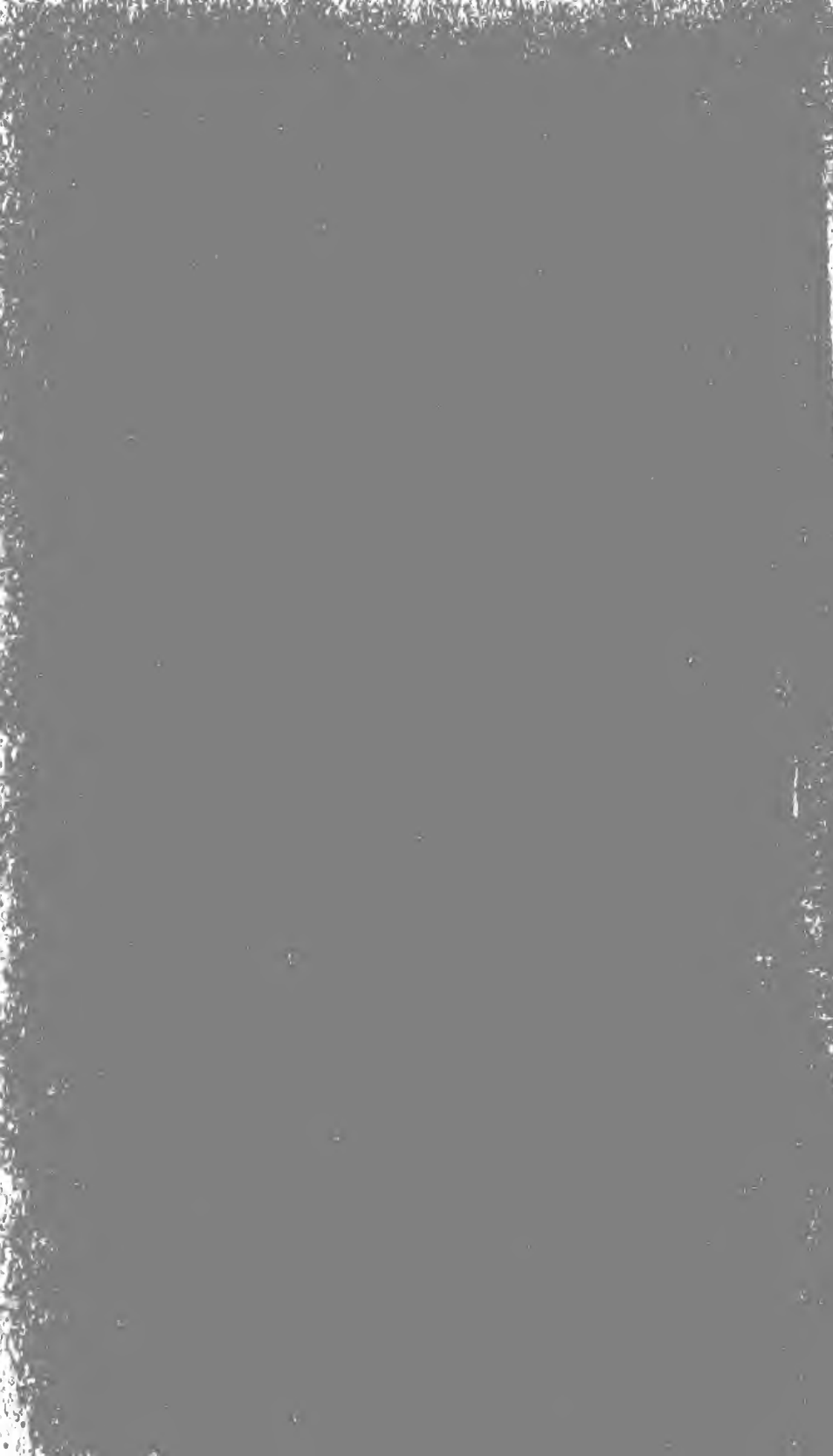


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THE

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EDITED BY

J. G. SCHURMAN AND J. E. CREIGHTON

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THE
PHILOSOPHICAL REVIEW.

THE NOTION AND PROBLEM OF THE PHILOSOPHY OF RELIGION.

A POSITIVE solution of the question regarding the true nature and province of the Philosophy of Religion may best be reached by inquiring, first of all, what it is *not*, and cannot be. In proceeding thus we are following the path which history has pointed out to us. For a true insight into the problem of the Philosophy of Religion was gradually gained, only through, and as a consequence of, the erroneous conceptions of past centuries.

The Philosophy of Religion originated in ancient times under the form of a religious philosophy and philosophical religion. The oldest philosophical systems of the Hindoos, Egyptians, and Greeks were philosophies of religion in the sense of a philosophically constructed cosmology. These world-conceptions aimed to satisfy religious needs and to replace the popular mythical religions of which they claimed to be the higher and esoteric truth. The Gnostic systems of the second century of the Christian era stood in exactly the same relation to the religious faith of both Christian and non-Christian communities. They sought, by combining the mythical notions and historical traditions of the existing popular religions with the ideas and speculations of philosophical systems, to establish a higher form of religion. This compound of different elements they proclaimed to be the esoteric truth of all religions. The Philosophy of Religion in this sense is a centaur, an unnatural

medley of philosophy and religion, and for this very reason is neither of the two. It is not philosophy, for neither its motive nor its method is that of sober scientific investigation and explanation of given facts. Nor can we call it religion, for no religion is a system of concepts, least of all of arbitrarily conceived and combined concepts. Religion is not a creation of thought, not a product at all, for it is something living, which grows up only in the real life of mankind in its historical development. We must add, however, that this confusion of religion and philosophy took place not only in the Gnosticism of early Christian heresies, but — partially under Gnostic influence — pervaded largely the dogmatic theology of the Christian fathers, and stamped its Gnostic character on the traditional doctrines of the Church. The doctrines sanctioned by the Church and transmitted as divine revelation are for the most part identical with that medley of religion and philosophy which constituted the naïve and dogmatic conceptions of the earliest philosophies of religion.

A second form of the Philosophy of Religion may be designated as the scholastic, because its classical representatives are found among the schoolmen of the middle ages. Scholasticism, however, did not terminate with the middle ages, but still wields an influence in the theological apologetics of the present time. It does not aim to create religion itself, but seeks to make the traditional religious teaching rational and acceptable. Its task is to demonstrate and defend religious dogma. The presupposition from which it proceeds is that the transmitted dogmas contain infallible, divinely revealed truth, to which man should readily and unquestioningly submit. The understanding, however, may and should endeavor to furnish a rational demonstration of what is to be received on authority. *Credo ut intelligam* is the watchword of this standpoint. The first requirement is faith in the transmitted dogma of the Church, grounded on the authority of the Church, which is ultimately to be regarded as the authority of God. But it is the function of philosophy as the obedient handmaiden of tradition to formulate its doctrines and to demonstrate their truth, or at

least their possibility. Now, however much acumen such a philosophy of religion may manifest, it is evidently not in harmony with the fundamental principle of all philosophy. For philosophy, guided only by the native laws of thought, aims at the discovery of truth. It cannot, therefore, rest in a given opinion or doctrine as though this were already truth itself. It must critically examine and prove the objects of its knowledge. It must distinguish the unessential from the essential, it must separate mere opinions from objective facts. In so far as the Philosophy of Religion is to be a philosophy, it cannot neglect this task. If it were simply to accept as infallible truth the traditions of the Church, and confine itself to formulating and systematizing these, it would renounce its claim to be a philosophy, *i.e.*, to be a science which undertakes to investigate and rationally explain phenomena. Nor can an appeal to the authority of divine revelation excuse philosophy from the task of thoroughly investigating all the facts. The claim to divine revelation which every religion sets up for its teachings must itself be subjected to philosophical criticism. Even when the universal proposition that religion is founded on divine authority is not rejected, we shall always have to inquire what we are to understand by revelation. What, we may here ask, is the peculiar relation in which the divine mind stands to the human spirit, and how has this revelation manifested itself historically? Reflection on the psychological conditions of revelation convinces us that a divine influence which is mediated by human consciousness must itself be affected by this medium. The product, therefore, of such a process of revelation consists of divine and human factors, and hence cannot be absolute divine truth, but must be influenced by the temporal and individual limitations that belong to everything human. A consideration of past historical events confirms this result of psychological analysis. The history of ecclesiastical dogmas shows us at every turn that they were not given ready made by a divine oracle, but that they gradually arrived at their present form by a process of transformation and development. We see that human — oftentimes all too human — agencies were at

work in this process, that human prejudices and the tenets of the schools played an important part, and that not infrequently mere caprice and accident, strategy and force, gave the victory to one or the other of the contending parties. With what right could doctrines which have thus originated lay claim to infallible authority and exemption from philosophical examination? It was not strange that an understanding trained and strengthened by the discipline of scholastic methods should finally reflect on its right of independent thought and criticism, and begin to exercise this right in regard to the content of transmitted doctrines. The dogmatic or scholastic Philosophy of Religion gave place to a sceptical Philosophy of Religion, which is represented by the rationalists (nominalists) of the later middle ages, and in a more decisive manner by the rationalists (deists, free-thinkers) of the seventeenth and eighteenth centuries.

This third form of the Philosophy of Religion is, it is true, in purpose and result the opposite of the preceding school. Its aim is not to prove the truth but the falsehood of traditional doctrines, not to establish but to destroy the authority of the historically given religion. But, with all its sceptical radicalism, it shares with its opposite the assumptions of a wholly uncritical and unhistorical dogmatism. If the scholastic Philosophy of Religion was positive dogmatism, that of the rationalists may be characterized as negative dogmatism. The former school accepted uncritically historical traditions as authoritative, while the latter just as uncritically set up its own subjective opinions of religious truth, and did not hesitate to manipulate and pronounce judgment on the facts of history in accordance with its own standpoint. The sceptical philosophy is as far from being a true comprehension of historical religion as the scholastic. Both fail to distinguish between religious doctrine and religion itself, and both lack the key essential to a thorough understanding of history. That is to say, they had not yet reached the notion of the gradual development of the religious spirit towards truth, and the thought that the symbolic concepts of different ages are expressions of different stages in that evolution. These religious traditions, measured by the narrow

standard of rationalism, were absurd and unmeaning. Rationalism did not imagine that with the husk it was rejecting a higher and more essential truth than was contained in its own scanty abstractions. The fault of rationalism was not that it dared to think rationally, but that it did not think rationally enough to understand and appreciate the objective reason in religious history. It was a necessary transition period. The mind had first to become conscious of itself and of its essential rationality, in order to find itself again in the world of history and to recognize the reason immanent in the historical development of humanity. It was not until the conception outlined by Lessing and Herder had been fully developed by Hegel that philosophy was able to attain a thoroughly clear conception of the facts of religion. The profound thought of *development*, as of a process in which an immanent ideal principle realizes itself under different forms and through different stages, which Hegel was the first to apply to history, has since become dominant in all fields of science and has proven itself very fruitful, especially for the history of religion. We have learned to perceive the pulse-beat of the human heart seeking God, even when rationalism could see nothing but illusion, superstition, and deception; and, on the other hand, we have come to recognize human limitations and frailties where the dogmatism of the churches found nothing but divine truth and infallibility. This evolutionary view of history, grandly conceived and developed by Hegel, may be regarded as a permanent achievement which no philosophy of history may henceforth ignore. But on the other hand, Hegel's Philosophy of Religion suffered from a one-sided intellectualism that made impossible a complete understanding of religion, which is not a matter of the head, but of the heart. On the one side, this view led back to an uncritical dogmatism, and on the other to an unhistorical radicalism — consequently just to the one-sided views above described, beyond which the principle of evolution itself should have reached. This intellectualism of Hegel's Philosophy of Religion has been overcome by Schleiermacher, who regarded feeling, in independence of knowledge and action, as the essence

of religion. Just as Hegel's evolutionism holds the historical key, so Schleiermacher's analysis of the religious consciousness furnishes the psychological key, to the comprehension of religious phenomena. Thereby the foundation is laid for a critico-historical Philosophy of Religion, which overcomes both the dogmatism and the scepticism of former standpoints.

What, then, is the positive problem of the Philosophy of Religion? In the first place, simply the knowledge of religion in respect to its essence and development as a fact of the historical experience of mankind, or an activity of the human spirit which has its ultimate ground in God. The Philosophy of Religion, like all philosophy, must make the phenomena of real experience its starting-point, and must go beyond them and penetrate to their transcendental grounds, which are themselves not phenomenal at all, but necessary postulates of thought. Its problem, therefore, is of a twofold nature: first, the historico-psychological examination of religion as a fact of human experience; secondly, the metaphysical investigation of the relation of man to his religious object, *i.e.*, to God and to his manifold revelation in the world, which is implied in this fact. The union of these two sides takes place in some form in all philosophical disciplines, but in the Philosophy of Religion the need of such a synthesis is more immediately evident, since in religion itself the relation to God is given as a psychological fact, which requires explanation as to its foundation, justification, truth, and necessity. But this is the business of a metaphysical investigation. The more closely this is related to the historico-psychological investigation, the more completely it carries out the fundamental tendencies there discovered, and reveals a principle which explains the experienced correlation between the subjective and the objective in an absolute unity which embraces the correlative parts, the better will it fulfil its task, and the more will all appearance of arbitrariness and chance disappear. The thinking subject will thereby experience that satisfaction which always results from the discovery of a rational connection between phenomena.

In the first place, then, as we have stated, the Philosophy of

Religion has to regard religion as a fact of human experience. Now religion is given to us in a twofold experience: first, the inner experience of the subjectively religious consciousness and the external experience of human history. Will it be enough to confine ourselves to one of these two sides — to seek religion only in history or only in the religious consciousness? Both attempts have been made, but neither could lead to satisfactory results. Indeed, this is self-evident, since each of the methods has its advantages, but also its weaknesses and dangers, which may be avoided only by the other supplementing it.

The exclusively historical view is unsatisfactory, because religion is, in its germ and essence, an *internal* principle of our spirit, which is given to us *immediately* only in our own consciousness. What is manifested in the external world also belongs to it, but only as a secondary and partial expression of its inner essence — an expression which is considerably influenced by the conditions of environment and by extra-religious circumstances and motives. In order, therefore, to understand the significance of the phenomena in which religion manifests itself historically — the forms of worship, the manifold legends and doctrines, the social institutions — we must regard them as modes of expression of the inner spiritual life and essence of religion. We must explain the meaning that is expressed in these symbolic forms by means of the fundamental motives of the religious consciousness, and must therefore project ourselves into the spirit of the historical religious societies. Such an interpretation of the symbols of the spiritual life of others is possible only for him who knows and observes the corresponding impulses of his own soul. We may say, therefore, that the indispensable key to the understanding of the phenomena given in external historical experience, or external manifestations of religion, lies in the inner experience of subjective consciousness. In addition to this we may say that the historical phenomena of religion are exceedingly complex and different in kind. The lowest and highest, the crudest and the most refined, the basest and the noblest, is found not only at different points of time, but also simultaneously in different religious

communities, even in the different members of one and the same religious community. How is it possible to recognize in this chaotic mass of phenomena the one true essence of religion? If we were to seek the notion of religion by a merely historical induction from the phenomena common to all religions, we should arrive at an abstract general notion which is without content, and in which the true essence and the highest worth of religion, as we Christians know it, is weakened and dissipated beyond recognition. This would be just as perverse as if one should attempt to determine the essence of art or morality according to that which the most barbarous savages have in common with the highest civilization. In this connection Principal Caird happily observes (*Introduction to the Philosophy of Religion*, pp. 82 ff.): "It is not that which is common to barbarism and civilization which is most truly human, but precisely that in which civilization differs from barbarism. As in the case of the individual, so in that of the race; there are many ideas which are essentially true, which yet are capable of being grasped by the human intelligence only at a certain stage of its intellectual progress. It is therefore conceivable that there may be in a religion ideas or doctrines which are essentially and absolutely true, whilst yet, in the actual experience of the world, the knowledge of them may have come at a late period of history, and even then only to a limited section of the race. Moreover, it is obvious that wherever we are obliged to introduce the notion of growth or development — wherever that which we contemplate is a thing which reaches its perfection, not by the accretion or accumulation of like materials, but by gradual evolution from the germ or embryo to the perfect organism — there the true idea of the thing cannot be got by finding out what is common to the lowest and highest and to every intermediate stage of its existence. If, therefore, in the religious history of the world, we can discover any indications of a progressive development, it is not by leaving out of view what is peculiar to Christianity — those ideas or doctrines which constitute its special glory and excellence — and taking account only of that which it has

in common with the earliest and rudest nature-worships that the essential idea of religion is to be established. If we accept the notion of an organic development in religion, there is indeed a kind of necessity which is predicable as well of the lowest as of the highest religions of the world. The former contains something which cannot be left out of the perfect idea of religion, something which is its necessary presupposition; and the highest religion, while it transcends, at the same time must take up and comprehend all that is true and valuable in the lowest. But, if this be so, so far from the universal truth in religion being that which is common to all religions, there is not a single idea in the highest or perfect religion which remains what it was in those which preceded it. In all organic development the perfect organism, while it comprehends and absorbs, at the same time annuls and transmutes all that pertained to the earlier and imperfect stages of life. Manhood presupposes, but does not retain, physically or mentally, the characteristic qualities of youth or childhood or infancy. That which really is common to all the stages of human life is therefore not to be reached inductively, but by grasping that idea which gives to all its successive forms and aspects the character of one organic whole. In like manner a merely empirical consideration of the various religions of the world or even of their historic succession and relations, however important as supplying the materials for a science of religion, does not in itself constitute such a science or give us that which is really universal in religion. To reach that we must be able to go beyond the mere historical forms and to see beneath them the idea which is ever advancing to its fuller realization, which, at each successive stage of its progress, loses nothing but leaves nothing unchanged, and fulfils the past only by transmuting the past. The perfect or absolute form of the idea, so far from giving us that which is common to all other forms, will thus retain in it unchanged not a single element which belonged to them. While it explains the latent significance of all that was true in the imperfect religions, it will transcend, and, by transcending, annul or destroy them."

The problem, therefore, is the recognition of that spiritual principle which, as impelling force, lies at the base of the entire sum and series of historical religious phenomena, and is expressed most imperfectly in the lowest stages, most purely and completely in the highest stages of the religious experience — that is to say, in Christianity. We may not, however, conclude from this that the essence of religion exactly corresponds to historical Christianity — that an historically reached definition of Christianity would at the same time serve as a definition of religion. Nor is the philosopher of religion thereby excused from further attempts to investigate religion. Various reasons forbid such a contraction of the philosopher's field of vision. As Christians we may be fully convinced that Christianity is the most perfect religion; yet the philosopher cannot assume this as an unproved postulate, but must seek to justify the conviction. This can be done only by comparing Christianity with other religions. Evidence must be brought from the history of the development of religions, that the other religions serve Christianity as a preparation, as subordinate stages, or that they contain only particular phases of religion, which are realized in Christianity in a higher and more comprehensive manner. It is clear, however, that such a comparative view of religions is impossible without some *criterion*. Now no historically given fact can furnish such a criterion, for this itself must be subjected to criticism. Nor is the universal concept of religion arrived at by induction a suitable criterion, for its content would be much too indefinite to furnish judgments concerning the relative worth of religions. If, however, we cannot obtain from history the norm necessary to an evaluation of religions, we must seek it within the religious self-consciousness itself. Of course it does not exist there as an 'innate idea,' for there are no 'innate ideas.' The religious idea manifests itself within us as an impellent force and craving, whose realization and satisfaction are reached through the interaction between this consciousness and its historical environment. The co-operation and harmony of these two factors — the natural predisposition and the external influences — bears witness to

what is true and right. So, also, the norm for the evaluation of the historical facts of religion lies in their agreement with the idea of religion found within us as a living, active principle, or, in other words, in this: that it corresponds to and satisfies our religio-ethical impulses and cravings.

Even if we should regard a critical comparison of Christianity with other religions as superfluous, and presuppose its perfection as a postulate of faith, we could not avoid such a consideration of the subjective religious consciousness. For here, too, the question would always have to be answered, What is the peculiar religious essence of Christianity? In what consists the distinguishing characteristic of this religion, in view of which it is identical with the concept of religion itself? In short, what is it that makes Christianity appear to us as the perfect religion? It is impossible to answer this question by a mere historical survey of Christianity. For history nowhere reveals to us Christianity as a simple and unmistakable fact, but as a highly intricate aggregation of different kinds of phenomena, which might impress the superficial observer as a maze of contradictions where every attempt at unification must fail. We have but to glance at the accounts of Christianity given by the various ecclesiastical historians — be they Catholic or Protestant — to appreciate how differently they conceived the essence of Christianity, although they possessed the same accurate knowledge of details. What seemed to one essential, and most important, was for the other an unessential accident, a foreign addition, a survival of Judaism or Paganism, something wholly incongruous with Christianity. How can we decide in what the true conception of Christianity consists? Historical details could not help us to a decision, for they themselves are capable of manifold interpretations. Christianity must attest its superiority through the total impression which it makes upon the mind of the observer. This impression is conditioned by the religious ideal, through which alone the religious nature of the individual attains its necessary realization, and in which his religio-ethical needs find their ultimate satisfaction.

We are therefore driven from external experience or history to inner experience, and compelled to seek in religious self-consciousness the key to the explanation of the historical phenomena of religion. But do we then agree with those who assert that the essence of religion can be discovered *only* in the subjective consciousness, be it rational thought or devout feeling? The one-sidedness of such a procedure is plain, for it can with difficulty escape the charge of individual arbitrariness. Looking at the matter more closely, however, we can say that such a procedure is not only unsuitable, but also impossible, and that, wherever it has been attempted and insisted upon, it has always been based more or less on self-deception. The religious self-consciousness with which the philosopher begins, is not an empty form, but filled with a rich content communicated to it by the developing influence of social environment. The Christian philosopher of religion cannot, and should not, abstract from his Christian modes of thinking and feeling, which belong to him as the inheritance of Christian centuries. He must derive his knowledge, not from an indefinite abstract ego, but from the fulness of the experiences of the real, devout self-consciousness formed by historical Christianity. This concrete Christian self-consciousness contains in an abbreviated form the entire product of the religious life of the Christian community and of the whole of humanity. The evolutionary stages of the race are repeated in an abbreviated form in the personal life of every individual. There is the same relation between the different stages in the religious development of the race and those of each individual. A consideration of the inner religious life does not exclude, therefore, an examination of historical religion, for the former owes its development and form to the latter, and is constantly nourished and moulded by its influence. The more closely, then, the philosopher attends to this actually existing interrelation, develops and enriches his own religious consciousness by a survey of the historical religions of humanity (and especially of Christianity), and interprets and judges those facts by the light of his own inner experience, the more easily will he avoid both of these false paths,

i.e., empty and arbitrary subjectivism and a blind, superficial historicism.

We have above described the first object of the Philosophy of Religion to be the comprehension of religion as a fact of experience. Then the question arose, What kind of *experience*? Is religion, the fact and material of our investigation, to be found in external, historical experience or in the facts of the inner personal life? The answer was, Not exclusively in the one nor the other, but in both as standing in intimate relation to each other. Now the further question arises, How must the philosopher proceed in order to *understand* this matter of experience so infinitely complicated? He must rationalize the materials of his experience according to the general rules of all scientific investigation. The nearest analogies to this procedure are furnished by the philosophical disciplines of epistemology (logic), ethics, and æsthetics. Just as these sciences reduce the states and processes of the knowing, moral, and emotional consciousness to their fundamental forms and laws, and then seek to explain the manifold and complex content of the mind from the relations and connections of these fundamental forms, in like manner the philosopher of religion must explain the facts of his religious consciousness.

A peculiar difficulty, however, confronts him at the outset. While, in the case of the above-mentioned disciplines, the sphere of the mental life with which they deal is easily determined, the problem is not so simple in the case of religion. Does it belong to the knowing, acting, or feeling consciousness? This question cannot be escaped. As is well known, it has been variously answered; but it is evident that none of the one-sided assumptions that have been made do justice to the matter. For in the religious consciousness all sides of the whole personality participate. Of course we must recognize that knowing and willing are here not ends in themselves, as in science and morality — where they are functions directed upon external objects — but rather subordinated to feeling, as the real centre of religious consciousness. The analysis of religious feeling must, then, form our starting-point. This is not a simple feeling, but a com-

bination of feelings of freedom and dependence. The various types of the religious feelings of humanity depend, therefore, upon the different proportions in which these different elements are combined. Analysis also shows that the completely harmonious unification of both these elements constitutes the religious ideal, just as the corresponding harmony of egoistic and altruistic impulses forms the moral ideal. The religious feelings manifest themselves most immediately in acts of worship, which are, therefore, to be interpreted as the involuntary expressions of emotional motives and as symbols of states of feeling. Acts of worship, however, are not possible without some conception of the objects upon which they are directed. Thus, besides worship, the practical expression of religious feeling, we have the theoretical expression in the form of religious notions, legends and doctrines, dogmas and systems. These are primarily symbolical expressions of the relations in which man feels that he stands to the higher powers. Since religion in these, its twofold forms of expression, is closely connected with moral action and theoretical knowledge, an investigation of its relation to ethics and science is necessary, in order to understand its peculiar nature. An historical survey shows that originally there was no marked distinction between religion and morality or between religion and science. The oldest customs were closely connected with forms of worship, and the oldest attempts at a philosophical cosmology with religious myths. As civilization advanced, their paths diverged. As society was organized and science developed, they severed their connection with religious authority and traditions and before long assumed a hostile attitude towards them. The conflicts between civil society and the Church, between secular science and faith, constitute for centuries the history of civilization. But however strained the relations, however violent the conflicts between these two parties may have been, experience has shown that neither can do without the other. Every attempt of either party to ignore or crush out its rival leads inevitably to its own destruction. When religion seeks to ignore and suppress morality and science, it becomes irreligious, superstition and fanaticism. On the other hand, when

morality and science break away from religion altogether, they are tossed about like a rudderless ship on the billows of the times. They are thus cast irresistibly hither and thither between the Scylla of an egoism where the self proudly disregards the real world and social limitations, and the Charybdis of an altruism in which the personality resignedly subjects itself to lifeless matter and the brutal multitude. A psychological analysis of the theoretical and practical consciousness furnishes the commentary to these undeniable facts of history. It shows that all our knowledge, moral volition, and action is concerned with the antithesis between self and world, and seeks the synthesis of this antithesis through the ideas of the true and the good. This mediation, however, is possible only on the supposition of a higher original unity, of a transcendental ground of ego and world, of spirit and nature, of individual and society, which from the beginning of the race has revealed itself in our consciousness of God. Thus the relative ideals of science and morality presuppose the reality of the absolute ideal — the truth of the religious consciousness of God — as their ground of possibility and as a guarantee that they are capable of realization. Herein we have the deepest reason for that indissoluble union which in spite of all differences and conflicts is always found to exist between religion, morality, and science.

In establishing and explaining this fact, the Philosophy of Religion has fulfilled its first task, *i.e.*, to understand religion as a fact of experience. At the same time, it has taken the first step towards the solution of its next problem. That is to say, it enters upon the metaphysical investigation of the relation implied in that fact, namely, the relation of man to his religious object, to God and his manifold revelation in the world. This relation is doubtless always given in religion as a subjective idea of human consciousness. For, in truth, no religion is without some notion of God. Hence the unavoidable question arises, whether and how far this religious conception of mankind corresponds to truth. It has indeed been said of late that this problem regarding things which we can never know does not concern the philosopher of religion, that he has to confine him-

self to the description and arrangement of religious phenomena and to justify religion by the practical value of its effects on social life. The objective truth of its articles of faith must, it is claimed, be left undecided. However well meaning such counsel may sound, weighty considerations may be urged against it. The fact seems to be overlooked that the religious man necessarily postulates the *truth* of his beliefs, and that without this presupposition his faith would lose all significance and power, and consequently all practical value, and become merely a beautiful æsthetical semblance, an illusion. Agnosticism, indeed, does not mean to deny directly the truth of a belief in God, but simply to hold it in suspense as unknowable. Yet experience has always shown that the passage from this timid scepticism to radical negation is but a small and easy step. And that we can readily understand. We naturally judge concerning the truth of an idea according to the readiness with which it may be connected with the orderly coherency of our entire conscious content. Whatever may be united with such a train of ideas, without contradiction, we regard as thinkable, and its reality as possible. Whatever is demanded by this complex we regard as a necessity of our thought, and consequently its reality as an assured certainty. Hence, an idea which is without all recognized relation to the content of our rationally connected consciousness (to our known world) seems to us to be unthinkable and consequently without truth. Agnosticism usually reaches its logical consequences in the popular consciousness in the following way: the unknowable divinity has at first neither meaning nor interest for it, and then what is practically indifferent is at last completely given up in theory also.

But has not Kant proved the impossibility of all metaphysical knowledge which transcends experience, and in particular has he not shown irrefutably, once for all, the insufficiency of the so-called proofs of the existence of God? Kant has doubtless destroyed the dogmatism of the old theological metaphysics and overthrown forever that gnosticism which presumed to comprehend the inner essence of divinity in its formulæ. He

has also shown irrefutably the inadequacy of the old proofs which would pass from a concept to reality, or from the contingency of the world and its purposive construction to a divine architect. We cannot ignore these results of Kantian criticism; so much we must grant to agnosticism. But the latter goes far beyond Kant's position. It ignores the fact that Kant himself, by his moral postulates, has made a beginning— incomplete and capable of improvement, it is true— to rationalize religious faith on a new idealistic basis. According to Kant, the existence of God is a "postulate of practical Reason," *i.e.*, a demand which reason must make in order to render conceivable the possibility of the highest good being realized, that is to say, of the moral government of the universe. Kant has indeed conceived the moral government of the world only as an ideal, and looked for its realization through the agency of an all-powerful, divine, inconceivable being. Against this the objection was always ready that this ideal could be nothing more than a devout wish, a Utopia, and that a God postulated in order to realize this ideal could have but a very problematical existence. But how would it be, if the deeper meaning of Kant's postulate were rather this: that just as reason is forced by its own peculiar constitution to find in the world the constant realization of a universal natural and moral order, so also it is compelled to postulate the eternal reason of God as the ground of the progressive rational order of the universe? This thought forms the valuable and permanent kernel which post-Kantian philosophy has freed from the husks of subjective idealism and developed to its logical consequences.

The Philosophy of Religion must not lose itself in the labyrinths of Hegel's dialectical panlogism or in the mysticism of Schelling's theosophy. Nor, on the other hand, should it remain entangled in the meshes of subjective idealism, whose principles, as Kant and his immediate disciples taught, render a proper understanding of religion, especially of the Christian religion, impossible. The province of the Philosophy of Religion is to furnish a rational ground for the belief in God. It fulfils this task, not by dogmatically ignoring inner and outer

experience — a procedure which can result only in sophistry — much less by assuming moral postulates which could not escape the charge of being arbitrary. Its object is attained by showing the gradually developing revelation of the controlling and purposive reason of God throughout the entire world-order. Here it must not be forgotten that the world-order in each of its phases, the natural, moral, and religious, includes both consciousness and the external world, and consists in their uniform correlation, that is to say, in the fact that each of these two factors is related to and determined by the other. The fact that thinking and being, moral personality and society, are so correlated that they develop in constant conformity with one another, and that neither can be conceived without its counterpart, forces us to presuppose a transcendental unity which manifests itself in this double order and reciprocal relation. In short, we are compelled to find in the world-order a manifestation of God. Furthermore, the different sides and stages which the world-order offers to view allow a more complete determination of the idea of God. In the natural world-order, that correlation of consciousness and existence, we find the divine revelation as all-consciousness and omnipotence. In the moral world-order, that correlation of conscience and social laws, the divine revelation manifests itself as holiness and justice. Finally, in the plan of salvation (as it culminates in Christianity) we discover the divine revelation as love and wisdom. The theoretical contemplation of the universe as the divine revelation gives to the religious idea of God its content and at the same time its rational ground. We are, indeed, able to comprehend the essence of God, but only in so far as this is manifested in the world-order as an efficient cause. To be sure, God is not identical with this order of the universe. An order presupposes and is the manifestation of an active ordering subject. But no subject is entirely exhausted by its external effects: it has also an inner side, a being-for-itself, which reflects and unites its manifold effects into a persistent unity. The laws of logic demand that this same thought be applied to God. Here, indeed, we have reached the limits of what is knowable.

We comprehend only that side of God which is turned towards us, his essence in so far as it manifests itself as the active principle of the universe. The inner nature of God, his being-for-himself, the inner reflection of his causality, we can as little know as we can perceive the side of the moon turned away from us. All hypotheses concerning the existence of God in and for himself (to which class belong also those regarding divine consciousness, unconsciousness, and superconsciousness) are vain and worthless. For, in the first place, they can never be verified; and, secondly, we are interested only in knowing what God is for us as active in the world, not what he may be in himself and for himself.

One's religious view of the world, of nature, and of humanity, is closely related to one's belief in God. These religious conceptions are generally embodied in legends concerning the origin of the universe, or of the earth and the human race, as well as concerning miraculous divine revelations which have occurred in the course of history. When such legends, which have arisen in prehistoric times, become articles of faith, they afford the chief ground of conflict between faith and science. In this connection the Philosophy of Religion has the thankworthy task (though one which is seldom appreciated) of mediating between the contending parties. The less it is satisfied with half-way concessions and compromises, and the more thorough it is in its efforts to remove forever the ground of controversy, the more permanent will be its success. This object is attained by a fundamental distinction between the different elements which are usually combined in such legends, namely, between the theoretical speculations which serve to satisfy a naïve desire for knowledge, and the religious motives which find expression in this symbolical form. * Whether the world was made in six days, as the Bible holds, or whether the process lasted for countless ages, and still continues; whether the sun revolves about the earth, as Biblical writers along with the rest of antiquity believed; whether primitive man sprang from the dust of the earth, or from trees or stars (in accordance with some myths), or whether he sprang from lower forms of

animal life, in accordance with the principle of natural selection — all these are questions of knowledge which science must solve, but which do not concern religion as such. For this is concerned only with the fact that nature, whatever its process of development, is dependent on God and fulfils his purposes in regard to us. The fundamental truths of religion, then, are not affected by any answer which may be given to the above-mentioned questions. Indeed, an order which, through the smallest and most insignificant means, eventually produces the highest, would be a sublime manifestation of divine omnipotence and wisdom. So, even though man has sprung from lower forms of life, he may nevertheless be the goal towards which the process of nature has tended from the very beginning, and in which creative reason produced the light of consciousness, the thinking spirit, consequently its own image.

In the legends of Paradise, and the fall of man, which, by the way, have their analogies in several religions, the Philosophy of Religion can recognize only symbolical expressions of man's two natures, the spirit and the flesh, the ideal, godlike disposition and the lower animal nature. Religious poetry symbolizes the opposition and conflict between those two principles, which are inherent in the very nature of man — in so far as he must by an act of freedom raise himself above the sphere of natural phenomena to a spiritual ideal — by representing them as particular events in time, or historical occurrences. The question is not concerning a compromise between those primitive legends and a scientific history of our race. It is rather to discover the profound ethico-religious thought hidden in these legends, and to demonstrate that it has been actually realized in the history of civilization and of religion.

At this point the Philosophy of Religion glances at the historical progress of religion and recognizes in the growth of the religio-ethical spirit the revelation of the educating wisdom and love of God. (This treatment of the history of religion is perhaps more correct in method than that which regards it as the starting-point and foundation of the philosophy of religion. This latter view may, it is true, be justified on the grounds of

practical convenience.) The beginnings of the religion of the human race must be investigated. Two rules should be observed in this connection. In the first place, the origin of religion must be so conceived as to contain the germ of the succeeding development in some way or other, be it ever so low and crude. Secondly, since religion is a matter which concerns man as a whole, it can never be explained from a single motive, but by the co-operation of several motives and experiences. Thus, for example, nature-worship and ancestor-worship were from the very beginning most intimately allied. In considering the historical development of 'religion, account must be taken of the influences of the progress of civilization, of legislation, of science, and of art as powerful instruments of religious advancement. We must especially emphasize the profound and pre-eminent significance of those religious teachers who, by their creative power and the depth of their personal religious consciousness and moral nature, were able to see and reveal the truth more clearly than their own or any previous age had done. They thus opened up to mankind new paths for the realization of its ideals. The wonderful impression which these highly gifted personalities produce in every field — and most of all in the religious — furnishes a natural explanation of the miraculous legends and apotheoses which, in the popular creeds, are always connected with the lives of these individuals.

The classification of religions is a very difficult matter. Inner principles of division are necessary to satisfy the demands of philosophy. These principles are derived in part from the specific character of the belief in God (polytheism, pantheism, monotheism), and in part from the fundamental religious temperament, according to the manner in which natural and moral motives, feelings of dependence and of freedom, are combined in it. On this is based the distinction between æsthetical and teleological religions (Schleiermacher), or of natural, legal, and redemptory religions (A. Schweizer and others). The only difficulty is that such classifications, however attractive they may be in themselves, can never be unreservedly applied to the actual course of events. This is quite evident; for all religions

which play any important part in history have, in the course of their development, frequently transformed their ideals in important respects, and have at the same time retained, in addition to these new ideals, their old ones, which are occasionally revived. To regard all this from a single point of view would be too difficult. Take for example the Hindoo religion in its development from the hymns of the Rig-Veda, through Brahmanism and Buddhism, to its final form of mystical Pantheism and coarse idolatry. In what place could this be inserted in the above classification? The most important thing will always be clearly to portray the peculiar characteristics of the different religions, and to explain them as well as possible from the character and the historical experiences of the various peoples. It is also of especial importance to show the influences which the different religions exercise upon and receive from one another, for in this we recognize something like an organic connection in the religious life of mankind. Thus, for example, the reciprocal influence of the Semitic and Indo-Germanic religions is of the utmost importance. For after thousands of years of preparation these finally made ready the soil where Christianity could take root and grow.

The philosopher of religion cannot, it is true, follow out the development of Christianity in detail. That is the business of biblical and historical theology. His task, however, is to show how Christianity is the fulfilment of all previous religious systems—of the Pagan as well as of the Jewish—since, by embracing their partial truths in a common unity, it removes their one-sidedness and sums up the religious inclinations of mankind in an essentially true and satisfactory manner. Christianity itself has not been able to express all at once the truth involved in itself, but only in the course of centuries has it been able to advance towards an ever fuller and purer expression of this truth. This evolution the Philosophy of Religion must also follow. It has to show how the Christian principle, in order to take root and establish itself in the world, had to adapt itself to the prevailing forms of the religious and moral consciousness, and how, after this unavoidable fusion of Jewish

and Pagan elements, the essentially Christian spirit was able to make its way but slowly and as a result of conflict, and to become in its essential character the real dominant force in humanity. The Reformation, that achievement of the Christian Germanic spirit, was the greatest stride in this development. But it has not reached its close, and will never reach it as long as the history of mankind lasts.

The Philosophy of Religion, by tracing its object through all the stages of its historical evolution, verifies the truth of that which it has recognized as the essence of religion in the psychological and metaphysical investigation. For the concept must justify itself here, as always where we deal with life, by proving itself to be the impelling force, the guiding principle, and the ideal goal of the entire process. The scientific investigation thus returns to its starting-point and completes its cycle. The only task which it still has to accomplish is to turn towards the future and discover how far it may be able to foretell the religious development of mankind on the basis of past experience. But let it not forget that the ultimate ideals of the world, as they are determined by the decrees of God, withdraw themselves from our human gaze. Where our knowledge and conjecture fail us, faith appears to console, and says, in the words of the Apostle, "Eye hath not seen, nor ear heard, neither have entered into the heart of man, the things which God hath prepared for them that love him."

OTTO PFLEIDERER.

UNIVERSITY OF BERLIN.

AN ANCIENT PESSIMIST.

EVEN in popular phrase life is described as having not only a sunny side, but a shady side as well. These two phases of existence stand related, partly as cause, partly as effect, to the alternating moods of thought and feeling, by which the ordinary consciousness of all men is governed; and philosophy, in giving a reflective interpretation to the facts of existence, tends to represent them in the different phases which they offer to the unreflective consciousness. That tendency of speculation which interprets human existence by its cheerier facts gives rise to systems of Optimism; while that tendency which reads the meaning of life in its tragedies constitutes what is understood by Pessimism. Not only, therefore, may a pessimistic tone of thought be heard throughout general literature in nearly all the ages, but many of the philosophical systems of the past point, more or less explicitly, to pessimistic conclusions; and it is a specially significant fact for us who are now looking back upon our century, as it nears its close, that, whatever may be the verdict in reference to its general literature, its philosophy will long stand conspicuous in history for the clear and calm force with which it has presented Pessimism as the only philosophical system which can satisfy the demands of speculative thought.

This fact has imparted a new interest to a pessimist of the ancient world, Hegesias the Cyrenaic. This old thinker occupies a niche so obscure that he has been passed without notice by many an inquirer, and few have been struck with the significance of his position as apparently the first, and indeed the only, philosopher of ancient times, who can be truly described as having deliberately reasoned out an explicit system of Pessimism. Even Mr. Sully's elaborate monograph on Pessimism,¹ though it traces some indications of a pessimistic tendency in the lit-

¹ Pessimism: a History and a Criticism. By James Sully, M.A. London, 1877.

erature of the ancient world, fails even to mention the name of Hegesias. In fact, Mr. Sully seems to hold that, while Pessimism can be logically developed from an ascetic system like that of the Cynics and Stoics, it is intrinsically inconsistent with the fundamental assumption of the Cyrenaic creed.¹ It is true that this statement is somewhat qualified afterwards by the explanation, that "even if happiness be shown to be illusory, the affirmation of happiness as the one true end is not in the least gainsaid."² But, even with this qualification, Mr. Sully's contention is, that "the supreme injunction" of Hedonism would require to be modified, if the ideal to which it points were declared to be unattainable under the actual conditions of human existence. The modification of hedonistic doctrine, which Mr. Sully holds to be logically necessitated by its association with Pessimism, is, as we shall find, precisely that which was adopted by Hegesias and his followers. It is therefore the more remarkable that Mr. Sully should not have given a place in his sketch to this ancient pessimist, who is thus rendered all the more interesting by his having apparently carried out what Mr. Sully conceived to be the issues of Pessimism more logically than many another adherent of the system.

Substantially all our knowledge of Hegesias is limited to two meagre sources,—a passage in Diogenes Laërtius (II 93), and another in Cicero's *Tusculan Disputations* (I 34).³ There is indeed a brief account of Hegesias in two or three sentences of Epiphanius, *Expositio Fidei* (1089 B), but it is simply a valueless abridgment of the information given by Diogenes. A sentence also in Valerius Maximus (VIII 9, ext. 3) cites the influence of Hegesias' lectures in Alexandria to illustrate the effect of eloquence, but the passage only repeats in briefer form the story told by Cicero.

The principal account of Hegesias, then,—in fact, the only

¹ pp. 41-43.

² p. 166.

³ The greater part of both passages will be found in Ritter and Preller's *Hist. Phil. Gr. et Rom.*, §§ 212 and 219. Mullach (*Fragm. Phil. Græc.*, vol. ii, pp. 398-438), though giving a very full collation of all the fragments bearing on Aristippus, and even on Euemerus and Bion the Borysthenite, makes no reference to any of the other Cyrenaics.

account of his philosophy, — is that of Diogenes Laërtius. As it is brief, it may be worth while to give it in full :

“Those who are called Hegesiacs hold that the ends of action are the same,¹ *viz.*, pleasure and pain, and that there is no such thing in reality as gratitude or friendship or benevolence, because we choose these things, not for their own sakes, but on account of the uses which they serve, so that, if there is no use for them, they have no existence: that happiness is wholly unattainable; for, on the one hand, the body is filled to the full measure with many sufferings, and, on the other hand, the soul suffers with the body and is thus disturbed, while fortune prevents many things from turning out according to expectation, so that from these causes happiness does not really exist: that life and death are both desirable. They held the theory that nothing is pleasant or unpleasant in its own nature, but that, by reason of want or novelty or satiety, some men are pleased, while some are unpleasantly affected: that poverty and riches, in relation to pleasure, are of no account, for rich and poor are not pleased in different ways: that slavery, equally with freedom, is a matter of indifference, when measured by the standard of pleasure; and so is high birth equally with low birth, and renown equally with obscurity: that, for the fool, life has some advantages, but for the prudent man it is a matter of indifference: that the wise man will do every action for his own sake; for he will hold that no other man is worthy of equal consideration with himself, and that, even if it appear that the greatest benefits can be derived from some other person, these are not equivalent to those which he himself may procure. They took away also our faith in sensations, on the ground that these do not give accurate knowledge; and they held that we must be guided in our actions only by what appears probable. They taught that faults should meet with forgiveness, for a man does wrong, not voluntarily, but under the impulse of some passion; and that therefore we should not hate, but rather teach, him: that the wise man will not be so much absorbed in the pursuit

¹ That is, the same as those held by the Cyrenaic School, which is described immediately before.

of good as in the avoidance of evil, placing the chief end of existence in a life that is free from pain and sorrow,—an end which in truth falls to the lot of those who are indifferent about the objective causes of pleasure.”

A few paragraphs before this passage, in enumerating the followers of Aristippus, Diogenes mentions Hegesias as known by the sobriquet of *πεισιθάνατος*—“persuader to die” (II 86). Of this no explanation is given by Diogenes, except such as may be suggested by the subsequent account of Hegesiac teaching, which has just been quoted, but the reason why the influence of Hegesias was thus characterized is more definitely furnished in the brief allusion to him by Cicero. There are two items of information preserved in this allusion. One is the fact, that Hegesias was author of a work bearing the title *Ἀποκαρτερῶν*,—a dialogue in which the principal speaker is described as committing suicide by starvation, and in answer to the dissuasive efforts of his friends, recounting to them the numerous evils of life which form the justification of his suicidal purpose. To this fact Cicero adds a second bit of information, that in his lectures in the schools of Alexandria this theme was treated by Hegesias with so much eloquence, that he was said to have induced many of his hearers to commit suicide, and to have been therefore prohibited from lecturing on the subject by the Ptolemy of his day. These two items of information are certainly not communicated by Cicero in the same tone. The work of Hegesias is spoken of in language which implies that, if Cicero had not actually read it, he had satisfactory means of knowing its existence and drift. On the other hand, the story about the effect of the lectures of Hegesias is told as if it were a mere report, for the accuracy of which Cicero does not undertake to vouch: “*prohibitus esse dicatur*” is the form of his statement. One may therefore, not without reason, suspect that the story is merely one of those bits of vulgar gossip, such as may be picked up all through anecdotal literature, in which the popular mind is seen pitching upon some superficial aspect of a philosophical system, and assuming that the practical issues, which it seems to involve, must be carried out in actual life.

Returning to the account of the doctrines held by Hegesias and his followers, we need not dwell on the obvious want of expository method displayed by Diogenes Laërtius,—a defect which seriously impairs the value of his whole history. With a very little attention, however, it is not difficult to grasp the essential drift of Hegesiac philosophy, especially when the statements of Diogenes are read in connection with his general account of the Cyrenaic School, in which the Hegesiacs are described as forming merely a minor sect. To understand, therefore, the phase of speculative thought represented by this sect, it is necessary to refer, at least, to the salient features of that Cyrenaic Hedonism of which it professed to be merely a modification.

Our knowledge of the Cyrenaic School, gathered from the account of Diogenes Laërtius, as well as from various other notices brought together in the well-known collections of Mullah and of Ritter and Preller, is fairly complete and satisfactory. We here come, for the first time in history, upon a doctrine which, in its logical principles and procedure, forms a remarkably interesting anticipation of a type of ethical theory which continues to assert its claims upon the philosophical thought of our day. From a notice of the Cyrenaic School by Sextus Empiricus,¹ it appears that they started from that speculative standpoint which, under such various names as Sensationalism, Scepticism, Positivism, Agnosticism, has almost uniformly led to Hedonism in ethical speculation. They limited the knowledge of man to his feelings (*πάθη*). What causes these feelings, or whether they have any causes at all, were questions relegated to the region of the Unknowable. Each man's feeling is therefore the criterion of truth for him; universal criterion there is none.

Feelings being thus recognized as the sole realities that we know, it became necessary to seek the real good of man in them. Now the Cyrenaics held that there are only two kinds of feeling, positive pleasure and positive pain: they explicitly rejected the doctrine, which afterwards became a prominent

¹ *Adversus Mathematicos*, vii, 191-6.

feature in the Ethics of Epicurus, that absence of pain (*ἀπονία*) is pleasure, and that absence of pleasure (*ἀηδονία*) is pain. Such a neutral state would, they maintained, be a state of insensibility as complete as that of a person in profound sleep. Accordingly they declared the chief end of life to be the pursuit of pleasure. They were also as decided as any nominalist could be in limiting pleasure to the particular feeling of the moment — the actual, concrete, present feeling of gratification. It was no ideal happiness of others, no abstraction like “the greatest happiness of the greatest number”; it was not even an ideal “good on the whole” of the individual agent himself, that they held forth as the supreme aim of human endeavor. It was *pleasure* (*ἡδονή*), not *happiness* (*εὐδαιμονία*). Happiness, they point out, is a system embracing past and future, as well as present, pleasures. But the past has perished forever, and the future is beyond our ken. The present alone is ours; and therefore present enjoyment is the sole object in which the wise man can be interested.

Such was the general drift of the speculations under the influence of which the doctrines of Hegesias were developed. The hedonistic principle, underlying those speculations, obtrudes two ethical problems. As the science of Ethics professes to be a rational explanation of the moral life of man, it must, in the first place, find a rational foundation for the virtues by showing that they are the forms of conduct by which alone the reasonable end of existence can be secured, and it must, in the second place, show that that end is, under the conditions of existence, attainable.

Now, what is the experience of Cyrenaic Hedonism with regard to the former problem? If pleasure is the sole object for which it is reasonable to live, how can we vindicate those social virtues which require a man to sacrifice his own enjoyments for the benefit of others, or even those private virtues which imply the abandonment of sensual gratifications? The Cyrenaics did not shirk the problem. On the contrary, they claimed to solve it by the same general explanation which subsequent hedonists have commonly repeated, — by showing that

the so-called sacrifices of a spiritual and disinterested morality are only apparent or temporary. Such a vindication of morality, however, assumes that the virtues of civilized man are, in the long run, uniformly coincident with his happiness. This complacent Optimism gleams through the whole literature of Epicurean Ethics. It was especially brilliant in the eighteenth century among the moralists and theologians of the Illumination; and even popular writers — novelists, essayists, sermonizers — are never weary of ringing changes on their favorite theme of the delightfulness of living virtuously, and the inevitable misery of vice. But a jarring note occasionally breaks this harmony of utilitarian moralists. Their optimistic faith is rudely shaken at times by a daring sceptic asking whether it is really the fact that virtue's ways are uniformly ways of pleasantness. This dissent has grown within recent times; and since the publication of Professor Sidgwick's *Methods of Ethics*, it would probably be difficult to find an eminent thinker who maintains, without theological or other explanations, the absolute coincidence of virtue and happiness.

In this issue of Hedonism the Cyrenaic thinkers have anticipated the perplexing conclusion forced upon the hedonistic Ethics of our day by the criticism of Mr. Sidgwick and other writers. The utilitarian vindication of the virtues was explicitly rejected by Theodorus the Cyrenaic. Theodorus is a remarkable figure in the history of ancient thought, and it is scarcely possible to repress the wish that fuller information with regard to him had come down to us. The information we possess has a somewhat perplexing aspect. For apparently he did more than any other Cyrenaic to purify the fundamental principle of Hedonism by working out a more refined conception of the enjoyment which forms the chief end of existence. In the purified Hedonism of Theodorus and his followers the sovereign good of man is not pleasure (*ἡδονή*), but a cheerful state of mind (*χαρά*), which has its source in an intelligent regulation of the conduct (*φρόνησις*), while the chief evil of life is not pain (*πόνος*), but that disagreeable condition (*λύπη*) which results from imprudence (*ἀφροσύνη*). As the sovereign good of life was

thus conceived to be dependent on a man's own prudence, it was also held to be completely within his control; and the Theodoreans therefore insisted as strongly as the Stoics, that the wise man is self-sufficient (*αὐτάρκης*), able to draw his well-being from sources within himself.

But this very doctrine, which commonly involves ennobling issues in speculation as well as in practice, was made the ground on which the Theodorean code of morals refused to find a place for the disinterested virtues, or even for the virtues of personal purity. If the obligations of friendship or patriotism¹ are enjoined, the wise man has to reply that, as he is not in want of anything extraneous to himself, he has no need of friends or of any other human relations. A similar treatment was accorded to those obligations which point to purity of individual character; the pleasures, of which these obligations demand a sacrifice, were declared to be disgraceful, not in their own nature, but by the common consent of ignorant men. In fact, Theodorus seems to have entertained a Carlylean scorn for the common type of mankind; and any disinterested labor for men in general, or any concern for their good or bad opinion, was, in his view, a regard for fools, wholly unworthy of the wise man.

The Cyrenaic Hedonism thus broke down in the hands of the Theodoreans by recognizing its inability to explain the common obligations of morality, and thus failing to solve the first of the two problems imposed upon all ethical theories. This conclusion, though not that to which the name of Pessimism is commonly applied, may yet be deemed pessimistic enough; for the position and prospects of humanity are hopelessly disheart-

¹ Too much importance has sometimes been attached to the fact that early in the fourth century B.C., Cynic and Cyrenaic alike adopted the term *κοσμοπολίτης* to describe their attitude to their fellow-men, as if this implied the expansion of morality beyond the limits of mere patriotism to the humanitarian point of view. With both schools in general the term seems to have indicated merely a negative moral attitude of indifference to the claims of any particular section of mankind rather than a positive interest in the claims of universal humanity. It is but fair, however, to add that Socrates seems to have expressed the idea of a cosmopolitan morality, calling himself *κόσμος* (Arrian's Epictetus, I, 9; *mundanus* in Cicero's Tusc. Disp., I, 37), not *κοσμοπολίτης*, as Lecky apparently supposes (Hist. of Europ. Morals, vol. i, p. 241).

ening, if the virtues, which the most cultured races have hitherto pronounced the supreme excellences of human life, are proved by reflective reason to be incapable of vindication on reasonable grounds. Still this conclusion does not deny the possibility of attaining the happiness, to which Hedonism points as the only reasonable end of existence; it only denies the possibility of attaining that end by living a virtuous life. It therefore remains an open question still, whether happiness may not be attainable in some other way.

This brings us to the question referred to above as the second problem of hedonistic Ethics. It does not appear that this problem was ever entertained by Theodorus. Apparently he taught that the wise man will simply seek his happiness in life without much regard for the popular code of morality; and probably he assumed that in this way the wise man might be reasonably certain of attaining his end. But this assumption cannot long escape the uncomfortable suspicion suggested by the very conclusion of Theodorus. For reason cannot rest in the mere negation, that happiness is *not* attainable by the common virtues. Men in general, therefore, and hedonists in particular, will demand to know by what mode of life happiness *is* to be attained. The pressure of this demand, and a critical attitude towards any reply, will inevitably, sooner or later, raise the doubt, whether happiness can be reached by any means whatever under the conditions of human existence. It was therefore but a necessary evolution of speculative thought that made Hegesias force this query on the Cyrenaic School.

Nor is it surprising that the query receives at his hands a negative reply. The precise line of reflection by which he was led to this reply, cannot indeed be gathered with certainty from the brief account of Diogenes Laërtius. But apparently there were two facts by which he was mainly influenced. The first was his theory of pleasure and pain,—a theory which seems to have been held by the Cyrenaic School in general. It is the theory which explains all the pleasures and pains of human life by analogy with those which are derived from the alternate cravings and satisfactions of bodily appetite. As in these the

agreeable or disagreeable effect depends on our want or satiety, so in all our feelings pleasantness or painfulness was held to be caused, not by any property in the object producing them, but rather by our own condition at the time. From this it was inferred that a man's happiness or misery depends largely upon himself rather than upon external causes. We see from the account of Diogenes, that no Stoic could surpass the followers of Hegesias in contemptuous indifference with regard to the outward circumstances of life. What bearing has this theory of pleasure and pain on the chief peculiarity of Hegesiac doctrine? Though it does not clearly appear from the statement of Diogenes, this theory was probably regarded by the Hegesiacs as implying that, as pleasure can never be obtained without a previous pain, complete happiness is, in the very nature of the case, impossible; all happiness must be marred by the attendant pains which are its prerequisite conditions. At least, this is part of the reasoning which Plato, in the *Philebus*, bases on the same theory; and it does not appear why the theory should have been introduced at all in connection with Hegesiac doctrine, unless this was its drift.

But while this theory led Hegesias to assert a Stoical indifference to the value of external things, it did not carry him, like Theodorus, to the allied Stoical doctrine of the self-sufficiency of the wise man. The logical rigidity of a theory did not paralyze his mental vision so as to prevent him from seeing the fact, that pleasure and pain are determined, not solely by our subjective state, but by objective conditions as well. That is to say, even if our subjective state were wholly within our power, so that we might at will give ourselves pleasure without any alloy of pain, yet our pleasures and pains are also excited at times by causes which, as external, are entirely beyond our control. Of these causes Hegesias seems to have dwelt specially upon two. The first is the condition of the body, which is of course affected by the general forces of the physical world of which it forms a part. The other is the general current of events, directed, as it is, by causes which we are often unable, not only to foresee, but even to discover after they have operated, and

which therefore we describe by such names as chance, accident, fortune (*τύχη*). On these grounds Hegesias contended that man is not sufficient of himself to secure pleasure or avoid pain at will, and that complete happiness is consequently beyond his reach.

But this conclusion must obviously alter the general law of conduct enjoined in hedonistic Ethics. If happiness be unattainable, then it may still be legitimate to hold that it is the highest good in the abstract; but it can no longer be wise to make happiness the object of pursuit as if it were actually to be reached. The wise man, instead of exposing himself to disappointment by endeavoring to realize an impossible ideal, will be content with the more modest success of avoiding unnecessary pain. This has, in modern literature, become the practical maxim, not only of pessimists like Schopenhauer, but also of hedonists like Bain; and it is an evidence of the logical clearness of Hegesias, that he saw so long ago the necessity of thus modifying the supreme maxim of Hedonism.

But, as Mr. Sully has pointed out,¹ this modification is not the only alternative: another maxim is conceivable. If there be nothing in life worth living for but happiness, and if this be unattainable, then it obviously becomes a question whether life is worth living at all. If the only practicable good is to avoid pain, does it not follow that the wisest course is to escape from the very possibility of suffering by the most expeditious euthanasia? This inference, too, was apparently seen by Hegesias to be a reasonable alternative for the hedonist.

It thus appears that this old thinker had grasped all the essential issues of Hedonism and Pessimism. At all events it is a fact of philosophical significance that, away back at the very origin of Hedonism as a theory of the moral life, it became distinctly associated with Pessimism. The fact points not merely to a fortuitous association in history, but to an inevitable connection in logical thought; and therefore it may help us more clearly to estimate the value of Hedonism as a solution of the problems presented by the moral life of the world.

McGILL COLLEGE, MONTREAL.

J. CLARK MURRAY.

¹ Pessimism, p. 166.

THE CONCEPT OF LAW IN ETHICS.

A LAW, in the primary sense of the term, is a rule of human action prescribed by authority. The use of the term to express the order of nature is a derived one, which became current only after a considerable historical development. Even this first-mentioned usage is primary only in a relative sense. At the dawn of history we find men ruled by custom rather than law. Clans, tribes, and village communities were ruled by institutions which mythology might explain as established by the gods or by the ancestor of the race; but for the living generation they were a fixed body of rules that could not be infringed without incurring on the individual and on the community the severe displeasure of the gods, and which men regarded as no more subject to change on their part than the paths of the sun, moon, and stars. History opens with this reign of custom. Among primitive peoples we find no distinction made between laws of the state, requirements of religious ritual, and the demands of morality. Conduct in all these respects was governed by an undifferentiated mass of rules, which were enforced upon the individual not only by the severest human penalties, but by the even more terrible fears of superhuman powers. "There is no system of recorded law literally from China to Peru," says Sir Henry Maine, "which, when it first emerges into notice, is not seen to be entangled with religious ritual and observance."¹

Since in early times legal and moral ideas were thus indiscriminately combined under the general notion of customary law, we must look for the beginning of the history of the concept of law in morality, where the tendency to discriminate between these two fields of conduct first manifests itself. It is not a case of a concept developed in one sphere of life and then carried over by analogy or metaphor to another; it is rather a

¹ Early Law and Custom, chap. i.

case of differentiation. We do not find moral and legal institutions existing side by side, and then after a time the conceptions developed in one sphere transferred to the other. Conduct as a whole is ruled by one homogeneous mass of custom. The first beginning of the distinction between moral and criminal law is seen in the division of custom or law into *written* and *unwritten*. The written law, being the expressed will of the king or state enforced by penalties, corresponds to our notion of law in the jural sense; while the unwritten law, which depended for its binding force on habit, public opinion, religious belief, and conscience, answers in a general way to our notion of moral law. The unwritten law was regarded as the source of the written. The latter only is changeable; the former is original and abiding. This division of the laws is very common in Greek literature.¹ One of the earliest and most famous examples of this is in Sophocles. Antigone defies the king, who has forbidden her to bury her brother, in these words:—

“Nor did I deem thy edicts strong enough,
That thou, a mortal man, should'st over-pass
The unwritten laws of God that know not change:
They are not of to-day nor yesterday,
But live forever; nor can man assign
When first they sprang to being.”²

The reduction of a portion of the ancient customs to writing, and the notion thus introduced of a written law in contrast with the unwritten law, must have been one of the first steps towards the development of the concept of positive law. But even the written law differs essentially from our modern notion of enacted law. It was not looked upon as the recorded will of an established legislative authority, but rather as a precipitate in writing of ancestral customs. Plato and Aristotle regarded the distinction between law and custom as quite unessential.

Another influence in developing the notion of positive law was the contrast which the Sophists, and later the Cynics, made between *law* and *nature* (*νόμος* and *φύσις*). They declared law a tyrant that compels men to act contrary to nature; all statutes

¹ Schmidt, *Die Ethik der Alten Griechen*, p. 201.

² Sophocles, *Antigone*, l. 450 ff. (Plumtree's translation).

arbitrary enactments set up by those in power for their own advantage. We find here, clearly conceived for the first time, the idea of law as the enacted will of rational beings, and, like many ideas that, when they are old, are regarded as veritable foundation-stones of conventional morals, its first tendency was quite subversive of all morality. As laws and usage had been looked up to hitherto as the only moral authority, this doctrine of the Sophists seemed to dissolve at once all moral as well as political obligation. Man is the measure of all things. Man is the source of the laws that govern his conduct. But if order and harmony in human conduct are brought about by enactments of the human reason, may it not be that the order and harmony in nature are due to the enactments of a universal Reason? If there is a law of men, why not a law of nature? Morality is obedience to law, after all,—not, indeed, to the fickle laws of men, but to the divine law of nature. Thus the Stoics transcended and synthesized the popular view of morals and the Sophistic opposition.

In the Greek conception of a *law of nature* or *natural law* we have something quite different from the natural laws of modern science. We find here the universal, unwritten norms of conduct and the order of physical phenomena combined under the single notion of law of nature. Laws which prevailed among all nations and were acknowledged as binding by all peoples—such as the sanctity of oaths, the duty of hospitality, *etc.*—could not, it was evident, have been founded by any prince or city or revealed by the divinities or oracles of any particular people; they must have their source in the universal divine will and be revealed by nature to all men in their own consciousness. Such universal and unwritten laws of human conduct, as we have already seen, were widely recognized by the Greeks. Heraclitus was perhaps the first to connect expressly this divine law with the order of things in the physical world.¹ Often the two were set in opposition, and

¹ Zeller, *Pre-Socratic Philosophy*, p. 41. An early example of the concept of law in its broadest aspect is the saying of Pindar:—

Νόμος, ὁ πάντων βασιλεὺς
Θνατῶν τε καὶ ἀθανάτων.

even those who insisted most emphatically on the invariable necessity of the natural order — as, *e.g.*, Empedocles, Plato, and Aristotle — did not designate this by the term law. With very few exceptions, before the time of the Stoics this word was applied exclusively to norms of human conduct, the laws of nature, when this expression was used, meaning such rules of conduct as were common to all men and binding upon them by virtue of their very nature.

“It was the founder of the Stoic school,” says Zeller, “who first brought into common use the concept of law as applied to the natural order of things.”¹ The extension of law from the sphere of human action to the physical world was a natural consequence of the fundamental doctrine of Stoicism. The Stoics believed in an ultimate ground and cause of the world, which was not merely the material substance of things, but was at the same time creative Reason. The natural order and necessity in the universe they regarded as the expression of the will of that ultimate Reason, and hence called it the law of nature. As man and nature are both under the same divine law-giver, no distinction was made between natural law and moral law. In the absence of scientific precision the same confusion prevailed throughout the Middle Ages. The laws that determine the order of nature and those which express the duty of man were regarded alike as divine commands. It is only since the sixteenth and seventeenth centuries that philosophers and men of science have held a clear conception of natural law as the expression of the uniformities of the phenomenal world, in distinction from the primary use of law as applied to norms of human conduct.

Were we tracing the history of the concept of law in physical science, we should have now to consider what use the Stoics made of this law of nature in explaining the material world; our interest here, however, is in the use they made of the concept in their moral philosophy.

¹ Zeller, *Ueber Begriff und Begründung der Sittlichen Gesetze, Vorträge u. Abhandlungen* 3 Samml., p. 192. Plato, in the *Timæus*, 83 E, seems to use the phrase “law of nature” in something like the modern scientific sense. Zeller finds one such case in Aristotle; see essay *Ueber Begriff, etc.*, note II.

The central problem of Greek ethics was not to determine the moral laws, but rather to find the chief good and the mode of conduct which would secure it. It is the doctrine of goods, rather than the doctrine of duties, which gave the key-note to the whole moral philosophy of the Greeks. With the Stoics, as with their contemporaries and opponents, the Epicureans, and with Aristotle before them, the aim is to determine the highest good of life. The Epicureans pronounced pleasure the highest good; the Stoics virtue, and virtue they explained as conduct according to the laws of nature. These laws of nature are not conceived so much as imperatives of the divine will which ought to be obeyed because thus commanded, but rather as ordinances of the divine reason, compliance with which can alone secure weal to rational beings.

-The good in every system of thought must be based on the general arrangement of the world, and as the Stoics understand the world to be a cosmos governed by Reason, they consequently found the good of the individual in submitting himself to the laws of this universal Reason. Obedience is not imposed upon man by authority, but men are bound by their very desire for the highest good to obey the laws of their own rational nature, which are at the same time the laws of the rational universe. The grand principle of human life, then, is to live according to nature. But by nature the Stoics meant almost the opposite of what is ordinarily meant by that term. To follow nature with them is not to give loose rein to one's native passions and emotions; it is to conform the individual to the universal and rational. Emotions and passions they regarded as a product of the irrational elements in our make-up, and as such to be negated by the wise man. Hence the modern usage of the term 'stoical.' This failure to provide for the legitimate exercise of the emotions is the pre-eminent defect in the Stoic theory of morals. An adequate ethics will find scope for all of man's faculties and powers, for the symmetrical development of all sides of his nature.

Closely connected with the modern concept of moral law is the idea of duty. Though quite in harmony with their general

mode of thought and intense moral earnestness, the notion of duty as a distinct moral concept does not seem to have been grasped by the Greek Stoics. In the term *καθῆκον*, 'the suitable,' 'the fitting,' 'the proper,' we have the 'lineal antecedent' of our duty. This is the term which was translated into Latin by *officium*. It was probably under the influence of the Roman sternness of character and reverence for law that this notion of duty as the correlate of law first came to consciousness.

The Stoics exalted the individual in contrast with the institutions and laws of human states, but only to subordinate him again to the universal Reason and the laws of the cosmic state. The cosmopolitanism of the Stoics was an integral part of their moral philosophy. It was a cosmopolitanism, too, in the broadest etymological sense of the term; it not only brought the individual into a common citizenship and brotherhood of all nations, but also made him as a rational being a partaker of the rational life of the whole cosmos. The universe is one city governed by one law of nature; and hence all rational beings, as subjects of this law, must be fellow-citizens of the one world-city. Plato had sunk the individual in the state. The Sophists regarded men as lawless atoms, essentially unrelated. By the doctrine of the universal Reason and the law of nature, the Stoics escaped both of these extremes. While doing full justice to the individual, they still emphasized his subordination to law and order. Due weight had been given to the moral significance of the state and legal institutions in the earlier systems, but the Stoics were the first to take the term 'law' out of its strictly jural sense and apply it in a wider and more distinctively moral field.

The notion of law thus borrowed from jurisprudence was destined to be returned with interest. The most signal triumph of the Stoic doctrine of natural law was in its influence on Roman law. The conception of a law of nature furnished the statesmen and jurists of Rome with a moral basis for their law and an ideal by which to direct its reformation and development. From the middle of the second century B.C. on, Greek

philosophy was studied by the leading minds at Rome. Epicureanism helped to break down the superstitious fears of the old gods, but its ethics met with no marked response. The ethics of Stoicism, however, appealed to the moral sense of the nation. Law took on a new and profoundly ethical aspect. Its ultimate seat and authority was seen to be not in the founder of the city or in the will of changeable deities, but in the unchangeable nature of things. Cicero was pre-eminently the great interpreter of the Stoic theory to his countrymen. "I know no reason," says Maine, "why the law of the Romans should be superior to the laws of the Hindoos, unless the theory of Natural Law had given it a type of excellence different from the usual one. In this one exceptional instance simplicity and symmetry were kept before the eyes of a society whose influence on mankind was destined to be prodigious from other causes, as the characteristic of an ideal and absolutely perfect law."¹ The law of Rome, as finally promulgated by the great jurists and handed down to posterity, was the product of a happy union of Roman practice and Greek theory. The Stoic notion of natural law furnished an ideal and ethical basis for the practical legal institutions of Rome, and in so doing gave them a breadth and depth of meaning that has made them of incalculable value in forwarding civilization. In the code of Justinian, the theory of the law of nature was preserved through the Middle Ages. Under the influence of the Church and of the Romanized cities the old law, as a body of practical rules, was kept in use by the Germanic conquerors.

It would be a most interesting historical study to trace the influence of the Stoic doctrine of law of nature embodied and preserved as it was in Roman law, to show how this doctrine affected the development of jurisprudence in France; how the alliance with the lawyers enabled the king to solidify and centralize the monarchy; how, later, Rousseau made of this jural doctrine a political doctrine which thus became the watchword of the French Revolution;² how the same doctrine gave a theo-

¹ *Ancient Law*, p. 78.

² "The theory of Natural Law is the source of almost all the special ideas as to

retic basis to the leaders of the English Revolution; and how, again, the same thought, learned from Locke, Montesquieu, and Rousseau, animated the American Revolution. We must not turn aside, however, to follow this notion of natural law through the tangled web of jurisprudence, theories of the state, and practical politics. Our purpose here is to trace, in the briefest possible outline, the notion of law in the principal systems of ethics, to show the typical forms in which this notion has appeared and its place in these systems.

In the Middle Ages morals and religion, ethics and theology, were inextricably confounded. It is, therefore, in the works of the Christian theologians that we must look for a continuation of the stream of ethical thought in this period. Remembering the stern denunciation which the founder of Christianity pronounced against the legalism of the Scribes and Pharisees, and his constant insistence upon 'inwardness' — *i.e.*, a rectitude of heart and spirit and a positive good-will (*ἡἀγάπη*) — we might expect to find the notion of law playing but a small part in Christian ethics. Three influences, however, may be mentioned, whose combined effect was to give a decidedly jurial form to the moral teachings of Christianity.

(1) The Hebrew origin of Christianity. As among all early peoples, so in the case of the Israelites, religion, morality, and civil law were presented to the popular consciousness in one undifferentiated mass of rules. The law of Moses, the code of ancient Israel, combined in its scope rules of worship, norms of moral conduct, and the legal ordinances of the nation; all alike were regarded as the express commands of Jehovah. The conception of their national god as a god of righteousness gave a peculiar prominence to the ethical portion of these commands. We find, therefore, the Decalogue, combining, as it does, the fundamental principles of religion and the most essential moral norms, early regarded as the core of the Hebrew code; and, after the early Christians had freed themselves from the trammels of the old ceremonial law, the "Thou shalt" and the

law, politics, and society which France during the last hundred years has been the instrument of diffusing over the western world." — Maine, *Ancient Law*, p. 80.

“Thou shalt not” of Sinai still thundered in the consciences of men as the veritable law of God.

(2) A second fact which had an influence in giving a jural form to Christian conceptions of morality was the three centuries of hostility and practical separation between Christianity and the Empire. During this period the Christians made a constant effort to have as little as possible to do with the secular courts. The Hebrew scriptures were regarded as revealing a divine code of laws, and by means of this code they constituted themselves ‘an orderly community essentially independent of the State.’ The moral maxims of the new religion, in taking the place of all civil law for three hundred years, became stamped themselves with the jural form. Among the Greeks, while moral laws were often regarded as of divine origin, the notion of command, the expression of a will, was never more than dimly conceived in the background. These laws were principles of conduct by which alone virtue or happiness could be attained, rather than the imperatives of a divine lawgiver sanctioned by rewards and punishments. In Judaism and Christianity the notion of the imperative came into the foreground.

(3) Besides its Hebrew origin and the peculiar circumstances of its early history, Christianity in the West was subject to a Roman influence which made for legalism. The peculiar jural bent of the best Roman thought and the high success of Rome’s legal institutions exerted a powerful effect on Latin Christianity. The very language was saturated with legal concepts. The mere translation of the New Testament into Latin gave to Christian doctrine a decided jural tone that had been quite unsuspected in the Greek. God was no longer the Heavenly Father of the common man or the Universal Reason of the Greek philosopher, so much as the Moral Governor of the world, bound to maintain a just government. Then, too, the ecclesiastical authorities not only exerted all their influence over the Teutonic invaders towards maintaining Roman jurisprudence, but they adopted the Roman law as the canon law of the Church.

All of these legalizing influences had had time to work their

full effect on Christian thought when, in the thirteenth century, "a genuinely philosophic intellect, trained by a full study of the greatest Greek thinker, undertook to give complete scientific form to the ethical doctrine of the Catholic Church."¹ In the system of Thomas Aquinas the notion of law occupies a highly prominent, if not the first, place. It was the influence of Aristotle, doubtless, that led him to give the first place to the doctrine of goods and virtues. The most complete statement of his moral philosophy is found in the first part of the second division of the *Summa Theologica*. He begins with a discussion of the chief good, which he finds to be the blessedness of union with God. He next treats of the virtues, and, following "the philosopher," divides them into intellectual and moral. The moral virtues, again, are classified into the natural or acquired and the theologic or instilled. Those virtues which may be acquired by the natural man are the four cardinal virtues of the Greeks, — Prudence, Temperance, Fortitude, and Justice. Besides these, as necessary to the highest end of man (communion with God), there are the three theologic virtues which are instilled in man by divine grace, — Faith, Hope, and Love. This analysis of the virtues is followed by a subtle discussion of sin, and then the subject of law is taken up.

Thomas defines law as "an ordinance of reason for the common good which is promulgated by him who has charge of the community."² Four kinds of law are distinguished, — eternal, natural, human, and divine. The *eternal law* is the divine reason of the supreme governor of the universe by which all creatures, rational and irrational, are ruled. This law, in so far as it applies to rational creatures, is given to them in two ways, — naturally and by special revelation. Hence the two kinds, natural and divine, corresponding to these two modes by which the law is made known to men. A portion of the eternal law God has so implanted in men's minds as to be known by natural reason. This is *natural law*, or the *law of nature*. All rational action aims at some good. The first principle,

¹ Sidgwick, *History of Ethics*, p. 110.

² *Summa Theologica*, Prima Secundæ, Quæst. XC, Art. iv.

therefore, of natural law is that good should be done and sought and evil avoided. Upon this principle are founded all the other precepts of the law of nature for the sake of whatever the practical reason naturally apprehends to be human goods.¹ *Human laws* are the special rules of particular communities deduced by the reason from the precepts of natural law. Obedience to the law of nature suffices for attaining to the natural or acquired virtues. Since, however, man is ordained to an end higher than the natural, it is necessary for the direction of human life that we have, besides natural and human law, *divine law*, given by God to man by special revelation. This divine law is double, — the one revealed in the Old Testament through the instrumentality of angels, the other in the New Testament by God himself made man. The divine law is ordained to secure the communion of men with God. To its positive commands, “without which the order of virtue, which is the order of reason, could not be observed,” it adds as counsels the monastic virtues of poverty, celibacy, and obedience, which, though not obligatory, afford a superior means for attaining to the perfect life.²

In Thomas Aquinas we have the culmination and epitome of Scholasticism, “the crowning result of the great constructive effort of mediæval philosophy.” The part which the jural view of morality plays in his ethical system illustrates very fairly the position of this view in Christian ethics in general. The Decalogue, with its never failing appeal to the moral consciousness, has been to Christians and to all who have come under the influence of Christianity the pre-eminent summary of moral principles; and, being expressed as the command of God, it has appeared as a moral law. Morality and obedience to the Ten Commandments are to many almost synonymous terms; and this fact, together with the other influences already mentioned, has given a prominently jural form to the ethics of the Church in modern times as well as in the Middle Ages.

Mediæval philosophy was characterized by submission to

¹ *Summa Theologica*, Prima Secundæ, Quæst. XCIV, Art. ii.

² *Ibid.* Quæst. C, Art. ii.

authority, — on the one hand to the Church, and on the other to Aristotle. Modern philosophy yields to no authority, but, facing freely the problems of the universe, seeks a solution which shall force irresistible conviction upon every intelligence. In the modern attempt to establish morality on an independent foundation, *i.e.*, independent of special revelation and of ecclesiastical authority, the notion of the law of nature was the first principle seized upon. If we examine the moral philosophy of Aquinas, two points present themselves on which, conceivably, an independent, rational morality might be founded, — (1) the acquired virtues, (2) the law of nature. It was the latter of these principles which actually served as the starting-point of modern ethics. The need of a new moral philosophy was first felt in politics. Renaissance and Reformation together had undermined the traditional confidence in the old authorities. Whenever there was a difference of faith between king and subjects, a new question as to the duties of allegiance was raised; and now that the general supremacy of the Pope over the nations was no longer recognized, a new theory was required to determine the relations and duties of independent states to one another. It was for the purpose of solving the problems arising from the changed relations of nations, that Grotius composed his epoch-making work, *De Jure Belli et Pacis*, — the work which is universally recognized as the foundation of the modern system of international law, and which also made the beginning of independent ethics in modern Europe. The basis on which he erected his system was the old Stoic theory of the law of nature as it had been handed down by the Roman jurists and ecclesiastical moralists.

In England the beginning of moral philosophy was the theory of the state propounded by Thomas Hobbes. According to Hobbes, man by nature is impelled only by self-interest, and all moral norms spring from the state and are determined by the civil law. The original state of nature was a condition of war of every man against every other man. In this state of affairs there was no law and no morality. Since reason, however, directs each to seek his own good and preserve his own

life, the first law of nature is 'to seek peace and follow it'; and this involves the giving up of such rights as hinder the peace of mankind and the performance of covenants, provided we can be assured that others will do the same. Such assurance can be had only when there is some coercive power to compel men equally to perform their covenants. The only way to erect such a power is by common consent to confer the power and strength of all upon one man or upon one assembly of men. After the sovereign power is once established, it is the duty of every one to yield implicit obedience to it in all matters. The civil laws which the sovereign institutes are to determine without question the conduct of the subject. They are to him the ultimate standards of right and wrong, good and evil. It is in his making all practical morality consist in obeying the laws of the state, that we find the jural aspect of Hobbes's moral philosophy. The laws of nature which serve as a theoretic basis for his system are jural only in the mode of expression, and not at all in the concept itself. The phrase 'law of nature' was one held in high respect by jurists, ecclesiastics, and rationalists. It was, therefore, a very advantageous phrase for the founder of a new theory of the state to have continually in his mouth. Indeed, Hobbes himself is careful to state that he does not in reality attach any jural significance to the term.¹

In the writings of Cudworth, the foremost of the "Cambridge Platonists" of the seventeenth century, we find a noteworthy opposition to jural conceptions of morality. In his view neither civil law nor divine law can determine morality. Good and evil are essentially and eternally distinct, and no mere will, not even that of God himself, can alter this distinction. Moral truths are immutable ideas of the divine reason, and, like the truths of mathematics, are apprehended by the human reason, and are, therefore, equally valid for all rational beings. In the ethics of Locke and Cumberland we find the jural concepts again regnant. Both of these philosophers treated morality as a code of laws promulgated by God, revealed in the natural

¹ See the close of chapters xiv and xv of the *Leviathan*, which he devotes particularly to the definition and deduction of the laws of nature.

reason, and sanctioned by rewards and punishments. By thus holding the law of God to be knowable by natural reason, they distinguished it from the divine law of the Hebrews and mediæval moralists. This distinction might be expressed by calling the ethics of the former *theologic* juralism, the latter *Hebraic* juralism.

The most thorough-going presentation of theologic juralism in moral philosophy, the culmination of the ethical theories of 'natural theology' as taught in the seventeenth and eighteenth centuries, is found in the system of Paley. With him the law of God is no mere incidental factor or theoretic basis, but the moving principle of the whole system. The moral law is conceived in complete analogy with civil law. It is the express command of a lawgiver who has the authority and power to enforce his will by rewards and punishments. In the ethical systems thus far considered we have found the law of nature, the law of God in two forms, and the law of the state, playing a more or less prominent part. Natural juralism, Hebraic juralism, theologic juralism, and civil juralism all involve the notion of a source of law apart from man. These systems, therefore, may all be designated as *heteronomous*. In signal contrast with all these is the system of Kant, which finds the moral law in the man himself, — the *autonomous* system.

In the present century the tendency of ethics, on the whole, has been away from the jural type. The phrase 'moral law,' however, has continued to occupy a prominent place in ethical discussions. The popular conception of morality as the command of the deity, the long and honorable history of the term in philosophy, the majesty of the civil law, the appropriateness of the term to express the unconditional necessity of moral duties, — all of these circumstances combine to keep the term in use, even though it is regarded as only a metaphor. Perhaps, too, the use of the word 'law' in the physical sciences has made moralists who retain little of the old jural sense of the term still cling to the word. "Metaphors from law and metaphors from war," says Bagehot, "make most of our current moral phrases, and a nice examination would easily explain that

both rather vitiate what both often illustrate." The "metaphors from law," however, will doubtless long continue to furnish the most effective means for popular instruction in morals; and if the different senses of the term be carefully distinguished, perhaps no more useful term can be found for the ethical scientist.

In all the sciences of to-day the term 'law' plays an important part. While the one term is used with equal freedom in all, the corresponding concept takes on almost as many different forms as there are different sciences. We hear continually such expressions as laws of motion, laws of chemistry, laws of logic, laws of poetry, laws of the state, laws of etiquette, etc. Among all these various uses of the term we may distinguish two typical forms of the concept: (1) law in jurisprudence, (2) law in physics. The first is the original form of the concept, the second a derived form. All the other uses of the term are varieties of one or the other of these fundamental species of the concept, or else more or less confused combinations of the two. "The term law," says Zeller, "in all languages meant originally a rule of conduct established by some person, whether human or divine, with regard to the conduct of man; a law is what the community requires or the Deity commands."¹ It is precisely in this same sense that we use the term to-day in jurisprudence. Holland gives the definition: "A law is a general rule of external human action enforced by a sovereign political authority."² This form of the concept involves three essential elements. To see these clearly we may state the definition thus: A law is (1) a rule of conduct which (2) a will in authority imposes upon (3) a subject will.

(1) The essence of the first element, rule of conduct, is *uniformity in action*. Without prescribed rules one man may act in one way, another in another, or the same man in different ways at different times. Wherever uniformity is observed in the conduct of men, it is ascribed to laws of some kind, — as the laws of the state, laws of custom, laws of nature, etc. Thus the law is an expression of uniformity in action. (2) This rule

¹ Vorträge und Abhandlungen, 3 Samml., p. 189.

² Elements of Jurisprudence, p. 37.

of action is always thought of as established by some power in authority. Hence, as a second element, we must recognize the *legislative will*. (3) The rule of action is laid upon some person, *i.e.*, upon a free will who may or may not conform to it. The freedom of the subject, or the *possibility of nonconformity*, is always contemplated in this sense of the term. This first typical form of the concept law involves, therefore, these three essential elements: uniformity in action, a legislative will, and freedom or the possibility of nonconformity on the part of the subject.

The Stoics, as we have seen, explained the natural order and necessity in the world as the expression of the will of universal Reason. They used the phrase 'law of nature' indifferently for the order in the physical world and for the principles of moral conduct. Now in the Stoic concept of law of nature as applied to the physical world, we find the element of uniformity of action as in the first form, the legislative will broadened into a universal Reason, but the third element, that of freedom, completely vanishes. In this case the law is not imposed upon persons who may or may not obey, but upon inert matter which always conforms to the law necessarily. Again, eliminating from this Stoic concept the second element, we have left the modern scientific idea of natural law. The legislative will and the possibility of nonconformity have disappeared, and there remains only the first element—uniformity in action. The metaphysical philosopher may still resort to an ultimate rational will to explain the order in nature, but the physicist, as such, uses the term law without any implication of a lawgiver. To him the law is the expression for the mode of action in things, not for something outside of things. It is simply the statement of the fact of a certain uniformity in nature. The general form of a law in physics is: Under certain conditions certain events always happen. This unexceptional validity of the physical law is its characteristic mark. Of the three essential elements in the jural sense of the term, we find only one in the physical law, *viz.*, uniformity in action.

What, now, is the relation of the concept moral law to these two typical forms of law?

The moral laws are those rules of conduct which we feel ourselves under obligation to obey. Briefly put, the moral law is the code of duties. In this general formal definition all moralists would agree, I think. It is in regard to the source, end, scope, and content of the code of duties that the schools differ. According to the Hebraic or the theological conception of morality, these norms of conduct are laid upon man by the divine lawgiver. In this case the moral law is of precisely the same type as civil law. The three elements of this type are all present, — the prescribed uniformity of conduct, the legislative will, and the subject will. Or if with Hobbes we regard the state, or — with certain recent writers — society or humanity the source of the law, we find the same essential agreement with the jural form of the concept.

But, as Kant has so well shown, any command which is put upon us by an external will can have of itself only the force of *legality*. It acquires the force of morality, obedience to it becomes a duty and not merely a matter of prudence, only as we bind it upon ourselves and it is brought by self under the feeling of obligation. No imperatives of parents, the state, or even of divine revelation, could command anything but a prudential, legal conformity, unless at the same time they appealed to the inner sense of duty. Such externally imposed imperatives may well be the *ratio cognoscendi*, but never of themselves the *ratio essendi*, of the moral law. "It is the very essence of moral duty to be imposed by a man upon himself . . . what we primarily understand by 'law' is some sort of command given by a superior in power to one whom he is able to punish for disobedience; whereas it is the essence of moral 'law' that it is a rule which a man imposes on himself, and from another motive than the fear of punishment, . . . the spirit of man sets before him the ideal of a perfect life, and pronounces obedience to the positive law to be necessary to its realization."¹ Thus in morality the legislative will is one with the subject will. But the concept of law still remains of the same general type. We still have the three elements of law as in jurisprudence.

¹ T. H. Green, *Prolegomena to Ethics*, p. 354.

While the term 'law' is generally used in ethics, as above described, in the jural sense, we should not forget the existence of laws in the physical sense. In moral phenomena we find certain uniformities of sequence as well as in physical phenomena. Conduct and character are causally related, and this relation it would seem possible to express by general formulæ, *i.e.*, by laws. The general form of such a natural law of ethics is: Such and such conduct produces such and such states of consciousness and such and such character. Selfishness brings unhappiness; violation of duty is followed by stings of conscience; lying degrades character, — these are examples of laws in the moral sphere in just the same sense, and of just the same validity and necessity, as the facts that ice melts at thirty-two degrees, and that a falling body increases in velocity as the square root of the distance. Spencer says: "I conceive it to be the business of Moral Science to deduce, from the laws of life and the conditions of existence, what kinds of action necessarily tend to produce happiness, and what kinds to produce unhappiness. Having done this, its deductions are to be recognized as laws of conduct."¹ Now, without making this the whole business of ethics, it is certainly a part of its work to discover these 'laws of conduct.' We may not believe, as Mr. Spencer seems to, that these laws can be deduced from biology. We may have to discover them empirically rather than deductively. We may, too, be more interested to know what sort of conduct makes for the 'health of the social tissue' or for perfection of character; but, at any rate, besides investigating ends and motives, ethics must formulate the laws of conduct by which the chosen ends may be attained. In logic and æsthetics, and indeed in all the practical sciences, we find this same double use of the term 'law.' The laws of logic, as statements of the mind's procedure in thinking, are necessary sequences of the same type as physical laws. But when from these laws of thought we form rules of argument, we have imperatives which we bind upon ourselves in view of certain ends, *i.e.*, laws in the jural sense of the concept. So, too, in æsthetics, from the principles of beauty we

¹ Data of Ethics, p. 57.

derive rules of art and use the term 'law' indiscriminately for both the principles and the rules. Since these two widely different concepts are both expressed by the one term 'law,' and since we have laws of both types in morals, ethical writers need to be particularly careful in order to avoid the confusion of the two which has been made so often in the past.

F. C. FRENCH.

COLGATE UNIVERSITY.

J. H. LAMBERT: A STUDY IN THE DEVELOPMENT OF THE CRITICAL PHILOSOPHY.¹

ALTHOUGH once famous as a philosopher and mathematician, Lambert is probably now best known as one of Kant's numerous correspondents. In fact, his contributions to systematic philosophy are now quite forgotten.² Nevertheless, the views expressed in his letters to Kant are so remarkable as to suggest the advisability of investigating more fully not only the possible influence of Lambert upon Kant, but also the true significance of this philosopher in the historical development of speculative thought. The solution of these problems is the object of this paper; but first let us give a brief exposition of the views of Lambert as contained in the works which will serve as the basis of our investigation.

Lambert's purely philosophical publications are few in number. The only two of much importance are the *Cosmological Letters*, published in 1761, and the *New Organon*, which appeared in 1764. Directing our attention to these, the *Cosmological Letters* consists of what were, for the time, most remarkable astronomical speculations. It resembles in many ways the treatise of Immanuel Kant on the same subject. In addition, however, to the purely scientific discussion, there is not a little that verges on the domain of metaphysics. Although a Newtonian, the author considers the law of gravitation as only a descriptive formula, not a metaphysical truth; for *actio in distans* he regards as inconceivable, since contrary to experience. The same mode of reasoning, it is interesting to note, appears to lie at the basis of the modern theory of ether as the only explanation of optic and electro-magnetic phenomena, and probably of

¹ Johann Heinrich Lambert was born at Muelhausen, Alsace, 1728. His death occurred in 1777. There is but one edition of his principal philosophical work, the *Organon*, that of 1764 (Leipzig).

² An enthusiastic, but extremely partial, discussion of Lambert's work is given by R. Zimmermann: *Lambert der Vorgänger Kants*, *Sitzungsberichte der Kaiserlichen Academie der Wissenschaften zu Wien*, 1879.

gravitation as well. Lambert, furthermore, argues from the successes of the empirical method in physical science, that all our knowledge is based on experience, but that the greater our knowledge of the physical universe, the greater appears to be our ignorance of its true constitution. He holds, however, that Leibnizian Teleology is quite in harmony with a mechanical theory of the universe, such as experience shows to exist. From this it is evident that Lambert is realistic in his sympathies, and that he endeavors to reconcile empiricism with rational metaphysics.¹

In the *Cosmological Letters*, as we have seen, Lambert is led up to ontological problems from the inductively ascertained laws of physics and astronomy. In the *New Organon*,² on the other hand, which is a treatise on logic and scientific method, we are introduced to the problems of the theory of knowledge and ontology by the subjective, as opposed to the objective, method of philosophizing. It will be found that the results which the author arrives at are similar. The epistemological problem is developed in the *Organon* from the consideration of the function of experience in scientific knowledge. All knowledge, the author argues, is not empirical; for this would give only historical enumeration.³ In scientific knowledge individual empirical cognitions are synthesized into a systematic unity. Such scientific cognitions as the laws of physics or the theorems of mathematics, have as their basis simple, homogeneous concepts,⁴ such as *time, space, solidity, etc.* Many of these correspond to the primary qualities of Locke. These are non-contradictory, Lambert holds, since they are qualitatively heterogeneous with each other. Hence their representation involves their possibility. They are, therefore, independent of experience, or *a priori*; though experience is necessary in

¹ Lambert's speculative reasonings are scattered throughout the entire book. But though the thought is not systematically developed, the above appears to be the author's position.

² The full title of the work is: *Neues Organon, oder Gedanken über die Erforschung und Beziehung des Wahren und dessen Unterscheidung von Irthum und Schein.*

³ Vol. i, ch. ix, § 600.

⁴ Einfache Begriffe.

order that these concepts be brought to consciousness (§ 656). Furthermore, the *a priori* sciences of geometry and kinetics prove the *a priori* nature of the concepts that make them possible (§ 658). Such being the process of knowledge, what relation does knowledge have to being? In answer to this, Lambert argues that idealism cannot explain the distinction we make between the true and the apparent, a position clearly that of the scientist rather than the metaphysician. But the senses by which we perceive the objective world, Lambert continues, are limited in their ability to respond to external stimuli. We have no means of perceiving electric phenomena directly, nor yet the ether waves beyond the red and the violet ends of the spectrum. The objective phenomena, furthermore, which we perceive are homogeneous, since they are all modes of motion; but the subjective corresponding phenomena are heterogeneous sensations.¹ Hence, from the very nature of knowledge, involving, as it does, a subjective factor, a philosophy of pure realism is impossible. But an objective factor, also, is necessary in cognition. By developing, therefore, our scientific knowledge from empirical and consequently objective data, we may in our thought approach nearer and nearer to the ultimate reality that underlies the apparent. But this ultimate reality we can never reach, by reason of the partial subjectivity of knowledge, and the world as known, therefore, will ever be but a symbol of that which is.²

From this brief exposition of the Lambertian philosophy, we cannot but conclude that the author was endeavoring to solve the one philosophic problem of the age, and effect a reconciliation of the empirical and rational theories of knowledge. Lambert was, therefore, on Kantian ground, and it is necessary to point out more clearly the exact relation that exists between the two systems of thought.

Noticing briefly the points of contact in the early astronomical speculations of Lambert and Kant, before proceeding to a comparison of their respective theories of knowledge, we

¹ Vol. ii, *Phänomenologie*, ch. 2, § 64. It is evident that Lambert foreshadowed the modern discoveries of Psycho-Physics.

² *Ibid.* § 89.

observe that though they were both ardent Newtonians, Lambert did not accept the law of gravitation as necessarily a metaphysical truth; Kant, however, with less caution, assumed the principle of the dynamical action and interaction of matter, and sought to refute thereby the Leibnizian Monadology. The two mathematicians, nevertheless, were otherwise quite in agreement, for both endeavored to reconcile teleology and mechanism.

Passing now to the more important question of the respective contributions of the two thinkers to the theory of knowledge, the problem proposed in the *Critique* and that which is developed in the philosophical section of the *Organon* are essentially the same: that of Kant is, How are synthetic, *a priori* judgments possible in mathematics and in physics? that of Lambert is, How is scientific knowledge possible? The methods employed are also very nearly identical. Kant's method is, to analyze knowledge and the fundamental element in knowledge — experience; that of Lambert is, to analyze scientific knowledge. Kant, however, clearly followed the critical method more rigorously, even if, as some hold, unsuccessfully; for he sought to demonstrate how experience itself is possible. His predecessor analyzed knowledge, but not the important element in knowledge. As regards the results arrived at by their analyses, both philosophers agree in considering all knowledge to be based on experience, and in assigning to the objective and subjective factors alike a share in the process of cognition. Their criteria, furthermore, are the same; necessity and universality are regarded as non-empirical, and therefore *a priori*. Still more important, as regards his relation to Kant, is Lambert's view that the *a priori* concepts are formal principles only, and do not therefore give material truth. To this fundamental doctrine of the later Critical Philosophy, Lambert, unfortunately, does not consistently adhere. For his confusion of the ontological with the subjective validity of the simple concepts is in direct contradiction with this doctrine.¹

¹ Lambert speaks of the propositions of geometry as "eternal and unchangeable truths." Vol. i, ch. 2, § 658.

In fact, his vacillating adherence to the dogmatic ontology of the age is in marked contrast with the clearly developed Kantian refutation of the Wolffian method. Probably, however, had Lambert been aware of the logical conclusion of Locke's sensationalistic epistemology in Berkeleyan Idealism, he would have avoided, as did Kant, such a contradiction. And had he read Hume, his main argument for the absolute objectivity of the physical world, that there must be a cause of sensation, would have vanished. But it is a matter for discussion whether Kant himself, in spite of his study of Hume, may not be criticised as regards his views on causality and its application to the *Ding-an-sich*.

Remarking now briefly upon Lambert's thought as a unity, there is, we think, a fundamental fallacy in the *Organon*. I refer to its eclecticism. Lambert sought to unite the philosophies of Leibniz and Locke. But the main problem was one of method, and the two methods, empiricism and rationalism, were diametrically antithetical. The Kantian Criticism did not seek to unite the two methods, but rather to construct a new method to take the place of its predecessors. Lambert perceived clearly the need of a new method in philosophy,¹ but this he failed to give. The *Organon* is rich in scientific method, but formulates no laws of philosophical method. Nevertheless, the general trend of thought in the *Organon*, not to speak of many important doctrines, is in reality that of the *Critique of Pure Reason*.

As to the possible influence exerted by Lambert upon the Königsberg philosopher, this might have taken place in one of two ways,—either through the published works of Lambert, or through his letters to Kant. Discussing first the relation of Lambert's publications to the thought of Kant, the *Theory of the Heavens* was written independently of Lambert's astronomical speculations, as it was composed before the *Cosmological Letters* was published. With regard to the *Organon*, it is doubtful whether Kant was influenced by any of the views here expressed, unless it was by those bearing on the *a priori* basis

¹ *Vide* Neues Organon, Preface; also Lambert's letters to Kant.

of mathematics. But this problem can be discussed to better advantage in connection with the correspondence of Kant and Lambert. There is nothing to indicate that Kant received any other important suggestion from Lambert's work. Even at this period (1764), Kant's thought had reached such a point in its development that he could have derived but little from Lambert's attempted reconciliation of the Lockian and Leibnizian theories of knowledge. Even Lambert's exhaustive discussion of being and appearance (*Sein* and *Schein*), which reminds one of the Kantian distinction between *noumenon* and *phaenomenon*, it is unnecessary to consider. For Kant must inevitably have been forced to such a distinction, rejecting as he did the Wolffian theory of thought and reality.

Turning now to the correspondence of Kant and Lambert,¹ we find that in November, 1765, the then famous mathematician wrote to the Königsberg docent, calling his attention to the similarity of their views in astronomy and in philosophy, for Kant had already published his *Theory of the Heavens* and also his dissertation on *The Only Possible Proof for the Existence of God*. Lambert proposes, moreover, that they plan a joint philosophical undertaking. The object of this is to be the improvement of metaphysics, and above all the perfection of a new method, for this is especially needed, since the method of Wolff, which proceeds in a circle of definitions and assumptions, has already proved its inadequacy.² To these overtures Kant immediately replied, accepting Lambert's offer, of which he shows the warmest appreciation. Lambert wrote again a month later, stating as the problem of interest, "whether, and if so how far, knowledge of form leads to knowledge of matter."³ In philosophy, Lambert explains in some detail, we cannot resort to intuition as in mathematics, as we are here concerned with material, not merely formal truth. But if we wish to make progress in metaphysics, we must go back to the simplest elements in knowledge. Unfortunately Kant did not reply to this

¹ This correspondence may be found in Rosenkranz' Kant, vol. i; also in Harstein's Kant, vol. viii.

² Rosenkranz' Kant, vol. i, p. 347.

³ *Ibid.* p. 354.

letter. In 1770, however, he sent his inaugural dissertation, *On the Form and Principles of the Sensible and Intelligible World*. In acknowledging the receipt of this letter, Lambert accepts the conclusions of Kant as to the intuitional basis of time and space, but denies that time is merely an *a priori* form of sensibility on the ground that changes in consciousness necessitate the reality of time.

This correspondence, we observe, began in 1765. At this period Kant had already broken away from the fundamental ontological fallacy of the Leibniz-Wolffian philosophy, and had made the distinction between formal or mathematical, and material or metaphysical truth. This is shown by the essays that appeared from 1762 to 1763. Kant could not, therefore, have been indebted to the corresponding suggestions of Lambert. He had furthermore already arrived at a conviction of the need of a new method in philosophy, which should serve as a criterion for metaphysical speculation, for he himself so states, both in his letter to Lambert and also in a letter to Bernoulli. Again, Lambert's profound conception of the necessity of basing philosophical reasoning upon what is now called the theory of knowledge was probably not new to Kant. Even before this, he was reported to have said that "Metaphysic is nothing but a philosophy of the first principles of our knowledge."¹ Consequently we cannot regard these most Kantian views of Lambert as more than historical coincidences.

There is, however, one doctrine which, we think, may possibly be of more historical importance. I refer to Lambert's repeated discussion of the problem of mathematical judgments. The reason of the great progress of mathematical science, Lambert declares, is that it is based on simple, homogeneous concepts, heterogeneous elements never being introduced.² Not only this, but the mathematician starts with intuitions, not with arbitrary definitions. Now it is quite possible that we have here the germ of the celebrated theory of the Transcendental

¹ *Vide* Stuckenberg, *The Life of Immanuel Kant*, p. 239, where this is stated positively. The author does not give his authority.

² Rosenkranz' *Kant*, vol. i, p. 356.

Æsthetic. It was upon the intuitional basis of mathematical judgments that Kant based his reasonings as to the intuitive, *a priori* nature of space and time. There is no evidence that I know of that Kant began the investigations which led to his final doctrine, before the period at which Lambert's letter was written. His mathematical studies, it is true, had shown him the erroneous use in philosophy of the mathematical method. But in his essay, *The Attempt to Introduce Negative Quantities into Philosophy*, the discussion is of logical, not sensuous problems. Kant had learned at this time that synthesis of ontologic validity was impossible for thought; he had not learned that it was likewise impossible for sense. Furthermore, in his reply to Lambert's letter sent him four years before, Kant discusses the problem of mathematical cognitions referred to by Lambert, and even states, to quote his own words,¹ "I could resolve upon nothing else than to communicate to you a clear outline of the way in which this science appeared to me, and also a definite conception of its peculiar method. In carrying out this intention I was led to investigations *that were entirely new to me. . . . But a year ago did I arrive at this conception.*"² Does this not at least make probable that it was Lambert's views that formed the starting-point of the Kantian conception of the transcendental ideality of time and space as the only possible solution of the problem of mathematical judgments? Besides, the step was short from a formal *a priori* concept to a form of sensibility, since Kant's reading of Hume had shown him the importance of sensation. Lambert, having read only Locke, whose sensationalistic epistemology is incomplete, failed to draw this distinction. In his final letter to Kant, however, he agrees with him in paying this tribute to sensation. Again, once having given that time and space were *a priori* forms of sensibility, the natural supposition was that they were nothing more, at least from the standpoint of Kant, who had rejected the Leibnizian identification of thought and reality. But aside from these reasons, it is certain that from about the time when Kant received Lambert's letter until 1770 he was at work upon

¹ Rosenkranz' Kant, vol. i, p. 358.

² The italics are my own.

this very problem of mathematical knowledge. It is equally certain, for he himself so states, that up to the time he received Lambert's first letter he was occupied in an entirely different sphere of speculation, the method of philosophy, the metaphysical principles of morals, and the principles of natural (not mathematical) science. From these various facts we cannot but conclude that it is more than possible that the starting-point of the Transcendental *Æsthetic* was unconsciously given by Lambert. And if it is to Lambert that Kant owed the starting-point of his theory of sensibility, it is to Lambert that he owed the starting-point of his entire theoretical philosophy.

We have now completed our examination of the historical relation existing between Lambert and Kant, as well as of the relative worth of Lambert's contributions to philosophy considered with reference to those of his successor. It remains only to point out that the position of Lambert in the history of speculative thought is quite independent of the purely logical validity of his philosophic *Weltanschauung*. Whether or not his epistemology be more tenable than that of Kant, it failed utterly to break the metaphysical deadlock of the age. It was not the *Organon*, but the *Critique of Pure Reason*, that developed clearly that fundamental conception for which the philosophic consciousness of humanity was then waiting, that of truth subjective as separate and distinct from truth as applied to things-in-themselves. Nevertheless Lambert's work, considered of itself, without reference to its possible influence on Kant, is of not a little historical significance. For, even though shadowy and incomplete, it may, we think, justly be regarded as the premature objectification of critical tendencies not yet ripe for fruition, but which when fully matured, reached their final perfection in the philosophy of Immanuel Kant.

HAROLD GRIFFING.

COLUMBIA COLLEGE,
October, 1892.

REVIEWS OF BOOKS.

A History of Æsthetic. By BERNARD BOSANQUET, formerly Fellow of University College, Oxford. London, Swan Sonnenschein & Co. New York, Macmillan & Co. 1892.

The third volume of the important international *Library of Philosophy*, under the editorship of Mr. J. H. Muirehead, should, for many reasons, be of a character to command attention. It is the first volume in the series by an Englishman; it represents a branch of philosophy within which English philosophical literature is most deficient, and it comes at a time when reflection is awakening to the profound importance of art as a subject-matter for philosophy—when, indeed, it seems likely to divide with psychology the interest of the immediate future. We may congratulate ourselves upon having a volume so nearly adequate to its occasion. Mr. Bosanquet has written neither a history of æsthetic speculation in its most technical sense, nor has he fallen into the opposite mistake and given us a history of the details of the concrete arts. The plan of writing the history of “the æsthetic *consciousness* in its intellectual form of æsthetic theory, but never forgetting that the central matter to be elucidated is the value of beauty for human life, no less as implied in practice than as explicitly recognized in reflection,” Mr. Bosanquet has carried out in such a way that his volume unites a philosophic continuity of thought with something of the wealth of actual art. I mention this point at the outset, for the characteristic trait of the work before us seems to me the successful way in which Mr. Bosanquet has combined the use of certain philosophic ideas as tools to bring unity and orderly development into the discrete and tangled mass of æsthetic speculation with a certain maturity of judgment about concrete facts. The book carries with itself as its atmosphere ripeness and soundness of incidental remark. Although, for example, Mr. Bosanquet in his preface especially denies any large firsthand acquaintance with mediæval thought, I cannot but think that the student of general history as well as of æsthetic theory, will find what is said upon this subject lingering fruitfully in memory.

Mr. Bosanquet's definition of art is so important as controlling his whole treatment of the historic development of æsthetics that it must be fully reported. He gets his definition by comparing the Greek conception of beauty with that most characteristic of modern thought. Among

the ancients the emphasis was laid upon the formal or logical traits : upon rhythm, symmetry, harmony, in short, upon the general formula of unity in variety. The modern way of looking at it thinks rather of meaning, of expressiveness, "the utterance of all that life contains." The contrast gives not only the conditions for a complete definition, but suggests the lines for the historical discussion. The resulting definition is that beauty is characteristic or individual expressiveness for the imagination, subject to the conditions of expressiveness within the same medium. The historical record evidently consists in tracing the steps by which the more formal conception of the ancients was broadened to include, under the notion of characteristic, material which both the ancient theory and practice would have excluded as beyond the range of the beautiful. Because of this method Mr. Bosanquet devotes much attention to the æsthetics of the ugly and the sublime, as they gradually emerge in historic reflection, since the consideration of these topics marks a widening horizon in conceiving of beauty. The important problem of the relation of beauty to the feeling of pleasure Mr. Bosanquet disposes of, by saying that we must have some generic conception of what beauty is before we have any differentia for marking off æsthetic pleasure from any other kind of pleasure ; as such differentia he suggests "pleasure in the nature of a feeling or presentation, as distinct from pleasure in its momentary stimulation of the organism." The equally important question of the limitation of beauty to art to the exclusion of nature is disposed of by showing that the beauty of art does not exclude that of nature ; any natural product in so far as it is viewed as beautiful becomes, for the time being at least, artistic. "Nature for æsthetic theory means that province of art in which every man is his own artist."

Mr. Bosanquet, as it seems to me, shows good judgment in making his discussion of ancient theory turn about the fact which has perplexed every student of ancient thought, — the seeming paradox that the Hellenic nation, the most artistic in the world in its practice, should in its theory, as seen in Plato and Aristotle, either have taken a hostile attitude to art or adopted a theory — that of imitation — which reduces the meaning of art to a minimum.¹ According to Mr. Bosanquet this attitude is due to a subordination, among the Greeks, of strictly æsthetic considerations to metaphysical and moralistic assumptions. The metaphysical assumption, almost inevitable to the period of transition from artistic produc-

¹ It may be noted here that Mr. Bosanquet makes no reference to that interpretation of Aristotle according to which "limitation" is not of any given product, but rather of the process by which the thing is originally brought into existence. Upon such a theory, imitation becomes re-creation (or reproduction), and the apparent discrepancy is very largely covered.

tion to that of reflection upon the products of art, was that artistic representation is no more than a kind of commonplace reality, related to the purposes of man precisely as everyday objects are related, except that the existence of the work of art is less complete and solid. Hence the essence of art was conceived, not as symbolic of an unseen reality behind the common object, but as merely imitative of the common object. This being premised, the moralistic assumption at once follows: to represent an immoral content is just to duplicate the instances of immorality and the temptations to it. In the region of *specific* æsthetic criticism the Greeks contributed, and Aristotle in particular worked out into some detail the idea already referred to — that of unity in variety, or the relation of the part to the whole. The metaphysics of art has a value partly negative and partly positive; positively, Plato and Aristotle contributed the necessary basis of all æsthetics in the conception that art deals with images and not with realities. Negatively they furnished a *reductio ad absurdum* of the imitation theory. Plato's discussion might be summarized, "So far as this is the true explanation of art, art has not the value popularly assigned to it."

I must omit all that is said of the details of Plato and Aristotle as well as of the Græco-Roman period (although this latter well illustrates what I have said regarding Mr. Bosanquet's cultured judgment) and come to Plotinus, in whom Mr. Bosanquet finds the first important theoretical reconstruction of the Platonic conception. While Plotinus still retains the conception of a spiritual or immaterial beauty, he admits a true natural beauty produced by participation of the material thing in the reason which emanates from the divine. Thus he defines art as following not visible things directly, but rather the reasons from which visible things proceed. This same theory, by carrying beauty back of merely formal and surface traits, also broke the tradition which limited beauty to symmetry, and gave a chance for theories which made something more vital of it.

The development of Christian thought with relation to æsthetics connects itself naturally, and perhaps historically, with the ideas of Plotinus. Corporeal objects were conceived as signs or even as counterparts of spiritual realities. Such a theory may be turned in either of two ways, according as either the likeness or the unlikeness involved in the idea of symbolism is emphasized. In the early church there was a profound sense of the unity of man with the world, of spirit with nature. The result was an increasing sense of the beauty of nature. But even at the first, there was a tendency to accompany this with a depreciation of the worth of man and his products. As time went on and the sense of the infinite value of the spiritual world deepened, this tendency grew into a belief in the impossibility of any adequate conveyance of spiritual

things through sense symbols, and Christianity assumed a hostile attitude to the whole region of pictorial art. Erigena sums up the outcome in his theory, that man has no right to take delight in the visible creation, save as one has already learned of the perfections of God and then goes to nature as showing forth his praises. An interesting comparison of Dante and Shakespeare makes the transition from the mediæval to the modern consciousness. Dante with his subordination of this world to the next, with his allegorical element resting upon the subordination of perceptible forms to a hierarchy of ethical interpretations, completes the mediæval position. Shakespeare gives us the net result of the immense spiritual value added to life through Christianity, but without the supernatural machinery so superbly manipulated by Dante.

The origins of modern æsthetic Mr. Bosanquet finds in the mingling of two streams — criticism and metaphysic. Criticism from Sidney and Scaliger to Lessing and Winckelmann, furnished æsthetic philosophy with its *data*; metaphysic from Descartes to Kant with postulate and *problem*. At first each of these streams worked in entire independence, therefore, during this time, there is no true æsthetic. Each side had both to adjust itself to theories and problem bequeathed from antiquity, and to absorb the great practical wealth of the immediate past. Since, as Mr. Bosanquet remarks, pre-Kantian æsthetic is not the generating cause of later æsthetic theory, but only an external attribute of the movement which was such cause, I omit his discussion of the metaphysic. In the chapter upon the data of modern æsthetic, we have a pretty full statement of the influence of the growth of philology and archæology upon æsthetic, as well as something concerning the distinctively critical writers. Although Corneille, Voltaire, Burke, and Gottsched, besides minor critics, as well as Lessing and Winckelmann, are taken up, I cannot but feel that, upon the whole, this chapter is the most deficient of any in the book. Nothing is said of the early Italian writers, although they were not only the first to reintroduce Aristotelian canons and methods, but to write specific critical treatises. It is now well enough established that the true source of the Elizabethan criticism is in Italy. Diderot has hardly more than a passing remark, while of Rousseau the saying of Amiel that “nobody has had more influence on the nineteenth century” is quoted, but the extended discussion such a statement calls for, is conspicuously absent. The proper notice of the Italian writers would, I feel sure, have supplied the thread of continuity which seems to be snapped at this point; while Rousseau, here as in his social speculation, is *the* connecting link between the popular and practical tendencies of the eighteenth century, and the distinctly reflective treatment of the nineteenth. Only an academic superstition seems to me to account for giving to Lessing a more important place than belongs to Rousseau.

In Kant, Schiller, and Goethe, or rather *through* them, the data of æsthetic were brought face to face with the metaphysical problem, and the union of Kant's abstract æsthetic with the appreciation of art as an expression of the human spirit, sharing its development, gave rise to modern concrete theory. This highly abstract summary introduces us to that portion of Mr. Bosanquet's work which by its very familiarity and present interest is most difficult to reproduce in a review. I can only call attention to a few of its salient features. In the first place the general method of treatment cannot be too highly commended. After an excellent account of the Critique of Judgment in its æsthetic part, Mr. Bosanquet goes on to Schiller and Goethe. He shows how Schiller being interested in the same problem from æsthetic reasons that appealed to Kant from metaphysical reasons, went on to remove the essential limitation of Kant, and thus opened the way for a further development in metaphysics as well as in æsthetic and concrete criticism. Certainly one of our greatest needs at present is a closer connection between what is now relegated on one side to technical histories of philosophy, and on the other to histories of literature and general 'culture.' The need is equally pressing in order to save the human and practical interest of the history of philosophy, now tending under the influence of floods of monographs to degenerate into purely 'scientific' material divorced from human life, and to save histories of literature from a sentimental character, because of their divorce from the main current of the intellectual development of humanity. It is not too much to say that Mr. Bosanquet in his alignment of Kant, Schiller, Goethe, and Hegel, has done more than any English writer to put these matters on their right footing. Were it not for the inexplicable omission of Herder's name, this statement could be broadened still further. In the second place, I wish to call particular attention to Mr. Bosanquet's conception of idealism, since the detail of his treatment is obviously controlled by his general agreement with the positions of objective idealism. "The central principle of idealism is that nothing can be made into what it is not capable of being. Therefore when certain syntheses and developments are actual, it is idle to deny that they are objective or immanent in the nature of the parts developed." Or, if I may venture to enlarge upon the definition, when it is shown that beauty or morality are products of a purely 'natural' development, their reality is in nowise impugned; the reality is neither in the first state merely as such, nor in the latter in its isolation, but in the law or movement which holds all in one unity. Finally the terms with which the specific problem common to both metaphysic and æsthetic may be expressed, are how to reconcile feeling and reason; how sense material may be pregnant

with meaning — this problem being first a practical one and only afterwards a theoretical one.

Mr. Bosanquet treats the æsthetic of the nineteenth century under three rubrics: first there is a chapter devoted to "exact æsthetic," understanding by this an attempt to get at the formal features which constitute any object beautiful. This chapter includes writers seemingly as diverse as Schopenhauer and Stumpf, Herbart and Fechner. Then comes a chapter dealing, under the caption of "methodical completion of objective idealism," with such authors as Rosenkranz, Shasler (to whom an amount of space is given seemingly disproportionate to his real importance), and Hartmann. The concluding chapter is upon recent English æsthetic, and is occupied largely with Ruskin and Morris. The general significance of this movement is found to be in an attempt to get a better conception of how in the work of art the content and expression are united, in a return to life as the real medium, for German æsthetic has in its later days fallen into scholasticism, over-refinement, and formalism through the touch of life. The signs of this return to life are found in Mr. Ruskin's study of the details of the beautiful in nature as against the more general formulations of the Germans, and in both Ruskin's and Morris's insistence upon the place of the individual workman in all art, the necessity that art be a genuine expression of the joy of the worker in his work, and the consequent greater attention to the minor arts, so-called.

It is significant that Mr. Bosanquet expects the next fruitful movement to come from England rather than from Germany. "As the true value of German idealism in general philosophy was never understood till the genius of English naturalists had revolutionized our conception of the organic world, so the spirit of German æsthetic will not be appreciated until the work of its founders shall have been renewed by the direct appreciative sense of English art and criticism."

There are a number of points in the implied or expressed philosophy of the book which I should like to see developed by themselves. The entire conception, for example, of a fixed distinction between the realm of art and that of commonplace reality seems to me to need a good deal of explanation. That there is such a distinction there can be of course no doubt, but Mr. Bosanquet makes something positive and rigid of the distinction; he makes it a datum which can be used in marking off regions of experience and deciding questions. I should have thought, on the contrary, that the distinction was a problem and a problem lying at the very heart of æsthetic. Instead of accounting for Plato's treatment of art by saying that he failed to distinguish between common reality and the artistic image, it seems to me more philosophical as well as more historical to say that man was then becoming conscious of ideas

(principles of action) wider than those expressed in previous civilization ; ideas demanding therefore new forms of embodiment and calling for new art, ideas which since they had not found embodiment for themselves appeared at the time to be hostile to all embodiment and thus to all art. The growing up of this distinction between commonplace reality and art seems to be due to just those historical periods when man has become aware of new principles of action just enough to condemn old action, but not sufficiently to secure expression for them. Commonplace reality, in other words, is simply the material which art has not yet conquered, which has not yet become a plastic medium of expression. Such a conception, indeed, is in line with Mr. Bosanquet's remarks about the future of art, when he says that in spite of the present apparent interruption of the art tradition, in spite of the fact that the discord of life has now cut deeper than ever before, we may feel sure that the human mind will find a way to resolve this discord and "the way to satisfy its imperious need for beauty." Two conceptions of art, finally, seem to be struggling with each other throughout Mr. Bosanquet's history : one of art as essentially a form of symbolism, the other of art as the expression of life in its entire range. The former can be reconciled with Mr. Bosanquet's fundamental philosophy only by a great stretch of the idea of symbolism ; it agrees, however, with the fixed distinction between commonplace reality and artistic reality, and at once lends itself to a conception of art which marks it off into a little realm by itself. The conception of art as expression of life leaves no room for any such division. Art becomes one with fulness of life. As Emerson says, "There is higher work for Art than the arts. . . . No less than the creation of man and nature is its end."

JOHN DEWEY.

The Sense of Effort. An objective study. By A. D. WALLER. Brain, 1891, pp. 189-249.

Report on the same by G. E. MÜLLER in the Z. f. Ps. u. Phys. d. Sinn., IV, pp. 122-138.

Dr. Waller's tone, in this essay, is modest, but his reasonings are too laboriously expressed. He suggests that experiments on the objective phenomena of muscular fatigue after voluntary movement may throw light on the vexed question of the peripheral or central origin of the feeling of effort. Effort is a sensation accompanying muscular action, fatigue a sensation following it. The concomitant feeling and the after feeling, Dr. Waller reasons, should presumably have the same organic seat, just as in vision an image and its after-image involve the same optic tracts. If experiments show the source of objective fatigue phenomena

to be central and not peripheral, then the subjective feeling of fatigue, as well as the feeling of effort, are probably non-peripheral in their origin. Thereupon Dr. Waller gives experiments which, as he thinks, show that the diminished efficiency of our muscles when we are fatigued by voluntary exercise must be more due to exhaustion of the volitional centres than to that of the muscles themselves. In these experiments, the state of the flexor-muscles of the fore-arm was observed in various ways :

(1) By the dynamograph, a short, stiff spring, which yields but slightly to the grasp of the hand, but has its deflections magnified by a long writing lever.

(2) By the ergograph, which records the heights to which a weight is raised by successive flexions of the middle finger.

(3) By the ponograph, which registers the upward spring of the finger when, in the middle of its flexion, it is suddenly set free from the weight.

(4) By the "bag-method," an elastic bag being fixed to the arm by a leather bracelet, and connected with a Marcy's drum. This records the "hardening" or *lateral* enlargement of the muscle, whilst the other three methods give its *longitudinal* variations.

The biceps muscle was also investigated by the ponographic method.

By alternating with each other series of voluntary contractions and series got by directly faradizing the muscle and nerve, Dr. Waller found that the voluntary contractions ran down at the end of each series from fatigue, rose again at the beginning of each new series in spite of the faradization-series which had intervened. Something then recovers from the fatigue of voluntary exercise, even though energetic contractions, peripherally induced, be still going on. Since, under these circumstances, the centre is the resting organ, it must be that the previously manifested fatigue had the centre for its seat. Conversely, Dr. Waller finds the faradic tracing to show a recovery at the beginning of each fresh series, and thinks this due to peripheral rest having taken place whilst the intervening series of voluntary contractions went on. To explain such a paradox, he invokes the "end-plate." The sinking observed during each voluntary series is partly due to expansion of the end-plate, and may mask a recovery of the muscle-tissue proper from previous faradic fatigue. Müller objects (pp. 124-6) that Waller's facts are inadequate to support these conclusions as to the recovery during voluntary contraction, though he agrees that the recovery during faradization exists, and points to a central seat for at least a part of the fatigue effect observed in the voluntary series.

By using Method 4 (the "bag-method") conjointly with the dynamograph, W. found that the lateral swelling or hardening of the muscle

gave parallel results, save that in the fatigued state the "lateral effects" are much less diminished in proportion than are the longitudinal ones, and that the spring is thus a much more sensitive indicator of fatigue than the bag. The maximal faradic shortening is much less than the maximal voluntary shortening, yet the "hardening" or lateral effects may be as great in the one case as in the other. The lateral effect slightly *outlasts* the shortening; and outlasts it considerably in fatigue, more especially in voluntary fatigue. It may in the latter case momentarily increase whilst the muscle is actually lengthening. These facts, according to W., point to the two distinct processes, lateral and longitudinal, in muscular contraction, which fatigue may dissociate. The protraction of the lateral process in voluntary fatigue he considers to show a continued influence from the fatigued centre, a "residual discharge" able only to harden but not to shorten the muscle. A cut-out frog's muscle also shows the lack of congruence of the lateral and longitudinal effects, for the shortenings successively diminish during faradic fatigue whilst the lateral effects show no such decline. Prof. Müller, on his part, entirely objects to W.'s interpretation of the results of his bag-method. It is contrary to generally received doctrines, he says, to suppose swelling without shortening in muscle, or hardening after inner tension has ceased. The records of Waller's "bag," he thinks, are due to contraction of antagonists, and to afflux of blood into the muscles, especially when the latter are faradically exercised. As for the frog's muscle, he points to the possibility of a mechanical elongation of the muscle's own length by its treatment as a sufficient explanation of Waller's results. This (which has been observed) would naturally give diminished tracings of shortening with undiminished tracings of swelling.

Dr. Waller finds still other peculiarities in fatigue. Using Method 3, that of the "ponograph," he finds the upward spring of an arm suddenly released from the weight it has been upholding to be greater in fatigue than when the arm is fresh. He considers that this fact is probably connected with the protraction (just described) of the "lateral effect" in fatigue, and that it looks, therefore, more like a residual central effect than like a peripheral effect. The centres, therefore, here again would seem to take the lead in voluntary fatigue. He finds, moreover, that when the two hands, one being fatigued, the other fresh, work simultaneously, each upon a dynamograph, the relaxations of the fatigued hand take place less promptly than in the other. W. candidly admits that all these phenomena may be, whilst M. insists that they probably are, purely peripheral in their origin.

W. then repeats and discusses experiments by Fick and Mosso which show that a maximal voluntary contraction, so far from being increased, is diminished when a faradic stimulation is added. The "step-down"

in the tracing is due, according to him, to contraction of the antagonistic muscles. The tendency of most of these results is to lead, according to Dr. Waller, to the view that the centres, getting fatigued first, cannot voluntarily overdrive their executive servants,—the end-plates and muscles.

Next Dr. W. reviews “with great reluctance” the experiments by which Bernhardt, Ferrier, and Brunton have compared our estimation of weights by voluntary and by faradic lifting. These have been quoted to prove that peripheral ‘muscular’ sensations are quite enough to account for what delicacy of discrimination we possess when ‘hefting’ weights. W. finds an enormous inferiority in the faradic method,—an inferiority even to the passive discrimination of weights by the skin of the supported hand, and such as can only be explained by a positively inhibitory effect, upon our ‘muscular’ sensations, of the faradic current used. W. also considers the anatomical proofs for the existence of sensory nerves in muscle-tissue to be inadequate.

He finally passes to the psychological question about effort. Testimony to the effect that effort can be introspectively analyzed into peripheral feelings he rejects as no better than testimony that we introspectively discern something non-peripheral. He does not, of course, deny the presence of afferent factors in effort and fatigue; but that they can be the only factors needed for the regulation of our outgoing exertions he considers disproved by the extreme rapidity with which such minute voluntary adjustments as those of the larynx have to be performed. Apparently there must be here some immediate central consciousness of what discharges are taking place. The outgoing currents must be measured out in advance of our feeling of their effects. In consequence of this consideration and of the part which his other experiments show to be played by the motor-centres in objective fatigue-phenomena, he concludes, as he began, that subjective fatigue and sense of effort must both have central seats, and that the feeling of the outgoing current which Bastian and others have denied must still be admitted to exist by psychologists. Müller, in concluding his report, points to the arbitrariness of Dr. W.’s assumption that objective and subjective fatigue must have one and the same seat. Objective fatigue might be largely in the centres, and yet our feelings of muscular fatigue might be due to the accumulation of waste products in the muscles exciting the nerve ends there. He ends with characteristic sharpness by saying that W. has shown by his so-called objective study how *not* to reach reliable results. Without going as far as this, I must confess that Dr. Waller’s fundamental assumption that objective and subjective fatigue and subjective effort must be held to have the same local seat seems to me singularly frail. I must also say that Müller’s criticisms of W.’s

experiments, especially of those made by the bag method, seem cogent. The paper confirms well what we already know,—that our motor centres get objectively fatigued. The only things in it which seem to throw any really fresh light on the question of the seat of the effort-feeling, are, first, the experiments which show that when our muscles contract faradically we largely lose the sense of how much we lift; and, second, the observations on the rapidity with which laryngeal and other minute innervations must be measured out. The latter remark is (so far as I know) a novel one, and, if it could lead to experimental treatment, it might be very important. Müller ignores it altogether.

W. JAMES.

Ueber den Hautsinn. By M. DESOIR. Separat-Abzug aus Archiv für [Anatomie und] Physiologie. 1892.

Dr. Dessoir has undertaken a thorough investigation of cutaneous sensibility. The work will fall, when complete, into three chapters, treating respectively of the temperature sense, the sensations of pressure and contact, with the muscular sense, and the common sensations. The present instalment consists of the first of these three divisions, to which is prefixed a lengthy discussion (70 pp.) of sensation in general. It is with this preface that I propose to deal here.

What differentiates sensation from perception? The author passes in review various definitions and determinations of the two terms. (1) According to Helmholtz, sensation is a simple subjective modification of conscious content, the effect of the operation of external causes on our sense-organs; perception is comparatively complex. Dr. Dessoir takes decided exception to the predicate of subjectivity. (2) A widely spread view distinguishes sensation from perception by reference to the different participation of consciousness in the two processes. Such a determination is rejected, partly because of the indefiniteness of the word 'consciousness,' partly because of our ignorance of the connection between sensation-act and sensation-content. The former objection is to me less strong than it is to the author; and the raising of the latter seems needless from the psychological point of view.¹ There are, however, others that might be urged. (3) Feeling has been made the determining moment. Or the sense-idea has been subdivided, the idea of the outer (perception) bringing always with it the idea of an inner (sensation or bodily feeling). Or the difference is a difference on the intellectual side: perception is sensation *plus* attention, or association, or consciousness, or memory-images. (4) The perception is complex,

¹ Uphues is wrongly credited with the formulation on p. 178.

the sensation simple. Of the origin of the perception, a psychological (fusion) and a physiological (summation) theory are possible. The writer concludes that sensation is a simplest sense-idea (presentation or representation), attended (*getragen*) by the consciousness of one's own mental activity; perception is a complex sense-idea, in which the part played by the subject normally retires into the background. Exceptionable in these descriptions are, firstly, the separation of act and content, alluded to above; secondly, the unexplained passage from inner to outer (which surely is the repudiated Helmholtz passage?¹) and from simple to complex; and thirdly, their cumbrousness. What we want is a working definition; and this is given by the view which regards sensation as the simplest mental concomitant of the excitation of a definite bodily organ.²

A second section deals with the properties of sensation. A sensation may not be regarded as a magnitude, for it cannot be expressed in the form *xn*. Its intensity is not quantity; its quality is not spatial. True: but are the possibilities exhausted? Dr. Dessoir, like every one else, makes unhesitating use of liminal values. — Intensity may attach to the simple sensation, quality only to sensation-complexes. The arguments alleged to support this position do not seem to me to be adequate. As regards sensible feeling, the writer appears to have misunderstood Professor Stumpf's remarks. What the latter attempts is not the reduction of feeling-tone to quality and intensity of sensation, but the reduction of 'color' to these elements. Such a reduction involves, as he sees, the separation of feeling-tone from color. For the rest, it is, perhaps, more correct to make feeling-tone dependent on quality and intensity of stimulus than on those of sensation.

There follows a short account of concomitant and after-sensations. Concomitant sensations are: I. Consensations: (i) homogeneous: (1) adjunctive (spread of tickling); (2) double (touch); (3) transferred (shoulder-pains in liver disease); (ii) heterogeneous (slate-pencil-shiver). II. Attendant sensations (fusions). III. Secondary memory-images (colored hearing). IV. Reflex sensations; reflex movement causes kinogeneous sensations: (i) stimulation unnoticed (colic); (ii) stimulation noticed (cough and pleuritic pain). — The synergic sensations (binocular, biaural) are, curiously enough, passed over. Groups II. and III. appear rather to present sub-forms of one type than separate types. Group IV. stands, of course, on quite a different level from that of the other groups.

After-sensations are (*a*) continuous, (*b*) intermittent. Qualitatively

¹ That is, if the sensation is primary. Cf. pp. 224, ff.

² The complex on this view is the idea, which includes presentation or perception on the one hand, representation or memory-image, on the other. Wundt, *Phys. Psych.*, ii,³ 1. But cf. the author, p. 233.

and intensively they are (1) homonomous, (2) heteronomous. Sub-forms of both the latter types are the (in algebraic sense) positive and negative after-sensations. This use of 'positive' and 'negative' is certainly correct; but the words are already employed, in psychological optics, in two different senses, and it seems unnecessary to add a third. The temporal division is one which, at least in optics, it will be difficult to carry through.

Stimuli are classified as immediate (induction current), mediate (light- and sound-waves) and—both (mechanical, thermal, electrical). Here again the reader is, I think, rendered a little impatient by the novel terminology; so very little is won by it.

The doctrine of specific energies—which culminated in Donders' phrase, that by exchange of nerves we should hear the lightning and see the thunder—is discussed at length. The specific energy of a nerve is its capacity of definite reaction to any kind of stimulus. Dr. Dessoir weighs the facts alleged in all sense-departments,¹ and finds them wanting. But, besides the lack of supporting facts, there is a series of theoretical objections to the doctrine; and the authors of these (Helmholtz, Wundt,² Stumpf) are passed in review. As regards the seat of the determination of sensation-quality, a position is taken up which pretty closely resembles that of Wundt. The author concludes, with commendable carefulness, as follows: Every sense-apparatus has a specific excitation, every cortical area a specific function. Even this leaves the question open: How many of each are there?

Perceptions are in certain cases externalized (thunder-clap) and excentrically projected (contact-sensations). The key to these phenomena is given by introspection and dynamometry. Sensations are externalized when they are attended by insignificant (locally limited) muscular work; projected when they greatly (widely) strengthen the muscular force. There has been a tendency of late to apotheosize the muscle-sense; and I confess myself a sceptic. Has the attendant phenomenon

¹ Dr. Dessoir's objections to a periodicity-theory of color-vision do not seem well grounded. Such a theory does take cognizance of the anatomical structure of the retina (Kirschmann, in *Phil. Stud.*, v, 493), and does recognize complementariness. For the rest, such phenomena as that described by Hilbert (*Zeitschr. f. Psych. u. Phys. d. Sinnesorgane*, iv, 74, ff.) accord better with a hypothesis of this type than with the others. As regards smell and taste, mechanical stimulation has been found effective by some observers; cf. Hermann's *Handbuch*, iii, 2, pp. 188, 189 and 256, 257.

² The writer (quoting Munk) appears to assume that a secreting cell is adequate to functions which differ as widely as perception of light from that of touch. And the first part of Wundt's argument is hardly correctly represented; see *Phys. Psych.*, i,³ 337. Again (p. 217), it is only so far as it is unstable (indefinite, *i.e.*) that the excitation of a nervous structure can, on Wundt's view, occasion different kinds of sensations. Lastly (p. 219), has the comparison of disparate sensations much sense?

in the present case any claim to pose as an *explanation* of the facts? Hypercentric projection (sensation of doubled contact) is explained by the principle that we perceive in most instances the beginning of a movement, not its course. There is a *saltus* here, from molecular displacement to sensation, which it requires faith to take.

Objectivity is given with sensation-content; subjectivity comes later, with apprehension of the sensation-act. Rather, it seems to me, is the separation of the two concepts the secondary thing, not the origin of one of them from the other. The baby-consciousness that Dr. Dessoir observed was probably an objective-subjective chaos, not yet objective *and* subjective, and certainly not purely objective. Quite right is the emphasizing of the objective nature of the common sensations.¹

The introduction concludes with a chapter on the classification of perceptions. Dr. Dessoir rejects the 'time-sense,' not without reason. The static sense goes altogether without mention, unless one count the 'rapidity sense' as a sub-heading of it. In the writer's classification two principles cross one another, — those of nervous correlation and of localization. He speaks of total, organic, irradiatory, central, and summation sensations. The special sections on the sense of pressure (in the course of which Dr. Dessoir proposes the word *Haptics* to cover all cutaneous sensibility with the exception of temperature-sensations) and the experiments upon temperature, I hope to notice in connection with the concluding parts of the research, as soon as these appear. If the author can furnish, even in rough, a psychology of the skin, he will have done good service. The chapters with which I have dealt here are of a preliminary character. There is much in them that stimulates to criticism: on the other hand they are throughout clearly and suggestively written.

E. B. TITCHENER.

Distinction and the Criticism of Beliefs. By ALFRED SIDGWICK.

London and New York, Longmans, Green & Co., 1892.—pp. viii, 279.

This book has the inevitable demerits, as well as most of the possible merits, of a logical treatise. It is an abstract and formal discussion of principles, with constant tantalizing suggestions of rich concrete interest; it circles round controversies the most vital with an air of judicial unconcern, and anon descends to the commonplace and even at times to the trivial. Yet it is the kind of book calculated to redeem logic from the charge of being a barren and altogether abstract science. For

¹ Why will not the author be consistent, and call these sensations "*Gemeinempfindungen*"? Even when he describes them under the head of "total perceptions" he admits the element of feeling (p. 237).

the entire undertaking is informed with what might be called a practical purpose. The subject of discussion is the rights and wrongs of Casuistry, or of the Socratic demand for Definitions and Distinctions in our thinking; and, near the close of an inquiry which has never lost sight of this aim, the author says, "One main purpose of our inquiry was to raise at the end the question how far reasoned doubt must triumph over certainty, and whether a casuistic treatment of definitions need or need not eat the heart out of the faiths we live by" (p. 200). Again, "the chief incidental aims" of the book are described as "reflections on controversy, on the faults of language, and on the conflict between the rival ideals, faith and doubt" (p. 235).

The treatise might be described as a plea for what the author calls the "rough distinction." This is defined by Mr. Sidgwick as "a distinction where the contrasted notions, even at their sharpest (A and Non-A), cannot be applied with perfect exactness to actual cases, . . . but where a certain proportion of them belong to a doubtful borderland" (pp. 15, 16). Or "a rough distinction is a distinction that depends on a difference of degree" (p. 16). It is only in virtue of its applicability to concrete cases, or the reverse, that a distinction can be called "sharp" or "rough"; "ideally, there is never any difficulty about a distinction; whatever difficulty there is attaches only to its application" (p. 22). Mr. Sidgwick's purpose is "to show the extent and importance of unreal [or artificially sharp] distinctions — that is to say, of the disagreement between definite language and fluid facts . . . how far it is to be regarded as one of the permanent sources of faulty thinking and of needless heat of controversy" (pp. 78, 79). In the taking for "real" what *are* "unreal" distinctions, he finds the chief source of Ambiguity. "Ambiguity, in its most effective and troublesome form, arises out of the 'real' roughness of distinctions that are drawn by language as if they were perfectly sharp" (pp. 7, 8). What, then, he asks, are "the uses and abuses of rough distinction"? More particularly, how does language "act as a drag upon the progress of knowledge"? For "we are all too ready to see in words a mysterious *datum* behind which it is impossible to go. It takes a long apprenticeship to realities before we begin to get free from this illusion" (p. 20).

The author bases this doctrine of the real "roughness" of distinctions upon the principle of the "Continuity of Nature." "Nature is full of examples of a development which appears in our clumsy and rigid language as self-contradiction. Every child that outgrows childhood, every seed or germ that becomes other than seed or germ, every fact that changes its character in the least degree, proves to us daily that the 'Laws of Thought,' those pillars of elementary logic, are too ideal and abstract to be interpreted as referring to the actual things or particular

cases that names are supposed to denote" (p. 21). "In this way, therefore, the picture we get of distinctions in general is that they are really fluid, but artificially hard; that the apparent absence of a borderland between (actual) A and Non-A is a result of our incomplete powers of vision wherever it is not a result of deliberately shutting our eyes to some of the facts. Either the transition is too quick for our clumsy observation, or in some way the process is hidden from us at present, and is therefore liable to become manifest whenever our observing power, or our insight into past history or remote places, shall become sufficiently improved" (p. 73).

This vindication of "inexact" thinking reminds one of Aristotle's maxim, that the exactness of our treatment ought to be proportionate to the subject-matter of the inquiry; it is a modern version of that maxim, generalized (where Aristotle said *some* subjects are inexact, Mr. Sidgwick says *all*), and founded on the doctrine of Evolution, which exhibits the "origin of species," and proves that the greatest and most obvious distinctions are the result of accumulation of the smallest and least perceptible variations. But instead of pursuing the inviting inquiry which he has thus opened up into the Logic of Evolution and discussing, for example, how far the Hegelian dialectic, with its categories that "pass over" into one another, overcomes the defects of the Aristotelian logic with its rigid, static distinctions, and is adequate to the interpretation of the subtle processes of nature, Mr. Sidgwick turns his attention to the practical bearings of the doctrine of the "rough distinction" upon the settlement of controversy. This turn of the discussion is disappointing to the more speculative reader, but is entirely in keeping with the object of the book, and no doubt more profitable for the audience he has especially in view.

All thought, particularly as expressed in language, is convicted of "unreal distinctions." "Every distinction is rough if we choose to be strict in demanding applicability; the charge must, therefore, be admitted and yet somehow disarmed, if we are to avoid the deadlock into which the continuity of Nature at first appears to lead" (pp. 143, 144). The charge is disarmed, and universal scepticism avoided, by considering the "relevancy" of the distinction to the "purpose" or "occasion." The validity of distinctions, it is maintained, is not absolute, but relative to the argument in which they are used; and, relatively to the argument, a distinction may be legitimately interpreted as "sharp," while, absolutely and "really," it is only "rough." "For the essence of scepticism is casuistry, or the inquiry after a description which shall be applicable to actual cases, instead of merely general and abstract. We shall see that such an inquiry can never be satisfied, and that therein lies the strength of the sceptical attack; but we shall also

see that it may be irrelevant to some special or passing purpose, and that by such irrelevance the destructive force of scepticism is limited" (pp. 12, 13).

I have only been able to indicate the general argument of a book which I consider an important addition to the literature of the higher logic. As illustrative of the happy and incisive suggestion, conveyed in a style of unusual smoothness and lucidity, in which Mr. Sidgwick's pages abound, I take one or two sentences in which he characterizes the distinction between philosophy and common-sense. "Philosophy is only common-sense with leisure to push enquiry further than usual, while common-sense is only philosophy somewhat hurried and hardened by practical needs" (p. 35). Philosophy substitutes "a reasoned discrimination in place of a haphazard test" (p. 225). The method of the one is "the method of careful attention to details, or interest in exceptional cases"; that of the other is "the method of taking short-cuts, or believing in general rules" (p. 226).

JAMES SETH.

Kant's Kritik of Judgment. Translated with Introduction and Notes by J. H. BERNARD, D.D., Fellow of Trinity College and Lecturer in Divinity in the University of Dublin. London and New York, Macmillan & Co., 1892. — pp. xlviii, 429.

All students of Kant in this country have doubtless long felt that a translation of the *Kritik der Urtheilskraft* was much to be desired, and will welcome the present volume as an important and much needed accession to our philosophical literature. The only portions of this third Kritik hitherto translated into English, so far as I am aware, are the passages included in Professor Watson's *Selections from Kant*. The work as a whole, however, has not been up to this time accessible to students unacquainted with German, and even readers to whom that language presents no difficulties have been often brought to a stand by its involved clauses and cumbersome confusing constructions.

There can, however, be no question of the importance of the *Kritik of Judgment* for a just comprehension of Kant's system. The portion which treats of the Teleological Judgment is his final expression regarding the ultimate relations which must be conceived between teleology and mechanism, freedom and necessity. It was the possibility of overcoming the opposition between these two categories—or rather of subordinating mechanism to teleology—that turned the youthful Fichte from Spinozism, and set him on fire to convert the world to Kantianism. "I have obtained from 'this philosophy,'" he says in one of his letters to Fräulein Rahn, "a nobler ideal, and do not now concern myself so much

with outward things, but am busy with myself. I have found that the will is free, and that not happiness, but worthiness, is the end of our being." It is particularly fortunate, too, that a translation of the *Kritik of the Æsthetical Judgment* should have appeared at this time, when there seems to be a revival of interest in Æsthetics throughout the English-speaking world. For what Kant has done in this field is scarcely less important historically than the results which he reached in his Critiques of the theoretical and practical reason. To quote from Eduard von Hartmann: "Kant's achievements in the domain of Æsthetics call for our fullest admiration. They prove that empirical material is not essential to the inductions of a great thinker. For Kant had seen and heard little of art, but nevertheless became the founder of scientific æsthetics. All the more important theories which are represented in modern æsthetics are foreshadowed in Kant's system, although partly only in embryo. The Æsthetical Formulism of Herbert and his school, the Feeling Æsthetic of J. H. von Kirchmann, the Æsthetical Idealism of Schelling, Schopenhauer, Hegel, and the Hegelian school, are one and all founded upon Kant, and rightly appeal to his authority." (*Die Deutsche Æsthetik seit Kant*, p. 23.)

The translation — judging from the passages which I have compared with the original — gives evidence of no small amount of patience and skill on the part of the translator. Smoothness and elegance of expression are oftentimes sacrificed to literalness, but I have always found Dr. Bernard's rendering clear and precise. He gives (p. xlvi) a list of the English equivalents which he has used for Kant's more technical terms, and though they do not always seem happy, they are at least accurate and have been consistently adhered to.

The translator's introduction is a fairly good presentation of the point of view of the work, and its relation to Kant's other *Kritiken*. The author does not agree with Kant's position, that the Teleological Judgment does not deserve the name of theoretical knowledge, although, like the Ideas of Reason, it forms a necessary regulative principle of our experience. Since, he argues, we can, from the behavior of other men, infer by analogy a consciousness like our own, we have equally valid grounds for postulating Mind or Intelligence as the ground of the universe. But it seems to me that the fact that the terms are unlike, that the objects differ so widely from each other, greatly weakens, if it does not entirely destroy, the argument from analogy. One cannot but approve and admire Kant's fairness and caution in refusing to draw a conclusion upon such grounds. The antithesis between the theoretical and the practical sphere, between reason and faith, which remains to the end in Kant's system, is, as both Professor Caird and Dr. Bernard tell us, the result of that opposition of sense and understanding with which he set out.

But is it possible, so long as we consistently adhere to *facts*, to overcome that dualism? The world of reality stubbornly refuses to be annulled by any logical process, and the final reconciliation, if we are to find one, must rest upon a postulate of faith that sense and understanding may, perhaps, "have a common root," and that "there must be a ground of the unity of the supersensible which lies at the basis of nature with that which the concept of freedom practically contains." But Kant, it seems to me, has done well in insisting that the theoretical and the practical domains must be kept apart, and in refusing to apply the term *knowledge* to what is, and must be, a conviction founded upon faith.

J. E. CREIGHTON.

An Introduction to General Logic. By E. E. CONSTANCE JONES.

London and New York, Longmans, Green & Co., 1892. — pp. xxiii, 283.

Although simplicity, distinctness, and directness in statement and obviousness in transition are the justification of a "First Book," this compend, which aims to be "a 'First Logic Book' which may be used in teaching beginners" and "a connected, though brief, sketch of the science," does not well exemplify such qualities. When, however, formal defects are put aside, grounds for grave exception to much in the discussion force themselves into view.

The relatively liberal allotment of space to the treatment of terms and propositions is indeed to be welcomed, but confusion and real misconception are introduced at the outset, not by the mere failure to distinguish properly between *something* and *some thing*, but by the downright obliteration of the distinction. The standpoint of the book being nominalistic, the agile interchange of *some thing* and *something* in the doctrine of names and propositions, which is here laid down, produces a *Durcheinander* in which the "beginner" must, I take it, be hopelessly confounded.

The somewhat labored and plentiful divisions, subdivisions, and cross-divisions are often neither accurate nor full, nor yet — what might perhaps excuse such shortcoming — suggestively helpful. Special names, for instance, form a class where "the application is limited by some constant condition not implied in the signification." By way of example, *winter*, we are told, means the coldest season of the year; but, as it does not mean that in temperate zones it occurs at intervals of nine months, it is a special name. Along with *winter* are classed 'genus,' 'one o'clock,' 'the conic sections,' 'King of Spain,' etc. Where unimplied constant condition is used in a sense that

embraces these examples, it may be safely asserted that there is no common name to which it does not extend.

That place is made for the distinction between conditional and hypothetical propositions is admirable; yet what is one to make of it, when he is told that the proposition : *If any flower is scarlet, it is scentless*, is conditional, and that the proposition : *If any bird is a thrush, it is speckled*, is hypothetical? That this is no mere lapse in selecting examples is shown by the fact that both cases are laboriously drawn out in other forms. This vital distinction, upon which Keynes lays stress, loses under the definitions and elucidations here given both clearness and pertinency.

Taking them at random, I have pointed out two or three of the rather numerous defects of this little book, with full acceptance, for the time, of its general theory. But any handling of logic which deals with propositions rather than judgments embodied in them, and with names rather than concepts fixated in names, has unavoidably more radical vices than such as have been noted. Not only do mere lexicographical and grammatical formalities tend to perplex and to confuse, to make difficulties where none exists, and to cover them up where they are serious (in the treatment before us, certain idiosyncrasies of the English tongue appear almost nudely as logical principles), but the best "Logic" of this kind can never be more in *Logic* than a good Physiognomic can be in *Psychology*.

WALTER LEFEVRE.

The Principles of Ethics. By BORDEN P. BOWNE, Professor of Philosophy in Boston University. New York, Harper & Brothers, 1892. — pp. xvi, 309.

The many readers of Professor Bowne's other philosophical works have doubtless been pleased to learn that this talented author has at length written a companion volume on ethics. It is evidently designed primarily as a text-book, but as Professor Bowne is a thinker of established reputation, the views expressed seem to call for more than passing mention. It is needless to say that the style is clear, concise, and attractive,—except, perhaps, in certain controversial passages, where the author lapses from argument into rhetoric. In another respect, also, the book is worthy of commendation. The author has a realizing sense of the great complexity of our concrete moral life, and refuses to admit that it can be explained completely by the application of any single abstract principle. He thus comes to recognize difficulties that are apt not to occur to the champion of one of the classic "types of ethical theory." One cannot help feeling, however, that the

author's disinclination to adopt any one principle as fundamental to ethics leads not infrequently to a vagueness of statement that is seriously confusing, while it has not kept him from arguing now and then in quite a partisan spirit.

In chapter i, on "Fundamental Moral Ideas and Their Order," Professor Bowne agrees with Schleiermacher that there are three leading moral ideas, the good, duty, and virtue. "Each of these is essential in a system which is to express the complete moral consciousness of the race." The ancient attempt to construct a system of ethics with the idea of the good as a foundation is held to have resulted in "a vast amount of unedifying speculation." The "duty ethics" fares somewhat better, but in turn is regarded as incomplete and therefore unsatisfactory. The question as to the order of these ideas comes next under discussion, and here the author's vacillation for the first time becomes clearly evident. Schleiermacher, as he shows, makes the idea of the good unconditional. This gives rise to the idea of duty or obligation, and virtue consists in the recognition of these demands and in habitual submission to them. At first Professor Bowne is inclined to look quite askance at this view, but in the course of the chapter his scruples appear to be overcome in large measure, and he ends by practically adopting it.

Unless we can tell what the good is, our abstract ethics must be practically worthless, and to the discussion of this question the whole of the next chapter is devoted. The result, however, is somewhat disappointing. The author begins by saying, "Nothing can be called a good except in relation to the sensibility in its most general meaning" (p. 49). If "pleasure" be taken as synonymous with "the good," we are not to understand that "passive pleasure" alone is meant. This, of course, sounds like hedonism, and the important question would now arise, Shall we admit qualitative, or only quantitative, differences between pleasures? This is answered indirectly by saying that we cannot reduce goods to a common measure, since the ground of distinction between different goods "must be found in the objects themselves" (p. 53). We naturally should like to know what it is in the objects which constitutes the ground of distinction. Do some objects minister to human perfection, and some not? On page 55 we find an answer to this question. "The truth is, there is no way of defining the perfection of an agent except in terms of its well-being or happiness." This sounds, not only like hedonism, but like egoism.

Professor Bowne himself does not seem to be very well satisfied with the result. At the beginning of the next chapter, on "Need of a Subjective Standard," he remarks, "Somehow or other we fail to get on. Some mistaken psychology has been ruled out, but about the only posi-

tive result thus far achieved is the vindication of life as a whole as the field and subject of ethics." The question is now raised, "Can we completely determine our judgments of right and wrong by what we know or anticipate of consequences, or must we also have recourse to some inner standard by which consequences must be judged?" (p. 81.) Consequences, of course, may be estimated for the individual or for society. Egoism is first examined, and naturally is found wanting. The author next considers utilitarianism. "If we retain the selfish theory of desire," he says on page 88, "there is no getting on; but we are not much better off if we give it up. For in that case we set up the general well-being as an end, and leave the obligation to seek it very obscure." Of course the end of action itself must be assumed by what Professor Bowne is pleased to call the "calculating ethics," but in this respect the theory is in no worse plight than one which should make perfection, self-realization, or anything else, the end of action. From the very nature of the case ultimates cannot be derived from anything else. But *if* we set up the general well-being as an end, the obligation to follow it would seem to be a necessary consequence. The author's objections to the practical working of utilitarianism seem decidedly weak. For instance, he says: "The guardian or the trusted clerk might well reflect whether the silly ward, or the old hunks of a master, could ever make such rare contributions to the sum of happiness as he himself could do, with his more æsthetic and gifted nature. . . . If one cared to do it, a good word might be said even for murder and cannibalism, while adultery lends itself rarely well to such treatment" (p. 90). If a man should seriously believe that utter faithlessness in financial matters, yes, and adultery, murder, and cannibalism, were likely to increase the total amount of happiness in the world, and should act upon this belief, his condition would certainly be pathological; he would belong, not in prison but in a lunatic asylum. It is to be remembered, moreover, that such speculations with regard to 'the sum of happiness' do not represent utilitarianism as it is understood by its advocates. That much abused theory has quite as much to say about the distribution of happiness as about the amount of the same, as is sufficiently indicated by its classic formula, "The greatest happiness of the greatest number."

The result of the chapter may be summed up in the author's own words, as found on page 97: "The duty ethics leads to the goods ethics, unless we are content to rest in a barren doctrine of good intentions; and the goods ethics leads back to the duty ethics, unless we are content to abandon ethical philosophy altogether. The true ethical aim is to realize the common good; but the contents of this good have to be determined in accordance with an inborn ideal of human worth

and dignity." It will be seen that the author's long and wearisome search for the good has resulted in his taking refuge in a partial intuitionism. His theory is left in a state of unstable equilibrium, ready to incline either way, according as the "duty ethics" or the "goods ethics" is under discussion.

We have now the key to the author's position, so that it will not be necessary to examine the rest of the book in detail. The theoretical portion ends on page 205, the remaining hundred pages being devoted to a brief survey of our leading ethical relations. Of the remaining chapters, the most important is that on "Moral Responsibility, Merit, and Demerit." The author is a most uncompromising libertarian. Indeed, for him the assumption of freedom in the world of moral action is as necessary as that of the law of causation in the physical world. "The denial of freedom must in logic result in denying all proper responsibility and merit or demerit. . . . Instead of a law of freedom, we have the parallelogram of forces; and life becomes a great Punch and Judy show, in which there is a deal of lively chattering and the appearance of strenuous action, but nothing more" (p. 166). As will be seen, the author makes the familiar confusion of determinism with fatalism. According to fatalism, no matter what I do, that which is destined to come to pass will come to pass; while, according to determinism, all the effort that I put forth will have its due effect. The only doubt is as to whether I shall actually put forth the requisite amount of effort, and of course the event is equally doubtful whether we assume freedom or determinism. This confusion vitiates the arguments throughout the chapter. Moreover, the author does not suggest that for the determinist it is as difficult to understand what is meant by responsibility for actions that do not proceed from one's character as it is for the libertarian to conceive of responsibility without freedom of the will. Even from his own point of view, there is a serious difficulty. "For perfect responsibility, of course, there must be perfect freedom and knowledge, so far as the deed in question is concerned." And yet "Nothing is plainer from experience than that our freedom and knowledge are both limited, and that they vary greatly from one person to another" (p. 169). But there is even greater difficulty in fixing the measure of merit and demerit. "In the mixed development of moral life, the natural impulses and the auxiliary motives arising from non-moral impulses are so many, and our ignorance of the real impulses is so great, that it has been questioned whether a truly moral act has ever been done" (p. 170). Freedom has been assumed to save responsibility, merit, and demerit; but just when the author seems surest of them, they threaten to elude his grasp.

In closing, a word may be said as to the qualifications of the present

volume for use as a text-book. The general clearness and vigor of the style have already been mentioned. But the author is not merely an agreeable writer: he is a man of strong moral convictions, which he is not afraid to express, even when they are likely to offend. By thus throwing his whole personality into his writing, he has produced a book that is almost sure to interest those who are beginning the study of ethics. This very moral earnestness, however, has sometimes led him into exhortation or invective, when cool, scientific argumentation would have been quite as much to the purpose. It is particularly unfortunate that he has not seen fit to explain somewhat more carefully the theories which he so freely criticises. The most serious pedagogical defect of the book, however, is that the author's own position is so difficult to make out. But the best test of the value of a text-book as such is actual use in class; and, considering Professor Bowne's wide popularity throughout the country, there is no doubt that the experiment will be thoroughly tried.

ERNEST ALBEE.

The Moral Instruction of Children. By FELIX ADLER. New York, D. Appleton & Co., 1892. — pp. 270. [International Educational Series.]

This book should be both interesting and suggestive to all who are engaged in the education of the young, since it essays a practicable solution of the problem of non-sectarian school instruction in the fundamental principles of morality, and seeks at the same time to bring the principles that are presented within the powers of apprehension of the young at every stage of progress. It offers therefore a graduated series of lessons adapted to various ages up to fourteen.

Conceiving ethics as the science of the limits within which man may innocently pursue his own ends, and taking for granted the *idea* of right and wrong as native to the human soul, the author proposes that the public school shall inculcate in youth "the common fund of moral truth held by all good men," by proper pedagogic methods, without dealing with the sanctions to it given by religion. The Ought is to be strongly impressed, but without the Why, since into the latter are wont to enter sectarian or philosophic differences of opinion. "Let philosophers differ," he says, "as to the ultimate motives of duty. Let them reduce the facts of conscience to any set of first principles. It is our part as instructors to interpret the facts of conscience, not to seek for them an ultimate explanation."

The classification of duties which the author proposes is based on the objects to which duty relates; *viz.*, self-regarding duties, duties to

all men, and special social duties. The selective principle which he adopts for the order in which duties should be presented, is that the moral teaching of any period of life should set out from the special duties of that period, taking its dominant duty as a centre, *e.g.*, with the young child reverence and obedience.

Possibly the most interesting part of the work is that which deals with the selection, arrangement, analysis, and inductive presentation of the means which the author recommends for moral instruction. He would begin with carefully selected fairy tales of the type of the German Märchen, in which are held in solution, as it were, some moral idea which the active imagination of the child is expected, without formal statement, at least to feel and appropriate, even though it may not be very definitely grasped. To fairy tales succeed fables, so selected as to illustrate some one form of evil or some one type of good, which is to be brought into clear view by the child and to be illustrated by facts within his experience. Selected stories from the Bible, arranged in chronological order, follow the fables. These present characters, acts, motives, and the results of acts, more complex ideas thus following the simple ones, and demanding from the growing youth analytic efforts of discrimination. Finally, the taste for the heroic of more advanced pupils is to be gratified to their moral improvement by narrations culled from the *Iliad* and the *Odyssey*. In his principles of selection of that which should be presented, the author evidently has in mind Plato's *Republic*. He candidly admits at the outset that there are opinions at variance with his own as to the use of fairy tales and fables. A quite opposing view is expressed by Dr. Dittes, an eminent German educator. He would exclude from youthful instruction, as foreign to the child's range of thought, all such creations of fancy as "Märchen, fables, myths, legends, and tales of religious miracles" (*religiöse Wundergeschichten*). Possibly the good doctor forgets that the child may *feel* rightly and to his benefit many things that at present he does not fully comprehend.

Did space permit, it would be interesting to follow the author in his discussion of the difficulties of religious instruction in schools like ours, and of the plans proposed to obviate these difficulties, of the moral value of various studies, and of the various special forms of duty that grow out of his general scheme of duties. It is sufficient for our purpose to have brought into prominence the general lines on which this work is framed, and to have emphasized its most important points of view in regard to both aim and means. It is no more than just to say that its style is always clear and its illustrations happy, reminding one in some respects of Herbert Spencer in his well-known treatise on *Education*.

Beiträge zur Geschichte der Philosophie des Mittelalters. Texte und Untersuchungen. Herausgegeben von Dr. CLEMENS BAEUMKER, O. Ö. Professor an der Universität Breslau. Band I, Heft i. *Die dem Boethius fälschlich zugeschriebene Abhandlung des Dominicus Gundisalvi De Unitate.* Herausgegeben und philosophiegeschichtlich behandelt von Dr. PAUL CORRENS. Münster, 1891. Druck und Verlag der Aschendorffschen Buchhandlung. — pp. 56.

Gundisalvi's brief treatise of a half-dozen octavo pages *De unitate* has some interest as one of the philosophic forms into which Platonic, Aristotelian, Neoplatonic conceptions were combined in the Middle Ages. Hauréau supposes it to have a further interest as one of the sources of David of Dinant's pantheism. Correns, however, shows that this pantheism is in no wise derivable from the tract *De unitate*. The treatise was first printed amongst the works of Boethius and is ascribed to him in two Florentine MSS. of the thirteenth and fourteenth centuries and in a MS. of the Paris National Library of the fourteenth century. In a MS. (Cod. 86, not collated by Correns) of Corpus Christi, Oxford, the treatise is ascribed to Dominicus Gundisalvi. Since Hauréau (*Mémoires de l'académie des inscriptions*, vol. 29, 2, p. 328) the authorship of Gundisalvi has been generally accepted. The mediæval character of the Latin and the evident use made of a post-Boethian book, viz., Ibn Gabirol's work *Fons vitæ* preclude the authorship of Boethius. Determining grounds for the authorship are: 1. The treatise could not have been written before the above-mentioned Latin version of the *Fons vitæ*, as the parallel passages arranged by Correns clearly show. 2. The author must have had an intimate acquaintance with the *Fons vitæ*. 3. The use made of the Bible and of Boethius show that we must look for the author amongst Christian thinkers. These conditions are met in Dominicus Gundisalvi, who with Johannes Hispanus translated the *Fons vitæ*, and to him the authorship of *De unitate* is attributed in Cod. 86 of Corpus Christi.

The basis of Correns' text is the Basel edition of 1546 and collations of the following MSS., all in the National Library of Paris: 1. Bibl. nat. fonds lat. 16605, perg. MS. of the thirteenth century. 2. Bibl. nat. fonds lat. 14700, perg. MS. of the fourteenth century. 3. Bibl. nat. fonds lat. 6443, perg. MS. of the fourteenth century. The readings of these MSS. are given at the bottom of the pages, and in an Appendix the readings of a Munich and two Vienna MSS. are given. The main doctrines set forth in the treatise are: 1. At the head of the entire cosmical order is the supreme uncreated One. 2. This absolute One as creative Unity (creatrix unitas) brought into existence a second, subordinate Unity, the created world (creata unitas). 3. The created world in

descending scale is composed of mind, soul, and the corporeal. 4. The elements of the created world are form and matter. This distinction applies to mind and soul, as well as to the corporeal. 5. The force which binds together these two opposing principles and gives to everything its being is the Unity peculiar to every individual thing. 6. This Unity has its origin in the supreme absolute Unity. 7. In everything there is an inherent striving for the greatest possible degree of being and accordingly for the greatest possible degree of Unity. 8. The ground for the inferiority of the created world to the creator is in the inferior degree of Unity. 9. The cause of this inferior degree of Unity lies in the nature of matter. The Neoplatonic character of these doctrines is on the surface; one will also mark at once the Aristotelian distinction between form and matter. Mediæval philosophers derived their knowledge of Neoplatonism from two sources, *viz.*, from the early Christian writers, especially Boethius and Augustine; on the other side from the Arabico-Jewish philosophy. Gundisalvi derived his knowledge of Arabic Neoplatonism from Ibn Gabirol (Avencebrol). In brief but clear fashion Correns has explained the historical position of this work in mediæval philosophy, besides giving us a good serviceable text with apparatus criticus. The series of "Beiträge" to the history of mediæval thought, of which this forms the first section of vol. i, promises under the general editorship of the learned Baeumker to be of great importance for the investigation of this neglected period of philosophy.

WILLIAM HAMMOND.

Genesis and Growth of Religion. The L. P. Stone Lectures for 1892 at Princeton Theological Seminary, New Jersey. By Rev. S. H. KELLOGG, D.D. New York and London, Macmillan & Co., 1892.

If Dr. Kellogg has by his earlier publications challenged the respect of scholars, his fame has not been lessened by the publication of the present series of Lectures. Rigidly conservative in tenor, they are the deliberate conclusions of one who deserves, by his previous studies in the "Origins," our thanks and appreciation.

It requires, however, intellectual fortitude to affirm that the development of religion from lower to higher conceptions derives no solid evidence from the sciences of Language, Prehistoric archæology, and Comparative Religions. There is a fundamental difference between the view of the history of Religion given by Professor Kellogg and that of Max Müller, D'Alviella, Réville, and many others who bring to the study of the origin and development of Religion the vast mass of evidence gained from Biology, Anthropology, Linguistic Palæontology, Ethnology, and Biblical Criticism.

That man has started from a lower form of life with divine potencies of mind, morality, and religion, and under providential guidance has pursued an ever advancing career of psychic and religious historic development, culminating in the realization of Christianity, is not, for Dr. Kellogg, a true or cheering conception of human destiny. The facts of sin and redemption are not irreconcilable with evolutionary religion; but the lecturer, in his loyalty to the truth of those facts, assumes that they are. The relics of a venerable tradition which certainly are found in literatures much older than the story of Genesis, and which the Hebrew writer was inspired to mould into theistic form, are made to stand as literal authority for the 'fall of man.' It is upon the authority of this account that man is claimed to have been an intelligent monotheist and to have lapsed into animism, fetishism, and polytheism. History, according to this view, is a pessimistic story of man. Primitive man, starting upon his march through time with a true conception of the Divine Unity and in holy fellowship with God, in spite of this stupendous advantage, enters at once upon a continuous descent, and "animism, polytheism, pantheism, atheism, and all other forms of religion or religious philosophy, must be regarded as various forms of degeneration from that primitive faith" of monotheism.

Anthropologists are more and more convinced that the psychology of the individual and that of the race reveal the same laws of development. The lower stages of conscious life of the individual cast light upon the early stages of primitive consciousness. Aristotle, with penetrating genius and using such materials as he could command, shows how one form of the mental manifestations constitute the basis of another. And the analogy is now made apparent, by a sound and Christian theory of evolution, between the life of the individual and that of the race in successive generations.

In the first Lecture, the question is asked, "What is Religion?" and various definitions are examined in a satisfactory way. The definition of Dr. Kellogg may be accepted as, on the whole, the best one. The second Lecture, on Fetishism and Animism, reveals at once the conviction of the author that these stages of belief are not steps of an upward, but of a downward movement. The third Lecture deals with Herbert Spencer's ghost theory, which requires no special notice, as hardly any one dealing now with the History of Religion accepts it as more than a partial account of the origin of Religions. The fourth Lecture is devoted to a criticism of the theory of Professor Max Müller, that of Henotheism. If Professor Müller in the ardor of popular discourse is sometimes delphic in his statements, it is not difficult, I think, to understand his argument in the main. His theory of the origin of the concept of Deity, and of religion, has always seemed to

me a noble one, which Christian theists should welcome as an attempt to rescue religious concepts from the exclusive claims of animists of the extreme type.

In the fifth Lecture, "On the True Genesis of Religion," the argument is as strong as possible, perhaps, from the standpoint of original monotheism. But that view, so far as it postulates a man in Eden who was a monotheist of the type implied in modern theism, has been sapped and mined by the correlative sciences of human development. Indeed, Professor Kellogg intimates more than once, that the original monotheism was an elementary one, and were it not for the misunderstanding of Professor Max Müller's position, whereby sensationalism is made the source of the whole religious content, Dr. Kellogg's argument would seem to be identical with that of Professor Müller. For he says, "We find, then, the origin of religion in these two factors: the one, subjective, the other objective; the former, the constitution of man's nature, in virtue of which he necessarily believes in the existence of a Power invisible and supernatural, to which he stands necessarily related; the latter, in the actual revelation of such a Power in the phenomena of conscience, and in the physical universe without us." If the fact of sin can be reconciled with his own view of man's original concept of Deity, it is equally reconcilable with Professor Müller's. The progress of the child in intellectual and moral perception more and more clearly reveals the fact of sin. Many persons are to-day found in Christendom who seem to be monotheists, animists, and fetishists in the various moods of religious feeling. The primitive man trying to grasp the unitary concept of Deity—call it the 'Infinite' or the 'Universal Power'—may have had moods in which animism and polytheism played their part.

But the Divine education is one of progress, not one of disaster. The advance of the consciousness of sin and need of redemption is parallel with the advance from inferior to higher intelligence and moral perceptions.

Dr. Kellogg's book is a valuable contribution to the History and Philosophy of Religion. The scholarship manifested is worthy of respect. A generous candor is shown in the collection of historic illustrations which sometimes tell against his argument. The only contention one may have with the Lectures is that the point of view throws the facts of progressive history out of perspective. Christianity is, or ought to be, the most cheerful philosophy of religion, and Scripture, indeed, itself teaches us that there has been a progress of man from the beginning, under heavenly guidance.

CHARLES MELLEN TYLER.

L'imagination et ses variétés chez l'enfant. F. QUEYRAT.
Paris, 1893. — pp. 162.

This book is characteristically French. It offers nothing new, but presents a number of psychological facts in a clear and interesting way, calculated to appeal to the unprofessional public to which it is addressed. The author has fallen into one or two mistakes,¹ owing to a too one-sided employment of authorities; in general he is accurate, if a little indiscriminating. In one point his style is defective; he shows an irritating tendency to extend and supplement the argument of the text by elaborate footnotes, which serve effectually to distract the reader's attention from the principal subject.

The psychological term "imagination" covers both the reproduction and combination of images. It is the former of these processes with which the writer is concerned. The first chapter is devoted to the consideration of the nature of images, of reproduced sensations, and of their physiological and psychological relation to the primary sensations. The law of association is then exemplified,—not in any way technically, but by a series of concrete instances. Here the value of *words* for our intellectual life is insisted on. Imaginations, memories, are of different kinds. Our aptitude for a particular order of perception depends upon our particular cerebral development, and this, in its turn, is conditioned by heredity. As we think in images, the images can serve as a basis of classification for pædagogical purposes; scholars will be of different "types"—normal, visual, auditory, motor. A large number of examples of the last three types is given in the three following chapters. The educator must seek to ascertain to what class a child belongs; visualization is necessary for achievement in the arts, in the natural sciences, in mathematics; auditory images are all-important for music, for languages, for poetry; motor equipment is indispensable in drawing and modelling, in elocution, in instrumentation, in feats of skill. Some practical suggestions are made in this connection.

The best type is the normal, in which the various images are more or less in equilibrium. In the other cases, substitution is impossible, and hallucination not far removed. Here, neither danger is to fear, in anything like a similar degree; while the child, though not a prodigy, has aptitude for all kinds of study. So that a relative equilibrium must be superinduced, if absent; assured, if present in promise. Again, rules are laid down,—or rather suggestions made,—which shall help bring about the desired end. The book concludes with a brief *résumé* of the entire argument.

E. B. TITCHENER.

¹ Thus Binet's authority is regarded as sufficient proof of the central seat of visual after-images (p. 15); the affective attribute of organic sensation is, as so often, over-emphasized (p. 20); the assumption of efferent sensations is wrongly ascribed to Wundt (p. 75), etc.

SUMMARIES OF ARTICLES.

[ABBREVIATIONS. — *Am. J. Ps.* = *American Journal of Psychology*; *Ar. f. G. Ph.* = *Archiv für Geschichte der Philosophie*; *Int. J. E.* = *International Journal of Ethics*; *Phil. Jahr.* = *Philosophisches Jahrbuch*; *Phil. Mon.* = *Philosophische Monatshefte*; *Phil. Stud.* = *Philosophische Studien*; *Rev. Ph.* = *Revue Philosophique*; *R. I. d. Fil.* = *Rivista Italiana di Filosofia*; *V. f. w. Ph.* = *Vierteljahrschrift für wissenschaftliche Philosophie*; *Z. f. Ph.* = *Zeitschrift für Philosophie und philosophische Kritik*; *Z. f. Ps. u. Phys. d. Sinn.* = *Zeitschrift für Psychologie und Physiologie der Sinnesorgane*. — Other titles are self-explanatory.]

PSYCHOLOGICAL.

Le Développement de la Volonté. A. FOUILLÉE. *Rev. Phil.*, XVII, 10, pp. 369-398.

It is a primary condition of liberty that the subject may control the decisions of the will, and consequently be a cause. One can say, then, that liberty is essentially a problem of causality. Liberty must be defined in terms of causality, even if it is only possible to define it negatively, as an exception to the causal order, or as a higher principle than causality. These definitions however contradict the essential principle of all thought and of science, and do not lead to the concept of liberty, but to pure indetermination. The idea of liberty implies a causality of an intellectual order. The true definition of liberty is the maximum of independence possible for a will which determines itself under the idea of a conscious end in accordance with the idea of its own independence. The problem is, then, to know to just what extent the self is cause. We have to ask (1) what has been the genesis of the idea of liberty, and (2) what are its effects. The author claims to have proved in previous writings the existence of a feeling of liberty which is present to consciousness as a concrete feeling of power. The illusory idea of a freedom of indifference arises, however, from the fact that our actions are determined by psychical states which are not entirely accessible to clear consciousness; that is, the determining factor is our psychical nature itself, of which we cannot render a complete account. We imagine, then, not only that the choice is the result of our power (which is quite true), but that this power itself is ambiguous, something not at all implied in our inner experience. The power of choosing is in reality the power of being determined by a judgment or feeling of preference. To choose arbitrarily, without such a judgment, is to refrain from choosing

and to commit ourselves to chance. The free-will theory, as it is stated by its recent defenders, is nothing more or less than a return to the old freedom of indifference. To admit any kind of indetermination whatever is to admit that certain acts are not determined by their antecedents, and hence have no complete reason. James's theory, by which the duration or intensity of a representation becomes all at once and at pleasure, increased or lessened, presupposes an action of the will, which does not result from the relations between the states of consciousness and for which the reason is not found in the Ego. On this hypothesis the will acts neither according to motives nor contrary to them, but it is able to change without reason its present motives into subsequent contrary motives. There is always a change, which, as such, is without motive. However complex or heterogeneous psychical states may be, causality is not thereby excluded. The law of causality does not require that the same causes and effects shall be repeated, but that any effect whatsoever shall be contained in a totality of reasons which determine it as it is present. Choice is always relative (1) to our character, (2) to our motives, which are the actual reaction of our character upon circumstances, (3) to the intensity with which our Ego conceives its independent power and opposes it to external motives. There are, indeed, cases where we are conscious of a real power which can balance all intellectually conceived motives, but this force itself is twofold. It is, firstly, the sub-conscious or unconscious strength of our inclinations, the force of our character. One is able to determine one's self contrary to reasons, but not without causes, only the causes themselves may be unreasonable, or at least foreign to reason. Secondly, we are able to balance all objective reasons, at least momentarily, through the medium of an idea of our own independence, of the autonomy of our Ego. We have always this disposable force, this idea of the I, to oppose to our other ideas. But this idea of the self is always a reason. Liberty is not without law, but it has its own laws, though these are very different in nature from physical laws. They are the laws of intellectual teleology, which permit the self to make itself an end, and in the moral sphere to take as an end the universal being. Freedom does not consist in getting rid of the laws of intelligence, but in fulfilling those laws.

J. E. C.

The Field of Æsthetics Psychologically Considered. II. H. R. MARSHALL. *Mind*, I, 4, pp. 453-470.

The search for a basis of separation between the æsthetic and the hedonic fields has given no satisfactory psychological result. There is no pleasure or class of pleasures which we are able to say must be

excluded from the æsthetic field in its widest sense, as it is shown to exist in the experience of the race. On the other hand, there seem to be for each individual certain pleasures which he does exclude from his own æsthetic field. Why or how this separation is made, is a question which hedonistic æsthetics must answer. It would appear that what is permanently pleasurable in revival (relatively speaking) is termed æsthetic, and that what is not thus permanent is termed non-æsthetic. The revivals to which the name 'pleasure' still clings, but which are not pleasant in themselves, appear to be what we cast out as non-æsthetic. But if each individual pleasure is ephemeral, the pleasure revival must be the same. The æsthetic field, then, must be changeable; it must alter with those conditions that render variable the nature of the revivals we are to find pleasurable. This appears actually to be the case. While the hedonist in æsthetics is compelled to abandon absolutism, he is not at a loss for a standard. The logical hedonist turns from his own to an objective field, *i.e.*, that of the highly cultivated man as he conceives him. Of course this standard is only relatively stable. M. shows that if the above position be correct, we are enabled to account for the genesis of many æsthetic theories which have been defended in the past. Incidentally it has appeared that the theoretic opposition to hedonic treatment of æsthetics has been increased, if not occasioned, by an incorrect and inadequate view as to the nature of pleasure-pain, held by æsthetic theorists. A most fruitful lesson is to be learned from this whole discussion, *viz.*, a lesson of liberality. We come to see the futility of attempting to force standards upon others. In the next article M. will attempt to show that æsthetic practice conforms with the principles relating to pleasure-pain which have been already enumerated.

E. A.

Sur les diverses formes du caractère. TH. RIBOT. Rev. Ph., XVII, 11, pp. 480-500.

The object of this article is merely to attempt a classification of the different types of character. R. neglects the history of the subject, which would be long and monotonous. Two principal theories have been held: one physiological, the other psychological. The former is practically the classic doctrine of the four 'temperaments,' though this has often been modified in its minor details. The latter is more recent, and appears to be of English origin. R. begins by attempting to establish the most general conditions of the determination of characters. There are two fundamental manifestations of the psychic life: feeling and action. We have, then, two great classes, *les sensitifs* and *les actifs*. (1) *Les sensitifs* are to be distinguished by the exclusive predominance

of sensibility. They are restless, timid, contemplative, likely to be pessimists. (2) *Les actifs* are like machines always in operation, and live an external life. They tend to be optimists. Observation shows that we must also recognize (3) *Les apathiques*, who have what almost corresponds to the 'lymphatic temperament' of physiology. The two other classes are positive; this is negative, but very real. Inertia is its characteristic. Shall we admit (4) *Les tempérés*? This type exists, but deserves no place in a fundamental classification. When we pass from genera to species, a new factor comes in,—intellectual dispositions. Intellect is not a fundamental element of character; it is the light, not the life. Character sinks its roots into the unconscious, and hence is so difficult to change. (1) *Les sensitifs*. Under this genus R. describes three species: (a) *Les humbles*: excessive sensibility, limited intelligence, no energy,—such are the constituent elements of this type of character; (b) *Les contemplatifs*, who are distinguished from the above by a very superior mental development, e.g., Maine de Biran and Alfieri; (c) *Les émotionnels*, in the restricted sense. To the extreme sensibility and the intellectual subtlety of *les contemplatifs*, activity is added. To this group belong very many great artists. (2) *Les actifs*. R. divides this class into two species, according as intellect is mediocre or powerful: (a) *Les actifs médiocres*. To this class belong many who have a rich fund of physical energy together with a constitutional need of spending it, e.g., tradesmen, sportsmen, etc. (b) *Les grands actifs*, who abound in history and play the chief rôles in it. Great military leaders belong to this type. (3) *Les apathiques*. R. distinguishes two species: (a) the purely apathetic type,—little sensibility, little activity, little intelligence; and (b), where a powerful intellect makes all different. Two cases are to be distinguished: the first includes certain men of genius (e.g., great mathematicians); the second R. calls *les calculateurs*. Franklin is a good example. We now pass from species to varieties, from characters relatively simple to those that are more complex. R. proposes the following groups: (1) *Sensitifs-actifs*, (2) *Apathiques-actifs*, and (3) *Apathiques-sensitifs*. The last is a contradictory synthesis, which nevertheless exists. This is less normal than semi-pathological. In this investigation R. has neglected all strictly pathological forms of character. He ends by showing that what he regards as true character does not change.

E. A.

Du trouble des facultés musicales dans l'aphasie. DR. BRAZIER.
Rev. Phil., Oct., 1892, pp. 337-368.

§ 1. *Introduction.* The notion of aphasia has grown steadily more complex. Difficulties in the way of its investigation are: (a) the

'mental formula' of the subject; (*b*) functional substitutions; (*c*) phenomena of induction; (*d*) commisural disturbances. § 2. *General nature of musical aphasia, or amusia.* Music is a language of the emotions; massive, not concrete, as is articulate language. The analogy does not go far: word and tone have very different language-values. On the other hand, the processes of acquisition and education are parallel in the cases of speech and music; whence it is intelligible that similar disturbances should arise in them. Yet a systematic treatment of amusia was not attempted until quite recently (Ballet, 1888; Knoblauch, 1890; Wallaschek, 1891). § 3. *Physiology of mental representations of music.* (*a*) Part played by auditory images in music.—These are the most important mental images. The development of the centres is very different in different cases: auditory daltonism occurs. Hence Ballet's view, that musical deafness cannot precede word deafness (*cf.* Ribot's law of memory), is untenable. Auditory images may take the quality of a voice, of a familiar instrument, or of an indefinite, mean instrument. They may be externalized (hallucination). In the representation of harmonic chords a visual image may supplement the auditory. Of 60 musicians, 51 were pure 'auditifs'; 9 stated that they also employed visual or motor images. The figures have no absolute value. (*b*) Part played by motor images in music.—The motor images (Stricker) fall into three classes. *α.* Song.—Physiology, like pathology (Ballet's motor amusia; *cf.* Broca's aphasia, = aphemia) points to the existence of a motor centre of musical memory. The muscular synergies, which singing has set in activity, leave us a residual image in this centre. *β.* Instrumental performance.—There are also motor centres for the playing of instruments; *cf.* the 'finger-memory' of musicians. Pathology speaks for their existence (Charcot). *γ.* Rhythm.—Music was originally the accompaniment of muscular movements, which physiological necessity renders rhythmical. The motor rhythm-image is distinct; it may be left intact, when the song-image is pathologically changed (Wallaschek's paramusia). (*c*) Part played by visual images in music.—The visual images may be very precise; usually they are approximate or schematic only. § 4. *Pathological cases: musical amnesia (amusia).* (*a*) Mixed or total musical amnesia (complex amnesia).—Here we have simultaneous functional failure of all the centres for the registering and producing of images. Two cases are cited, and further investigation demanded. (*b*) Special musical amnesia (simple amusia). *α.* Auditory amusia or tone-deafness (Wallaschek, Grant Allen).—One case is cited. In ideal tone-deafness the subject, aphasic or not, hears a melody as a series of noises, without significance or æsthetic association. His memory for melody ceases. He may read music still, but without appreciation. Song is impossible. *β.* Visual amusia or notal blindness.

— This naturally precedes verbal blindness. The subject may write music, but cannot read it (Proust, *etc.*). One case is cited. In it, the time-value of the notes was recovered before their tonic value; *cf.* Ribot's law of regression. γ . Motor or expressional amusia. — Some aphemics retain their motor song-images, but cannot reproduce the words of the songs. A more numerous class retains the airs and their motor images, but only recovers speech for the words of these airs. In motor amusia, the aphemics have lost the motor memory for singing, as they have that for articulation. Probably this amusia can occur in the absence of aphemia. § 5. *Conclusions.* Two hypotheses are possible: that the centres for music are identical with those of speech, but that partial functional disability may arise; or that the centres are near together, but distinct. The question must be decided by pathological anatomy. Physiologically, we may apply to music as to speech the theory of the three images (auditory, visual, motor). As regards classification, we may distinguish total (or, at least, complex) amusia and simple amusia (of reception; tonal deafness and notal blindness: and of transmission; vocal and instrumental motor amusia). Amusia may exist independently of aphasia. Finally, timbre will be imaged in terms of pure audition; melodious song in those of audition, sight, and muscle sense; the harmonic chord in those of audition, supplemented by vision; rhythm by those of the muscle sense alone.

E. B. T.

On the Introspective Study of Feeling. H. M. STANLEY. Science, Oct. 7, 1892.

Psychology is a very imperfect science. Not even the classification of psychic phenomena into intellect, feeling, and will is universally accepted. Most apparent is the imperfection in the domain of feeling. Literary authority and common observation are the sources from which most essays on feeling draw their inspiration; and they are often colored also by ethical or philosophical bias. To study feeling scientifically, we must assume that it is "a biological function, governed by the general laws of life, and subject . . . to the law of struggle for existence." The first difficulty that meets us here is the automorphism of psychological method. Yet this subjective method is necessary. Can it give us direct knowledge of feeling, as conscious content, or only mediate knowledge, through its accompaniments? Ward upholds the latter position. But though the cognition of feeling as a fact of consciousness is always associated with the feeling-disturbance of consciousness itself, the two processes are distinct. There is nothing in the nature of feeling to make it only indirectly observable by consciousness.

E. B. T.

Ueber binoculare Wirkungen monocularer Reize. E. B. TITCHENER. Phil. Stud., VIII, pp. 231-310.

(1) *Introduction.* Colored stimulation of one retina evokes, under certain conditions, a color-sensation in the other. This has been explained as due to binocular contrast (Fechner, Wundt, Helmholtz, Béclard); to a direct excitation of the second retina (Chauveau; denied by Charpentier); to the central origin of after-images in general (Parinaud, Binet), or of the binocular after-image in particular (Ebbinghaus). (2) *Experimental results.* The phenomenon is to be ascribed to physiological excitation of the second retina (*cf.* Ramón y Cajal). The secondary after-image differs from the primary: (a) as being of less absolute duration; (b) as being of relatively different duration in its successive phases; (c) in brightness (at least in the negative and complementary stages of both). It appears in circumstances which preclude the possibility of retinal rivalry (*cf.* Exner, Kleiner, Delabarre). Experiments carried out with a unilaterally color-blind subject confirmed its independent existence. (3) *Theory.* The secondary after-image can be subsumed to Fechner's theory. Positive and complementary after-images are explained as "exhaustion phenomena, which have not yet reached the value of the difference limen in the negative direction, as regards their brightness-coefficients." The fact, established in the course of the investigation, that color-blind constituents of the one half of the optical apparatus can conduct to the other half an excitation of the quality to which they themselves are insensible, cannot be turned to account for the decision of the question of the peripheral or central seat of color-blindness. The experiments indicate that the physiological basis of contrast is different from that of after-image, if Fechner's theory of the latter is maintained; but they make no positive contribution to a theory of contrast-phenomena.

AUTHOR.

Beiträge zur Kenntniss der Farbenblindheit. I. A. KIRSCHMANN. Phil. Stud., VIII, pp. 173-230.

(1) *Preliminary remarks.* Color-sensation is not an explicit function of wave-length. For, firstly, the same sensation is occasioned by rays of quite different refrangibility, if the brightness-relations are suitable. Secondly, the law of relativity comes into operation. Thirdly, there is no such thing as homogeneous light: the collimator slit of the spectro-scope is always wider than the wave-length of the rays employed. This latter fact helps to explain the law of mixture of non-complementary colors, and the position of green in the series of spectral colors,

while it invalidates the distinction of ground-sensations. The apparently exceptional position of purple in the color-series is due solely to the arbitrary conditions of 'normal' dispersion. Since all component theories are merely mathematical schemata, the Helmholtz classification of color-vision under the heads of dichromatic and trichromatic must be given up: seeing persons are rather achromates, dichromates, or polychromates. (2) *Diagnosis of color-blindness.* Normal color-vision presents differences in different persons. The extent of the spectral colors is variously defined; the spectrum is of various length; the brightness-maximum is variously placed; there are differences between the two eyes. Color-blindness implies considerable deviation from the norm. To test it one may use (a) the pseudoisochromatic tables of Stilling (not certain); (b) the spectrum; (c) colored wools; (d) colored papers, employed directly or in top-mixtures; (e) colored flames; (f) colored glasses and combinations of gelatine sheets. It is best to submit the subject to all these tests. (3) *Experimental results.* (a) A bipolar system, with saturation-maxima in the position of (the normal) yellow and indigo-blue. Neutral line near *E*. (b) The color-series is interrupted at three points; pure yellow, blue-green, and purple give only the brightness-sensation. Brightness-maximum in the normal place. (c) Red-green blindness; the neutral line at $\lambda = 518$. (d) A blue-yellow system, with unshortened spectrum. (e) Hereditary and monocular partial color-blindness. The color-series lacks the qualities violet, green, and yellow, and the transitions of these to neighboring qualities. A unique case. The color-blind eye sees everything brighter than the normal eye. This the author interprets to mean that in all instances, where no energy is expended in the excitation of a color-sensation, the whole stimulation-energy can be applied to the production of the brightness-sensation. The color-sensibility is apparently greater in indirect vision. (f) A case only different in degree from that just mentioned. (Subject brother of the last.) (g) A system which proves that the absence of a quality (in direct perception or as contrast) does not necessarily involve the absence of the opposite quality.

E. B. T.

Ueber die Schätzung kleiner Zeitgrößen. F. SCHUMANN. Zeits. f. Psych. u. Phys. d. Sinn., IV, pp. 1-69.

(1) *The psychological basis of the comparison of small time-magnitudes.* § 1. No adequate theory has as yet been propounded. The conscious content in question consists of the secondary impressions of expectation-strain and surprise. This is indicated both by the results of experiments with variously graduated series of metronome-beats and by contrast-

experiments. The sensory attention, in the course of comparison-experiments, adapts itself (*stellt sich ein*) to the normal time; deviations from the normal call up surprise or expectation. If the normal time be given to the reagent in varying order, the secondary impressions occur only with comparatively large time-differences; sensible discrimination decreases. These facts hold alike for the cases in which the compared intervals succeed one another immediately, and in which they are separated by a pause. They have been tested for intervals up to 2". For intervals under 0.3" the conditions of the sensory attention are different; the basis of comparison, however, is the same. § 2. The rapidity of a rotating drum, on which syllables are printed at equal intervals, is estimated by the strain of the attention necessary for the cognition and pronunciation of the syllables. § 3. If lines be drawn on the rotating drum, in place of the syllables, the rapidity of the movement of these lines is estimated by the strain of attention necessary to follow them all for a moment with the eyes. But this is, of course, not the sole basis of such estimation. § 4. The psychophysics of attention is very incomplete. It seems certain that a tendency to automatic activity at definite intervals can be impressed on the sensory centres; and this helps to explain attentional adaptation. Perhaps expectation-strain implies the existence of an internally aroused strain-feeling. (2) *The results of previous investigation.* § 5. Mach and Vierordt. Valuable in Mach's investigation are: the determination of the maximum of relative sensible discrimination (at 0.3"-0.4"); the emphasis laid on adaptation; the calling in of secondary sensations to explain the time-sense. Vierordt employed a reproduction-method; imagining that the mean variable error measured sensible discrimination, and that the reproduced time gave the "corresponding temporal sensation-content." Both assumptions are untenable. § 6. The Leipzig investigations. That of Glass alone deserves notice. He found that large times are over-estimated (*cf.* Vierordt); and that there is a periodicity of the constant error. This last fact (which is quite clear only in the final series of experiments) is perhaps to be explained by the influence of respiration. § 7. Münsterberg. He also emphasizes strain-sensations of expectation, and (for large times) respiration. But he recognizes the periodicity-law of Estel, Mehner, and Glass. Firstly, this law is not in the experimental results; secondly, what of periodicity there is, is not explicable by respiration-influence; thirdly, the mean variable error of Glass does not exhibit the periodicity of the constant error. And the contrast-phenomena, to which he appeals, he has described incorrectly. His employment of Mehner's remark, that an interval is shortened by weakness of the limiting stimulus, is invalid, because the fact is wrongly stated. § 8. Lesser contributions. Exner; Buccola; Hall and Jastrow (whether

filled intervals appear longer than empty intervals); Stevens, Nichols, F. Martius (rhythm); Paneth (alteration of reproduced times with magnitude of interval between apprehension and reproduction). (3) *New experiments.* (a) Method of right and wrong cases. — Sensible discrimination is largely dependent on the magnitude of the difference between normal-time and comparison-time. The lowest relative difference-limen obtained was $\frac{1}{46}$ ($N = 400 \sigma$, $D = 13.3 \sigma$; for $D = 20 \sigma$, the limen was $\frac{1}{36}$). The constant time-error is positive for times $\geq 600 \sigma$. Very perfect practice is required. The results confirm the theory. (b) Method of reproduction. — The mean error does not measure sensible discrimination. Small times are not over-estimated, if the normal time and the interval between experiments are kept constant. That the time-error for a large time is negative (Vierordt) is due to the method. § 11. Further experimental facts confirm the theory. A strong limiting stimulus shortens the period: this is due to the secondary impression of surprise. An empty time, separated by an interval from an equal (normal) empty time, appears smaller (*cf.* Hall): this is also due to surprise. Biaural experiments, again, showed the influence of expectation. Whether the stimulus-limen is reduced in consequence of adaptation of the sensory attention, could not be determined. No respiration-uniformity (*cf.* Münsterberg) was discovered.

E. B. T.

Zur Kenntniss des successiven Kontrastes. Dr. RICHARD HILBERT. Zeitschr. f. Psych. u. Phys. d. Sinnesorgane, Bd. IV, Heft 2, pp. 74-77.

The negative after-image of a colored object is not always of the complementary quality. In the writer's case, the normal dark blue image, produced by a yellow stimulus, became light green, under circumstances of physical and mental fatigue. He compares with this the "Abklingen" of solar after-images.

E. B. T.

Disturbance of the Attention during Simple Mental Processes.

E. J. SWIFT. Am. J. Ps., V, 1, pp. 1-19.

This paper describes a research made in Ebbinghaus's laboratory at Berlin, to determine the effects of different disturbances upon reaction-time. The experiments covered the following cases: simple muscular reactions to an auditory stimulus, the attention being disturbed through the sense of hearing; auditory choice-reactions with auditory disturbance; muscular reactions to a visual stimulus with visual disturbance;

visual choice-reactions with visual disturbance ; auditory muscular reactions with visual disturbance, and *vice versa* ; and, lastly, auditory choice-reactions with visual disturbance, and *vice versa*. The experiments with simple muscular reactions, where the disturbance and excitation affected the same sense, show, first, that, contrary to the opinion of Wundt and Cattell, muscular reaction-time is lengthened by disturbance ; and, second, that a distraction of the attention through the sense of sight has more effect upon reaction-time than a disturbance through the sense of hearing. On the other hand, in the reactions involving choice, the mind is less disturbed in discriminating between sight-impressions than between those of hearing. A similar result appeared in choice-reactions where disturbance and stimulus affected different senses. The writer offers as explanation the facts that we are most often called upon to discriminate rapidly between objects of sight, and that we are more accustomed to disturbances in visual discriminations. The results of experiments with muscular reactions, when the stimulus and disturbance affected different senses, show, in opposition to the conclusions of earlier investigation, that reaction-time is here less influenced than when excitation and disturbance are given through the same sense. It appears also that in simple muscular reactions an intermittent light disturbs the attention more than a sound. An additional series of experiments was made to find how muscular and choice reactions vary when the reagent's attention is directed to different kinds of work. Three tasks were given : repeating a poem previously memorized ; reading an English book ; reading Kant's *Kritik*. It was found that the muscular reactions were affected almost as much as those with choice ; and the writer concludes that the simple muscular reaction is by no means so perfectly organized a brain reflex as has been supposed.

M. F. WASHBURN.

ETHICAL.

Unterhalb und oberhalb von Gut und Böse. E. v. HARTMANN.
Z. f. Ph., CI, 1, pp. 54-86.

The naturalistic standpoint in ethics is right in so far as it denies the obligation of a moral law imposed from without and requires a self-determination from within. It errs in recognizing no other determinants of the will than egoistic ones. The notion of the natural should not be so narrowly conceived as to exclude anti-egoistic impulses and other-regarding motives. By developing social and moral impulses nature guided by teleology rises to a sphere which is natural only as to

its means, not as to its ends. The error is also made of asserting a purely mechanical determination instead of a logical one embracing both causality and teleology. Yet this standpoint can consistently allow within its mechanism neither subjective purpose nor responsibility. The moralistic view is essentially autonomous. Its truth lies in the fact that it goes beyond the merely natural sphere, if not as to its means, yet so far as its source (unselfish disposition) and aims (unselfish moral conduct of life) are concerned, that it transforms the objective purposes of the world into subjective laws and recognizes the self-created moral law as absolute norm. It fails when it regards the moral sphere as the highest and changes the mediate teleological value of the same into an immediate one, when it forgets that morality is a means to absolutely supra-moral ends and overlooks the reflection of the supra-moral in the spiritual life of man, in art, science, and religion. It is right in making moral responsibility the cardinal point of human life, in rejecting purely mechanical causation, in combating fatalism, wrong in its indeterminism and absolute responsibility. The supra-moralistic position holds when it considers the moral sphere as a means to higher ends, but errs in emancipating man from the moral law and in referring responsibility wholly to God. We must agree with this theory when it declares the germ of moral disposition from which morality proceeds to be a phase of divine grace; we find fault with it for ignoring the natural means placed at the disposal of the will for self-determination. According to the first standpoint there is no objective good or bad; according to the second the moral law is absolute, the gods themselves being subject to it; according to the third God stands beyond the pale of morality, while man's acts are good in so far as they conform to the will of God. (We have, corresponding to these different ethical conceptions, different views of science, art, and religion.) None of these three theories taken by itself is true. Their truth lies in their union. Let us say, then, that moral willing is determined. Since it autonomously transforms objective purposes into moral laws, its teleology transcends natural teleology, which pursues ends without being conscious of their obligation. The causal or mechanical world order is but a means of the teleological natural order, the latter a means of the moral world order, which in its turn serves the ends of the supra-moral plan of salvation. The ultimate goal is conceived by the religious consciousness as redemption. Universal redemption = the return of all things to God, individual redemption = the ideal anticipation of the real. We live morally, in order to reach supra-moral ends. The supra-moral is not only the end but also the ground of morality. A supra-moral God is immanent in man, the religious consciousness, therefore, the immediate and final sanction and profoundest source of moral consciousness. Religion is neither a

means of satisfying the natural impulse to happiness nor something hovering beyond morality. It penetrates, renews, and ennobles moral and natural life. Only by uniting these three standpoints are we able to solve the problem regarding the origin of good and evil. By reason of the teleological organization of nature, anti-egoistic impulses are already evolved in the animal sphere. With the growth of consciousness these predispositions to good reach the dignity of norms. This evolution is the work of preparatory grace. Inherited disposition means original grace and original sin. Hence the morally good has its mediate or immediate origin in the supra-moral sphere. Evil springs from the natural which has not yet been drawn into the service of the supra-moral and moral teleology. Now the natural is willed by God. Is evil, then, also decreed by God? Can anything be bad that is not opposed to divine purposes? This antinomy needs to be solved. The natural sphere where evil originates is logical in so far as it is a means of higher stages of teleology, relatively illogical in so far as it checks their realization. That which is absolutely illogical, or the will, necessitates this antilogical process. To the will of God, then, we may attribute the existence of evil. But since the will or the absolutely illogical in God transcends the moral sphere, it cannot be called bad. On this basis, then, we can hold to the supra-morality of the absolute as well as to the immoral character of evil within the moral sphere. We are also enabled to solve the problem of man's moral responsibility in spite of the fact that he is absolutely dependent on God and relatively dependent on nature.

F. T.

The Study of Crime. W. D. MORRISON. *Mind*, I, 4, pp. 489-517.

An estimate of the value of criminal statistics is a necessary preliminary to the study of crime. Changes in judicial procedure affect the number of offences, and render statistics misleading. It is not possible to compare periods with absolute certainty. Brief periods are of no value, and in long periods account must be taken of changes in (1) law, (2) attitude of authorities, (3) public feeling, (4) conditions of life. International statistics are only reliable as throwing light on the probable causes of crime. The subject falls under three heads: (1) movement of crime, (2) causes, (3) means of repression. The movement of crime comprises extent, intensity, and geographical distribution. It is determined by examining the records of cases reported, cases tried, and cases of conviction. Each record has special advantages and defects, but, interpreted in the light of each other, the three form a valuable index of the state of crime in a community. The causes of

crime are personal, cosmical, social. The personal factors are sex, age, physical and mental constitution. The physical inferiority of women affects the nature of feminine offences, their isolation the number. At different ages different crimes are dominant. Bold thefts are common in youth; offences of violence and cunning belong to later stages. As age advances crime decreases. The physical factors are not as a rule direct causes. They debar an individual from honestly obtaining the means of life, and so lead to crime indirectly. There is no proof of the existence of a distinct criminal type. Though mental defects, like physical, in the main act indirectly, some psychological characteristics, such as want of pity and probity, do directly betray a criminal disposition. Cosmical conditions are those of climate, soil, seasons, temperature, configuration of the earth. The evidence of international statistics is insufficient to show that nature has more than an indirect influence on conduct. The influence of temperature is not quite certain, but that of the seasons is indubitable. The social causes of crime are numerous and complex. Most important of them is the concentration of population in large towns. The denser the population, the greater is the proportionate number of police. Poverty may influence the nature of crime, but not the amount. That ignorance is an important factor is now denied by all investigators. Education merely determines the form of crime. The effect of drink has been exaggerated. It is the most temperate communities that present the blackest criminal records. The influence of nationality cannot be determined precisely. Occupation, political institutions, militarism, and religious beliefs, all exercise a distinct effect. The general conclusion is that criminal conduct is a product of all the causes working together, but operating in each case with different degrees of intensity. With regard to the repression of crime, we must study the physical, mental, social, and economic conditions of the criminal, before we can devise effective measures. The diminution and mitigation of punishment have been carried to excess. Imprisonment in cells only intensifies criminal propensities. Abolition of cells and establishment of outdoor occupations are the reforms at present most urgently demanded.

D. IRONS.

Utilitarianism. A. L. HODDER. *Int. J. E.*, III, 1, pp. 90-113.

A defence of utilitarianism in view of later criticisms. Right acts are those which do not cause excess of unhappiness over happiness, if we consider all affected, and especially remote and indirect consequences. It is sometimes difficult to determine on which side the preponderance lies. But utilitarians do not attempt to introduce the yard-stick into ethics. Only those acts, however, are moral and right which are voluntary,

promote happiness, and would not be practised by some except for a reward. *If men desire only happiness, that is the basis of morality.* The objection that pleasure ought not to be the ground of human action, even if it is, can only mean that another system would be better for mankind. But if a better system is possible, it is sanctioned by the principle of utility, and really is utilitarianism. *But men do desire only happiness.* Other apparent motives may be in the foreground; but happiness, although remote, is the determining factor. We shun insanity and illusion, however pleasant, because we regard it as a condition of humiliation and misery. The miser loves money, not for itself, but for the pleasure of security and power which it may give even when hoarded. It is for the sake of pleasant memories that we desire useless mementos. We often love business routine, because habitual actions not at first pleasant become in time relatively so. Some love disinterested virtue. This is accounted for by the pleasure of a commending conscience in such men always overpowering. Some are willing to admit that every desire fulfilled gives pleasure, but hold that the pleasure comes from the very fact of fulfilment and not from the object desired. This is untenable. It is not that we desire an insipid thing and rejoice in having got it, but we desire what is pleasant in itself. The rise of social morality is as follows: If a man desires pleasure alone, he will urge his fellows to act for his benefit. When interests clash, he who would suffer least will generally give way. Society would enforce abstinence from pleasures which cost others more than equivalent pain. In fine, acts would be classed as right and wrong according as they advanced public happiness and were not natural to all men. All desire happiness, but not necessarily the happiness of all. The object of morals is the object of society, not of individuals. Society will enforce the moral law upon some, others will obey for their own good. One's responsibility to morality depends, not upon one's self, but upon liability to punishment by society.

E. L. HINMAN.

Philanthropy and Morality. FATHER HUNTINGTON. Int. J. E., III, 1, pp. 39-64.

Popular opinion at present attaches much greater importance to practical beneficence than to charity based upon theory. While the emphasis of the practical is a hopeful sign of the times, is it not a mistake to oppose practice to theory, or to suppose men will act right without understanding the rational principles that should regulate conduct? Philanthropy must make for human progress, and this is the fulfilment of the moral law. Hence philanthropy must contribute to morality. Let us, then, consider the effects of practical beneficence

upon the recipients. It is an accepted truth that state aid to people in their homes tends to create a pauper class. It is claimed, however, that private alms-giving will not have this effect, as it cannot be relied upon. But the pauper class make little distinction between aid bestowed by the government or a charitable institution. The result is to foster a spirit of dependence in the recipients, and to cause others to sink to the same condition. Institutions for old people, invalids, and children, at all events, we are told, are indispensable. But the moral effects even of these are undesirable. The care of such people has always had a salutary influence upon those whose duty it is to provide for them, and has been one of the strongest incentives to industry. Such benefits should not be denied to the poorer classes. Nor do such institutions necessarily promote the welfare of the inmates themselves. Children are removed from the beneficial influences of home life. They feel no responsibility to provide for their daily wants, and when turned out into the world they are so ill adapted to it that many of them make shipwreck of life. Upon the rich dispensers of the alms, the result of the practice is no less desirable. It soothes their conscience, leads to their glorification, and keeps them from considering the justice of their relations to the poor. What, then, is the remedy for this state of things? To be *just* before being *generous*. If men are to live, they must have access to the earth which is the source of life. This does not mean a new allotment of the soil, but the collection of the rental values of land, irrespective of improvements, as the fund from which the expenses of the city, state, and nation shall be met. Thus alone can the cause of the evil be removed. While under existing circumstances it may still be necessary to help the poor, we should at the same time teach them the cause of their poverty, and thus educate them to demand a reform of the present abuses.

D. D. HUGH.

METAPHYSICAL AND EPISTEMOLOGICAL.

The Idea of Necessity, its Basis and its Scope. P. CARUS.
Monist, III, 1, pp. 68-96.

The idea of necessity is based upon the conception of sameness, and the existence of sameness is a fact of experience, upon the presence of which depends the existence of the mind itself. Necessity is not fate. I. The Basis of Necessity. Etymologically, the necessary is the inevitable. The idea of necessity is closely allied to the idea of sameness. The logical principle of identity ought to be named the principle of sameness. The statement $A=A$ does not mean that this particular A

is itself, but that all A's in so far as they are A's are the same. Sameness is the capability of one thing's being substituted for another. It depends upon a special purpose. Sameness is an idea and, like every idea, stands for something real. Mind is possible only because sameness is real. All things are in some respects the same. Without samenesses the feelings of the world-stuff would be in a chaos, and mind would never be evolved. All future progress in science as well as in civilization depends upon the reality and persistency of samenesses in the objective world. Science systematizes and presents in compact form the samenesses of experience. The law of the conservation of energy and matter is the most comprehensive formulation of the sameness of the universe as a whole. A world of sameness is a world in which necessity rules, and necessity means inevitableness. The world in which we live is a cosmos. Everything in it is necessarily ordered. II. The Scope of Necessity. Determinism is the negation of absolute chance, not of chance in the sense of an unexpected event. Determinism asserts the universal validity of the law of cause and effect. Chance is any event not specially intended, either not calculated or, in the present state of our knowledge, not calculable. Absolute chance involves the idea of a creation out of nothing and so contradicts the law of the preservation of matter and energy. Absolute chance is therefore unacceptable to the mind and in this sense inconceivable. Chances similar to the throws of a die have had a great influence upon the formation of worlds and upon human destiny. For example, the fate of a man depends mainly upon his own character, but also partly on circumstances which he cannot control. Necessity does not exclude free-will. A being is free, if it acts according to its own nature. There are no purely mechanical phenomena. The world has motions, but it does not consist solely of motions. Feeling cannot be explained by motion. Mentality is a new factor in the sphere of being. The action of mind depends upon a meaning which has nothing to do with mechanics. Everything that acts has spontaneity. That action is spontaneous which springs from the nature of the thing in action. The brain-atoms are possessed of the same spontaneity as the atoms of a gravitating stone. Brain-atoms have the additional attribute of awareness. The action of mind is determined by psychical and mental laws. In conclusion: Natural laws do not suppress the spontaneity of nature; they simply describe how things do act. The essence of nature is not materiality, but spirituality. The spiritual is the permanent source and condition of mind, which is transient. All nature is spontaneous, free. A higher freedom arises with the recognition of natural laws as the eternal aspects of natural phenomena. "The truth shall make you free."

J. A. LEIGHTON.

Lotze's Antithesis between Thought and Things. II. A. EASTWOOD. Mind, I, 4, pp. 470-489.

We have seen that Lotze proposes to neglect at first any inquiry into the content of the ultimate and concrete truths of philosophy. He will merely investigate "the grounds on which, in a subjective sense," the certainty of those truths "for us reposes." The immediate effect of the modesty of his endeavor is to raise a presumption against the objective validity of knowledge. And, apart from this danger, is it possible to discuss the nature of ideas as though it had nothing to do with the nature of objects? E. dwells on this particular fallacy because he considers it typical of Lotze's usual method of argumentation. How is it possible to understand knowledge, when we have made it representative of something which we do not yet know? This difficulty Lotze endeavors to surmount by his famous "metaphysical postulate." However "metaphysical" such a postulate may be, it can only demonstrate its supremacy over the "circle of ideas" in so far as it is logical. Lotze's fault consists in forgetting that the category of causality, which he makes the basis of explanation of "knowledge in the widest sense," is itself the work of the mind. Indeed, he has an uneasy feeling that he has not been doing justice to the unique character of thought. Thus, when raising the question how the thinking subject is "operated upon" by the object of knowledge, he observes that thought must be treated as an object which is "receptive" of certain particular "stimuli to its spontaneity." Against this supposition it must be urged that the knowing subject *qua* subject has no objective nature at all. But Lotze goes further toward making thought independent and at the same time an object or "thing." After an external stimulus has called forth its activity, thoughts, he tells us, may "have their origin in the constitution of the mind alone." Here, again, he is converting good "common-sense" into bad metaphysic. And now let us turn to the other side of the antithesis between thought and "things," and come to close quarters with this "something more" which is perpetually casting its shadow upon Lotze's "ideas." This is supposed to be necessary in order to account for *a posteriori* knowledge. Lotze seems to forget that, in trying to supply data or grounds as the causes of the data of experience, philosophy is committing itself to an endless regress. Idealism is doing nothing preposterous when it denies the existence of things *per se* independent of thought. We ought to correct Lotze's assertion, that change "completely dominates reality," thus: Being predicable of things only in so far as they are brought under the unity of thought, change is completely dominated by thought. Change is one of the essential aspects in which reality presents itself as a phenomenon; thought, the presupposition of all phenomena, cannot itself

be conditioned by a phenomenon. Speaking generally, the antithesis between thought and "things" fails, because philosophy cannot begin with an isolated inquiry into either cognition or reality, but must necessarily begin and end with one inquiry into the cognition of reality. Divorce the two, and they become abstractions which never can unite themselves, but have to appeal to a third party to effect their union; and E. fails to see the piety of a philosophy which makes the fact of its own helplessness the ground of an appeal to God.

E. A.

HISTORICAL.

Epikureische Schriften auf Stein. H. USENER. Rheinisches Museum, Neue Folge, Bd. XLVII, 3, pp. 414-456.

The *Bulletin de correspondance hellénique* (XVI, 1-3) contains thirty-one pages filled with the fragments of an immense inscription found in Oinoanda in the interior of Lykia. The contents are what one might call the collected works of an Epikurean philosopher. An old teacher of the Epikurean philosophy, by name Diogenes, conceived the notion of carving in stone his exposition of the doctrines of Epikuros. He knows little of the philosophy of other schools, confuses Aristotle with Ainesidemos, and in his exposition is not free from garrulity and tautology. The inscription dates probably from the last part of the second or the first part of the third century. The writing was originally on the wall of a large hall, after whose destruction the stones containing the inscription were used for other purposes. Part of them, with the writing turned to the interior, were employed in the building of another wall. U. supposes that only about a fourth part of the original inscription has been found. After describing the form of the characters, the number and dimensions, etc., of the columns of stone, and after giving in general the external history of the discovery with an estimate of the editorial work of the French savant who in the above-mentioned number of the *Bulletin* published the first account of it, Usener in thirty-five pages prints an emended text of this latest treasure-trove. He divides the inscription into six parts: 1. Address of Diogenes to the citizens of Oinoanda. 2. Letter of Epikuros to his mother. 3. Letters of Diogenes to Antipatros. 4. Dialogue of Diogenes with Theodoridas. 5. Epitome of the Epikurean physics. 6. Manual of the Epikurean art of life. In the letter to his mother (9) the key-word for the evolution of Epikuros' ethical teaching is given, εὐθυμία. This is the characteristic notion in the ethics of Demokritos, and it is from Demokritos through Nausiphanes that Epikuros derives his ethical doctrine. This is

the only mention of the Demokritean word we have in the remains of Epikuros, and it furnishes Hirzel (who in his *Untersuch. über Cic. phil. Schriften* argues the derivation of Epikuros' ethical philosophy from Demokritos) with a proof from original sources. In the Epitome of the physics (24) the fragments from Epikuros' sketch of primitive cultures and the doctrine of the natural origin of language correspond with Epikuros' fragm. i. 75, Lucretius v. 925 ff., and Diodoros i. 8. The exposition of Diogenes is fuller; it adds to our knowledge of Epikuros in informing us of his rejection of the popular mythology which referred the arts and language to the gods, and contains the polemic against the doctrine that language originates in convention (θέσει). No. 26 combats the Stoic doctrine of ghosts. No. 31 is concerned with the doctrine, which in Epikuros' philosophy holds an important place, that psychical suffering is greater and more dangerous than bodily suffering. No. 40 is an important fragment dealing with the rejection of εἰμαρμένη. No. 41 contains a polemic against the Stoical doctrine of the continuance of the soul after death.

W. H.

Hindu Monism. Who were its Authors, Priests, or Warriors?

A. BINET. *Monist*, III, 1, pp. 51-67.

India was ruined by priestly rule, but the philosophy of her Brahmins was original and profound. From the beginning the priests were powerful, but they formed no caste until the Yajur-vedas, the Brahmins, and Sûtras. Of these the Brahmins claimed divine relations, and put themselves above the king and nobility. They ruled indirectly only, through possession of the rights of sacrifice. Civil law could not be enforced against them, and they were so depraved that it became necessary to forbid adultery during religious rites. Below the Brahmins were the Kshattriyas, the Vaisyas, and the Sûdras, the latter with neither civil nor religious rights. The book of Manu shows great increase in the power of the Brahmins and merciless burdens on the lower castes. With the advent of the older Upanishads, came a great revival of interest in the problems of thought, the results of which may be summed up thus: Being, as it is in itself, the ground of all existence, immanent in man, and perceived directly in thinking, is the only reality. The phenomenal world is a sense-delusion. This was the first monism propounded. The remainder of the essay attempts to prove that this monism originated with the warrior class and not with the Brahmins. B. refers to Bk. II. of the Brihadâranyaka Upanishad; to Bk. V. of Chândogya; Bk. VI. of Brihadâranyaka; the beginning of the Kaushîtaka, and to the eleventh and following chapters of Bk. V. of Chândogya. These references show the origin of this monism in the warrior class.

Gautama was of the warrior class. He opposed the superstitions of the Brahmans, and taught, in popular style, a final beatitude in reach of all. Vardhamâna Jnâtaputra, the founder of the Jaina sect, was of the warrior class, as was also Krishna Vâsudeva, the founder of the Bhâgavatas, of North India. These latter held a monotheism quite parallel to Christianity, but original with them.

W. M. TIPPY.

Tommaso Campanella e la Citta del Sole. DR. ROMANO CATANIA.

La Fil., Gennaro-Febbraio, pp. 281-300.

Tommaso di Campanella was born at Stilo, in Calabria, in September, 1568. In his fifteenth year he entered a Dominican convent. He devoted himself from early youth to the study of the occult sciences, magic, astrology, and the Kabbalah, as well as to the observation of nature. He became an eager opponent of scholasticism. Incurring the enmity of the clergy, he was prosecuted by the Inquisition and imprisoned at Rome. He was released and went to Florence and thence to Padua. Here he again gave offence to the Dominicans and was subjected to a short imprisonment. Meanwhile he was developing his philosophy. Convinced that human knowledge is founded on sense experience, he desired to get rid of all philosophical and ecclesiastical traditions and go straight to the study of nature. He cherished, however, a leaning to Neoplatonism and Pythagoreanism. He considered the world as living, attributing a soul to the universe, to the earth, and to the stars. Less original and less logical than Bruno, he failed to give his monism a scientific basis. There were in fact two sides to Campanella's character and work: on the one hand he belonged to the new order of things, often showing good sense and exactitude and acuteness in making observations; on the other hand he often loses himself in mediæval mysticism and occultism. He believed in the immediate coming of the millennium, that kingdom of God which he describes in the *City of the Sun* and the *Monarchy of the Messiah*. This dual tendency is not peculiar to Campanella, but belongs to the transition character of his age. Campanella tried to reconcile the contradictions of his philosophy by the concept of God, who gives man his sense knowledge and who governs human fate through both natural and supernatural channels. When the kingdom of God is perfected, all kingdoms and states will be under the wise rule of a pontiff, aided by the best men, and the world will be filled with knowledge and happiness. In 1598 he returned to Calabria, then groaning under the tyranny of Spain. Campanella's prophecies were eagerly listened to and created great excitement. The authorities suspected a conspiracy; Campanella as its supposed head was arrested. The trial lasted for

many years, and he was frequently subjected to the most atrocious tortures, but constantly protested his innocence. It has been asserted that Campanella was a madman ; he did lose his reason for a time, owing to the tortures he underwent, but that this aberration was only temporary is proved by the works which he wrote while in prison and by the course of his life after his twenty-seven years of imprisonment were over. The last twelve years which he lived after his liberation were comparatively prosperous. He was well treated by the Pope, and protected and honored by Cardinal Richelieu. He died in Paris in 1659.

E. RITCHIE.

NOTICES OF NEW BOOKS.

Einleitung in die Philosophie. Von FRIEDRICH PAULSEN, a. o. Professor an der Universität Berlin. Berlin, Verlag von Wilhelm Hertz (Bessersche Buchhandlung). 1892. — pp. xvi, 444.

Professor Paulsen's course of lectures entitled "Introduction to Philosophy" is at last presented to the public in book-form. The author aims to acquaint his readers with the great problems which the world propounds to the human mind as well as with the answers given to them by the leaders of thought. He studiously avoids the form of historical narrative, preferring the form of discussion. He does not confine himself to presenting the problems together with the solutions offered by history: he also attempts in every case a solution of his own. We get, therefore, in addition to the fundamental questions and answers, the writer's own philosophy. In his opinion philosophic thought seems to be tending in the direction of idealistic monism. On this path the truth is to be sought. The history of modern philosophy represents a continued attempt to bridge the chasm between supernaturalistic dualism and atomistic materialism. Philosophy at present tries to mediate between a religious and an atomistic cosmology. It suffers all the disadvantages of such a position, being exposed to the shafts from both the camps between which it takes its stand. Peace will not ensue until science and faith are reconciled. Until then philosophy is to retain its post, regardless of all attacks. Professor Paulsen begins with an introduction on the nature and significance of philosophy (pp. 3-51). Here he discusses the relation of philosophy to religion and mythology as well as to the sciences, and gives a classification and the fundamental problems of his subject. Two books follow, dealing respectively with the problems of metaphysics (pp. 55-353) and those of epistemology (pp. 354-431.) An appendix on the problems of ethics (pp. 432-440) brings the work to a close. Book I is divided into two chapters, the one devoting itself to the ontological, the other to the cosmologico-theological problem. Book II discusses in its first chapter the problem of the essence or the relation between knowledge and reality; while its second chapter examines the question concerning the origin of knowledge. In the ethical part the questions are asked and answered, What is the ultimate end or highest good? What is the standard of moral worth? The views of Professor Paulsen on this subject are too well known to call for any further statements in this place. (A review will follow.) F. T.

The Principles of Ethics. Vol. I. By HERBERT SPENCER. New York, D. Appleton & Company, 1892. — pp. xiv, 572.

The first of the three parts into which the present volume is divided consists of the author's well-known *Data of Ethics*. In fact the two other parts together do not occupy quite as many pages as the first, so that less than

half of the volume is new. It will be remembered that the *Data of Ethics* was published by itself in 1879. After more than ten years of ill-health, partly occupied in further elaboration of his *Principles of Sociology*, the author wrote *The Principles of Ethics—Part IV, Justice*, which was published separately last year. He now publishes Part II, "The Inductions of Ethics," and Part III, "The Ethics of Individual Life," thus completing the first volume according to the original plan. There still remain to be written and published the concluding parts of the second volume: Part V, "The Ethics of Social Life—Negative Beneficence"; and Part VI, "The Ethics of Social Life—Positive Beneficence." The author is particularly anxious to complete these parts, since the divisions at present published, taken alone, are likely to leave a wrong impression respecting the general tone of evolutionary ethics. "In its full scope, the moral system to be set forth unites sternness with kindness; but thus far attention has been drawn almost wholly to the sternness."

E. A.

Einleitung in die Moralkissenschaft. Eine Kritik der ethischen Grundbegriffe. Von GEORG SIMMEL, Privatdozent an der Berliner Universität. In zwei Bänden. Erster Band. Berlin, Verlag von Wilhelm Hertz (Bessersche Buchhandlung), 1892.—pp. viii, 467.

The large number of contradictory moral principles advocated by different moralists shows that ethics has not yet acquired that certainty of method which makes other branches of knowledge so fruitful. Ethics should, therefore, preface its investigations with a critique of the apparently simple notions with which it deals. Whether it has any claim to existence as a special science outside of this sphere is indeed questionable. Since its subject-matter belongs in part to psychology, sociology, and history, it may perhaps seem inexpedient in the future to embrace such a variety of sciences under a single head. All that the writer aims to do, therefore, is to present a sort of preface or introduction to these special ethical investigations. He criticizes the fundamental concepts of ethics and discovers their highly complicated character, at the same time calling attention to that realism which raises its own abstractions to the dignity of active psychical forces. The concepts examined by Dr. Simmel in this first volume of his work are Obligation (*Das Sollen*) (pp. 1-84), Egoism and Altruism (pp. 85-212), Ethical Desert and Guilt (pp. 213-292), and Happiness (pp. 293-467). (A review will follow.)

F. T.

Geschichte der Philosophie. Von JULIUS BERGMANN. Berlin, Mittler und Sohn, 1892.—Band I, pp. vii, 456. Band II (erste Abtheilung), pp. 251.

This work, the author informs us, is addressed to those readers who seek to reach a true conception of philosophical systems and to understand the movement which is manifested in their development. It will appeal mainly to those who seek through the study of the History of Philosophy assistance in understanding the problems of philosophy itself. This work differs from other volumes of a similar nature by the limitations it has set for itself as

regards content, and the fulness with which the more important systems are treated. Another important feature, which is especially evident in the second volume, is the insertion of important and lengthy remarks, partly explanatory, partly critical, in the historical presentation. The first volume, a little more than a third of which is devoted to the systems of the Greeks, treats of philosophy before Kant. The most noticeable feature in the proportions of this volume is the small amount of space allotted to the philosophy of the Middle Ages and the transition period. The first part of the second volume deals with the period from Kant to Fichte and is much fuller in its treatment than the preceding. The latter half of the volume has not been yet published, but the author hopes that it will be ready some time during the present winter. A critical review of the work as a whole will follow.

J. E. C.

Ethik. Eine Untersuchung der Thatsachen und Gesetze des sittlichen Lebens. Von WILHELM WUNDT. Zweite umgearbeitete Auflage. Stuttgart, Verlag von Ferdinand Enke, 1892. — pp. xii, 684.

This second edition of Wundt's ethics appears six years after the first. The main divisions are unchanged. The introduction (pp. 1-17) treats of the nature, methods, and problems of ethics. The first section (pp. 18-269) presents the facts of the moral life as they are revealed in language, religion, customs, and laws. The author differs in some points from Ihering, but the *Zweck im Recht* appears to be the source of a good deal of the material embraced in this section. It is characteristic of German ethics, as compared with English, that there is throughout no appeal to, no consultation with, the individual consciousness of the moral agent. The second section (pp. 270-432) traces the development of theories of morality from the earliest Greek moralists to Mr. Spencer and Mr. Sidgwick. This treatment is necessarily sketchy, but in this part the author has made many improvements in the second edition. The excellent classification of ethical systems is common to both editions. The third section (pp. 433-594), which has been little changed, discusses the principles of morality in four chapters devoted respectively to the will, conscience, moral ends, moral motives, and moral norms. The fourth section (pp. 595-684), which treats of the different spheres of morality, considered as individual, social, political, and cosmopolitan, suffered in the first edition from a too great compression, but the matter has been worked over for the second edition and considerably improved.

J. G. S.

The Concept of Law in Ethics. Thesis accepted by the Faculty of Cornell University for the Ph.D. degree in Philosophy. By FERDINAND COURTNEY FRENCH, A.B. (Brown), Fellow in the Sage School of Philosophy. Providence, R.I., Preston & Rounds, 1892. — pp. 51.

This work aims to trace the development of the idea of moral law throughout the course of ethical philosophizing and so to establish a historical foundation for the use of the term in modern ethics. Primitive communities are found always to be governed by a mass of customary law in which are contained, without distinction, political, religious, and moral norms of conduct.

In the first chapter, "Jural Aspects of Ancient Ethics," is shown how the Greeks gradually differentiated the word "norms" from the rest, and in the Stoic system reached the conception of a moral "law of nature." The second chapter shows the tendencies towards juralism in Christian ethics. The jural aspect of mediæval ethics is indicated by a study of the place which the idea of law held in the moral philosophy of Thomas Aquinas. Chapter three presents the typical form which the concept of moral law has assumed in modern thought as exemplified in the systems of Hobbes, Locke, Paley, and Kant. The fourth and last chapter aims to establish a clear distinction between the jural and the physical senses of the term "law" as used in ethics. A bibliography is appended.

AUTHOR.

The History of Modern Education. By S. G. WILLIAMS, Ph.D. Syracuse, N.Y., C. W. Bardeen, 1892. — pp. vii, 395.

The rise and growth of modern methods of instruction, of educational systems and organizations, are depicted in this work of Professor Williams in a clear and judicious manner. After tracing in broad outlines the preliminary stages of modern education, the author turns his attention to the beginnings of education in the Renaissance, follows its course through the succeeding centuries, and ends with a portrayal of the educational characteristics of the present age. The material offering itself to the student in this connection is, of course, abundant and complex, and no more can be done in a work of small compass than to select representative facts and personages. Where so much is given to choose from, it is no easy task to hit upon the essentials. Professor Williams has succeeded in meeting this difficulty in a very satisfactory manner. He takes up the matter by centuries, treats of the characteristics of education in these respective periods, then explains the various educational opinions and systems prevalent in the times under consideration, and notices their prominent teachers and reformers. The references to early American efforts in this line, to the founding of colleges and the enactment of the first school laws in the United States, will also interest the student. With a careful discussion of the relative disciplinary value of studies, in which the writer reveals the opposing tendencies of our own age, the book closes.

F. T.

History of Modern Philosophy. By B. C. BURT. Chicago, A. C. McClurg & Co., 1892. — Vol. I, pp. xii, 368; Vol. II, pp. 321.

The work attempts to exhibit the content of the leading modern systems of philosophical thought with considerable fulness, and without presuming too much upon the reader's familiarity with the subject or thrusting upon him, directly or indirectly, any preconceived theory of the history of philosophy in general. The most recent systems have in it received fuller notice than in former histories, while some earlier systems, entirely ignored in other histories, have received the attention which they deserve. Only so much biographical and bibliographical information is offered as suffices to show the proper identity of authors and of their works, and the natural connection of

systems of thought with the lives of individual men and of periods of history; and only a limited space is allowed to critical comment, partly because the author inclines to the view that the history of philosophy attentively read is largely self-"criticizing" and self-explaining. The leading articles of the work rest, as a rule, pretty directly upon original or nearly original sources of information. The author discovers three main periods in the history of modern thought: an intuitive, extending from the revival of ancient systems to (but not including) Bacon; an analytic, extending from Bacon to Kant (exclusive of the latter); a synthetic, extending from Kant to the present. He believes that the substantial truth of modern thought is most fully expressed in the great German systems, to which the latest most characteristic English systems furnish not so much a corrective as a foil. AUTHOR.

Geschichte der Philosophie. Von W. WINDELBAND, Professor an der Universität Strassburg, Freiburg i. B. J. C. B. Mohr, 1892. — pp. 516.

Readers acquainted with Professor Windelband's *Geschichte der neueren Philosophie* (2 vols.) will welcome this briefer, though more comprehensive, work from his hands. The first section of the book, which deals with the philosophical systems of the Greeks, appeared some three years ago. Although intended for a text-book, it is in several respects a departure from the text-books already in use. It is primarily a history of philosophy, and not of philosophers or even of philosophical systems. The author is more concerned with philosophical problems and concepts, and the inner connection of the systems, than with any external facts regarding the lives and circumstances of individual thinkers. The treatment is not biographical, but philosophical. The chronological order has not been strictly followed, but systems have been grouped together rather on the basis of the common character of the problems with which they are occupied. As to proportions, about two hundred pages are devoted to Greek and Greco-Roman philosophy, seventy to mediæval systems, and the remainder to the Renaissance and modern periods. The bibliography which is given at the beginning of each chapter is carefully selected and extremely valuable. An English translation of this valuable work is in course of preparation and will soon be published.

J. E. C.

Vorlesungen über die Menschen- und Thierseele. W. WUNDT. 2te umgearb. Aufl. Leipzig, L. Voss, 1892. — pp. xii, 495.

This book has more than the value of the second edition of a work published nearly thirty years ago; it is the latest indication of the author's attitude to many of the vexed questions of psychology. In appearance it is greatly altered, a single volume representing the former two volumes, and the 'additions and remarks' printed at the end of each of these, together with the series of lectures on social psychology, being entirely omitted.

Comparatively unchanged are lectures 1 (= 1 and 2 of the first edition), 2, 3, 4 (= 7, 8, 9), 8, 9, 10, 11 (= 14, 15, 16, 17), 12, 13 (= 21, 22), 29 (= 55, 56). Completely remodelled are 5, 6, 7 (= 11, 10, 13), 14 (= 30), 25, 26

(= 31, 51, 52), 28 (= 42). The remaining chapters (15-24 inclusive, 27, 30) are quite new.

Noticeable alterations of standpoint are the psychological explanation of Weber's law; the proposition of a periodicity theory of visual sensation in place of the Young-Helmholtz hypothesis; the explanation of optical contrast; the place assigned to feeling as a constituent of conscious content; the ascription of all expressions of the animal intelligence to the laws of association; etc. Noticeable omissions, besides those already mentioned, are lectures (of the old edition) 3-6 (physiological and logical), 12 (on the structure and function of the sense-organs), and 18-20 (self-consciousness, consciousness, idea).

The book can be unreservedly recommended to those who are seeking for an introduction to the methods and results of the new psychology without the intention of pursuing the study of the science very far. Its style differs greatly from that of the *Physiologische Psychologie*, being easy and comparatively untechnical. For the working psychologist, it has another and a more positive value. One may, perhaps, hope that the volume will before long appear in an English dress.

E. B. T.

Notes on the Nicomachean Ethics of Aristotle. By J. A. STEWART M.A., Student and Tutor of Christ Church, Oxford. 2 vols. Oxford, Clarendon Press; New York, Macmillan & Co., 1892. — pp. ix, 539, 475.

The author gives us in these two stately volumes a thousand pages of notes on Mr. Bywater's edition of the *Nicomachean Ethics*. The notes are not exclusively philosophical in kind: along with explanations and illustrations of the philosophical notions and termini technici of Aristotle, philology and textual criticism receive attention. With few exceptions, as Mr. Stewart says in his preface, the text of Bywater has been accepted. No text is printed in the volumes excepting in the passages quoted for comment or illustration; nor are the notes preceded by introductions or followed by appendices. The author supposes these to have been satisfactorily supplied by Grant in his edition of the *Ethics* (1885). A good feature of the book is the admirably prepared analysis which prefaces each chapter. The work will be found a storehouse of information about the *Nicomachean Ethics* and the history of its criticism, the author having made liberal use of the more important commentaries, both ancient and modern. The notes are not free from diffuseness; in fact, the contrary could hardly be expected in a thousand pages of commentary on two hundred pages of Greek. Not least interesting is the skilful employment of modern philosophers for purposes of illustration and comparison,—as Hobbes, Cudworth, Kant, Schopenhauer, Spinoza, Bacon, and others.

W. H.

First Steps in Philosophy. By WILLIAM MACKINTIRE SALTER. Chicago, Charles H. Kerr & Company, 1892. — pp. 155.

This little book is devoted to the examination of two fundamental philosophical conceptions,—Matter and Duty. The first part is thus occupied

with a physical and the latter with an ethical problem. The substance of the discussion on Matter was published in *The Journal of Speculative Philosophy*, 1884; the second part was delivered as lectures to the Plymouth School of Applied Ethics during the summer of 1891. The author is not concerned with the problem regarding the ultimate nature of matter as the supersensible cause of our sensations, although he maintains that "we have an unextinguishable faith that there are such causes" (p. 25). His inquiry is into the nature of the material world as given in experience, and his conclusion is that "Reality (so far as material things are concerned) is not to be opposed to sensation, but is sensation, actual or possible. Matter is a general name for the sensations viewed on their objective side" (p. 66). In the second portion of the book the author defines Ethics as that which deals with what should or ought to be, in so far as this depends upon us for its realization. The "should be" is absolute, irrespective of any condition and of whether the person to whom it applies has any sense of its truth or not. What should be, or the ethical ideal, Mr. Salter holds to consist in such a realization of the nature of each particular thing as does not involve injury to itself or harm to other beings. Intuitionism and Utilitarianism both take account only of parts of our nature, the realization of whose total capacities is alone absolutely good. The truth of both is included in the theory which regards perfection or self-realization as the end.

J. E. C.

Die Philosophie der mittleren Stoa in ihrem geschichtlichen Zusammenhange dargestellt. Von A. SCHMEKEL. Berlin, Weidmannsche Buchhandlung, 1892. — pp. viii, 483.

In this history of the philosophy of the Middle Stoa, almost the entire space is devoted naturally to Panætius and Posidonius, the representative philosophers of the school. Very brief account is further given of Hekaton, Mnesarchus, and Dionysius. Biography and external history furnish the subject of a short introduction. In Part I sources are discussed, more particularly Cicero, Polybius, Sextus, and Varro; in Part II the systems of the several members of the school are treated under the divisions of physics, anthropology, ethics, politics, and the exact sciences; in Part III, under the same divisions of philosophy, the relation of the Middle Stoa to the philosophies immediately preceding and following it is discussed. Review of the book will follow.

W. H.

Beiträge zur Geschichte der Philosophie des Mittelalters. Texte und Untersuchungen. Herausgegeben von Dr. CLEMENS BAEUMKER, O.Ö. Professor an der Universität Breslau. Bd. I, Hefte 2, U. 3. Avencebrolis (Ibn Gabirol) *Fons vitae*, ex arabico in latinum translatus ab Johanne Hispano et Dominico Gundissalino. Ex Codicibus Parisinis, Amploniano, Columbino primum edidit Clemens Baeumker. Fasciculi I et II. Münster, Aschendorff'sche Buchhandlung, 1892. — pp. 1-71, 72-209.

The initial contribution in this series was the treatise *de Unitate* noticed in another part of the present number of this REVIEW. The text of Baeumker is

based on the two Parisian MSS., 3472 of the bibliotheca Mazarinea and 14700 of the bibliotheca Nationalis, along with the other two above mentioned. Of the five treatises into which the dialogue *Fons vitæ* is divided, the first three parts are printed in fasciculi I and II, *i.e.*, (1) on the assignment of universal matter and universal form and on the assignment of matter and form in composite substances; (2) on substance as the basis of the corporeality of the world; (3) on the affirmation of simple substances. The various readings are given at the foot of the pages. The painstaking and scholarly work in these contributions of Baeumker make them a *sine qua non* for the investigation of the particular subjects they treat.

W. H.

Ueber die Abstraction. Dr. H. SCHMIDKUNZ. Halle, C. E. M. Pfeffer, 1889. — pp. 43.

This pamphlet contains, besides preface and index of authors quoted, two chapters: on the essential nature of abstraction, and on the limits of abstract and concrete. The writer's thesis is that the process in abstraction is that of logical accentuation (*logische Verstärkung*). This accentuation is more than the conscious content of attention.

E. B. T.

Analytische und synthetische Phantasie. Dr. H. SCHMIDKUNZ. Halle, C. E. M. Pfeffer, 1889. — pp. 103.

Six chapters on imagination. (1) Special basis: the origin and effect of the work of art; the movement of mind and of imagination; literature. (2) General basis: induction and deduction, etc. (3) Creative imagination: the origin of imagination, of the drama, etc. (4) Receptive imagination: synthesis and analysis. (5) Relation to knowledge and nature: the principles of the work of art, idealism and naturalism, etc. (6) Differences in value: the superiority of analysis. — Index of authors quoted and of contents.

E. B. T.

The following books have also been received:—

The Modalist: A Text-Book in Formal Logic. By Edward John Hamilton, D.D., Professor of Philosophy in Hamilton College, N.Y. Boston, Ginn & Co., 1891. — pp. 331.

The Human, and its Relation to the Divine. By Theodore F. Wright, Ph.D. Philadelphia, J. B. Lippincott Company, 1892. — pp. 271.

An Introduction to the Science of Thought. By S. S. Hebbard. Madison, Wis., Tracy, Gibbs & Co., 1892. — pp. 84.

On the Perception of Small Differences. By George Stuart Fullerton and James McKeen Cattell. Philadelphia, U. of P. Press, 1892. — pp. 159.

Grundriss der Philosophie. Von Johannes Eitle, Professor am ev.-theol. Seminar in Urach. Freiburg i. B., J. C. B. Mohr. — pp. 204.

Kant's Systematik als systembildender Factor. Von Dr. Erich Adickes. Berlin, 1887, Mayer & Müller. — pp. 174.

Immanuel Kant's Kritik der reinen Vernunft. Mit Einleitung und Anmerkungen. Herausgegeben von Dr. Erich Adickes. Berlin, 1889, Mayer & Müller. — pp. 723.

The Logic of Hegel. Translated from the Encyclopædia of the Philosophical Sciences by William Wallace. Second edition. Oxford, Clarendon Press; New York, Macmillan & Co., 1892. — pp. 439.

Elements of Art Criticism. Abridged edition. By G. W. Sampson. Philadelphia, J. B. Lippincott Company, 1892. — pp. 406.

Hereditary Genius: an Inquiry into its Laws and Consequences. Second edition. By Francis Galton, F.R.S. London and New York, Macmillan & Co., 1892. — pp. 379.

Problèmes musicaux d'Aristote. Par Ch.-Em. Ruelle. Paris, Librairie de Firmin, Didot et Cie, 1891. — pp. 35.

Problems of Reality. By Belfort Bax. London and New York, Macmillan & Co., 1892. — pp. 177.

Theorie des Gefühls zur Begründung der Aesthetik. Von Prof. Max Diez. Stuttgart, Friedrich Frommann's Verlag (E. Hauff), 1892. — pp. xii, 172.

Die Suggestions-Therapie bei krankhaften Erscheinungen des Geschlechts-sinnes. Von Dr. A. Freiherrn von Schrenck-Notzing. Stuttgart, Verlag von Ferdinand Enke, 1892. — pp. xvii, 314.

Zur Herrschaft der Seele. Von Paul Robert. Leipzig, Verlag von Otto Wigand, 1892. — pp. 93.

Die Freiheit des Menschen. Von Drs. von Strauss und Torney. Leipzig, A. Deichert'sche Verlagsbuchhandlung Nachf. (Georg Böhme), 1892. — pp. 55.

Grundriss einer einheitlichen Trieblehre vom Standpunkte des Determinismus. Von Julius Duboc. Leipzig, Verlag von Otto Wigand, 1892. — pp. xiv, 308.

Die Erkenntnisslehre Spinozas. Kritisch behandelt von Dr. M. Frhr. Schoultz v. Ascheraden. Marburg a. L., Druck und Verlag von Oscar Ehrhardt, 1892. — pp. 84.

Die Aussichtslosigkeit des Moralismus. Von A. Gerecke. Zürich, Verlags-Magazin (J. Schabelitz), 1892. — pp. xiv, 226.

Bernard of Clairvaux: The Times, the Man, and his Work. By R. S. Storrs. New York, Charles Scribner's Sons, 1892. — pp. xvi, 598.

Acht Abhandlungen Herrn Prof. Dr. Michelet zum 90 Geburtstag, etc. Leipzig, C. E. M. Pfeffer, 1892. — pp. 102.

Die Philosophie und die soziale Frage. Von Gustav Engel. Leipzig, Verlag von C. E. M. Pfeffer, 1892. — pp. 41.

Anfangsgründe der Erkenntnisslehre. Von K. C. F. Krause. Leipzig, Otto Schulze, 1892. — pp. 229.

Le Système de la Philosophie. Par K. C. F. Krause (tr. par Lucien Buys). Leipzig, Otto Schulze, 1892. — pp. 321.

PHILOSOPHY AT THE CHICAGO EXPOSITION.

It may be that many lovers of philosophic thought do not sufficiently understand the possible importance that attaches to the proposed "World's Philosophical Congress," to be held in Chicago during (probably) the latter part of August, 1893. Much effort has been expended in order to bring the Congress to the notice of that class of scholars; but the absence of anything resembling an organized philosophical body, compels a vast amount of detailed work, producing the desired result indeed, but much too slowly for the time at our disposal. Therefore the aid has been asked of the philosophical journals, seeing that through them a multitude could be reached by a single letter. Moreover the writers for such journals and their readers are precisely those from whom a Philosophical Congress must be formed.

It is significant that every journal has, like this REVIEW, in the interest of philosophy, promptly and cordially offered its pages to the "Local Managing Committee," in order to aid both this committee and the philosophic world to act and co-operate in the endeavor to assemble a Congress that shall truly represent the present status of philosophy in the civilized world.

The World's Congress Auxiliary is constituted as follows:— 1. **A Central Organization**, authorized by the Directory of the World's Columbian Exposition, and recognized by the Government of the United States as the proper agency to conduct a series of World's Congresses in connection with the Exposition.

2. **A Local Committee of Arrangements** for each Congress. This Committee constitutes the means of communication and action between the Auxiliary and persons and organizations that will participate in a given Congress. This Committee of Arrangements consists of a comparatively small number of persons who, with few exceptions, reside in or near the place where the Congress is to be held.

3. **Advisory Councils**. Each Committee has adjoined to it, and constituting its non-resident, but active, branch, an Advisory Council, composed of persons eminent in the work involved, and selected from many parts of the world. The members of such Councils co-operate with the proper Committees by individual correspondence.

4. **General Honorary and Corresponding Members** are also appointed. They are invited to give their advice and co-operation in relation to the whole series of the proposed Congresses.

5. **Committees of Co-operation**, appointed by particular organizations, are recognized by the Auxiliary as representatives of Societies or Institutions, and are cordially invited to an active participation in the World's Congress work.

The General Objects of the World's Congress Auxiliary are 1. To provide for the proper presentation of the Intellectual and Moral Progress of the World, in connection with the Columbian Exposition of 1893, in a series

of World's Congresses under the auspices of the Auxiliary, with the assistance of the leaders in all the chief departments of human achievement.

2. More particularly, to provide places of meeting and other facilities, for appropriate organizations of a kindred nature to unite in World's Congresses in Chicago, at a convenient time during the Exposition season of 1893, for the consideration of the living questions pending in their respective departments; and to arrange and conduct a series of Popular Congresses in which will be presented summaries of the progress made, and the most important results attained in the several departments of civilized life, voiced by the ablest living representatives whose attendance can be procured.

3. To provide for the proper publication of the proceedings of such Congresses, as the most valuable and enduring memorial of the World's Columbian Exposition of 1893.

4. To bring all the departments of human progress into harmonious relations with each other in the Exposition of 1893; to crown the whole glorious work by the formation and adoption of better and more comprehensive plans than have hitherto been made; to promote the progress, prosperity, unity, peace, and happiness of the world; and to secure the effectual prosecution of such plans by the organization of a series of world-wide fraternities through whose efforts and influence the moral and intellectual forces of mankind may be made dominant throughout the world.

As far as practicable the several Departments of the World's Congress Auxiliary have been planned to bring to Chicago, during the time assigned to the Department, the largest number of kindred organizations for simultaneous or alternate sessions, thus enabling persons interested in several subjects of a kindred character reasonable opportunities to attend several Congresses, without a too prolonged stay at the Exposition.

The Government of the United States, recognizing the World's Congress Auxiliary as the proper agency to conduct a series of International Congresses, in connection with the World's Columbian Exposition of 1893, has directed the Diplomatic and the Consular Officers of the United States in all countries to request "that a convenient number of the most eminent representatives of the various departments of human progress, be selected as delegates to attend the respective Congresses, by or under the direction of the Government to which they are respectively accredited, in addition to those who will come as the representatives of the leading institutions and societies of different countries; and to extend the assurance that the largest practicable participation of foreign peoples and Governments in the whole series of the Congresses is especially desired; and that such a co-operation on the part of other Governments will, it is confidently believed, tend in the highest degree to promote, strengthen, and extend those fraternal relations and mutual benefits which may now justly be regarded as the supreme objects of international intercourse, and as involving a higher civilization and a broader human progress."

In addition to such Governmental delegates, the World's Congress Auxiliary also most cordially invites the appropriate institutions and societies of other countries to create Committees of Co-operation, to appoint delegates and otherwise contribute, as far as may be in their power, to the success of

the Congresses to be held at Chicago in 1893. Individuals eminent in any department of human progress are also particularly and cordially invited to attend the Congresses in which they are respectively interested.

However great may be the honor and advantage which any nation will derive from a participation in the magnificent material exhibit already assured, it is not too much to say that a higher glory and more lasting benefits may be secured by sending its eminent men and women to take part in the World's Congresses of 1893.

The World's Congresses of 1893 will be held in the Permanent Memorial Art Palace, erected on the Lake Front Park, through the co-operation of the Art Institute of Chicago, the City of Chicago, and the Directory of the World's Columbian Exposition. This "World's Congress Art Palace" will have two large audience rooms arranged to seat about three thousand persons each; and more than twenty smaller rooms, which will accommodate from three hundred to seven hundred persons each. Meetings of such a character as to draw a large popular audience will be held in the main audience rooms, while meetings of Chapters or Sections of different Congresses for the discussion of subjects of a more limited interest, will be held in the smaller rooms. It will thus be possible to have two General Congresses and twenty Special Congresses or Conferences in session at the same time, and to have three times as many meetings within a single day by arranging different programmes for morning, afternoon, and evening sessions; but it is not anticipated that so many daily meetings will be required in any Department of the World's Congress work; nor that, as a general rule, any Congress or Section will desire to meet more than once or twice in a given day.

The Committees of the Auxiliary are actively engaged, with the assistance of their Advisory Councils and Committees of Co-operation, in arranging the Programmes for the different Congresses, and much progress in this direction has been made. It is expected that most of the Programmes will be ready for announcement before the close of the present year. In these Programmes the dates of the various Congresses of the several Departments will be more specifically announced.

The foregoing consists chiefly of extracts from the General Circular of Information issued by Hon. C. C. Bonney, President of the Auxiliary, and signed by the General Secretary of the Exposition. The following points are deserving of special attention, although any one deeply interested would gain by carefully reading the whole, so as to see on how thorough and generous a plan the Exposition has provided for the success of the whole enterprise covered by the World's Congress Auxiliary. Notice should be taken

First. Of the three departments found in each Congress:—

- (a) The LOCAL COMMITTEE OF ARRANGEMENTS.
- (b) The ADVISORY COUNCILS.
- (c) The CORRESPONDING MEMBERS.

Those wishing to co-operate can best do so by noting the place and function of each one of these departments.

Secondly. It is important that provision is made for the "publication of the proceedings of Congresses," so that the philosophical work done in Chicago, which, it may be presumed, will be of a very high character, will be put at once in a form permanent and most available for further usefulness.

Thirdly. The grouping of kindred organizations in point of time gives to each assurance of an audience of the largest and most sympathetic character.

Fourthly. The Foreign work marked out, and much of it already accomplished, by the Auxiliary. In this region, it is obvious that something more than passive sympathy will be required in order to bring European and other Foreign philosophy into close active relationship with the Congress.

Fifthly. Lest doubt should linger in the minds of some respecting the ability of the Auxiliary to provide suitable accommodation for so many Congresses, attention is called to the section bearing on this point; and in addition it may be added that if for special meetings philosophy should require an audience room capable of seating 10,000 persons, such a room will be placed at the disposal of the Congress.

Circulars giving full information respecting the whole auxiliary scheme have been distributed so freely, that it hardly seems possible for them to have missed any proper recipient. This was done through the general office of the Auxiliary.

The Local Committee was compelled, as its only resource, to open personal correspondence with men of well-known philosophical attainments, and of national reputation. The first point to ascertain was, how much such men were interested in the proposed Congress, and whether they would contribute and co-operate towards its success. It is gratifying to report that the response has been sufficiently pronounced and cordial to settle it beyond all question that a Congress *can* be assembled here which for numbers, representative weight, thoroughness of work, philosophic ability — in short, for everything that goes to constitute a philosophical Congress — will be an unqualified success. The *active* co-operation of the philosophic world is all that is required to insure this result.

But if philosophic thinkers, those who ought to be most deeply interested in this Congress are entirely passive in the matter, each one waiting for the other to take the initiative, or for the Auxiliary alone to evolve the Congress out of the depths of the Committee of Arrangements, the great opportunity of Philosophy will be lost. For, in point of fact, such an opportunity has never occurred in America heretofore, and is not likely to recur for a century, of assembling and meeting such a world of thinkers, and confronting them with such an appreciative audience, — for the educators and thinkers in all departments will then be present in great numbers. Then, if ever, Philosophy ought to let her light shine.

When it is said that such numbers of those who would gladly be the audience of Philosophy will be here, it is said advisedly and positively.

It is now known to the management of the Auxiliary that over one hundred Congresses *will be held* under its auspices; that several of these will number thousands of representatives, and many more their hundreds.

It may not be amiss to add, that, owing to the utter lack of organization in Philosophy, it has required more work on the part of the Committee of Arrangements, personal and clerical, to insure a prospective meeting of fifty representative thinkers, than it did to organize perfectly at least one scientific Congress that will number five thousand. Nevertheless, we anticipate a Philosophical Congress of not less than one thousand.

What may be called the nucleus of an "Advisory Council" has accepted appointment as such, and it is constituted as follows—the names being alphabetically arranged:—

Professor Nicholas M. Butler, Columbia College, N.Y.
 Professor Thomas Davidson, Keene, Essex Co., N.Y.
 Dr. William T. Harris, Washington, D.C.
 Professor John Clark Murray, McGill College, Montreal, Canada.
 Professor Josiah Royce, Harvard University, Cambridge, Mass.
 Professor Paul Shoray, Chicago University, Chicago, Ill.
 President J. G. Schurman, Cornell University, Ithaca, N.Y.

Received later:—

Professor G. H. Howison, University of California, Berkeley, Cal.
 William M. Bryant, Esq., St. Louis, Mo.
 Professor J. McBride Sterrett, Columbian University, Washington, D.C.

As many more names, recommended by these, have been asked to take place also on this council; and more, to be recommended in like manner, will be added just as quickly as the names are given to the Auxiliary, until an "Advisory Council" is formed, as large, and as thoroughly representative as possible, and this we must regard as representing the organized Congress on the philosophic side, and will co-operate with and serve it accordingly cheerfully, and to our uttermost.

Papers have been promised to the Committee, as many in number, and as excellent in quality, as the above Advisory Council. But nothing more is said for the present on this point, until a larger Advisory body can be consulted as to the details of arrangement best suited to secure a fair representation of all Philosophy. One thing, however, is certain: the difficulty will not be to obtain enough and good enough work, but to do justice to the large amount that will be offered.

Correspondents can aid first and most of all, so far as this Committee is concerned, *by answering all correspondence promptly and decisively.* In this philosophic movement *time* is an element of importance.

Give to the Committee any suggestions deemed important.

Advise the Committee as to persons whose presence at the Congress would be most valuable, and communicate with those persons, urging the importance of the Congress.

If possible, call together somewhere groups of such persons, and let them outline a programme of proceedings, a list of desirable subjects, or determine upon a place of meeting for consultation and further arrangement—*i.e.*, a meeting with some members of the Committee of Arrangements—to be held as soon as possible.

Determine who shall constitute the "Committee of Foreign Correspondence"; for this is one of the most important of all the committees, since upon its composition and conduct depends the amount of interest that foreign thinkers will take in the Congress.

Finally, in order that this Committee may make monthly reports of progress to those intending to participate in the Congress, it needs to be regularly informed of all co-operative movements.

The first report of the kind will be mailed about Dec. 1.

R. M. FOSTER, M.D.

Chairman Committee of Arrangements.

THE
PHILOSOPHICAL REVIEW.

KANT'S CRITICAL PROBLEM: WHAT IS IT IN
ITSELF AND FOR US?

"The key to the right understanding of the entire *Critique* is to be sought for the most part in the introduction."—BRASTBERGER.

A PART from the introductory matter, with which we have in this article principally to deal,¹ Kant's greatest work, if we exclude the important closing chapters on method, falls into three main divisions, called, respectively, transcendental æsthetic, transcendental analytic, and transcendental dialectic. The first proves that space and time are *a priori* forms of sensibility, and explains from that fact the existence of mathematics as a pure or *a priori* sensuous science. The second shows there are *a priori* forms of thought, which are validly applied to appearances, but not to things in themselves; and claims that on them rests a pure science of phenomenal nature, an *a priori* physic. The third exhibits the antinomies into which thinking falls when it applies the *a priori* forms of thought to things in themselves, and overcomes them by showing the subjective source and objective invalidity of metaphysics.

I.

In formulating the problem of the *Critique* in the preface to the first edition, Kant begins with a reference to the

¹ The exposition in this article, unless otherwise specified, is based on the prefaces and introductions of the two editions of the *Critique*, on the chapter on "The Discipline of Pure Reason in its Polemical Use," and the introduction to the *Prolegomena*.

The references are, in German, to Hartenstein's edition, and, in English, to Max Müller's translation of the *Critique* and Mahaffy's translation of the *Prolegomena*,—the pages of the English works being enclosed by ().

problems of the dialectic. This corresponds with what is known of the function of the antinomies in the development of Kant's critical thought. If reason is always troubled with questions which cannot be ignored, because they spring from its own nature, and which cannot be answered, because they transcend its powers and involve it in contradictions, there seems no escape from such an ugly dilemma save by a criticism of the faculty of reason in general, touching that whole class of knowledge it may strive after, unassisted by experience. This is the task undertaken in the *Critique of Pure Reason*. In a favorite metaphor of Kant's, it is a court of appeal to protect the just rights of reason and dismiss all groundless claims, and that not arbitrarily, but according to the eternal laws of reason. Without such a critique, which secures us the peace of a legal status, reason would be in perpetual war with itself. But the *Critique* decides the question of the possibility or impossibility of metaphysics in general, and the determination of its sources, its extent, and its limits. And it does this by making an inventory of all our possessions acquired through pure reason. If its final result is a negative discipline, restraining reason from going beyond the narrow limits of possible experience, its initial problem is, What can we hope to achieve with reason, when all the material and assistance of experience are taken away? And pure reason is so perfect a unity that the answer to this question must be absolutely complete, or altogether erroneous. So that Kant can boast, for that matter like Bacon, Descartes, and most of the founders of modern philosophy, that there is not one single metaphysical problem which his method does not solve, or at least supply a key for solving.

The determination of the contribution of reason to knowledge, in other words, of the mind-given or *a priori* parts of knowledge, with a view to fixing the limits of reason and so solving or rather escaping the interminable contradictions of metaphysics:—such is Kant's earliest announcement of the aim of the *Critique*. It is the problem of *a priori* knowledge, considered on its subjective side alone. "I mean," says

Kant, "to treat of reason and its pure thinking, a knowledge of which is not very far to seek, considering that it is to be found within myself." But the objective aspect of the problem of *a priori* knowledge, which is here scarce even incidentally glanced at, is of equal importance, and was so felt by Kant, as we know from the history of the inquiry started in the famous letter to Herz. Accordingly, in the preface to the second edition of the *Critique*, published in 1787, six years after the first, this aspect of its problem is brought into the foreground. The point of view shifts from the dialectic to the analytic, and emphasis is laid rather on reason's conquest of the phenomenal world than its utter inadequacy to seize upon the supra-sensible world, which, it is here gently insinuated, is the only circumstance that keeps the celestial portals open to faith, and so leaves us secure in the practical possession of God, Freedom, and Immortality. Here, therefore, Kant appears, no longer as a judge passing sentence upon human knowledge, but as a builder setting it upon new and immovable foundations. This he does by means of a great constructive principle, in virtue of which he regards himself as the Copernicus of philosophy.

What is the Copernican thought with which Kant would revolutionize metaphysics? It is akin to that which he tells us had already been at work in mathematics and physics and turned them into established sciences. For it must not be overlooked that, in Kant's view, a revolution had been effected in those sciences similar to the one he contemplated for metaphysics. He brings both the fact of that revolution and the means of its accomplishment into the closest relation with his own achievements. As to mathematics, he holds there was a long period of tentative work, among Egyptians and Greeks, before the discovery of that royal road which has led to the surest of sciences. The change is to be ascribed "to a revolution, produced by the happy thought of a single man," whose name has not been preserved to us. But that revolution consisted in the discovery that no scrutiny of an actual geometrical figure or of its concept could give information regarding its qualities, which, on the other hand, was derived

from what the geometer had himself placed into the figure, according to concepts *a priori*, and then represented by a construction. All the safe *a priori* knowledge he had of the figure was limited to the necessary consequences of what he had himself introduced into it, in accordance with his own concept. The truths of mathematics are given by the mind, not extracted from things. And precisely in the same way, though not until the beginning of the modern period, did physics enter on the highway of science. Galilei, Torricelli, and Stahl saw that reason has insight into that only which she produces on her own plan, and that she must compel nature to answer her questions. Reason, it is true, must be taught of nature; but not in the character of a pupil, who agrees to everything the master likes, but as a judge who compels the witness to answer the questions which he himself proposes. And so, concludes Kant, even physics owes its beneficent revolution to the happy idea of seeking from nature information in accordance with what reason had itself placed into nature, though this could not be known from reason itself and must be learned from nature. The examples of mathematics and physics suggest a similar revolution for metaphysics, which, like them, is a science of rational cognitions. If these have become perfect sciences by the discovery that the truths they assert of objects are mind-originated, the same assumption might be made of metaphysics generally. And this is Kant's Copernican thought. "Hitherto it has been supposed that all our knowledge must conform to the objects: but, under that supposition, all attempts to establish anything about them *a priori*, by means of concepts, and thus to enlarge our knowledge, have come to nothing. The experiment, therefore, ought to be made, whether we should not succeed better with the problems of metaphysics, by assuming that the objects must conform to our mode of cognition; for this would better agree with the demanded possibility of an *a priori* knowledge of them, which is to settle something about objects, before they are given us."¹

¹ III, 17-18 (I, 370).

Here, as in the preface to the first edition, the problem of the *Critique* is declared to be the explanation of a *a priori* knowledge, that is, a rational knowledge of objects prior to experience of them. But, it is here added, the fact of such knowledge impels us to make the Copernican assumption, that objects must conform to our mode of cognition. There is no difficulty in applying the assumption to the objects of sensuous perception (*Anschauung*), as Kant made clear in the *Dissertation* of 1770. If the perception had to conform to the constitution of objects, how could we know anything *a priori* about these objects? But if the object (as an object of the senses, not of reason) conform to the constitution of our faculty of sense-perception, we may easily have a *a priori* knowledge of it. Still we cannot stop at these sense-presentations, if they are to become knowledge. Perceptions without thought are blind. They must be referred, as representations, to something as their object, which we endeavor to determine through them. This object then must be conceived. And I have the choice of admitting either that the concepts by which I determine it conform to the object, in which case it is impossible to see how I can know anything about it *a priori*; or that the objects, or what is the same, the experience in which alone they are known, must conform to those concepts, in which case the problem of a *a priori* knowledge is again solved. For experience, as a kind of knowledge, requires understanding; and the rules by which understanding acts must be considered logically prior to the objects given through them. These rules, existing in me *a priori*, are expressible in *a priori* concepts, to which accordingly all objects of experience must necessarily conform. In general terms, Kant's revolutionary metaphysical thought is "that we can know *a priori* of things only that which we ourselves put into them."¹ And from this it follows that such a *a priori* knowledge can never be of things as they

¹ III, 19 (I, 372). Similarly Leibnitz, *Nouveaux Essais*, p. 195 A (Erdmann's ed.) or V. 42-3 (Gerhardt's ed.): Si quelques évènements peuvent être prévus avant toute épreuve qu'on en ait faite, il est manifeste, que nous y contribuons quelque chose de notre part.

are, but only of objects as they appear to us in the forms of space, time, and the categories. Things themselves, however, though we can never *know* them, or even that they exist, we must continue to *think* as real counterparts to the phenomenal objects of our knowledge. Otherwise we should have the absurd result of an appearance without anything that appeared. And in this way the door of the suprasensible world, with its transcendent objects — God, Freedom, and Immortality — is left open to faith.

Some passages in the second preface, which was written in view of criticisms on the entire work as it appeared in the first edition, may not be intelligible at this stage to readers unacquainted with the general subject-matter of the book. But even to them Kant's aim and problem must stand out with perfect clearness. His object is to make an inventory of the possessions of pure reason, to fix the limits of its use, and to explain why, within a certain area, though not beyond, it gives us an objectively valid knowledge of things. It is in addressing himself to the last part of this entire undertaking that Kant comes upon the Copernican thought with which he would revolutionize metaphysics, and transform it, as geometry and physics had been similarly transformed, into an irrefragable science. If the inkling of his solution which we have just given seems obscure, it may be illuminated and expanded in another article. Here it concerns us to realize, not the solution, but the problem itself. This is to survey, explain, and (indirectly) vindicate *a priori* knowledge, and to distinguish it from its counterfeit semblance. If the undertaking is successfully carried out, there will emerge, in Kant's opinion, a science absolutely complete and perfect for all time, the science of pure reason. For he holds that reason, so far as its principles of knowledge are concerned, forms a separate and independent unity, in which, as in an organic body, every member exists for the sake of all others, and all others for it, so that no principle can be safely applied in *one* relation unless it has been carefully examined in *all* its relations to the whole employment of pure reason. Thus the *Critique* can claim to have

compassed the whole field of *a priori* knowledge, to have accomplished its undertaking completely, and to be to posterity a treasure which can never be added unto, because it had only to deal with principles and the limits of their employment, which are fixed by those principles themselves. "In the sphere of pure reason you must determine *everything* or *nothing*."¹

In determining the general *intention* of the *Critique*, we have at the same time become apprised of its Copernican *contention* and of its universalistic *pretension*. In the introduction, which was undoubtedly improved as it was enlarged in the second edition, as well as in the corresponding part of the *Prolegomena*, the aim of the work is more fully specified. Its problem is formulated from a new point of view, and then resolved into elementary questions corresponding to the main divisions of the work. In the prefaces it was stated that the inquiry was about knowledge given by pure reason. But all knowledge must be expressed in the form of judgments or propositions. If those judgments derived from experience be called empirical or *a posteriori*, those independent of all experience may be called pure or *a priori*. These *a priori* judgments are the products of reason alone. Hence the inquiry into pure reason resolves itself into an inquiry into *a priori* judgments.

But the problem admits of still further specification. There is another classification of judgments—a classification that has reference to their content, as that into *a priori* and *a posteriori* has reference to their source. If the predicate of a judgment adds nothing to the subject, but merely explicates it, then the judgment is *analytic*. If I say, All bodies are extended, I have asserted nothing which was not already contained in the notion 'body' and might not have been got from it by analysis. On the other hand, if I say, All bodies are heavy, in that case the predicate is something added to the notion of the subject, for by no analysis of the notion 'body' could the predicate 'heavy' be discovered. Judgments in which the predicate thus goes beyond the content of the subject are

¹ IV, 11 (13).

called *synthetic*. And synthetic judgments alone enter into the critical problem. For analytic judgments can be explained at once as the products of the analysis of concepts subject only to the logical law of contradiction, and with that explanation they may be dismissed.

But manifestly not all synthetic judgments come within the purview of a critique of pure reason. This deals only, as we just saw, with *a priori* judgments. It has nothing therefore to do with the vastly larger number of synthetic judgments, namely, with synthetic judgments *a posteriori*. And in fact these are all as easily explained as the analytic judgments. For in every *a posteriori* synthetic judgment, it is experience that enables me to add to the subject a predicate which contains something more than the notion of the subject implied. 'Heavy' is not implied in 'body' as 'extended' is. The *experience* of the conjunction of that quality with this substance supplies, however, a ground for the synthesis of them in the judgment, Body is heavy.

Both analytic and *a posteriori* synthetic judgments may therefore be set aside. They present no difficulty as to their possibility. And in any case they are irrelevant to the present inquiry into the possessions of pure reason. We are left, then, with the remainder of human knowledge, *a priori* synthetic judgments. And to explain under what conditions, and in what fields, *a priori* synthetic judgments are possible, is to answer the critical question, as originally framed, What and how can reason know without all experience? The object of the *Critique*, from this point of view, is to inquire into the ground of the possibility of *a priori* synthetic judgments, as well as to determine the limits of their validity.

But have we such pure knowledge, such *a priori* synthetic judgments? This is a question of fact that must be settled before we go one step further. For there can be no doubt that all our knowledge at least begins with sense-impressions. It does not, however, therefore follow that it arises from sense-impressions. Even in our common experience, it is possible that mind-given components are mixed with the impressions

received from sense. Nay, such *a priori* principles are necessary to the very possibility of our sense-experience. Otherwise, it would have no certainty, but remain a collection of contingent rules; and how could we then say, for example, Every change *must* have a cause? But apart from common sense, we have, in the sciences of mathematics and physics, judgments which are universal and necessary. Experience could not so stamp them. They must therefore be *a priori*. They are also synthetic. Neither experience nor analysis can prove, for example, that $7 + 5 = 12$, or that in the communication of motion, action and reaction are always alike. Nor is the number of such propositions scanty. Mathematics is made up entirely of synthetic judgments *a priori*. Furthermore, not merely judgments, but even certain ideas, may claim for themselves an *a priori* origin. Of these it will here suffice to mention space and substance. But what is still more extraordinary is this, that we have a whole class of *a priori* synthetic judgments which in no way enter into our sense-experience or can be brought to any of its tests. This is metaphysics. And it is in this very kind of knowledge which transcends the world of the senses, and where experience can neither guide nor correct us, that reason finds its most important, its loftiest, and its most imperative problems. These unavoidable problems of pure reason are God, Free Will, and Immortality.

But just there is the rub. A science built on other foundation than the solid ground of experience and constructed of materials whose origin and worth no man knows, is surely a precarious edifice. But two circumstances have hitherto saved it from attack. In the first place, human reason is naturally constructive rather than critical. And, in the second place, the brilliant example of mathematics has created a presumption in favor of every kind of *a priori* knowledge; and the all-important point was overlooked that while mathematics deals with objects only that are capable of sense-presentation, metaphysics reaches out to objects which are beyond the grasp of any experience. But the time has now arrived to inquire whence this metaphysical knowledge is derived, and to test its truth, value, and

extent. As, however, metaphysical principles, whether valid or not, are of the same kind as we find in other rational sciences, Kant brings the problem of pure reason, which no doubt was forced upon him by metaphysics, under the general formula, *How are a priori synthetic judgments possible?* On the solution of this problem depends the life or death of metaphysics. For, that such a science veritably exists, no one can avouch who has considered its essential aim and observed the ill progress hitherto made by metaphysical systems. That pure mathematic and physic exist as sciences, nobody doubts. *That* they are possible, is proved by their actuality. And we shall only have to ask, *How* they are possible? But with reference to metaphysics, we shall have to settle whether reason, in pretending to tell us something of suprasensible objects, does not go beyond its own powers, and if so, what are its limits, and above all, what impels it, as by a universal and natural necessity, to go beyond those limits in quest of unattainable realities. The general problem of pure reason, *How are a priori synthetic judgments possible?* may, accordingly, be divided into four other questions:

1. *How is pure mathematic possible?*
2. *How is pure physic (science of nature) possible?*
3. *How is metaphysic, as a natural disposition, possible?*
4. *How is metaphysic, as a science, possible?*

Thus Kant formulates the problem of critical philosophy. However obscure the body of the *Critique* may appear, the introduction is written in a style so clear, exact, and even elegant that its interpretation makes little strain upon the reader's attention. And yet it has been Kant's fate to have his problem variously rendered. In the short and definite expression which it officially received at his hands, there is little room for misapprehension. All the terms of the proposition, *How are a priori synthetic judgments possible?* seem perfectly clear and unambiguous. Yet it ought to be noticed that, by his own confession with regard to metaphysics, Kant cannot omit the inquiry, *When are a priori synthetic judgments valid?* But if any one chooses to find this question implied in

Kant's formula, he might maintain that the determination of the conditions of the possibility of *a priori* synthetic judgments forms at the same time the test of their validity; and Kant's statement of the problem of pure reason would remain intact. All the same, Kant himself, in giving a synopsis of the *Critique* twenty years later, specifically sets the question of objective validity side by side with that of psychological origin. The problem, he there states, was a twofold one: (1) How are synthetic judgments *a priori* possible? and, (2) How from synthetic judgments is knowledge *a priori* possible?¹ And the context shows that the knowledge which in the last question is distinguished from synthetic judgments, is only these judgments themselves, when validly referred to objective reality. Thus, to illustrate, when Kant asks, How is pure mathematic possible? he means to investigate, first, the subjective materials out of which, in the absence of all sensuous experience, it is constructed, or the conditions under which it arises as a psychological phenomenon, and, secondly, the grounds on which it can be referred to real things, its objective applicability and validity. And with regard to pure physics and metaphysics, the same two questions of origin and validity have to be raised. So that Kant's problem in general is both psychological and epistemological. He will explore the constitution of the mind, which makes the production of *a priori* synthetic judgments possible. And though we call this part of his task a psychological inquiry, it is independent of empirical psychology, which Kant explicitly repudiates; for this could tell him only of the growth of the contents of the mind, whereas he is bent upon dissecting the organism of intelligence itself. Perhaps it might be called a question of transcendental psychology. But however named, the inquiry is included in the general problem of the *Critique*. It is not, however, the principal problem. That is and remains the epistemological question: How are judgments which we form independently of experience valid for sensible objects but not for suprasensible?

¹ *Ueber die Fortschritte der Metaphysik, seit Leibnitz und Wolff*, VIII, 526. This important declaration refutes Riehl's (*Philos. Kritikismus*, I, 294 pp.) denial of the psychological aspect of the critical problem.

But though Kant's own introductory account of the scope of the *Critique* is explicit enough, the body of the work itself as well as other utterances of the author have suggested to many commentators a broader problem than, How are *a priori* synthetic judgments possible? They see in this formula only a provisional statement of the ultimate problem, How is knowledge in general possible? Or, since all knowledge is composed of synthetic judgments, and the *a priori* sort is manifestly more perplexing than the *a posteriori*, they conceive of Kant as asking a test question, which embraces the entire difficulty, as though he would say, "Show me how you get *a priori* synthetic judgments, and I can understand how the *a posteriori* are possible." This view makes the fact of synthesis, of which *a priori* judgments supply a flagrant instance, the central problem of the *Critique*. Holding Kant's distinction between analytic and synthetic judgments to be essential, it regards as accidental and provisional the division of the latter into *a priori* and *a posteriori*,—a division, it maintains, which is transcended by the solution of the very problem in which it appears. This general conception of the critical problem may be rendered still more specific by a few quotations from a well-known British expositor: "Kant does not clearly explain the relation in which *a priori* and *a posteriori* synthesis stand to each other . . . Hence he does not hesitate, for the present, to speak of empirical synthesis as if it were entirely independent of *a priori* synthesis . . . But if we take such statements as conveying the whole truth of the matter, we make the *Critique* a sealed book to ourselves . . . If the *Critique* proves anything, it is that there is no experience without *a priori* synthesis . . . It is therefore the aim of the *Critique* to detect the forms of synthesis which are necessarily implied in experience, and to show that they *are* so implied . . . The object, then, which Kant proposes to himself is a criticism of human knowledge, with the view of determining its nature and limits."¹

¹ Caird's *Philosophy of Kant*, 218, 206, 219, 200, 189. So Adamson, art. *Kant*, in *Encyclopædia Britannica*, XIII, p. 851; Watson, *Kant and his English Critics*, 11-12; Cohen, *Kant's Theorie der Erfahrung*, 3; and, after much hesitation, Vaihinger, *Commentar zu Kant's Kritik d. r. V.*, 443 (cf. 186-189, 352-359, 433-443).

This interpretation of Kant's problem is based upon the "transcendental deduction," and an examination of it might therefore be profitably reserved for a later article. But so much of the transcendental deduction as bears upon the point in dispute may be anticipated and readily understood. It amounts in fact to no more than this, that the pure concepts of the understanding (substance, cause, etc.) are objectively valid, because they render all experience possible, so far as its form is concerned. Or, in other words, the transcendental deduction explains ordinary experience as a complex of presentations of sense synthesized by thought. And since the deduction is the centre and essence of the critical philosophy, it is natural to see in the *Critique*, however otherwise Kant may have described its problem, merely an account of the forms of synthesis entering into experience and a proof of their indispensableness to it. Not the creations of reason, unassisted by experience, but reason's impregnation of experience: such would be the subject of the *Critique*.

It is not, it will be admitted, a happy piece of historical criticism which reaches an interpretation incompatible with the explicit statement of the text. And it has yet to be shown that a determination of the forms of synthesis entering into experience is an answer to the Kantian question, What and how can reason know without the aid of experience? Nor is it relevant to urge that an author's initial statement of his problem is always provisional, and subject to modification by the solution subsequently attained; so that we who have the end and outcome of Kant's work before us can understand its intention better than he did. The preface of a book is the last part to be written. And what is more, Kant had not only his entire work but also the opinions of the public upon it before him when he wrote the new prefatory and introductory matter for the second edition and for the *Prolegomena*. Yet it is precisely there that the problem is first completely crystallized in the form, How are *a priori* synthetic judgments possible? And when one remembers that the entire aim of the *Prolegomena* was to present the critical philosophy in a clear

and intelligible abstract, it seems impossible to accept an interpretation of the critical problem which, whatever of truth it may contain, has the fatal defect of differing from the explicit statement of it there made by Kant himself.

The same caution is enjoined upon us by the history of Kant's philosophic development. Experiential knowledge, it might easily be shown, never made any difficulty for him. His perplexity began and ended with rational knowledge. That sensuous impressions should give us reports of their objects, he found natural enough. But how assertions made by reason alone should yet be true of objects: that was his great puzzle from 1772 to the completion of the *Critique*.

Yet in solving the question of *a priori* synthetic judgments, which remains Kant's central problem, he was brought to a view of experience from which it could no longer be regarded as the opposite of reason, as a simple, self-explaining or ultimate something accounting for *a posteriori* synthetic judgments, a thing of absolute indifference to the critical philosopher. On the contrary, experience became a matter of vital concern in the determination of the conditions of *a priori* knowledge. Mathematics, it is true, forms a special domain by itself, and the explanation of its possibility made no reference to experience. But when you ask how an *a priori* knowledge of nature is possible, you touch an object of which we have also an empirical knowledge. For what, in fact, is nature but the complex of all the objects of experience? Your problem, then, is to explain the possibility of an *a priori* knowledge of objects of experience, such, for instance, as we have in the propositions, substance is permanent, and every event is determined by a cause. And if your solution is to the effect that nature, to be known thus *a priori*, must, though given to us through the senses, yet be subject to mind-imposed conditions, you cannot escape the conclusion that these are mixed up with sense-presentations in our *a posteriori* knowledge, so as, in fact, to form its constitutive principles, or, in Kant's phrase, to render experience possible. Thus, unintentionally and perhaps unwittingly, you have been forced to

make an analysis of experience. It is far from a complete analysis (and this is where Kant fails us lamentably at the present day), but it is a considerable advance on the initial assumption that experience was given us by the senses, and as such needed no explanation. The senses, Kant has discovered by following up the problem of *a priori* knowledge, do not give us all that enters into what we call experience. They do not give us the relations of things. These are added by the understanding, which is the sole source of those principles of combination that render experience in its fullest sense possible. What experience is apart from this system of mind-given synthesis, in what sense if at all it can be spoken of, is a question that will meet us at a later stage. The point now to be emphasized is that Kant, in order to explain the possibility of an *a priori* knowledge of nature, forms a new conception of experience as a complex of sense materials ordered under categories of the understanding. These categories render experience in this sense possible. They also are the conditions of an *a priori* knowledge of nature. Accordingly, if you restrict your view to the transcendental deduction, you may say that Kant's problem is, indifferently, How are *a priori* synthetic judgments (about nature) possible? or, How is experience possible? But even then you will have to admit that the last question grows out of the first, that it comes into view in following up the first, and demands an answer only for the sake of the first. And when you extend your view to the other two parts of the *Critique*, to the æsthetic and dialectic, you see that they take no account of the second question, but devote themselves entirely to the determination of the possibility and validity of synthetic judgments *a priori*. Their problem is, What and how can reason alone know? This, therefore, remains the essential and actual, as it was also the historically and psychologically predetermined, problem of Kant's great *Critique*.

Not that from different points of view, and in different connexions, it may not be rendered variously even by Kant himself. And as, after the first edition of the *Critique*, Kant

emphasized rather its constructive than its destructive aspects, it need not surprise us, in view of what has just been said, to have the critical undertaking described as a theory of experience. It seems to be so described in an interesting manuscript note which Kant inserted, at the beginning of the analytic, in his own copy of the *Critique*. "Experience," he there writes, "consists of judgments, but it is a question whether those empirical judgments do not presuppose *a priori* judgments. The analysis of experience [*i.e.* the Analytic] contains the resolution of it into judgments and concepts *a priori*. The problem is, How is experience possible?"¹ The true position of this question in the *Critique* is admirably shown in the following passages of the *Fortschritte der Metaphysik*.² "If there is therefore synthetic knowledge *a priori*, it can only be by containing conditions *a priori* of the possibility of experience. It would then contain also the conditions of the possibility of the objects of experience in general; for only through experience can they be for us knowable objects. The conditions *a priori* which makes experience possible are the forms of objects, space and time, and the categories which contain the synthetic unity of consciousness *a priori*, so far as under them empirical presentations can be subsumed. Accordingly³ the highest problem of transcendental philosophy is, How is experience possible?" That is to say, you explain *a priori* knowledge of nature by assuming that the mind furnishes space, time, and the categories, which make experience, and therefore the objects of experience (nature) possible. Thus the explanation of the possibility of experience is the solution of the highest problem of the *Critique*. Of its "highest," yet not of its entire problem, because the question, How is *a priori* knowledge of nature possible? is only one of four questions into which the general problem was resolved. And only two or three pages from the passage just quoted Kant speaks of "the transcendental philosophy, that is, the doctrine of the possibility of

¹ B. Erdmann's *Nachträge zu Kant's K. d. r. V.*, 21. (Vaihinger, *Commentar*, 357.)

² VIII, 535-6.

³ 'Accordingly' is emphatic.

all *a priori* knowledge in general, which *The Critique of Pure Reason* is." ¹ He felt, therefore, no incompatibility in describing the transcendental philosophy of the *Critique* as having for its object the determination of the possibility of *a priori* knowledge and yet claiming that its chief undertaking was to explain the possibility of experience. We can know *a priori* only what we ourselves think into things. And this faculty of thinking *a priori*, this original and invariable spontaneity without which we should know nothing *a priori*, is at the same time the condition of the possibility of all other appearances, of nature itself as a system of knowable objects.² It is thus the ground of *a posteriori* as well as of *a priori* synthetic judgments. And in one of the *Reflexions*, Kant says, "The principal inquiry is, How do we come by knowledge in general, and especially *a priori* knowledge?"³ But that this statement is not to be strained beyond the natural interpretation here adopted, is clear from the circumstance that it is intercalated between two other reflections, both of which revert to the original formula of *a priori* synthetic judgments. "It is," runs the one, "the possibility of all *a priori* knowledge, which is self-contained and borrows nothing from the object, that forms our first and most important inquiry."⁴ "The first question," runs the other, "is, how we can have notions which have not been learned from any appearance of things, or principles, which no experience has taught."⁵

This last quotation brings us to a point of view from which the whole question may, with great advantage, be finally surveyed. Kant's problem, it has been here maintained, was correctly stated by Kant himself. How are *a priori* synthetic judgments possible? How and what may reason know independently of instruction from sense? The scope of such knowledge, it was settled by the *Critique*, does not go beyond the sensible world. And the conditions of it are the *a priori* functions of the mind, which may be expressed in notions (cause, substance, etc.). Our problem, therefore, may be said to

¹ VIII, 533. ² *Kant's Reflexionen zur krit. Philos.* II, 88 (no. 286).

³ *Reflexionen* II, 87 (no. 283). ⁴ II, 87 (no. 282). ⁵ II, 87 (no. 284).

concern both *a priori* judgments and notions. But these, the analytic showed, entered into experience as formal or constitutive principles. Hence our problem of the *a priori* has led us to a new conception of experience. And as this was the latest discovery of the *Critique*, it is very natural that in the introduction it should form the subject of the opening paragraphs. "If we remove from experience everything that belongs to the senses, there remain nevertheless certain original concepts, and certain judgments derived from them, which must have had their origin entirely *a priori*, and independent of all experience, because it is owing to them that we are able, or imagine we are able, to predicate more of the objects of our senses than can be learnt from mere experience." But even there it suggests the real problem, which is, How "we are able to predicate more of the objects of our senses than can be learnt from experience." And Kant passes on to the immediate statement of this problem in the well known formula. And where he has occasion to connect the problem of *a priori* knowledge with the problem of the *a priori* constituents he has discovered in experience, as he often has, he treats these as a kind of knowledge, though they are only elements, factors, or constituents of knowledge. Through this confusion¹ it is not at all impossible that for Kant the subsidiary question regarding the *a priori* of experience (How is experience possible?) is often included under the principal question, out of the solution of which it arose, How are *a priori* synthetic judgments possible? But whether that be so or not, the substitution for the original problem of the correlative derivative one, whose importance for Kant seemed to grow with time, was not unnatural from certain points of view, and, as our quotations show, actually took place. But this occasional variation of formula cannot with any propriety be described as a "methodical conversion of the problem" or a "historical change of front" on the part of Kant.² He had simply solved

¹ For Kant's persistent confusion of *a priori* judgments (whether of empirical or metempirical objects) and the *a priori* elements (percepts and concepts) that enter into experience, see Vaihinger's *Commentar*, 168, 187-188, 213, 222-223, 357-358.

² Vaihinger, 435.

his problem of *a priori* synthetic judgments by means of the principle of "the possibility of experience," and then discovered that this too might be taken as a starting point from which the same result could be attained. For experience is possible, experience is to be explained, only by the aid of those *a priori* conditions whose realization in and through experience furnished the explanation of the validity of *a priori* synthetic judgments. You may start with the "mystery," as Kant calls it, of *a priori* synthetic judgments and find its explanation and justification in the *a priori* which is the indispensable condition of experience, or you may start with the fact of experience and then ascend to its *a priori* conditions and the judgments which they render possible. In both cases the argument traverses the same ground and deals with the same factors and processes, though here the object of interest and the animating impulse is sense-knowledge, there knowledge independent of sense. Still the correlation of the two questions must not be turned into a co-ordination of them. For Kant the problem both of logical and psychological priority was, How are *a priori* synthetic judgments possible?¹

It has been shown, then, that there are no good grounds for setting aside Kant's own statement of his own problem. That statement includes, as we have seen, two questions, How do *a priori* synthetic judgments arise? and, How comes it they are valid of objects? The first, which we have hitherto called the question of origin, might be also designated the question of the possibility of synthesis in the absence of sense-experience. In *a posteriori* judgments the synthesis between subject and predicate is effected by means of an empirical perception. How is it brought about in the case of *a priori* judgments? Kant is hereafter to show that it is also by means of perception (*Anschauung*), but pure perception. Still the question of the possibility of synthesis *a priori* is not so fundamental as the other constituent of the main problem, How is it that judg-

¹ Vaihinger seems at the outset to accept this as the main problem; then he rightly enough correlates it with the problem of experience; next, on insufficient grounds he co-ordinates the two; and, lastly, subordinates the original to the derivative problem (*Commentar*, 189, 434-5, 441-2, 443).

ments formed independently of objects, by pure reason alone, are yet valid for objects? This is the question of the famous letter to Herz, for which Kant took so many years to find the answer we now have in the transcendental deduction. It is *par excellence* the question of the *Critique*. Yet, as we have seen, we have Kant's own warrant for specifying, along with the question of the objective validity, that also of the ground of synthesis, of *a priori* synthetic judgments.

But though, in the face of idealizing interpreters, Kant's formulation of his own problem may and must be held to be correct, and though its terms are sharply defined so that the explicit meaning is unmistakable, a doubt has arisen as to what the problem implies beyond itself. In asking, How are *a priori* synthetic judgments possible? you assume their actuality, or you do not. Does Kant, then, take for granted the validity of such judgments, and seek to discover the conditions on which it rests? This is the common interpretation. But it has been warmly opposed by a recent school of commentators,¹ who have brought great learning, ability, and insight to the study of Kant. These writers declare that, as a matter of fact, Kant makes no such assumption. Had he done so, they hold the *Critique* would have ended with the introduction. But its object, in their opinion, is to prove the validity of mathematical and other *a priori* knowledge. The validity is not presupposed in the problem, it is what makes a problem at all. Far from being a *datum* or a part of the argumentation, it is the demonstrated conclusion of the *Critique*. The only fact, they assert, which Kant takes for granted is the existence of *a priori* synthetic judgments as mere *psychological phenomena*. Whether they are objectively valid is to be settled by the *Critique*, which decides against the pretensions of metaphysics, but in favor of mathematics and physics. This, we are told, was the original and characteristic course of Kant's thought, though it is distorted by the analytic procedure of the *Prolegomena* and the second edition of the *Critique* as influenced

¹ Paulsen, *Entwicklungsgeschichte der Kantischen Erkenntnisstheorie*, 173; Windelband, *Geschichte der neuern Philosophie*, II, 52, 55; Riehl, *Philosophischer Kriticimus*, 326-7, 341.

by it. Even mathematics is not to be taken for granted; its validity must be proved on grounds that are independent of it. That mathematical propositions are more than figments of the brain, that they are true of real objects, is, says Riehl, no assumption, but the demonstration of the *Critique*.

This controversy, like so many others, can be settled only by a study of Kant's own utterances in the light of his philosophical development. But one point in the argument just given may be immediately disposed of. Though the method of the *Critique* is synthetic, that is, descends from conditions to facts, while the method of the *Prolegomena* is analytic, that is, ascends from facts to conditions, the minutest examination and comparison fails to discover any difference in their attitude towards the question now under consideration.¹ The presupposition of both is that there are *a priori* synthetic judgments which are objectively valid. And this corresponds with the history of the psychological development of the critical problem in Kant, while the contrary assumption that the *Critique* was to prove the validity of mathematical and other *a priori* synthetic judgments, is absolutely irreconcilable with that history. Such knowledge, apart from metaphysics, was never problematic to Kant, though it was long a problem. And the nature of the problem is already clearly described in that letter to Herz of the 21st of February, 1772. We have through pure reason a knowledge of objects; yet objects are independent of us; whence, then, the correspondence between the deliverances of reason and objective facts? Not a proof of the correspondence, which it never occurred to this scion of rationalism to doubt, but an explanation of it, of the "mystery" and "miracle" of knowledge, which ordinarily depends upon experience of objects, yet originating without such experience. Kant did not originally speak of proving the validity of mathematics; his language is to "explain" or "render intelligible" the fact of such *a priori* knowledge. For it surely is a puzzle that the mind should be able to say in advance what the laws of the

¹ So Erdmann, *Kant's Kritikismus in der ersten und in der zweiten Auflage der Kritik d. r. V.*, 172, 186, and similarly in his introduction to *Kant's Prolegomena*, XXX.

spatial world must be. Nor is this mode of statement limited to mathematics. Quite generally Kant says in the first edition of the *Critique*: "It is a fact that we are in possession of different kinds of synthetical knowledge *a priori*, as shown by the principles of the understanding which anticipate experience."¹ And "to understand the conditions which render every kind of them possible"² is declared to be, on the same unimpeachable authority, the task of the critical philosopher. With such passages before us, it is unnecessary, though it would be legitimate, to appeal to the wealth of confirmation to be found in the *Prolegomena* and the second edition of the *Critique*, of which, however, use has already been made in our exposition of the Kantian problem.

There is, however, an important truth which we owe to the school of commentators whose main contention we have just rejected. While they have failed to show that the object of the *Critique* is to prove the validity of mathematics and the other rational sciences, they have made clear that these are not, on the other hand, the proof of the *Critique*. That mathematics and physics are the "premisses" of Kant is a common statement. Yet it is utterly misleading. It implies that Kant weaves them into an argument from which a new conclusion is drawn, after the analogy of a syllogism. But they are not in any sense materials of proof. They are objects of investigation. The problem is not, What can be inferred from *a priori* synthetic judgments? but, What are the conditions on which they themselves depend? It is a matter of explanation alone.

Yet the explanation of a fact may under certain conditions become the proof or justification of that fact. If you have not seen the flash of light which accompanies the detonation of a cannon, I may by the help of those acoustical, optical, and physiological principles which explain these phenomena, prove to you that it really existed, if not that it was actually perceived by me. It is in the presence of doubters who question a fact, but must accept principles from which that

¹ III, 506 (653).

² (9).

fact can be deduced, that the determination of the conditions of its possibility is at the same time (provided those conditions be given) a demonstration of its existence. And it was because the shadow of scepticism flung its baneful cloud over the pure rationalistic problem of the *Critique* that Kant was obliged in self-defense to use his principle of explanation as a principle of proof. That mathematics and pure physics were valid *a priori* knowledge, he himself never doubted. But the fact had to be defended against the attacks of scepticism. Hence Kant claims that the deduction of the categories removes all doubt of the validity of mathematics and physics, and thus saves so much of *a priori* valid knowledge.¹ For "if anybody finds it quite impossible to understand the possibilities of such principles he may at first have some doubt as to whether they really dwell within us *a priori*."² It is perfectly intelligible, then, that when Kant has the sceptical objections in view he should pass imperceptibly from an explanation *How*, to a proof *That, a priori* synthetic judgments are possible. His position is admirably described by Vaihinger: "The validity of mathematics and pure physics, which was for Kant himself an absolute problem, becomes for the *Critique* a hypothetical problem."³ In other words, Kant's object is to explain the validity of *a priori* knowledge, which he never doubted; but his explanation turns out at the same time to be a proof of the validity of such knowledge to those who had impeached it. For without resting on this *datum*, without as it were telling us that he is dealing with the problem of *a priori* knowledge at all, Kant discovers certain functions of the mind which are not only adequate to the explanation of mathematics and pure physics, but which contain them, and from which they may be evolved as objectively valid sciences.⁴ The validity of *a priori* synthetic judgments, though never doubted by Kant, is not a premiss of the *Critique*, or a part or means of its argumentation, but the object of its explanation, and, indirectly and incidentally, of its proof as well.

¹ V, 57.² III, 506 (653).³ *Commentar*, 397.⁴ This applies rather to the *Critique* than the *Prolegomena*.

II.

The nature, significance, and implications of the critical problem have now been described. Whatever may be said of that problem, it was at least an unavoidable one for Kant. But I cannot stop to trace the stages of development through which he passed on the way to it, and analyze the fermentations of thought from which it was necessarily precipitated. Suffice it to say that were there to-day a rationalism like that which shaped all Kant's speculations—a dogmatism boasting a rational knowledge of things without the aid of sense-experience—we should realize much more vividly than we are now able to do the practicalness as well as the profound originality of Kant's investigations. He is the Hercules of German philosophy. But his work done, even Germany needs him no more, save as every nation needs to preserve the memory of all the thinkers who have contributed to the culture of the race. And for the English-speaking world, which never felt the tyranny of rationalism, Kant's problem is not merely obsolete, but so unintelligible that, without reading into it an esoteric meaning, it is often difficult to justify the composition of the *Critique*. Yet the *Critique* must be justified! For is it not the greatest work of modern philosophy? Certainly for the *Germans* no thinker has done so much as Kant, Aristotle and Plato alone excepted. And as the Germans have written our histories of philosophy, the German estimate of Kant has passed to all other peoples. And so it happens that, although Anglo-American philosophy never had a problem like Kant's, you may still hear it descant of Locke, Berkeley, Hume, and Reid—the men who have actually thought our problems—as the mere precursors of the German philosopher. The fact is that each in his own time and place did his peculiar work, as each was conditioned by the character, thought, and culture of his people.

While thus insisting upon the fact that Kant's problem was a special historically conditioned problem, which grew out of modes of thought that have now no existence even in

Germany, I do not mean to assert—it would be folly to assert—that Kant's elaborate solution of the problem contains nothing which is not obsolete. It has been shown that Kant's theory of *a priori* judgments leads up to a new conception of experience, and this may, conceivably at least, have a value of its own independent of the *datum* from which it was reached. Before now, men have gone out to look for asses, and found a kingdom. What the value of Kant's discoveries may be, can be settled only by a special examination of them in detail. Here it behooves us only to emphasize that the *Critique of Pure Reason* was written to answer the question, How are *a priori* synthetic judgments possible? and that this question could not to-day be put—put, I mean, with any propriety.

For, as we have seen, that question implies—it would be idle if it did not imply—that we have such *a priori* knowledge. Kant's assumption, stripped of every technicality, is that the mind can have knowledge of objects, in independence of and in advance of the intimations of sense. If that assumption be not tenable, the *Critique* is without a problem, even though much that it contains may still remain worthy of consideration on its own account. Knowledge *a priori*, according to Kant's definition, is knowledge absolutely independent of sensuous impressions (*von der Erfahrung schlechtin unabhängig*). How do we know we have such a possession? Its infallible tests, Kant declares, are universality and necessity. And Kant's application of these tests furnishes us not only *a priori* judgments but also *a priori* notions, of both of which examples were given in the exposition of the critical problem. Kant endeavors to prove, then, that we have such *a priori* possessions; but his proof turns on the assumption that universal and necessary notions and judgments cannot be derived from experience and must therefore originate in pure reason. What is universal and necessary must be *a priori*. And such *a priori* is to be found, metaphysics apart, not only in mathematics and physics, but in our ordinary knowledge; for even experience—in Kant's new conception of it as a compound of sense-matter organized by formative thought—contains universal

and necessary factors. This brings us to Kant's second assumption, namely, that experience (as thus conceived) is itself a standing witness to the existence of *a priori* cognitions or elements thereof. "Besides demonstrating the actual existence in our knowledge of principles *a priori* by a reference to fact, we might," he says, in a paragraph added to the introduction to the second edition of the *Critique*, "even *a priori* prove as much. We might demonstrate, that is, the indispensable necessity of such principles to the very possibility of experience. For how should there be any certainty in experience were all the rules in it only empirical and (consequently) contingent?" This elastic and somewhat magical principle of the "possibility of experience," which is elsewhere used to explain (and incidentally prove) the objective validity of principles, here takes its place side by side with the criterion of universality and necessity, as a proof of their subjective origin *a priori*.

Whether we have principles that are *a priori*, or universal and necessary, or constitutive of experience, or reason-originated and not sense-received, is a question we shall presently consider. Meantime it can be seen how Kant came by his belief and ineradicable conviction of their existence. It was due to his inheritance of the rationalistic antipathy to sense, which (to say nothing of earlier stages) is announced at the beginning of the critical period in the *Dissertation*, permeates the *Critique*, and, in the ethical treatises, receives its culminating expression in the conception of moral life as a struggle against sensuous impulses out of reverence to the law of reason. And Kant, with such deeply engrained inherited views of sensibility, could not be expected to find in sense-experience anything worthy of the name of knowledge. German philosophy had unanimously opposed it to knowledge as a mere animal analogon — *consécutions des bêtes*. And though Kant had come to question the rationalistic theory of knowledge, he never doubted that, if it was not all derived from reason, reason alone gave it certainty. The subjective certainty, the universality and necessity, even of experiential knowledge,

he followed Leibnitz in referring to *a priori* principles of reason with which it was somehow charged. "*La vérité des choses sensibles se justifie par leur liaison, qui dépend des vérités intellectuelles, fondées en raison,*"¹ says Leibnitz. And Kant's summary explanation in the *Prolegomena* reads like a comment on this passage. The reader who has hitherto considered experience as a mere aggregate or empirical synthesis of perceptions, is invited to reflect that it goes much further than these, as it gives empirical judgments universal validity, which can come only from a pure synthesis of the understanding *a priori*. "Experience consists in the synthetical connexion of phenomena (perceptions) in consciousness, so far as this connexion is necessary. Hence the pure concepts of the understanding are those under which all perceptions must be subsumed ere they can serve for judgments of experience, in which the synthetical unity of the perceptions is represented as necessary and universally valid."²

But suppose one denies that any synthesis of perceptions can be necessary and universally valid. Suppose the previous question to be raised, whether any proposition whatever can have universal and necessary validity. What then? Well, for Kant, the scion of rationalism, such a doubt would be inconceivable. For his part, he never saw beyond the Leibnitzian opposition of "truths of fact" and "truths of reason." The former were "contingent," the latter "necessary and eternal." The former were derived from experience. Of the latter Leibnitz held that their truth comes from the understanding alone; truth infallible and unchanging cannot be demonstrated by the senses. Kant never deserted this position. And, as we have seen, he also fortified it with a Leibnitzian construction of experience on an *a priori* basis. For him as for Leibnitz it remained self-evident, that "general principles enter into our perceptions (*pensees*), of which they form the soul and band of union,"³ (*l'âme et la liaison*), and that, accordingly, "the mind

¹ *Nouveaux Essais*, p. 378 B (Erdmann) or V. 426 (Gerhardt).

² IV, 58, 53-54 (87), (79-80).

³ *Nouv. Ess.*, p. 211 B (Erdmann) or V, 69 (Gerhardt).

contains originally the principles of various notions and doctrines." ¹ Whoever, therefore, denies the universality and necessity of judgments, whether the so-called *vérités de fait* or the *vérités de raison*, must find Kant's *Critique* in large part superfluous and irrelevant. This was felt alike by early Kantians and anti-Kantians. If there are no *a priori* principles either within experience or apart from it, what, in all the world, is the use of an inquiry into their origin, extent, and validity? And followers like Metz and Reinhold were free to admit that the actuality of universal and necessary knowledge and experience was nowhere demonstrated by Kant, for whom it was, on the other hand, simply an assumption, a *petitio principii* as Herbart did not hesitate later to describe it. No wonder, then, if Selle and other empiricists poured their concentrated attacks upon this weak point, till even Kant himself became conscious of the danger. His reply, which is contained in the preface of the *Critique of Practical Reason*, is remarkable only as evidence of Kant's incapacity to put himself at the objectors' point of view. He simply repeats in a self-confident tone his unproven assertion of the existence of *a priori* knowledge. "What worse," he exclaims, "could happen to these our efforts than that somebody should make the unexpected discovery that there is no *a priori* knowledge at all, and can be none. But there is no ground for anxiety. That would be to prove by reason that there is no reason. For we say that we know anything by reason only when we are conscious that we could have known it, even if it had not been given us in experience; so that knowledge through reason and knowledge *a priori* are the same. To wish to squeeze necessity out of a proposition taken from experience (*ex pumice aquam*) or to find in it true universality . . . is downright contradiction. To substitute for objective necessity, which is found only in *a priori* judgments, subjective necessity or custom is to deny to reason the faculty of making assertions about the object, that is, of knowing it and what belongs to it. Thence it would follow, for example, that you could not say, in the case

¹ *Nouv. Ess.*, p. 194 B (Erdmann) or V, 42 (Gerhardt).

of one state or event regularly following another, that the earlier could be inferred (*schliessen*) from the later (for that would signify objective necessity and a concept of a synthesis *a priori*); you could only say, in the same way as animals, that similar cases might be expected, thus at bottom rejecting the notion of cause as false, as a mere deception of thought."¹

This would be for Kant the destruction of objective and therefore (as he reasons) universal validity. Put into experience a framework of *a priori* conditions under which facts may be subsumed (and so inference made possible), and you endow experience with objective validity, securing for it at the same time universal and necessary assent. Substitute for the objective necessity thus grounded the custom-produced subjective necessity of propositions (*ex pumice aquam*), and you rob reason of its gift of telling us anything about objects *a priori*, and reduce human knowledge to the level of animal observation and expectation. A subjective expectation founded upon observation of nature's doings in the past is the terrible alternative Kant offers to his own theory of an objective necessity somehow superinduced upon nature by the *a priori* apparatus of the human mind! If, for the sake of an imaginary *a priori* knowledge, you will not rise to a theory of objective relations, in accordance with what the creative mind of man *makes them what they are*, you must sink to the brutish plane of a receptive intelligence which *takes them as they are!* And modern thought has wisely surrendered the phantasies of rationalism for the realities of experience, and, on the whole, found it a tolerable and even a fruitful exchange.

There is no *a priori* knowledge. To make such an assertion is not, as Kant maintains, "to prove by reason that there is no reason." Reason is the faculty of *a priori* knowledge, according to Kant; and when I deny there is such knowledge I do not base my denial on this mythical faculty, but on a survey of the whole domain of knowledge. The burden of proof is really on Kant. For it is surely the height of presumption for any finite intelligence to maintain that any law

¹ V, 12.

is universal or any fact necessary. We know that things are so and so, but not that they must be, or will always be. Our knowledge is made up of actual perceptions and of inferences and hypotheses suggested by them. This latter constituent, for which Kant substitutes a system of mind-created, universal and necessary principles, is in fact mere guess, assumption, or postulate. Alike in science and in ordinary knowledge (for the two differ only in the matter of systematization) you may trace the constant rise and fall of such ordering postulates. What we now call general principles or ultimate laws or notions are the exceptional cases of happy survival. They live for us, not because we can see into their necessity, but solely because in the growth of experience no perceptions have conflicted with them, while they in the meantime have served as ordering or systematizing centres of ever widening fields of fact. Darwin could not endure a scientist who, while observing, was not constantly forming hypotheses. He only demanded of the individual what the race has done since language began to be used. The universe which spreads infinitely about and within us is an abysmal mystery. Knowledge consists of the observations and the verified guesses man has made of his more immediate environment. Only the dogmatist, ignorant of what Bishop Butler calls the doubtfulness in which things are involved, can to-day believe that any of our knowledge must be universal or necessary. In an age of omniscient rationalism the case was different, and to such an age Kant belonged. Though he deemed natural theology impossible, he declared the foundations of physical science immovable. For us, the one like the other is made up of facts perceived and of hypotheses to account for them. Some branches of knowledge have more of the perceptual element, like mathematics, others more of the speculative element, like theology; but no absolute line of separation can be drawn between them, and while neither can be pronounced invalid (for there is no higher court) each must be accredited according to the amount of evidence it adduces. If the Newtonian method is good in one domain of knowledge it is good in another. It is vain to claim

a different kind of authority for the law of causation or the axiom of permanency of substance from that belonging to the theory of gravitation or the hypothesis of natural selection. All alike are postulates—guesses made to explain facts and happily verified by them. This is all that can be said for their validity. And as to their origin, all alike have had an historical growth.

There is, I have said, no *a priori* knowledge. Kant's science of pure physics is made up of postulates, which it is true growing experience tends to establish. But mathematics, it will be objected, cannot thus be disposed of. The subject may be considered more fully at another time. Here it is necessary to distinguish between mathematics as a system of universal and necessary truths, and mathematics as a system of truths originating in independence of experience. As to the first point, I shall only observe that for my own part I am not more certain of a demonstration of Euclid than of a chemist's analysis of water into hydrogen and oxygen. And I believe a "plain" man of the necessary intelligence, unsophisticated by philosophy, would tell the same story. But if others on reflection find they make a different estimate of the two kinds of knowledge, their attention may for the present be called to the fact that the subject-matter of geometry is the simplest conceivable,—mere extension everywhere alike,—and that whatever certainty the human mind is capable of reaching it must attain in this science, though it does not therefore follow that the self-evidence of geometrical truth differs in kind from the probability which, in varying degrees, you find in the other sciences, and of which, in fact, it is only the vanishing point. And with regard to the second issue, the conception of mathematical propositions originating without experience, it may here suffice to ask whether any one devoid of sight and touch could even, for example, cross the *pons asinorum*. If geometry, for that matter like all other knowledge, is the product of the mind, it is not made without sense-experience. But these statements are premature till Kant's theory of mathematics has been examined. It is only intended here to

explain that the existence of mathematics is no proof of the existence of *a priori* knowledge. There is no *a priori* knowledge. Theology, in this respect, is neither worse nor better off than mathematics and physics.

There may be some who, while ready to admit the weight of these arguments against Kant's initial and fundamental assumption, will yet endeavor to escape their force by the assertion that without *a priori* principles there could be no knowledge or experience whatever. These interpreters concern themselves less with Kant's direct problem than with that analysis of experience to which its solution forces him. And with the results of that analysis before them, they ask in Kant's own words, How can experience be organized without *a priori* functions of the understanding, and whence could it derive its certainty if all the rules on which it proceeds were themselves empirical and contingent? But in this objection two assumptions are involved, both of which have been already to some extent refuted. In the first place, it is assumed that experience has a certainty transcending the evidence of sense-perception. But this we cannot to-day accept. And, in the second place, it is assumed that experience, which it is rightly seen is more than a chaos of passive feelings, has its sense-presentations ordered under "principles" which are more than postulates. But this we have adduced grounds for denying. No doubt the sensational philosopher is in error when he supposes that custom or association, based on a repetition of sensations, could be the source of the "principles" under which sensations are colligated. These principles can by no mental chemistry be extracted from those sensations. They are the product of the mind's activity as Kant rightly saw, though not its spontaneous product. But when Kant, following his rationalistic bias, attributes to them a metempirical authority, he flies in the face of the facts of philosophic thought, both in the individual and in the race. They are not the absolute and immutable decrees of a world-creating reason, but the tentative hypotheses of a world-interpreting understanding.

Furthermore, this defence gives Kant's real attitude on the subject of experience. Kant touched experience at all only to explain *a priori* knowledge, which was the supreme and all-engrossing subject of his interest. And, accordingly, he never got beneath the formal side of experience, those *a priori* conditions which the mind puts into things. For since what we know *a priori* is what we put into objects, we need not trouble ourselves, in the explanation of mathematics and physics, with the other constituents of the object. These Kant massed together as "matter," and considered as "given *a posteriori*," and as forming a kind of experience like that of the animals. But for us whom Darwin has taught to respect the brutes, and who do not believe in an *a priori* knowledge, or in a universal and necessary part of experience, this *a posteriori* sense-given matter, which was below the plane of Kant's contemplation, is precisely what stands in need of examination. And so far as our philosophy and physiological psychology can to-day make out, Kant was under an illusion in supposing the senses "gave" us something on which the understanding had only to impose its *a priori* apparatus to turn it into an object. What is "given" is the physical stimulus accompanying sensation. This serves, we know not how, like the movement of a trigger, to occasion (we need not say "cause") the production of (let us say) a sensation of color, which sensation is as much mind-produced as the category of substance in virtue of which it is referred to an objective ink-bottle. Color, substance, cause, are all elements of knowledge, all phenomena of the mind, yet all original on the occasion of specific, nervous stimulation. None of them is "given," all are produced by the mind. The distinction between *a priori* and *a posteriori* thus vanishes even for experience, when experience is analyzed more exhaustively than it was by Kant. If by the *a priori* elements or factors of knowledge or experience you mean what has been mind-originated (not sense-given), there is nothing in experience that is not *a priori*, for colors, sounds, smells, and tastes are no more "given" to us than the notion of causality or the idea of space. It is because Kant, in common with Locke,

made the naïve assumption that sensibility was a kind of counter on which the external world deposited its wares, that so much of his philosophy is obsolete. Our desideratum is an analysis of the knowledge and experience we happen to possess, not an inquiry into the conditions of the universality and necessity of an imaginary possession which the rationalist asseverates we cannot, as men, be without.¹

If we have a faculty that supplies us with knowledge without the aid of sense-experience, it is not unreasonable to suppose that it can also tell us *a priori* what its contributions are. And so Kant asserts that his theory of *a priori* knowledge is itself *a priori*. It is spun by reason out of its own resources. And it is absolutely complete and necessary. Reason, as the first preface declared, is an organic unity, so that "whatever it produces entirely out of itself, cannot hide itself, but is brought to light by reason itself." And in so bringing it to light the *Critique* gives a "perfectly complete" and "absolutely necessary" account, the very opposite of "opinion" or "hypothesis" which, according to the same preface, "in this kind of inquiries it is in no way permissible to propound." As its title at once indicates, *The Critique of Pure Reason* is an examination of the faculty of *a priori* cognitions by itself, without appeal to any kind of experience. It is a criticism of pure reason *by* pure reason. Its aim is to bring reason to a true knowledge of itself. For reason has hitherto misunderstood itself and fallen into self-contradiction. Kant will determine its limits with apodictic certainty, in accordance with immutable principles of its own institution. He can, therefore, boast that his system is "based on no data except the reason itself."² It excludes psychological reflection, which can give only empirical data. Kant repudiates such a method and procedure, and claims to prove everything "from absolutely certain principles *a priori*."³ For pure reason contains in itself the "criterion (*Richtschmur*) for the criticism of its entire use."⁴ What

¹ "In all this," as has been said of Herbart, "there rules the old ontological error which will not recognize what is given in experience until there has been a speculative construction of it by reason."—WUNDT, *Logik*, II, 430 n.

² IV, 22 (32).

³ III, 27.

⁴ V, 16 (*Kr. d. pr. V.*, Einl.).

this criterion is, we learn from the chapter on "The Discipline of Pure Reason." "Our reason," it is there stated, "ought to be compared to a sphere the radius of which may be determined from the curvature of the arc of its surface (corresponding to the nature of synthetical propositions *a priori*), which enables us likewise to fix the extent and periphery of it with perfect certainty."¹ To determine the sphere of reason, which is the object of the *Critique*, what is given is the curvature of its arc, namely, *a priori* synthetic judgments. And the method of solving this problem is itself *a priori*, so that the results are absolutely indisputable. The subject of investigation for the *Critique* is *a priori* knowledge and the investigation itself (*i.e.* the *Critique*) is *a priori* knowledge.

It is a flattering view of one's own work that makes it as definitive and as absolute as a proposition in mathematics. But in Kant's case it was not the result of vanity. He believed in a mythological entity called reason, a self-poised organic unity, which was the source of *a priori* knowledge, and ought therefore, he supposed, to determine *a priori* what *a priori* knowledge it possessed and the conditions of it. Kant's absolutist pretensions are the natural counterpart of a heaven-scaling rationalism which will have "all or nothing." But since the outcome of the *Critique* is that we can have *a priori* knowledge only of objects of a possible sense-experience, it is not easy to see how the *Critique* itself can claim to be such *a priori* knowledge. If *a priori* knowledge is explained and justified as a condition of the possibility of experience, is it pretended that the *Critique* is also necessary to experience? If not, it is not *a priori* knowledge, has no claim to absoluteness or necessity, and remains merely an hypothesis to account for a (assumed) fact. Does not the *Critique* open with the declaration that all our knowledge begins with impressions of sense? Whence then your knowledge of the *a priori* forms?

I have called reason, in Kant's sense, a mythical faculty. Consider only what functions he attributes to it. It knows *a priori*; it criticises *a priori* what it knows *a priori*, and it

¹ III, 506 (652-3).

does this by means of its own *a priori* principles. In Kant's favorite metaphor, the *Critique of Pure Reason* is a court of appeal. It differs, however, from all terrestrial courts in this curious circumstance, that in it plaintiff and defendant, judge and jury, witnesses and laws, are but a single entity, a polymorphous abstraction generally designated pure reason. And since pure reason is the faculty of *a priori* knowledge, it is no wonder Kant demanded that the finding of this tribunal on the subject of *a priori* knowledge should itself be *a priori*. With a court so constituted, how could it be anything else?

But for us, who have lost faith in this magic faculty of a rationalistic philosophy, it is really difficult to understand how Kant's procedure can be described as *a priori*. That is *a priori*, according to Kant, which is independent of experience, either of the outer or of the inner sense. But how could the *Critique* get under way at all without reflection? Shall we then interpret *a priori* merely as universal and necessary? Kant certainly maintains that in matters of pure reason there must be apodictic proof. And, what is generally overlooked, he declares, in the preface to the second edition of the *Critique* that his philosophy follows the method of Wolff, that is, the "dogmatical procedure of reason," which "derives its proof from sure principles *a priori*."¹ Other passages might be adduced to show that Kant sometimes falls back on the Leibnitzo-Wolffian sense of *a priori*, that is, deduction from first principles. But if when he tells us "The determination of the true limits of our reason can be made on *a priori* grounds only,"² he means that he has established it by ratiocination from first principles, in the manner of the school of Wolff, his contention must be emphatically repudiated. However difficult to understand, Kant's asseveration that reason's determination of the possibility of *a priori* knowledge is itself *a priori*, must be taken in the Kantian sense, which is what a circumspect exegesis also demands.

A plausible explanation has been offered by Benno Erdmann. The separation of the *a priori* forms of our knowledge

¹ III, 27-28.

² III, 504 (650).

from its empirical constituents, the definition of these forms, and their union with one another are, he says, "pure *a priori* acts, although in the order of time experience has preceded them."¹ But this does not obviate the difficulty. For the acts described are all acts of reflection; they belong, therefore, in Kant's phraseology, to the inner sense, and are as much *a posteriori* as the perception of colors or sounds.

But how else could the investigations of the *Critique* have been made? What other way is there for the discovery of the *a priori*? None, absolutely none. The fact is that Kant, if waked from his dogmatic slumber, is still dallying with the sweet dreams of rationalism. Mere experience, whether outer or inner, could not furnish that certainty which, as he postulated for *a priori* knowledge, he also required for any theory of *a priori* knowledge. Reason itself, therefore, without the aid of observation or reflection, should supply him with the materials of his investigation! When, however, he came to the fulfillment of his task, it was not of course this imaginary faculty that carried him through, but, though he was never conscious of the difference, the common gift of reflection with which in an unusual degree nature had endowed him. Kant's system is in reality a philosophy of *a posteriori* reflection, though in intention and pretention a philosophy of *a priori* demonstration. The question of the possibility of *a priori* synthetic judgments was to be decided by the presence or the absence of the conditions of them in the human mind; and whether these conditions were there or not was a matter to be settled by reflection alone. The *Critique*, therefore, is at once psychological and epistemological. Its problem, it is true, is formulated without reference to psychology, but its solution is effected, not only by way of psychological reflection, but by liberal appropriation of psychological facts and theories. Kant's criticism of the *a priori* is itself *a posteriori*. The critical philosophy has a psychological basis. As a theory of knowledge, what other could it have? It is one thing to say that experience cannot produce the *a priori* forms. It is quite

¹ *Kant's Criticismus*, 13.

another to say that we, through reflection on experience, cannot come to a consciousness of these forms. Kant never clearly distinguished between these very different positions. Hence his contention that a theory of the *a priori* must itself be *a priori*, and so, absolutely complete and necessary.¹

The critical problem then is to be solved precisely like any other problem. Whatever his intention, Kant solved it by means of hypotheses, which, as they originated in reflection, must also be brought to the test of reflection for their verification. There are *a priori* synthetic judgments; here are hypotheses to explain them. We have seen reasons to doubt the existence of such judgments. But we are not on that account altogether excused from an examination of the conditions Kant has found for them, since these, as we saw, are not only intended to explain but to some extent also to justify *a priori* knowledge. Neither, on the other hand, should any pretensions to infallibility of method or finality of results debar us from examining Kant's solution of the critical problem with the utmost freedom. But all this must be reserved for later articles.

EDITOR.

¹ Whether the *Critique* is metaphysical (*a priori*) or psychological (*a posteriori*) is a question that has given rise to a voluminous literature in Germany. It is to be solved, I think, by distinguishing between the *intention of the author* and the *execution of his work*. That was rationalistic, this empirical. By this distinction we can account not only for Kant's self-contradiction on this subject, but also for the discordant discussions to which it has given rise. Of older writers who have discussed this subject it will suffice to mention Fries, Schopenhauer, Beneke, and Herbart. For the later treatment of it, see, besides Kuno Fischer's *Geschichte*, Meyer's *Kant's Psychologie* (an exhaustive and judicial monograph); Cohen's *Kant's Theorie der Erfahrung*, 105 ff., 122 ff.; Riehl's *Philos. Krit.*, 294-311; Windelband's *Gesch. d. n. Philos.*, 52 ff.; Vaihinger's *Commentar*, 431-2 (with the references).

EPISTEMOLOGY IN LOCKE AND KANT.¹

LOCKE'S hypothetical Realism or problematical Dualism is, as such, a sounder theory than the vastly more acute and subtle theories of his critics. But in Locke's hands the theory is stated in such a way that Berkeley and Hume become logical necessities ; if they had not existed, it would have been necessary to invent them. Locke's rudimentary psychology, his inextricable commingling of psychological, epistemological, and metaphysical questions, are mainly to blame for this. Above all must be signalized the atomic sensationalism which he places in the forefront of his theory, though he himself is the last man to abide consistently by it. Readers of Green's massive Introduction to Hume will remember the constantly reiterated criticism that Locke habitually uses idea or simple idea as equivalent to "idea of a thing." The simple idea, says Green, is thus represented as involving a theory of its own cause ; it is not a mere sensation, but the idea of a quality of a thing ; it is referred to a permanent real world of which it is representative or symbolic. Beyond doubt this is precisely what Locke does. One has only to open the Essay to find Locke continually passing from the one order of phrases to the other. "The senses," he says, "let in particular ideas" and furnish the yet empty cabinet ; but Locke says with equal readiness they "convey into the mind, several distinct perceptions of things." The particular ideas bare of all reference, a drip, drip of discontinuous sensations, so many present existences in consciousness, each testifying to itself alone, are transformed without a qualm into "ideas of things without." Locke apparently does not see the difference between the two sets of statements. But if the difference is *ignored* in Locke, we find

¹ This paper connects itself with the articles on "Psychology, Epistemology, and Metaphysics" and "The Problem of Epistemology," which appeared in the second and fifth numbers of this Review.

it explicitly denied by Hume that there is any difference: "To form the idea of an object and to form an idea simply is the same thing; the reference of the idea to the object being an extraneous denomination, of which in itself it bears no mark or character."¹ Green, as I take it, does not mean that Locke was wrong in taking up this second position, and in beginning his theory of knowledge, not with a simple idea of sensation — a mere sensation — but with a judgment in which a causal reference and the distinction of self and not self are implicit. Green's point is that Locke on his own avowed principles is not entitled to the second and sounder position, a position which may be shown to involve many consequences which no sensationalistic philosophy can admit. Green seeks to pin Locke down to his sensationalistic formulae, interpreted with the utmost rigor of the law, in the light of Hume's deductions, whereas it is apparent on every page of the *Essay* that Locke never dreamt of their bearing such a meaning. Hence it is that Green is less than just to Locke and deals only with his inconsistencies. Professor Campbell Fraser's reconstruction is far truer to his spirit and intentions. In truth Green's interest is not with Locke's theory as a whole, but with English sensationalism as that first disclosed its features in certain definitions and statements of the *Essay*. Locke's first way of stating the case implies that false substantiation of the bare particulars of sense which issued in the agnostic sensational atomism of Hume. It leads directly to the ideal theory and the so-called doctrine of representative perception in the objectionable form in which it is attacked by Reid. "It is evident," says Locke, "the mind knows not things immediately, but only by the intervention of the ideas it has of them." So far he is on perfectly safe ground, except that the word "intervention" has already a subtle *suggestio falsi*. But the formula which Locke places at the very opening of Book IV (and which therefore naturally takes a prominent place in the mind of the student as determining the sense of what follows) is far from being equally unobjectionable;

¹ Treatise I. p. 327 (Green's edition).

though the difference may seem so slight as to be almost imperceptible, and the danger that lurks in it is probably only apparent to us in the light of subsequent events. "Since the mind," says Locke, "in all its thoughts and reasonings, hath no *other immediate object* but its own ideas, which it alone does or can contemplate, it is evident that *our knowledge is only conversant* about them."—So, again, in the opening of Chapter II, he repeats that all our knowledge consists "in the view the mind has got of its own ideas." Now it is one thing to say that the mind knows things only by the intervention or by means of the ideas it has of them, and another thing to say that ideas constitute the "immediate object" of the mind, and that "our knowledge is only conversant about" ideas. The last is so far from being true that it might be more correct to say that our knowledge is never conversant about ideas—ideas never constitute the object of the mind at all—unless in the reflective analysis of the psychologist. Otherwise, our knowledge is always conversant about realities of some kind; to say that we know by means of ideas is simply to say that we know; but ideas are naught except as signs of a further reality, and from the first they are taken not *per se*, but in this symbolic capacity. As Locke himself puts it in his excellent chapter on the Reality of Human Knowledge, "It is the knowledge of things that is only to be prized . . . If our knowledge of our ideas terminate in them and reach no farther . . . our most serious thoughts will be of little more use than the reveries of a crazy brain."—Locke's shifting statements show us, indeed, "the psychologist's fallacy" in full blast. If we once yield ourselves to his first line of thought; if we admit a start from ideas *per se*, a custom-woven, private, ideal phantasmagoria will be our only substitute for the common or objective world of real persons and things. We get a theory of Representative Perception that is totally indefensible; the ideas are taken as really intervening *between* the mind and things; the mechanism of knowledge is converted into an elaborate means of defeating its own purpose. It becomes a *tertium quid*, a kind of screen which effectually shuts off the knower from what he

desires to know. We are supposed, first, to know the ideas on their own account as mental states or mental entities, and subsequently, by a process of conscious inference, to refer them to real causes and archetypes. If knowledge at any stage did terminate thus in the ideas themselves, it is difficult to see either what considerations could suggest to us the step beyond their charmed circle or on what grounds it could be justified. This is in fact the point of the idealistic and sceptical criticism which Berkeley and Hume brought to bear upon Locke's hypothetical Realism. Berkeley, as Green puts it, tries to avoid Locke's inconsistencies by dropping the reference to transcendent real objects altogether: for idea of an object he deliberately substitutes idea simply. To him the ideas *are* the objects, sensible things are clusters or collections of ideas — actual and possible perceptions of intelligent beings. “The table I write on exists, that is, I see and feel it; and if I were out of my study, I should say it existed — meaning thereby that, if I was in my study, I *might* perceive it or that some other spirit actually does perceive it.” In his recurring phrase, the being of things “is to be perceived or known,” or, as he puts it even more strikingly, “the object and the sensation are the same thing.” “An idea can be like nothing but an idea” and the supposition of independent originals of our ideas is gratuitous. “If there were external bodies, it is impossible we should ever come to know it.” The supposition of such bodies is, in short, not only “groundless and absurd,” but “is the very root of scepticism; for so long as men thought that real things subsisted without the mind, and that their knowledge was only so far forth *real* as it was *conformable to real things*, it follows that they could not be certain that they had any real knowledge at all. For how can it be *known* that the things which are perceived are conformable to those which are not perceived, or exist without the mind?”¹ As Hume clinched the matter afterwards: The mind has never anything present to it but the perceptions, and cannot possibly reach any experience of their connection with objects. Hence Berkeley proceeds, “All this

¹ *Principles of Human Knowledge*, Section 86.

sceptical cant follows from our supposing a difference between things and ideas. . . The arguments urged by sceptics in all ages depend on the supposition of external objects.”² He is resolved himself to make a clear riddance of all such sceptical cant. On Berkeley’s principles there is no opening for doubt either as to the existence of a real world or as to the truth of our knowledge of it, because the knowledge, the immediate conscious fact, *is* the existence and (along with a possibility of similar conscious facts) the whole of the existence. “That what I see, hear, and feel doth exist, *that is to say, is perceived by me*, I no more doubt than I do of my own being.” Unquestionably not, for if existence be understood in this sense, the two facts are simply identical. Doubt cannot touch the existence of a present feeling while it is being felt. But if I thus reduce the existence of a permanent external world to unreferred feelings, Hume is of course at hand to apply the same argument to “my own being” which Berkeley here and elsewhere treats as a fundamental certainty. These same perceptions or ideas whose presence in consciousness I have asserted to *be* the existence of sensible things, constitute the evidence of my own existence : in fact they *are* my existence. As Berkeley himself says, the duration of any finite spirit must be measured by the number of ideas or actions succeeding each other in that same spirit or mind ; . . and in truth whoever shall go about to divide in his thoughts or abstract the *existence* of a spirit from its *cogitation* will, I believe, find it no easy task.”¹ My own being, in fact, as something more than the existence of my present conscious states, will be found by a sound philosophy to rest ultimately on a process of rational construction substantially similar to that which establishes the existence of an independent *object* of knowledge. Hence an Idealism or Spiritualism which does not guarantee the rights of the object is a lop-sided theory which has no defence against the further inroads of its own logic. Put forward as a short and easy method with the sceptics, Berkeleianism only precluded to the sceptical nihilism of Hume.

¹ *Ibid.*, Section 87.² *Ibid.*, Section 98.

Humianism, so far as that is necessary to our argument, may best be dealt with in the modernized version of Mill. But before doing so, it will be instructive to trace the very similar process of criticism by which the realistic elements were eliminated from the original theory of Kant, and we shall see how their elimination leads to similar sceptical results.

It is important to observe that Kant's starting-point is a hypothetical dualism in many respects similar to that of Locke. Our knowledge refers to things which are other than our knowledge and may be said, in that sense, to lie beyond it. This further reference (which we have some reason to believe essential to the very nature of knowledge) Kant certainly starts with; and whatever results his theory leads him to as regards the *kind* of knowledge we have of things, he never loses hold of what he calls the thing-in-itself as that which alone gives meaning to the cognitive effort. Our knowledge of things may be imperfect and colored by the infusion of subjective elements, but if there were no 'things-in-themselves,' the whole process of knowledge would be a completely unmotivated excursion into the void. Hence, as Kant puts it in the Preface to the Second Edition of the *Critique*, with his whole system explicitly in view, "while we surrender the power of cognizing, we still reserve the power of thinking objects as things-in-themselves. For otherwise we should require to affirm the existence of an appearance without anything that appears—which would be absurd." In other words, our cognitions may be *Erscheinungen*, merely phenomenal, but as phenomena—as cognitions—they imply real objects, of which they are the cognitions. It is, of course, the peculiarity of the Kantian scheme, that our knowledge is so organized as to defeat its own purpose and cut us off from a knowledge of things as they really are. So far as our knowledge of it is concerned, the thing-in-itself shrinks, therefore, for Kant into a mere unknown somewhat; but in that capacity it remains as the necessary presupposition of the knowing process.

It would be superfluous to multiply quotations in support of a position which even those who try to explain it away must admit to have been held by Kant. I will, therefore, quote only one typical passage from the *Prolegomena* in which he elaborately distinguishes his own doctrine from that of Idealism:—

“Idealism consists in the assertion that there are no other than thinking beings; that the other things which we believe ourselves to perceive are only ideas in thinking beings—ideas to which in fact there is no correspondent object outside of or beyond the thinking beings. I, on the contrary, say, Things are given to us as objects of our senses, external to us; but of what they may be in themselves we know nothing, knowing only their appearances, that is, the ideas which they cause in us by affecting our senses. Accordingly I certainly admit that there are bodies external to us, that is, things which, although wholly unknown to us as regards what they may be in themselves, we yet know through the ideas which their influence upon our sensibility supplies us with, and to which we give the appellation body: which word signifies, therefore, only the appearance of that to us unknown, but not the less real, object. Can this be called Idealism? Surely it is precisely the opposite.” He declares roundly elsewhere “that it never entered his head to doubt the existence of independent things (Sachen).” Kant (in the passage quoted and elsewhere) assumes independent things not only as existent, but as the trans-subjective cause of our sense-affections. How else, he says, could the knowing faculty be roused to exercise, if not by objects which affect our senses? The position is to Kant so much a matter of course that he does not stop to argue it. And so it remained to the end. To interpret such statements as preliminary or provisional on Kant’s part is completely unwarranted. If they had been a piece of exoteric condescension or accommodation to the untrained minds of his readers—if he had been merely educating these readers up to a point of view which would transform their whole conception of the universe and render the thing-in-itself an unnecessary adjunct—then Kant must have given us some hint at least of this

pedagogic use of language, instead of leaving such expressions staring at us from page after page of his works in a perfectly unqualified way. They appear not only in works written while he is supposed to have been working his way towards his own deeper view, but are to be found quite as unambiguously in writings composed long after his whole scheme lay clearly outlined before his mind. A few statements¹ may certainly be pointed to, mostly obscure in their drift and phraseology, which, *if they stood by themselves*, might be interpreted in an idealistic sense. But when they have to be placed against the mass of counter-evidence — the numberless explicit assertions of the realistic position and the vehement disclaimers of Idealism — which may be quoted from Kant's writings, it is manifest that the Idealism that seems to the eyes of later-born critics to shimmer in the words was not present to Kant in writing them, and that, whatever their meaning may be, an interpretation must be sought not inconsistent with the fundamental Realism of the authentic Kantian philosophy, whether that is formulated in the First Edition or the Second, in the *Prolegomena* or in Kant's express statements in later years. Of these last I will only refer to his rejoinder to Eberhardt in 1790, the year of the *Critique of Judgment*, and his public declarations in regard to Fichte and his system in the year 1799. Publicly invited by Fichte to disclaim the derivation of sensation from the impression of things-in-themselves, the aged philosopher hastened to disown the Fichtean idealism which he characterized in the newspapers as a pure logic from which it was a vain hope ever to extract a real object. The *Wissenschaftslehre*, he had said in a letter to a friend the year before, impressed him "like a kind of ghost." "The mere self-consciousness, or, to be more correct, the mere form of thought without matter — consequently without the reflection having anything before it to

¹ The chief passages that seem opposed to a realistic interpretation occur in the chapter on Phenomena and Noumena in the first *Critique*; but Kant is there speaking in another reference. He is speaking not of the existence of things-in-themselves, but of a non-sensuous intuition of them. Besides, his subsequent declarations are sufficient to show that they are not intended to throw doubt on the existence and causal activity of things-in-themselves.

which it could be applied — makes a queer impression upon the reader. When you think you are going to lay hold on an object, you lay hold on yourself instead ; in fact the groping hand grasps only itself.”

It may seem strange that a system with such a firm realistic basis should have been the parent of so many idealisms, whether we look to the constructive Idealism of his immediate successors, Fichte, Schelling and Hegel, to English Neo-Hegelianism or to the sceptical and positivistic idealism of many German Neo-Kantians. But the reason is not far to seek. If Kant starts from, or implies throughout, a hypothetical dualism of the Lockian type, he likewise accepts in the most unqualified way the doctrine which we found in Locke and Hume of the subjectivity of knowledge — the necessary limitation of the mind to its own ideas. This doctrine we saw to be true in what it affirms ; it forms, indeed, the first step in philosophical reflection. Consciousness cannot, in the realm of fact or existence, pass beyond itself ; its own states are, therefore, all that is immediately present to or *in* the mind. But if it be forthwith concluded from this, that it is impossible by means of certain facts in my consciousness indirectly to reach, or in other words to *know*, a world of other facts beyond my consciousness, we are arguing with more haste than caution. The two propositions, at all events, do not mean the same thing. That knowledge is, and must be, a subjective process is not of itself sufficient to discredit its results and stamp its efforts in advance as unavailing. Yet historically the two statements are generally found together, as if they were two sides of the same truth : knowledge is subjective, *therefore* it can never give us the object as it really is. So it was with Hume, and so it is with Kant.

By Kant the position is not usually stated quite so broadly. He does not usually say in so many words that, because knowledge is subjective, it can bring us no true report of real objects. To Kant it is the sensuous or receptive character of our perception that invalidates it. Our perception is derivative ; it depends for its matter upon an affection of our sensi-

bility by the object. This is what Kant constantly emphasizes as stamping our knowledge with phenomenality. Sensations are subjective affections which nowise express or reveal the nature of the object but only its relation to us. As the sun melts wax (to use an example of Locke's), so the thing produces a certain effect upon my sensibility: I am internally modified in a certain way. But such a modification of *my* nature, however it may be set up in me by the thing, cannot possibly reveal the nature of the thing as it is in itself. In Kant's own words, we know "only the mode in which our senses are affected by an unknown something" (*Werke* IV. 63). "Supposing us to carry our empirical perception even to the very highest degree of clearness, we should not thereby advance a step nearer to a knowledge of the constitution of objects as things-in-themselves. For we could only, at best, arrive at a complete cognition of our own mode of perception, that is, of our sensibility" (III. 73). "It is incomprehensible," he explains elsewhere (IV. 31) "how the perception even of a present object should give me a knowledge of that thing as it is in itself, seeing that its properties cannot migrate or wander over (*hinüberwandern*) into my presentative faculty."

This is further emphasized by the contrast, which Kant again and again recurs to, between our sensuous or receptive intelligence (*intellectus ctypus, derivativus*) and a creative, or as he otherwise terms it, a perceptive understanding (*intellectus archetypus, originarius*). The latter, he explains in the celebrated letter to Marcus Herz, must be conceived as all activity or spontaneity; its ideas, therefore, will have creative efficiency. They will not be passively related to foreign objects; they will themselves *be* the objects, and such a being's knowledge would, of course, be entirely *a priori*, as the world known would be entirely self-produced. In complete contrast with such an intelligence, we may conceive a being entirely passive or recipient in its relation to the object. In this case, the ideas of the subject would be altogether empirical or *a posteriori*, due to piecemeal communication from the side of the object. And, as we have already heard Kant say, they would in such a case

give only the way in which the subject is affected by the object—only certain ‘passions’ or sensuous modifications of the subject, accompanied by a causal reference to an (otherwise unknown) object.

Now, according to Kant, the human mind is neither purely active nor purely passive ; human knowledge is a compound of receptivity and spontaneity. Kant assumes, on the evidence of mathematics and pure physics, that part of our knowledge possesses universality and necessary validity, and, as universality and necessity cannot be yielded by sense, that the principles of such knowledge must be *a priori*, drawn in the act of knowledge from the nature of the mind itself. Hence it comes that the crucial question for Kant is, Granted these *a priori* principles, these notions of the understanding, how can they apply to objects which are given independently of them? If our mode of perception were intellectual or spontaneous throughout, creating its objects whole (both form and matter), there would, of course, be no such difficulty. But our perception being sensuous, dependent for its matter upon foreign objects that exist in their own right, what guarantee have we that ideas which have their source in the mind may be validly applied to independent objects? To the question as thus put there is but one answer—we have no guarantee at all. Kant’s way out of the difficulty, therefore, was, in effect, to renounce the attempt to know the real objects and to rest content with the subjective modifications of his own sensibility. That these *a posteriori* subjective affections should range themselves under the *a priori* forms of sense and understanding no longer presents any difficulty ; on the contrary, it is obvious that the structure of the mind must impress itself on whatever it receives into itself. This fusion of *a priori* and *a posteriori* elements yields us the so-called objects of sense—the subjective objects, the phenomena or appearances in us—to which Kant applies the term experience, and to which he limits the scope of our cognition.

It will be seen from what has been said that it was not primarily the subjective origin of the *a priori* principles that led

Kant to pronounce our knowledge merely phenomenal. It is rather to our sensuous or receptive attitude in cognition that the phenomenalistic taint is due. It is due to this fundamental characteristic of human intelligence, rather than to any defect inherent in themselves, that the categories are strictly limited to a phenomenal or subjective world; they are empty, as Kant says, without the filling of sense. But though Kant's phenomenalism has thus its roots in his view of the *a posteriori* even more than in his account of the *a priori*, his theory of the *a priori* is unquestionably what gives his system its distinctive character. But for mathematics and physics and Hume's sceptical analysis of necessary truth, Kant might have remained content with a theory like Locke's. Locke gives a substantially similar account of *a posteriori* knowledge, but the sceptical implications of 'the theory of ideas' have not yet developed themselves. The connection is closer between the ideas and their real causes or prototypes — which Locke, indeed, believes them faithfully to represent, so far at least, as the primary qualities are concerned. The elaboration of the *a priori* element by Kant, and the prominence given to it in the constitution of the so-called object of sense, inevitably widens the gulf between ideas and things, between the phenomenon and the thing-in-itself. The phenomenal object, drawing so many of its determinations from the subject, becomes detached from the object whose appearance it is supposed to be, but which, be it observed, it no longer represents. It becomes a satellite of the mind, a mental object. And eventually, under cover of the ambiguous terms 'object' and 'experience,' it assumes a quasi-independence of the mind also, and is then ready to do duty for the real things of science and common life.

We need not wonder, then, that, in the course of the exposition, the thing-in-itself, the transcendent cause of our experience, falls into the background. It falls into the background not because it is any the less supposed to be there, but because Kant is not interested in the particular matter of sense of which it is the source and explanation. He is altogether absorbed in vindicating, in view of Hume, the universal and

necessary elements of experience. He has to show how by the aid of certain mentally-supplied principles of synthesis—and only by their aid—the discontinuous and unconnected particulars of sense are worked up into “experience-objects,” and, generally, into an experience-cosmos in space and time. The deduction or exposition of this *a priori* system may be said to constitute Kant’s whole industry in the *Critique*. The *a posteriori* element, though equally necessary to experience as a living fact, he is content to refer to simply as *given*—given from another source, as he says somewhat curtly in the press of his investigation into the *a priori*. The infrequency of reference to this other source is the less to be wondered at, seeing that the thing-in-itself had become attenuated under the influence of Kant’s presuppositions, into no more than the unknown cause or correlate of our sense-impressions—“a notion so imperfect,” according to Hume, “that no sceptic will think it worth while to contend against it.”¹ As nothing could be said of the sense-matter until it was formed, the thing-in-itself seemed merely to furnish the prick of sense that set the *a priori* machinery in motion. Kant himself says in the *Aesthetic*, with a kind of naïve triumph, that the thing-in-itself is never asked for in experience. In short it is completely obscured, and its place practically taken, by the subjective or experience-object which Kant constructs, and which he interposes, as it were, between us and it.

It is high time, therefore, to inquire narrowly into the nature of this ‘experience’ which tends to swallow up everything else in Kant, and which, in the mouths of his more recent followers, becomes a magic and all-sufficing formula.

Experience is distinguished, on the one hand, from mere sensation. Kant holds, and rightly holds, that from particular impressions of passive sensation alone no knowledge could possibly arise. These sensations, if they exist, are unknowable; they become elements of knowledge only when actively seized and rationally interpreted by the mind. Knowledge implies, besides the stimulus of sense, a nucleus of primitive

¹ *Enquiry*, Section 12.

judgments, which involve the basal category of cause and ultimately the whole structure of reason. If, therefore, sensation, or the sense-stimulus, be styled subjective or merely subjective, then the cognitions or perceptions¹ which are thus constituted out of the impressions by the *a priori* resources of the mind may be said to be, in comparison, objective, that is to say, they are not merely internal states of the subject, indistinguishably fused, as it were, in its inner life; they are objects or presentations which have a relative permanence, and which may be contemplated, so to speak, at arm's length. They are objective, however, only as thus compared with sensations (which may be hypothetically defined as the states of a being in which the contrast of subject and object has not emerged, and for which consequently the fact of knowledge does not yet exist). In themselves, as perceptions, they are still subjective, still modes of my consciousness. Their objectivity is an immanent or subjective objectivity, as compared with the transcendent or trans-subjective objectivity of independently existing things. Indeed, to call them objects is perhaps to invite misconception. These phenomenal objects are more probably described as percepts, and no percept carries me, so far as its own existence is concerned, beyond the ring-fence of the self. Whatever reference to a trans-subjective world my percepts may carry with them, they are, as percepts, in me; they are my ideas, in the wide Lockian sense of the word, my *Vorstellungen*, as Kant so often says. Adopting the favorite Kantian expression, we might say that experience, just because it is experienced, is *eo ipso* a subjective fact. Mediatly, of course, my experience is the only means I possess of passing beyond my individual subjectivity to the trans-subjective universe of other men and things. But in its immediacy, as a fact of consciousness doubt of which is impossible, it cannot bridge the gulf between the subjective and the trans-subjective. The sceptical question would never have been asked, if trans-subjective reality were already present—immediately present in the heart of consciousness. But it is presuming too much

¹ Kant's distinction between cognitions and perceptions is not here in point.

upon the ambiguity of words to ask us to accept the immanent object as actually *being* the transcendent object—the real thing. The subjective object is certainly, like faith, the evidence of that trans-subjective world. It is, we may hold, the substantial and sufficient evidence, but the one is not the other. If the one were the other, doubt, as I have said, would be impossible and to lead evidence would be ridiculous.

Hence when Kant argues, as he so often does, that his system is immeasurably superior to the problematical Idealism of most philosophers, his speech bewrayeth him. His very insistence on the fact that, in his system, doubt of the existence of material things is impossible—that he is as certain of the existence of objects in space as he is of any fact of the internal sense—only proves that these material things in space are simply my spatially arranged perceptions. Space and all its contents, as he is so fond of saying, are only phenomena of my consciousness, only ideas in me. Kant's immediately known real things in space recall, in fact, Berkeley's very similar protestations that he is placing reality upon a firmer basis than ever before. Others may doubt whether matter exists or not; for his part, he has immediate certainty on the point. Berkeley plainly availed himself in this of something like a *double entendre*; he endeavored to substitute the perception, or the object immediately present to consciousness, for the trans-subjective real of which it is the perception. But the trans-subjective to which all subjective facts refer is not thus to be got rid of. Berkeley restores it in another form; Hume himself, in the *Enquiry*, seems inclined to leave it standing in the attenuated form of "a certain unknown, inexplicable something"; and in this shape it is retained by Kant as the thing-in-itself. For the counterstroke of all this somewhat mystifying talk on Kant's part about real things in space is his reminder that these objects are, after all, only phenomena in consciousness. Their reality is only empirical; and as the only empirical reality of which we can intelligibly speak is the process as it passes in my consciousness or yours, Kant stands practically on the same ground as Berkeley. The only differ-

ence between Berkeley's ideas of sense and Kant's empirically real phenomena lies in Kant's more adequate account of space and of the intellectual elements involved in perception. This difference is, of course, fundamental, and Kant's analysis may probably be used so as to make subjective idealism definitively untenable ; but in such Kantian passages as those to which I have referred, it does not lift us at all beyond the Berkeleian standpoint.

I have just said that the only sense in which we can intelligibly speak of empirical reality is to designate the process as it passes in my consciousness or yours. But does Kant always use empirical reality and experience (*Erfahrung*) in this sense? Certainly he sometimes does, and perhaps always intended to do so—though good intentions cannot be credited in philosophy. In addition to many incidental statements, emphasizing the subjective character of these so-called objects, reference may be made to a passage which has all the appearance of being a carefully weighed official declaration on the subject. I mean the sixth section of the Antinomy of Pure Reason, where Kant, according to the title, brings forward his “transcendental idealism as the key to the solution of the cosmological dialectic.” Here Kant repeats a great number of times and in the most explicit fashion this purely subjective and individualistic interpretation of experience. “It has been sufficiently proved in the *Aesthetic*,” he says, “that everything which is perceived in space and time—all objects, therefore, of our possible experience—are nothing but phenomena, that is, mere ideas, which, as represented, that is to say, as extended beings or series of changes, have no self-subsistent existence beyond our thoughts. . . . The realist in a transcendental sense makes out of these modifications of our sensibility self-subsisting things—makes *mere ideas*, consequently, into things in themselves.” But for transcendental idealism “space itself and time and all phenomena are not in themselves *things*. They are nothing but ideas, and cannot exist at all beyond our mind (*ausser unserem Gemüth*). . . . That there may be inhabitants in the moon, although no man has ever perceived them, must

certainly be allowed ; but that only means that we might meet with them in the possible progress of experience ; for everything is real that stands in one context with a perception according to laws of empirical progress. They are real, therefore, if they stand in an empirical connection with my actual consciousness, although that does not make them real in themselves, that is, apart from this progress of experience. . . There is nothing really given us except the perception and the empirical progress from this perception to other possible perceptions. For in themselves phenomena, as mere ideas, are real only in perception, and perception is in fact nothing but the reality of an empirical idea, that is, a phenomenon. To call a phenomenon a real thing before it is perceived means either that in the progress of experience we must meet with such a perception, or it means nothing at all. . . Phenomena are not anything in themselves but mere ideas, which when they are not given to us (in perception) are not met with anywhere at all."

This elaborate passage might be reinforced by many emphatic expressions on Kant's part to the same effect. Thus he warns us that "all objects without exception with which we busy ourselves are in me, that is, determinations of my identical self." He speaks of the mind as prescribing laws *a priori* to nature, and of nature as submitting to the legislation of the understanding ; but he smooths the paradox for us by reminding us that "this nature is in itself nothing but a sum of phenomena, consequently not a thing-in-itself but only a number of ideas in my mind (*eine Menge von Vorstellungen des Gemüths*)." In such passages there is no mistaking Kant's meaning ; even in his phraseology he recalls Berkeley and Mill, except that for associated sensations we have rationally constructed perceptions. Otherwise Kant's phenomenal world of present perceptions and possible perceptions corresponds exactly to Mill's world of actual sensations and permanent possibilities of sensation or Berkeley's world of actual and possible sense-phenomena. The recurring phrase of the *Critique*, "possible experience," is itself significant of the affinity of standpoint. It may be observed also that when this view is firmly held, as in

the long section quoted from the Dialectic, "the non-sensuous cause of these ideas" — "the transcendental object" — reappears, as if Kant, like Berkeley, found it necessary to give a permanent background to what would otherwise be too palpably a flickering, intermittent, and disconnected existence in the shape of experiences of this or the other individual consciousness.

But it is equally certain that, at other times, the non-sensuous cause falls into the background with Kant, and he speaks of the phenomenal objects in a way that ill accords with the purely subjective existence which is all he here allows them. Kant has told us himself that material objects, or the phenomena of the external sense, "have this deceptive characteristic about them that, as they represent objects in space, they detach themselves, as it were, from the soul, and appear to hover outside of it" — "although (as he proceeds) space itself in which they are perceived is nothing but an idea, whose counterpart is not to be met with in the same quality outside of the soul."¹ In spite of this caveat about the subjectivity of space, it is impossible to read the *Critique* carefully without becoming aware that this deceptive characteristic of our spatial perceptions — this subtle detachment of themselves from consciousness — has its influence upon Kant himself. Kant does *not* habitually think of his phenomenal objects as merely subjective experiences, a moment here then gone, till a similar experience occurs in my own or in some other human subjectivity. He talks with some scorn of those who "hypostatise ideas and transfer them outside of themselves as real things,"² but he may easily be shown to fall under his own censure. It is already dangerous to speak, as he does in the Aesthetic, of ideas as having external things for their objects, when the true state of the case, on the Kantian theory, is that the ideas, *i. e.*, our spatial perceptions, *are* the external things. So, a few pages later, he defines our perception as the idea or representation of phenomenon (*Anschauung = Vorstellung von Erscheinung*), where the perception is not identified with the phenom-

¹ Werke III. 608 (ed. Hartenstein).

² *Ibid.*, p. 611.

enon, but is said to be a perception of it, as if the phenomenon existed independently of the conscious process. Such questionable expressions might be quoted in large numbers, but that is the less necessary, seeing that the fallacy is traceable to the leading determinations of his own scheme in the *Analytic*. It is in the *Analytic* that the ambiguous use of the terms 'object' and 'objective' to which reference has been made, reaches its height—one consequence of which is that the real thing to which reference is made in knowledge is temporarily shouldered out of the system. We are told that objects are made by the superinduction of the categories and the forms of intuition upon the matter of sense. Such objects, it is true, are still phenomenal or purely subjective—subjective matter of sense shot through with subjective forms of thought—but they are insensibly thought of as having a permanence which does not belong to the come-and-go of our subjective experiences; we are led to regard them, not as individual perceptions of individual subjects, but as objects valid or existent for all. This idea of objectivity as universal validity—validity for all human beings or for consciousness in general—becomes of determining importance for the Kantian thought, and in it all the ambiguities of the system meet.

Recognition by other consciousnesses, it may be freely admitted, is an all-important *test* of trans-subjective reality. That which is recognized by others certifies itself to me as an objective or trans-subjective fact, not a subjective fancy. The recognition is a decisive *ratio cognoscendi* of its independent existence, but, conversely, it is the existence of a trans-subjective reality that is the *ratio essendi* of the recognition. That, at any rate, is the only hypothesis which can be got to work with more than superficial plausibility. Because an independent fact exists, everybody recognizes it; but no multiplication of subjective recognitions can in themselves manufacture a real object in any other than a Berkeleyian sense. To Kant, however, by the help of this conception of validity, the phenomenal object acquires a quasi-independence; it seems to become more than the actual and possible subjective experiences of individual

conscious beings—something of which the individuals have ideas, and to which their ideas must conform. *Erfahrung*, or experience, a term which should expressly emphasize the subjectivity, comes to signify for Kant, perhaps unconsciously, a stable and connected world of things, identified neither with the intermittent cognitions of individual subjects on the one hand nor with the admittedly trans-subjective world of things-in-themselves on the other. Sometimes, as in the passages already quoted, Kant rouses himself and emphatically declares that this world of experience is only “a play of ideas” in us; but at other times he clothes it with all the permanence and independence which the ordinary man attributes to real things. And when he says that no enquiry is made in experience after the trans-subjective reality, that is true only because he has virtually installed the phenomenal object in its place. If the phenomenal object were consistently understood as the percept or cognition of an individual subject, it would be absurd to say that in experience we rest content with that; its dependent and explanation-craving character would be too apparent.

It need hardly be added that there is no justification for the intermediate position of quasi-independence insinuated by Kant. The object of consciousness in general, or the social object, is in itself a pure abstraction. It expresses an agreement in content between a number of cognitions which, as far as they are real facts, exist in as many numerically distinct consciousnesses. There is no “consciousness in general,” and consequently its object cannot be an existent entity but only an *ens rationis*. But although this seems tolerably plain when thus stated, it is beyond question that *Erfahrung* or the world of phenomena which plays such an important part in Kantian literature is a hybrid conception due largely to the ambiguity of the words object and objective which has just been explained. The development in the hands of the Neo-Kantians of this conception of experience as the exclusive reality will show us the danger of departing from the trans-subjective reference in knowledge. But that subject must be pursued in a separate article.

ANTHROPOMETRY AND EXPERIMENTAL PSYCHOLOGY.

ONE of the features of the International Health Exhibition held in London nine years ago was the Anthropometric Laboratory, conducted under the direction of Mr. Francis Galton. The instruments in action dealt with "keenness of sight, the color sense, judgment of eye [visual estimation of length, etc.], [keenness of] hearing, the highest audible note, breathing power, strength of pull and squeeze, swiftness of blow, span of arms, height (sitting and standing), and weight." Craniometry was purposely omitted. Instruments for measuring delicacy of touch (sensibility to pressure, etc.) were exhibited, but not used.¹ This laboratory may be taken as fairly typical of its kind. Further subjects to be anthropometrically investigated would be, *e.g.*, sensible discrimination, reaction time, mental fatigue.²

Such a laboratory will form part of the anthropological exhibition at the coming World's Fair. But, in addition to it, the working of a psychological laboratory will be exemplified. That is, there will be a special exhibit of psychological instruments, and a series of psychological tests, beside the anthropometrical. These psychological tests have been provisionally determined somewhat as follows: keenness of sight, the color sense, judgment of eye (estimation and discrimination of lengths, forms, etc.), touch (discrimination, weight, pain, etc.), movement (discrimination, rate), time-sense, reaction time, mental fatigue, memory, association, etc.³

¹ Francis Galton: On the Anthropometric Laboratory at the late International Health Exhibition. London, 1885. [Journal of Anthropological Institute, Feb., 1885.]

² F. Galton: Exhibition of Instruments for testing perception of differences of tint, and for determining reaction-time. London, 1889. Remarks or Replies by Teachers to Questions respecting Mental Fatigue. London, 1888. [Journal of Anthropol. Inst., August, 1889 and November, 1888.]

³ Experimental Psychology at the World's Fair: Address delivered by Prof. J. Jastrow to the American Psychological Association at Philadelphia, Dec. 27, 1892.

This preliminary scheme, though more extensive than that of the London Laboratory, is plainly co-ordinate with the latter over a very large range of subjects. One is tempted to ask, then : What will be done in the anthropometric laboratory proper? Or, to give the question a more general form : What constitutes the difference between a psychological and an anthropometrical experiment?

Obviously, a number of investigations—those into height, weight, span of arms, size and shape of head, and so forth—can be ruled out at once. They have no direct connection with psychology. Where, in the other cases, does anthropometry end, and psychology begin? Let us consider a typical instance; that of reaction time. To the psychologist, the reaction experiment has a threefold importance. Firstly, it presents a means of training the student of psychology in the exclusively psychological method,—introspection. Secondly, the reaction is the exact type of a voluntary action: practice in it is practice in control of attentional direction. Thirdly, its time value may be useful for the temporal definition of mental processes; though this, its most patent aspect, has up till now proved itself the most difficult to turn to true psychological account. And all this implies that psychological experimentation in the sphere of reaction is no easy matter. The subject must be educated by a long course of practice; all disturbing influences must be eliminated, whether they are external or internal; the recording apparatus must be the most accurate possible. More than that: not every one is capable of acting as subject. The psychological *Anlage* is necessary here, just as is the physiological in experiments upon the nervous system. Of seven normal persons who offered to take part in an investigation of my own into the reaction time of visual discrimination, only two proved to possess the needful power of concentration of the attention, patience, and ability to control their results at all constantly by introspection. Nor is this by any means an isolated experience.

With the anthropometrical reaction it is quite different. The experiment is not controlled, as regards direction of the

attention, etc. Its whole importance is centred in the time result, which is statistically treated. Any and every person is accepted as subject; the time curves being plotted with reference at most to differences of age, occupation, and the like,—not with regard to the psychological processes underlying the experimentation. And so with the other subjects common to the anthropometrical and psychological lists. In the paper above quoted Mr. Galton writes: "In testing the delicacy of the senses, I think we should do wrong if we pursued the strict methods appropriate to psycho-physical investigations. We do not want to analyse . . . the many elementary perceptions called into action. It is the total result that chiefly interests us. Thus . . . [a person] ought to be allowed to handle weights in the way he prefers, and we may disregard the fact that his judgment rests on a blend of many different data, such as pressure, muscular exertion, and appreciation of size."¹

So far, then, it might seem that the difference between anthropometry and psychology is mainly a difference of end. The experiments are pretty much the same, except that the psychological are more exact; but their results are put to different uses. It should not be difficult to vary them, so as to make these more distinctively anthropometrical, those more distinctively psychological. And all this could have been foreseen, and need not have been specially emphasized here.

Perhaps I can state my argument most emphatically, if I say at once, and in one word, that the difference above and beyond these differences is that of practice. Of course, the widest interpretation must be given to the term. I mean, that an experiment of the type under discussion becomes a psychological experiment, whatever its additional anthropometric value may be, when the subject is a psychologist; whereas the "psychological" experiment, for which the subject has not been psychologically trained, can (with very few exceptions, of which more presently) only have an anthropometric value. To take the first analogy that occurs: suppose that the average

¹ On the Anthropometric Laboratory, etc., p. 4.

man is given materials, and required to make bread. The results will have some anthropological value; it is of interest to know that this or that way will be so and so often followed. From the baker's point of view, on the other hand, they will possess but little worth. Now it is one of the commonest errors, that since we are all using our minds, in some way or another, everyone is qualified to take part in psychological experimentation. As well maintain, that because we all eat bread, we are all qualified to bake it.

The position will not be granted, at first sight. It will be objected that the end of the experiment is, after all, the justification of its name,—for we receive untrained students into our university laboratories, and all agree in calling their work psychological. It is, unfortunately, true that an adequate preparation for experimental investigation is very rare among those who enter the psychological laboratory. But, of course, the fact of entering does not make them psychologists; training is needed, as it is in Physiology or in any other science. And the whole objection really supports the argument. If the end of the psychological experiment be Psychology, then assuredly such a laboratory as that outlined above is not psychological; for its chief end is not knowledge of mental process, but statistics relating to "human faculty."

To resume, then. The psychological experiment presupposes, almost universally, practice;—practice in introspection, practice in attentional concentration, practice in the control of the particular apparatus employed. The anthropometrical experiment requires at most only so much practice as is necessary for the correct carrying out of instructions. The value of the former is—or should be—as much qualitative (for analysis and description) as quantitative; the value of the latter is solely quantitative. The similarity of the methods employed by the two sciences ceases to be misleading, when we remember the relation of these to one another. As is social psychology to anthropology, so is individual psychology to anthropometry.

We have been dealing with those experiments which are common, in name at least, to the psychological and anthro-

pometrical laboratories. Certain experiments, as we saw, belong exclusively to the latter. Are there not others, which would serve to throw light upon the working of consciousness, the course of mental processes, without presupposing a special training of the subject? The first themes to suggest themselves are undoubtedly those which find representation on the list made out for the World's Fair Laboratory: association, memory, illusions. Even here, however, the path is not free from difficulty. The psychological experiment upon association should be carried out under conditions which ensure, so far as this is possible, entire absence of preoccupation on the part of the experimentee.¹ Experiments on memory demand a continuance of the interest of visitors, outside of the laboratory. The facts of optical illusion are patent enough, but their explanation is not so easy.

The foregoing criticism has been wholly destructive. I would suggest something like the following plan, — very diffi-
culty of the problem, — by way of reconstruction. All or nearly all of the experiments already quoted should be carried out in the anthropometric laboratory. This latter should have two exits, one of them being the entrance to the psychological laboratory. Only those persons would enter this latter, therefore, to whom the anthropometric tests had been applied, and who had thus gained some knowledge of the methods and instruments which anthropometry shares with psychology in their simpler forms. Such an arrangement would, without doubt, mean a great reduction in the total number of visitors to the laboratory; but those who entered it would be evincing a more serious interest in the questions of the science, and their comparative fewness would enable the attendants to devote more time to them individually. The laboratory itself should contain a series of psychological apparatus, — as much as possible of it being demonstrated in action, — and, in addition to charts and diagrams, there should be a very full guide-

¹ E. W. Scripture: Ueber den associativen Verlauf der Vorstellungen. *Phil. Stud.*, VII, p. 53.

book explaining the purpose of the instruments, and tabulating the results obtained with them, emphasis being laid throughout on the psychological value of the experimentation. These guide-books, one of which would be taken away by every visitor, would probably do more than the laboratory exhibits to spread a knowledge of the aims and achievements of the new psychology. As for actual experimentation, the influence of direction of the attention on reaction time, qualitative association, optical illusions, tonal fusion, the phenomena of contrast, and similar subjects might be illustrated by a typical experiment; it being made clear that the experiment has, in most cases, no more than an illustrative value, while a statement of the present position of the science as regards the various departments of investigation is found in the guide-book.

Only in some such way as this does it seem possible to give a tolerably adequate representation of experimental psychology in a popular manner. The success of the undertaking would be mainly dependent on the intelligibility and completeness of the guide-book. As a matter of fact, it is as impossible to show a psychological laboratory at work, in expository surroundings, as it would be to repeat Hertz' experiments in a drawing-room.

It is, I hope, unnecessary to add that these remarks are not in any way intended to disparage anthropometry. It is as unfair to her to rob her of experiments and dub them psychological, as it is to psychology to conceal the difficulty of her own experimentation by substituting the simpler anthropometrical for it. Let psychology maintain the closest relations with anthropology; the benefit will be mutual. But, if we identify them, we put the seal of scientific approval on a popular belief which is no more true, though it may be less irritating, than the view which confuses psychology with 'psychical science.'

E. B. TITCHENER.

DISCUSSION.

REALITY AND IDEALISM.

By way of introduction to his very vigorous and skilful attack (see Vol. I., No. 5, of this REVIEW) on my article on "Reality" (in No. 3), Mr. F. C. S. Schiller is kind enough to say that I can present my views intelligibly. I fear, however, that I am not fully entitled to his compliment; for, in this case at least, I have certainly not succeeded in making my views intelligible to him. It would occupy too much space were I to attempt to clear up all the misunderstandings that I find in his criticism. I must limit myself to what seem the more important in their bearing on the general question.

Mr. Schiller complains (p. 535) that my opponents' views "are not stated or definitely referred to." For the sake of brevity and also in order to deal with the problem unencumbered by questions of literary interpretation, I kept my pages fairly free from names and references. I did, however, make one reference to Prof. A. Seth, from whom I quoted the *dictum*: "The individual alone is the real." It may serve the convenience of those interested in the problem, if I add, that in writing my paper I had in view, not merely the widespread reaction (in Great Britain at least) against what has been called Neo-Kantianism, but in particular a recent work entitled *Riddles of the Sphinx* (noticed and analyzed in the REVIEW, Vol. I., No. 5), a work with which I may assume that Mr. Schiller is acquainted and with which I should imagine he is in substantial agreement. The special interest of this book, in my opinion, is that in it certain metaphysical theories, which are only implicit in the anti-Hegelian arguments of Prof. Seth, are carried out fearlessly to their extreme logical consequences (*e.g.* that God is limited in power).

Mr. Schiller does not appear to see or to admit that the question "What is reality?" is primarily a question about the *meaning* of a word; and I do not find that Mr. Schiller has yet given any sufficient explanation of what he means by "real"; nor do I know of any "Realist" who has done so. Mr. Schiller speaks as if I were occupied entirely with attacking "adversaries," whereas the greater part of my paper was simply an attempt to classify the very various

senses in which the term "real" is used by ordinary people, in order to discover how far their meanings are consistent with one another, and how far, if at all, they are inconsistent with idealism. Mr. Schiller brings a whole scholastic apparatus of distinctions to bear upon me, and complains that I have not recognized the differences between the psychological, the epistemological, and the metaphysical questions that may be asked about reality. Now, as I have not fully ascertained what Mr. Schiller and his friends mean by "reality," I am not able to discuss all the questions on which, he says, my paper "trenches." Nor can I admit that all his distinctions are valid. He will find, indeed, that I did (on p. 282) recognize the distinction between philosophy and psychology, meaning by the latter an empirical "natural science" which excludes or professes to exclude "metaphysics." By metaphysics Mr. Schiller seems to mean ontology. If so, I certainly never meant to raise any metaphysical question at all; for I cannot see how a science of things as they are in themselves apart from our knowledge of them, is a possible science. Ontological questions cannot be answered, because they cannot be intelligibly asked. Mr. Schiller may therefore assume that in dealing with the question of the meaning of an ordinary English word, I was dealing with an "epistemological" problem—and with a "metaphysical" only in so far as metaphysics is identical with the criticism of conceptions and with the working out of the necessary consequences of the conditions of knowledge. But I am unable to say how far my views are "Neo-Hegelian" (for I do not know what that means) or how far they are not rather Palæo-Kantian (for I am not quite sure what Kant meant).

Mr. Schiller thinks that "the discussion of the question—What is reality?—presupposes a settlement of the question—Is there reality?—in the affirmative" (p. 536, foot). For my part I am quite unable to discuss the question whether "reality" exists until I know what is *meant* by reality. Before I discuss what a griffin or a chimera is, must I presuppose that the griffin and the chimera exist? On this principle one could never disprove the existence of any absurdity that any one chose to talk about. "The primary psychological fact," says Mr. Schiller (p. 537), "is that everything that is is real, and that the burden of proof lies on those who deny that anything is real." To "deny that anything is real" is an ambiguous phrase. Does the burden of proof rest with the person who denies that a round square or an unfelt sensation is real? If so, the burden is not a very heavy one. On the other hand, if Mr.

Schiller means "those who deny that there is any reality," I do not know who those persons may be — unless the word reality is used for what is self-contradictory and meaningless. "That everything that is real" is either a purely verbal proposition or, if it means that every *datum* of consciousness is real in all, including the fullest, senses of reality, it is a falsehood.

The first of the questions which Mr. Schiller enumerates (on p. 535) is: "How do we know that there is any reality at all, or how do we come to assert an external world?" Apparently in this question "reality" is meant to be identical with "the external world." But, "external" to what? By "external world" the plain man means the world outside his own body: is then his own body not "real"? If "the external world" be taken to include the body of the speaker, he can only mean by it (I can see no other intelligible meaning) all that is in space, and the word "external" is being awkwardly used, as it often is, to mean "extended": are my thoughts and volitions, then, unreal?

[In this connection, I may note a very strange passage in Prof. A. Seth's article in the same number of this REVIEW. "The table," he says (p. 514), "which is in immediate contact with my organism is as completely and inexorably outside the world of my consciousness as the most distant 'star and system visible upon the bosom of the night.' Though I press my hand against it, it is no more *present in* consciousness than is the friend on the other side of the globe whose image rises at the moment in my mind." Now unless "the world of my consciousness" be identified with the bodily organism, to say that a thing is *outside* the world of my consciousness can only be a metaphorical way of saying that I am not conscious of the thing or (if stress be laid on "world") that I never have been or never can be conscious of the thing. It is true I only *feel* resistance, hardness, smoothness, etc., but when I interpret these sensations by the idea of a table, surely the table is *inside* my consciousness, in the only intelligible sense that can be given to that spatial metaphor. The table does not indeed come inside my organism, unless the contact be very violent.]

In a foot-note on p. 537 Mr. Schiller seems to argue that because our dreams are judged *unreal* from the standpoint of our waking life, our waking life can only be judged *real* from the standpoint of some other life. This at least is the only meaning [?] I can extract from the passage. But Mr. Schiller's argument would involve a *regressio ad infinitum*: we never could know anything to be

real, if an extraneous standpoint were always necessary. In the sense which reality bears to the plain man (which is all that I am considering in the passage Mr. Schiller is criticising), no extraneous criterion is needed; our waking life is real because our experiences are coherent *with one another*. If any one maintains, not merely in a moment of poetic or other frenzy, but in his serious leisure, that "it is a mad world," he is a sceptic or a fanatic with whom philosophical argument is a waste of time, for he has taken away our only possible criterion of madness — the rationality of coherent experience. (Similarly if any one maintains pessimism in the literal sense of the term, *viz.*, that this is the worst of all possible worlds, he is claiming to have a criterion of "good" and "bad" outside the region of human experience which alone gives a meaning to "good" and "bad.")

On p. 538 Mr. Schiller quotes my three "tests" of reality: "The agreement between the inferences drawn from the experiences of our different senses, the agreement between the judgments of different persons, and the harmony of present experience with the results of our and their previous experience, constitute between them the test of reality." (p. 267.) Yet, on p. 539, he says: "But perhaps Mr. Ritchie does not contend that any one of his criteria is singly sufficient as a test of reality and proposes to employ them collectively." Why "perhaps"? "Reality" in ordinary use has different grades. Each test alone assures us of a certain degree of reality; only the combination of all assures us of reality in the fullest sense which that term bears in the practical affairs of life, which determine what is "real" to the ordinary sane person. On p. 538 Mr. Schiller rejects the agreement between the testimonies of our different senses as a test of reality, and yet he adopts (on p. 540) the "practical test" suggested by Prof. James: "that is adjudged real which has intimate relation to our emotional and active life." But "practical convenience" is just a part of the experience of our senses.

With regard to my argument (on p. 267) that "if A seems to himself to see a mouse run across the floor, but if B, C, D, E, and F, being all present, having good eyesight, and looking in the same direction, maintain truly that they saw nothing, A may well doubt the reality of that mouse," Mr. Schiller asks "how is it to be established that A, who does see it, does not considerably surpass them in the delicacy of his senses?" Well, that is a matter that can surely be tested by other experiences. I suggested an appeal to a

hungry cat. Mr. Schiller thinks that I would scorn an appeal to the lower animals if it were a question of establishing the objectivity of an apparition (p. 538). I certainly should not scorn the appeal, if Mr. Schiller can give me satisfactory evidence that any real animal can smell apparitions and is in the habit of eating them with relish. There is a tale of a man who *said* he was taking a mongoose to eat up the snakes seen by a victim of *delirium tremens*; but, on being pressed, he admitted that the mongoose was not "real" any more than the snakes.

Mr. Schiller takes occasion to bring in an argument of the kind which is a favorite with people who are trying to wriggle themselves into a belief in discredited superstitions under the guise of scientific caution. "We act quite inconsistently," he says, (p. 539) "in sometimes submitting to the superior delicacy of the expert's senses, and sometimes rejecting it. A room full of unmusical or inartistic people would hardly dispute about tones or colors with a single musician or painter, but an assembly of non-sensitives would probably deny that Macbeth saw a ghost." They need not deny that Macbeth "saw" a ghost; they would if sensible, though "non-sensitive" persons conclude that if he really did, his nerves were in an unhealthy condition. The sensitiveness to musical sounds or to colors differs only in degree among different human beings not deprived of hearing and sight—although the difference may range from a very high degree of sensibility to almost complete absence of it. But we do not find that whilst one of the company sees a ghost distinctly, some of the others see it dimly, and others again not at all, or only when they put up their eyeglasses. The "expert" can have the reality of his special experiences tested by their conformity with the other experiences of other normal persons, *e.g.*, the professing connoisseur in wines or teas can have numbered samples submitted to him without being told where they were grown or what they cost. The expert is a different sort of person from the "sensitive" whose nerves are deranged by too much spirit-rapping or spirit-drinking.

"The third criterion [*i.e.*, the harmony of present and past experiences]," Mr. Schiller proceeds (p. 539), "at first seems more valuable—until we recollect that every new fact and every new experience is in some degree out of harmony with and contradictory of our previous experience." No: contradictory of our previous *interpretation* of our experience, perhaps; but that is a very different thing. Mr. Schiller carries this confusion between genuine experi-

ence and alleged or imagined experience to an extreme point, when he asks "What right have we [if the harmony of present and past experience is a test of reality] *e.g.*, to reject countless traditions in order to prove that miracles are 'contrary to experience'?" Traditions are not "past experiences"; they are the *alleged* experiences of other people and of people, moreover, who are conveniently out of the way and cannot be put in the witness-box and cross-questioned. If the test of "absence of conflict with present and verifiable experience" be rejected, we are unable even to *begin* the scientific examination of the credibility of tradition. With an opponent who denies that scientific history is possible, philosophical argument is indeed difficult.

Admitting the practical importance of the test of "intimate and continuous connection with my life" (Prof. James's words, expressing part of what I meant by coherence between present and past experience), Mr. Schiller says "there may be much doubt about its speculative value" (p. 540). In all matters many practical tests that are valid up to a certain point break down beyond that point, even for the purposes of more careful practice. But to suppose an ultimate and irreconcilable discrepancy between practical value and speculative truth implies a philosophical scepticism that renders profitable discussion impossible. I should certainly distrust any "approach to the ultimate reality of things" which began with the removal of the only criterion that we can possibly have of any reality whatever.

Mr. Schiller wonders why I did not mention along with the tests of coherence in experience the test of "conformity to the necessary laws of thought." I did not do so, because it is not the plain man's way of putting the test but the scientific man's, and a reference to my article will show that I reserved the scientific sense of reality for my third head. [The analyst of the PHILOSOPHICAL REVIEW in *Mind* (New Series, I. p. 439), has similarly failed to note my divisions. The words which he quotes, "A thing really is—that way of thinking about it which fits it into its place in an intelligible system of the universe" are not put forward as my own answer to the question "What is reality?" They only represent what (so far as I can understand) the scientific man means by reality when he translates the ordinary man's "real world" into a series of thought-conceptions (universal laws of nature, etc.). They would indeed be very inadequate as a *philosophical* answer to the question; for, as my critic points out, they do not take account of the antithesis between

thought and existence which is assumed in all our ordinary thinking. With that difficulty I have endeavored to deal in the succeeding pages (272, 277, and 282).]

When Mr. Schiller says (p. 541), "The only certain and ultimate test of reality is the absence of internal friction, is its undisputed occupation of the field of consciousness, in a word, its self-evidence," he *either* means exactly what I mean when I say that the inconceivability of the opposite is the test of truth (explained on p. 271), *or*, if "self-evidence" means an appeal not to rationality but to mysterious and irresponsible intuition, the alleged test is thoroughly fallacious. And in any case "undisputed (as distinct from *indisputable*) occupation of the field of consciousness" is a purely psychological and "accidental" matter which of itself proves nothing as to truth or falsehood. Conviction and truth are not the same thing; and the "field" of some people's consciousness may be fully occupied with very rank weeds or very chaotic rubbish.

Readers of Mr. Schiller's paper (see *e.g.* p. 541), who have not seen mine, might be apt to imagine that mine was full of big talk about "The Absolute." That word, as a substantive, only occurs at the foot of p. 277, and I put it into the mouth of a supposed objector.

On p. 542, Mr. Schiller asks, "in what respect" — if I cannot lay claim to omniscience — I am "better than those publicans and sinners, the 'plain men' and the realists." The coupling of the two classes is his, not mine. I make no claim to be better than "the plain men," but only to represent their real, working view of reality more correctly than the so-called "Realists." I do not claim to be better than the Realists, because I am far more humble; I do not profess to understand what is meant by a reality "beyond" all thought. I agree with the scientific Positivist that we can know only phenomena; but I agree with the plain man in holding that these phenomena are the real world itself and not a "shadow" or "symbol" of it. But, as a student of philosophy, I insist on taking that word "phenomena" quite seriously, and hold that a "phenomenon," which appears to no percipient or thinking subject, is a contradiction in terms. And as to all these metaphors of "beyond" and "behind," I should like to appeal from Mr. Schiller, not to his largely Kantian namesake, but to Goethe, whom Hegel quotes: —

"Natur hat weder Kern noch Schaaale
Alles ist sie mit einem Male."

Mr. Schiller objects (p. 542) to my using the word "God" (it occurs on pp. 270 and 277 only), although he does not hesitate to drag in a theological nickname by labelling (he is fond of labels) my doctrine "pantheistic." If he will substitute on p. 270 for the word "God" the words "the unity of the cosmos which, at least as an ideal, is presupposed in all science, and which, being the ultimate subject (see p. 280) of all knowing, must be thought of as possessed of complete knowledge," he may do so. On p. 277 I expressly added, "in theological language" (and in view of the context on p. 270 also, these words might very well have been supplied by "the benevolent reader")—so that I have at least the same right to use the word "God" that my critic has to drag in "angels" (whether good or bad is not specified) on p. 545.

By far the most significant part of Mr. Schiller's paper is contained in the last three pages. While professedly retaining and defending the definition of the "real" as the individual, he, quite correctly I think, admits the utter untenableness of the notion that the individual is a fixed, unalterable entity. "Individuality," he says, "becomes [in the light of "the general flux of reality itself"] a hypothesis and an ideal" (p. 544). If the utterance be seriously taken it must, so far as I can see, lead to the conclusion that, in the truest and fullest sense, there can only be one perfectly real individual. Mr. Schiller stops at "the angels" or at some system of polytheism, — I have no other appropriate name for a system which professes to believe in many (*how many?*) absolutely independent and self-subsistent beings. When Mr. Schiller describes the universe as "constituted by the interactions of real individuals" (which individuals he has just admitted to be, most of them at least, in a shaky and far from solid state), under that word "interactions" he is concealing the element of unity and of reason, which alone makes the totality of things not a chaos but a cosmos.

In saying that the individuality as well as the reality of the real [the reality of the real sounds tautological] must be thought of, "not as a completed *being*, but as a *becoming*, i.e. as *being a process*" (p. 545), Mr. Schiller is saying what seems to me profoundly true. But "becoming" is unthinkable, except relatively to a permanent substance or subject. "Becoming," as the concept which experience obliges us to apply to the world in space and time, is not as Mr. Schiller thinks, a violation of the law of contradiction (p. 540), — in that sense of "contradiction" in which the law is a test of reality. But an *absolute* "becoming" is a notion which is certainly

self-contradictory : it is like speaking of an absolutely fast or an absolutely slow movement. It is only possible for us to say, "all is in flux," because we are, without confessing it, placing ourselves in a position of fixity and watching the stream rush past. This new flux-philosophy, accepted uncritically as expressive of the whole truth, could only, like the old Heracliteanism, form a basis for a scepticism which negates itself the moment it is taken quite seriously. Thus, when any such phrase as "a self-differentiating unity," or "the one *in* the many" is suggested as the least inadequate formula by which to describe the ultimate reality of things (*i.e.* the truth of things in their totality, and not merely in any of those partial aspects with which ordinary language and the special sciences are satisfied), this is no dictum of a dogmatic ontology, but the conclusion to which we are driven by a critical examination of the concepts that we find ourselves using in ordinary and in scientific experience. (If any one denies that knowledge and science are possible, with him profitable argument is not possible either.) This conclusion of epistemology (if Mr. Schiller likes that word) is moreover, *if* it were treated as a mere speculative hypothesis (and I hold that it is much more), the only hypothesis which seems to me capable at the same time of accepting without reserve the results of scientific discovery, however "materialistic" they may seem, and yet of explaining, and to some extent justifying, the speculations of the greatest religious thinkers.¹ On the other hand, the theory of "pluralism" or "monadist realism," which in Mr. Schiller's view is the only alternative to the scepticism that results from what he calls "the failure of epistemology," but what seems to me only the failure to understand it,—this monadist realism is incompatible with the genuine realism of common sense, with the presuppositions of the sciences, and, I would add, while in agreement with much popular phraseology on theological subjects, it is in conflict with the higher forms of Christian thought, all of which undoubtedly *seem* "pantheistic" to the abstract understanding which cannot escape from dualism.

For this pluralism or animated atomism Mr. Schiller, as if a little ashamed of "Realism," endeavors to appropriate the name "ideal-

¹ I have expressed this same idea in a review of Prof. A. Seth's *Hegelianism and Personality in Mind*, Vol. XIII. p. 259, and in a paper entitled, "Darwin and Hegel," in the *Proceedings of the Aristotelian Society*, Vol. I., No. 4, Part II. (London, 1891), p. 74 ; both of these papers bear upon the present discussion, so that I may be excused for referring to them here.

ism" — "if Berkeley retains any claim to the doctrine he discovered!" (p. 546.) But the doctrine of many "spirits," existing alongside of and mutually excluding one another, is just that part of Berkeley's philosophy which he did not "discover," but simply took over without criticism from ordinary picture-thinking and traditional popular theology; and in his last philosophical work, the *Siris* (to which Prof. A. C. Fraser has recalled the attention of the world), we find him struggling, with the help of ancient sages, to obtain some more adequate conception of the One in relation to the Many than he had reached in the naïve metaphysics of his earlier writings. If Mr. Schiller wishes a correct label for the views I have tried to maintain about Reality, I should be quite satisfied with "Neo-Berkeleyian," and the name would honestly indicate that, even if the controversy about Reality were settled in the Neo-Kantian fashion, we were only at the beginning of the detailed problems of philosophy. We should only, like Berkeley, have cleared the ground by getting rid of a certain amount of bad metaphysics. If by "What is reality?" were meant, "What are the constituent elements of the universe?" which is what I suppose Mr. Schiller means by his question, "What does reality turn out to be — after inquiry?" (p. 535, foot), I should consider that the question was rather awkwardly worded, but I should certainly agree that we are a very long way from a proper answer, and that that answer can only come "after inquiry," *i.e.* after all the sciences have been perfected.

DAVID G. RITCHIE.

JESUS COLLEGE, OXFORD.

REALITY AND "IDEALISM."

The kindness of the Editor enables me to comment briefly on Mr. Ritchie's reply to my criticism. Mr. Ritchie complains that I have misunderstood him, but I find nothing in his remarks to sustain this charge. With one exception — for I certainly supposed that we were discussing something more interesting than the philological meaning of the word "reality," and dealing at least with propositions and 'ideal contents,' if not with the reality which is beyond them and provokes them.¹ But for the rest, I have nothing to

¹ Even so, I had hoped that pp. 541-2 gave a fairly complete account of how I conceived of the generation of the various senses of the word "reality," as well as of that to which it is applied.

retract — especially as Mr. Ritchie prefers to raise minor points rather than to meet the chief issues. Thus in the matter of epistemology and metaphysics: he seems to confuse them worse than ever. This may account for his inability to grasp my use of the latter term; for it would otherwise be pretty clear that I mean by metaphysics the science of ultimate principles and conclusions as to the nature of phenomena. Such a science would depend for its materials on *all* the sciences, and *not exclusively* on epistemology, and would certainly decline to be saddled with “things as they are in themselves” and “apart” from phenomena — abstractions which, I believe, we owe to Mr. Ritchie’s friends, the Kantians. On the other hand, such a view of the field of metaphysics *does* require some mediation between the deduction of a category and the assertion of the phenomenal (‘real’) existence of an object corresponding to it, which constitutes the transition from epistemology to metaphysics. But what, I ask in vain, is the creative charm by which Hegelians hypostasize their categories? Mr. Ritchie is as silent as his master’s grave. Instead of elucidating this crucial point, he raises a deal of dust about the “external world” and my supposed identification thereof with reality, as if I had not shown myself to be perfectly well aware that phenomena (and the inferences from them) constitute the world, and are all “inside” consciousness, and as if the phrase could possibly mislead in a preliminary statement like mine on p. 536. To say that there is reality or an ‘external’ or ‘objective’ world is merely to refuse to acquiesce in the primal chaos of phenomena, and to attribute to them (rightly or wrongly) inner connections and distinctions, in the hope of regarding it as a cosmos. If this attempt to interpret phenomena is found ultimately to involve the discrimination of the self and the world, and to issue in (metaphysical) “realism,” that is no ground for the charge that the primary subjectivity of phenomena has been ignored. So all my realism amounts to — I cannot speak for Prof. Seth — is a refusal to reduce either of the mutually-implicated factors of a given context to the other, without a more sufficient cause than the chaos of phenomena which is the *datum explicandum*. It is unfair, therefore, to treat this attempt to transcend subjective idealism as uncritical, especially while we are left in doubt as to the manner and validity of Mr. Ritchie’s method of taking the self-same step from phenomenality to objectivity.

Coming next to the question of the *criteria* of reality, it seems as if Mr. Ritchie did not take any great interest in it, else he would

have discussed the intricate problems to which it gives rise less superficially, and explained what exactly are the limitations of his three tests, and how exactly he conceives them to work together. I may say, however, that, doubtless owing to my brevity, he misses the point of my 'foot-note' (p. 537). The absurdity he ascribes to me is one which his own treatment involves. He¹ had denied 'reality' to dreams, because of their incoherence in the (*ex post facto*) judgment and (imperfect) memory of waking consciousness. What he overlooked was the breach of continuity awaking involves. So I denied that the incoherence of dreams existed *for the dream-consciousness*, and that their condemnation by waking consciousness was relevant, *unless he could show that the coherence of 'waking' life could survive a similar breach of continuity—such as that of death.* It was not I, but his argument, that referred the assertion (or denial) of reality to an extraneous standard.

As to the obscure art of ghost-seeing, I am sorry to have to dispute Mr. Ritchie's facts. If he refers to the evidence (Proc. Psychological Research Soc., vol. vi., pp. 279-80) he will find that it sometimes *does* happen that "one of the company sees a ghost distinctly, others see it dimly, and others again not at all."

Mr. Ritchie tries to turn the edge of my objection that every new experience must conflict with previous experience, by denying that the experiences conflict, though their interpretations may. I should have thought he would have been the first to admit how great is the infusion of theory in our 'facts of experience,' and how impossible it is to get down to bare facts.²

The question raised on p. 198 as to the theoretic value of a practical test, involves, it seems to me, the crucial parting of the ways between scientific and philosophic Evolutionism. Mr. Ritchie thinks that "to suppose an ultimate discrepancy between practical value and speculative truth implies philosophic scepticism," and proposes to guarantee our mental processes by their practical efficacy. I think he is, very possibly, right. But neither can we assert his principle, without a metaphysical faith that the course of evolution

¹ Whether speaking for himself, or for the 'plain man.' Considering the importance he attaches to the opinion of this worthy and of the 'scientific man,' Mr. Ritchie seems strangely eager to sacrifice them in a difficulty (*e.g.* p. 196, p. 198).

² Whether this be explained by the theory that facts are at bottom 'rational,' or that hereditary assumptions and acquired prejudices have hopelessly biased our view.

intrinsically tends towards harmony. And this is more than a purely 'scientific' evolutionism is probably as yet ready to admit.

As to the, I admit, generally impracticable, test of self-evidence, it does indeed include the logical test of inconceivability, but it is much wider, as it may equally well rest on an emotional basis. And if Mr. Ritchie will think out all that is involved in a completely congruous experience, freed from every shadow of a doubt and every trace of disharmony, he will see that 'self-evidence' is a lofty metaphysical ideal rather than a psychological accident.

As regards Mr. Ritchie's criticism of *my* views, I utterly deny that I have yielded any ground to *his*, and if he had quoted me completely and in my own words, this would, I think, be quite clear. Thus in the passage he quotes (p. 544), he omits to complete my admission that individuality was an ideal by the addition "*as well as a characteristic of reality.*" He should be careful, too, about his adjectives in so delicate a matter. Thus that of "unalterable" seems singularly inappropriate to the individual, even of pre-evolutionist days. For the chief value of the individual as an explanation surely always lay in his *flexibility*, as contrasted with the rigid immutability of the logical category 'out of Time.' Again "absolutely independent" is an epithet I never used of the individual, and it does not, I believe, occur in the book to which Mr. Ritchie refers us for a statement of the views he combats — "*Riddles of the Sphinx.*" It is, indeed, in its most obvious sense, incompatible with the conception of a world constituted by the interactions of individuals.¹

As to the subject of Becoming, I must deny that Becoming is a thinkable conception — that it is more than a *symbol* to designate the contradiction of Thought implicit in all reality, the $\sqrt{-1}$, as it were, of rationalism. Of course, therefore, "absolute Becoming" is "unthinkable," "self-contradictory," "the basis for scepticism," &c.; but all these abusive epithets do not mend matters, for they simply re-state its incomprehensibility to thought. And no reconciliation is, I submit, possible from the side of mere thought, but only from that of the real self, which both becomes and thinks, and forms the permanent subject by which the flux is measured, and so, grasping it from the side of *feeling*, can reduce Becoming to an *appearance*, to be interpreted by the finite and definitely determinable conception of

¹ For the reasons why these do not justify a hypostasization of "the element of unity and reason," I may refer to "*Riddles of the Sphinx*," p. 356-8; for reasons why pluralism is not polytheism, *ibid.* p. 374.

a *process*. To the view, on the other hand, which seeks all reality in Thought, Becoming, and all that becomes, reality, time and motion, form a mystery which "experience obliges" it to admit, but which the timeless and changeless inter-relations of its own data can never hope to explain.

In conclusion I must draw attention to Mr. Ritchie's claim (p. 200) that the admission of individuality as an ideal necessarily leads "to the conclusion that in the truest and fullest sense there can be only one perfectly real individual." This claim throws a lurid light on the facility with which "Neo-Kantians" hypostasize their epistemology. It so astounds me that I hardly dare to ask, *why* ideals are necessarily *monopolies*, to be enjoyed only by single persons. Once more we are left face to face with that weird transition from a logical category to a metaphysical reality, over a gulf, which, in spite of all challenges (p. 536), no Greenian ever deigns to bridge, and which, I grieve to say, separates me from Mr. Ritchie a thousand times more impassably than does the broad Atlantic.

F. C. S. SCHILLER.

REVIEWS OF BOOKS.

Einleitung in die Philosophie, von FRIEDRICH PAULSEN, a.o.
Professor an der Universität Berlin. Berlin, Verlag von Wilhelm Herz, 1892. — pp. xvi, 444.

In a work from the pen of Professor Paulsen we naturally look for the same qualities as those which characterized his former productions : speculative insight, breadth of knowledge, and a remarkable faculty of clear statement and apt illustration. All this the reader will find in this *Introduction to Philosophy*, as well as a moral enthusiasm which cannot but command his respect, whatever view he may take of the conclusions reached by the author. And if he believes that the great problem of philosophy at the present day is the reconciliation of science, philosophy, and religion, he will here find a man of like mind with himself, from whom he cannot fail to receive stimulation and help. For the author sees that no theory of the world can be satisfactory which does not enable us to reduce all the various phases of reality to unity ; and hence he refuses to admit that we must abandon speculation and limit ourselves to the "cultivation of our gardens." Each of the sciences deals with some aspect of reality, and the true meaning of this aspect will yield itself up only to one who contemplates it as a phase of the whole. In the prosecution of his task the author is led to consider (1) the nature of Reality, and its ultimate form, and (2) the relation of Knowledge to Reality, and the origin of Knowledge ; and he prepares the way for his own theory by a careful criticism of the main doctrines which he is unable to accept. These criticisms seem to me the most valuable part of the book ; but of course those who can be satisfied with the "idealistic monism" which he espouses will find the other part not less satisfactory.

The author shows in a very clear and convincing way the untenability of Materialism as an ultimate view of the real. The aim of the materialist is to show that psychical events do not differ in their nature from physical events. The inadequacy of this view is at once apparent when we distinguish the two very different formulæ by which the reduction of mind to matter is supposed to be established.

If it is said that, objectively considered, psychical events *are* brain-movements, the simple answer is, that a thought which is a physical movement is as great an absurdity as a piece of iron which is made of wood. Thought is not motion, but thought. The only plausible way of reducing psychical to physical events is to say that the former are the *effect* of the latter. On this view we must suppose that a brain-movement is transformed into a sensation of definite quality and intensity which is its equivalent. Now, sensation is not motion, and hence we must suppose that, as energy is known only through its expression in motion, a certain quantity of energy has been destroyed. We are therefore shut up to the alternative of denying the principle of the conservation of energy, or abandoning the supposed causal relation of psychical and physical events. In point of fact, even materialists like Büchner virtually adopt the latter view when they say that "thought and extension are two aspects of the same being." Now, this doctrine of the parallelism of psychical and physical events, to be a satisfactory explanation of reality, must be extended to every form of being. Hence, in the first place, the Cartesian idea of automatism must include, not only plants and animals, but also man. But, in the second place, we must equally extend the psychical principle to all things, to plants and minerals as well as to animals and man. It is true that we have no direct knowledge of the inner life of any being but ourselves. Psychical phenomena are given to us only at one point, in self-consciousness, whereas all other beings are presented to us only on their physical side, as moving bodies. But just as we infer the inner life of human beings from the physical movements which is their outer expression, so we are entitled to reason to the inner life of even inorganic things in the same way. Thus we get rid of the difficulty which besets the materialistic view of the causal relation of inner and outer events. The causal relation obtains only between physical events, or between psychical events, never between physical and psychical. If we follow the chain of movements from the vibration of a bell to the final movement in the brain we find that there is between them a causal relation; but the sensation of sound is not the effect of these external movements, but of the psychical events which correspond to them point for point. Our author, in short, is an uncompromising advocate of the 'mind-stuff' theory, which he regards as established by the impossibility of drawing any hard and fast line between the various orders of existence, by the identity of the elementary constituents of inorganic and organic bodies, by the impossibility of

otherwise explaining the fact of life, and by the view to which a true theory of knowledge inevitably leads, that all forms of external reality are but the phenomenal presentation of reality in our sensibility. Now, as all forms of being agree in the possession of an inner psychical life, we must ask what is the essential nature of this life. Obviously it cannot consist in self-consciousness, or even in consciousness; for, not to speak of inorganic things, the plant or the lowest forms of animal give no evidence of intelligence. The point of identity must be found, as Schopenhauer says, in *will*, which appears first as a blind force or impulse, then as the direction to particular ends, and finally as self-conscious effort penetrated and directed by intelligence. Thus will is at once the beginning and the end of psychical life: it is the one constant factor, present alike in the lowest and the highest form of being.

All things, then, have an inner life or soul. But what is soul? Certainly not a mysterious 'entity' or 'substance,' such as is maintained by the spiritualistic dogmatists. The term 'soul' is simply a name for the fact that for each being the various psychical events which constitute its inner life form a unity. Hence there is no meaning in saying that the soul is localized in a particular part of the body. Ideas are no more in the brain than they are in the stomach or in the moon. But psychical events no doubt accompany and correspond to corporeal events. This correspondence is thorough-going. The physical equivalent of the soul-life is the totality of physiological processes. For us, no doubt, our inner life appears as a thin chain of ideas, but to an intelligence which could contemplate the whole of our physical and psychical life, our soul-life would seem to consist of an infinitely complex unity of contemporaneous events, partly above and partly below the threshold of consciousness.

So far we have been dealing with the problem of *Ontology*, and now we must turn to the problem of *Cosmology*. Granting that every form of reality has an inner as well as an outer side, the question arises, whether all reality forms a single whole, or is merely an aggregate of independent parts. If we take the former view, we must adopt some form of teleology. Our author shows in a very conclusive way the inadequacy of the old conception of design, as held by Anthropomorphic Theism. The truth is, that since the promulgation of the Darwinian theory of development, that conception has become incredible. Does it follow that all teleology is excluded? That it does not follow may be seen, if we consider (1) that the very "struggle for existence" implies the will or effort to maintain the

life of the individual and the species, and (2) that even apart from natural selection there is in all living beings a tendency to greater perfection of being, a tendency which by inheritance would in course of time lead to the variation of species. In man this tendency, which in lower beings is blind and instinctive, assumes the form of conscious striving after pre-determined ends. The rival theory of Atomism is an untenable hypothesis. Material atoms are pure abstractions. If an atom is extended, it must be divisible; if it is a system of forces it cannot be an atom, because force necessarily implies something upon which it acts. Thus each change in nature presupposes changes in nature as a whole. The same thing holds in regard to the changes of the inner life. But while this is true, it is not the less true that all psychical events imply the operation of will; in other words, the ordered succession of events is here purposive. And this holds good, not merely of all organic beings, but even of inorganic things, though of course only of those beings in their inner life. From these considerations the conclusion irresistibly follows, that all forms of reality are but phases of a single Reality or Will; in other words, that the totality of psychical events are but the modes in which the one Unity unfolds its essential content with absolute spontaneity.

Is this Idealistic Pantheism inconsistent with the religious consciousness? If that consciousness consists in the feeling of reverence, based upon the perception of our finitude, and of faith in infinite goodness, it is a doctrine which is in perfect harmony with religion. It may be objected that, in denying the personality of God, Pantheism cuts at the root of all religion. To this objection the answer is, that while the inner nature of the All-one is no doubt different in kind from ours, yet God must be conceived rather as beyond than below personality. We may therefore speak of the holiness, wisdom, goodness, and blessedness of God, if only we remember that these predicates are but symbols of a nature which transcends our power of conception. Thus an Idealistic Pantheism at once affirms the immanence and the transcendence of God: He is manifested in the world, and yet He is not identical with it.

After thus showing the relation of his doctrine to science and religion, the author gives an interesting sketch of the historical evolution of the idea of God, and a short discussion of the relations of faith and knowledge. This brings him to the second great division of his subject: the relation of knowledge to reality, and the origin of knowledge. That we have a real knowledge of

our own inner life is manifest, if, discarding the untenable hypothesis of a mysterious 'substance,' we regard the soul as simply the unity which is presupposed in all our inner experiences. Feelings, desires, ideas, thoughts are as they appear. No doubt we have empirically a limited knowledge of self, but this does not show that there is any noumenal self different in kind from the self that we know. Nor is it any real objection to urge that we can only know ourselves under the subjective form of time; for, though to an absolute intelligence our inner life would not appear as in time, its *content* would be the same. Now, this knowledge of self is the key to the knowledge of the not-self. I know the real as it is in itself, in so far as it is of the same nature as myself. The world, it is true, exists for us only in and through our own ideas; but this does not prevent us from having an assured belief in a reality independent of those ideas. The Not-I is revealed to us in the experience which we make as *willing* beings, whose efforts are checked by an external limit. The further development of the opposition of I and Not-I arises from (1) the distinction of one's own body from other bodies, (2) the distinction between possible and actual perceptions.

To attempt anything like an adequate criticism of a book so comprehensive in its character, is obviously impossible here, and I shall only indicate the lines upon which such a criticism might proceed. (1) The whole method seems to me false. It is the method of seeking for unity by the elimination of differences, instead of seeking for it by the inclusion of differences in a higher unity. Thus, in his theory of reality, the author seeks to show that all forms of existence have an inner life, by eliminating the self-consciousness which is characteristic of man, the sensibility which is characteristic of animals, and the growth which is characteristic of plants, and then affirming that all things are in their essence identical. But surely, if it is a valid answer to the materialist to say that "thought is thought, and not motion," it is equally valid to say that self-consciousness is self-consciousness, sensation is sensation, and growth is growth. (2) The same false method is employed in the reduction of the psychological life to what is called 'will.' It is mere confusion to call by the same name blind and unconscious effort and self-conscious effort. Were it not for this confusion, it would be manifest that there is no more reason for calling will primary than for calling intelligence primary; the fact being that there is in the lowest form of being merely the potentiality of both and the actuality of neither. (3) It is but another instance of the same perverse method, when all

forms of being are regarded merely as modes of a single Reality. It is quite true that man has no existence out of relation to the whole, but his relation to the whole does not annihilate his free activity, but implies it. He cannot be conscious of his own nature apart from his consciousness of the whole, but neither can he be conscious of the whole apart from his consciousness of himself. (4) The ultimate Unity to which all existence is reduced is admittedly "without content" for us. This abstraction of I-know-not-what may as well be called Devil as God. If we know nothing of it, how do we know that its true nature is manifested in what seems to us the end of existence? To speak of personality, thought, will, as "symbols" of the unknowable nature of this "X-to-the-nth-power" is mere assumption; for a symbol which for us is symbolical of nothing, may be symbolical of anything. With the author's desire to affirm at once the immanence and the transcendence of God I thoroughly sympathize, but I am certain that the solution is not to be found in a dead and meaningless abstraction.

JOHN WATSON.

Les Principes de la Nature, seconde edition, corrigée et augmentée des Essais de Critique Générale (troisième Essai). Par CHARLES RENOUVIER. Paris, Alcan, 1892. — Two vols. 12mo., pp. xcvi, 302, 407.

Perhaps no first-rate philosophic writer, with a strongly articulated system of doctrine, has ever taken as much pains as M. Renouvier to explain it to his generation by turning over and applying all its aspects in a would-be popular way. I say "would-be" popular, for it is to be feared that the strenuous abstractness of Renouvier's terms and the length and complexity of his sentences have kept him from ever becoming a writer easily read. He has, however, accomplished his main purpose; and over the younger generation of university men in France no one can be named who has his influence, or who is habitually spoken of with such respect. Nevertheless, in foreign countries, in our own for instance, much to the disadvantage of our philosophic culture, he seems almost unknown. The present work is not the best one by which to make acquaintance with his quality. Far better would it be to take that wonderful and masterly book called *Esquisse d'une Classification Systématique des Doctrines Philosophiques* (M. Renouvier is seldom happy with his titles), which ought long since to have been translated into English, or simply to turn over the leaves of the periodical *Critique Philosophique*, and to

read any article signed by him of which the heading wore a tempting sound. Once caught in the firm-knit texture of his philosophic web, as these writings display it, it would be strange if any one with capacity to enjoy strong thinking could help going on to master the *Essais de Critique Générale*.

As Bonaparte said that the Europe of the future would have to be either Republican or Cossack, so, to put the matter ultra-simply, the present reviewer feels like saying that the philosophy of the future will have to be that either of Renouvier or of Hegel. They represent the radical extremes, and what lies between need hardly count. Either hold fast, with Renouvier, to the principles of identity, contradiction, and excluded middle absolutely, and then regard the world as a *bundle*, an irreducible pluralism of data related by definite laws, or insist with Hegel that a more inward unity than that of mere 'law' weaves all this manifold together, throw over the logical principles aforesaid, frankly grant the world to be a mystery, and deny of every datum that it is in truth the individual existent which it seems. Clearness and consistency, with irremediable discontinuity and pluralism, or, on the other hand, unity without clearness or 'consistency,' and with the need of some more living sort of insight than that furnished by the logical understanding — such is the dilemma which it is Renouvier's great merit to have made sharper and more explicit than it ever was made before. He sides with the understanding so uncompromisingly that all monists should regard his system as the most precious possible object against which to develop their reaction.

Renouvier's great principle is, that amongst the difficulties which philosophy presents, a datum or principle which is merely inexplicable must always be preferred to one which is inwardly self-contradictory. The worst examples of self-contradiction which philosophy offers are those things infinite in nature, which yet are supposed to be completely given. Such are an infinite past time, an infinitely extended or a finitely extended but continuous matter, an infinite causal regress, or an infinitely omniscient God. Instead of such actualized infinities, Renouvier postulates blank, unexplained beginnings or endings as lesser stumbling blocks, and supposes thus a Universe finite in extension, division and history, and cared for by a finite personal God. He accepts the Humian criticisms; moreover, he regards the minimum of verifiable being as the *phenomenon* with its double subject-object quality, and denies both material and spiritual substances and transitive force or cause. Yet with all this Roman

austerity, and mathematical economy in the way of beliefs, no one can call Renouvier dry. Sentimental he certainly is not, but few writers show a wider sympathy with mankind's graver needs. Thus the relations of better and worse are amongst those which, finding them between phenomena, he keeps. This, he says, is a really moral world, and a world in which, as it offers itself, something is really wrong. Following then Kant's postulate that what ought not to be need not have been, he denies universal determination, and amongst the various unexplained beginnings, which as ultimate categories have at any rate to be admitted amongst the data of philosophy, he finds a place for the predestinate acts of individual beings. Free-will, so called, thus takes its place within the system; and nothing can be finer than the manner in which Renouvier thereupon shows, in an admirably true account of the natural history of belief, that, if free-will be admitted at all into the Universe, it must be left as a legitimate 'methodological' factor in the construction of philosophy. For philosophies are acts. Whether men admit or deny the fact, passion always plays some part in making them reject or hold to systems, and volition, whether predestinate or unpredestinate, always will play a part in deciding when to encourage and when to suppress one's doubts. Renouvier's refusal to blind himself in this matter is a refreshing breath of manliness in the midst of the self-deception and pretence so usual amongst philosophers. Instead, however, of simply deploring this inevitable complicity of our active nature in our theoretic life, he discusses soberly its bearings, and shows that in dealing with a certain class of doubts, insoluble by pure theory, there is inward propriety in letting volition have its say. The question of universal predestination, for example, is theoretically insoluble. But if our wills *be* ever free from antecedent determination, what is more fit than that they should have a voice in acknowledging that truth, which by acting they create? We may, then, without shame freely postulate our freedom, and we may freely postulate many other things that go with it in harmonious connexion. Renouvier thus decides for the existence of beings outside of the individual thinker, and for moral relations with them, and postulates immortality and a moral providence or God. In much of this he of course but follows Kant's footsteps. It must be said that the tone of his theism is more ratiocinative than devout, and that much of his impressiveness, when he defends objects of traditional veneration, comes from the fact that his personal affections seem so little engaged.

Such is an extremely brief definition of M. Renouvier's place amongst philosophers. In the volumes before us he applies the general principles of his system to the Natural Sciences, so as to trace the main lines which their speculations will have to observe. His conception of the world is a sort of monadism very much like Leibniz's, except that Leibniz's infinitism is removed, and the monads are not permanent substances but trains of representation. Real existents, in short, are psychic in nature and of various grades, and their 'intercommunication' is but our name for the fact that they form a concerted harmony, such that, when the inner states of one are modified, the inner states of others follow suit, the forms of the harmony being what we call the laws of nature. Leibniz was wrong only in speaking of the harmony as *pre-established*, for this word, while seeming to give a solution, really but throws the problem back, and behind the *fact* of the harmony we should not seek to go. The monads agree in responding to each other's changes under the forms of space and time perceptions so that the world-order appears subject to mathematical laws. Were the monads themselves only objects of outer representation like the time and space which they appear to each other to inhabit, they might be treated as indefinite in number, extent, and subdivision, for we can always go on to add to, or to divide, our own ideal objects. The moment, however, that these objects also exist as subjects, or in and for themselves, they cannot be indefinite but must be actual and numbered. If numbered, they are finite, so that all existence is discrete, and the old physical dispute between the plenum and atoms in vacua is decided categorically in favor of the latter view. Change, too, is discrete; and the world, so far as real, is like an immense pulsation composed of a number (unassignable though at all times determinate) of concerted elementary pulsations of different grades. Since the inner life of the realities is psychical, the outer view of them as atoms can only be symbolic. The atom is, in short, but our name for a *point of space* so far as influence appears to emanate therefrom. The 'subject' that exerts the influence need not be known to physics, so long as the definite mechanical laws of the influence can be ascertained. It is interesting to note in passing how completely the popular fancy of the atom as a hard little suprasensible body has vanished from higher physical thought. Lasswitz and Wundt, for example, use almost identical words with Renouvier in declaring the conception 'atom' to be a mere economic device like 'co-ordinate' for compendiously expressing the variations of a lot of phenomena in reference to a portion of space.

Our author then treats successively of various physical, chemical, and biological conceptions of a general sort. It is obvious that not much can be done here from the *a priori* point of view, and that his opinions can be but tentative and suggestive. This is one reason why I called the present work a poor one with which to begin the study of its author. He believes in kinetic theories, and in general in the tendency to convert physics into mechanics. All the orders of 'force' he would reduce to accelerations varying with distance, and would prefer to see common matter rather than ether treated as the vehicle of radiant energy, if a theory could be defined. In biology he insists that, since in the formation of living things the physical and chemical laws seem to work as if under plastic guidance, we ought frankly to admit the fact. This seems to imply that when 'monads' of a superior order appear, the phenomena which ensue need new 'laws' to express them. Living matter, as we call it, must be the space-correlative of a form of psychic existence superior to that of which dead matter is the sensible cloak. The connexion of our own 'soul' with the body, in the synthesis known as a 'person,' involves new modes of conduct in the bodily materials themselves, which, out of that connexion, would not be found moving as they now do in the service of our mentally determined ends. "Our imaginations, our passions never occur without all our acts, from degree to degree, from the highest organs to the lowest atoms, being modified according to law. Each of these acts, while existing inwardly for itself, is a force in relation to the other correlative acts. . . . The effect of these forces is a phenomenon of harmony, beyond which we cannot penetrate and which is one with existence itself, for there is no existence but by relations and communications." The details M. Renouvier leaves perforce indeterminate; and because they express no very trenchant doctrine, I say little of the pages in which he treats both of planetary and of organic evolution. They were written twenty-five years ago, and are now brought down to date by critical additions, a form which is always disadvantageous, and especially so when the subject has made such an extraordinary progress between the two dates. It should be said, however, that Renouvier, even twenty-five years ago, was far more hospitable to 'Darwinism' than most Frenchmen. His only reserves bore on the attempts to treat evolution as a monistic *philosophy* of nature through the conception of continuity of change, which of course he rejects. The higher qualities of being, when they come, simply *come*; the inferior can in no intelligible sense *produce* the

superior, although the superior may supervene only when certain conditions of the inferior are fulfilled. Thus human germs may in the fulness of time have developed in anthropoid wombs. Renouvier talks much in these chapters of the pre-existence of material germs of the higher forms awaiting the proper conditions to unfold; but one does not well see why, on his non-substantialist principles, he should need pre-existent germs at all. The word germ in his pages does but give a body the *potentiality* of a being of specific nature, and potentiality is always expressible, as Renouvier himself so often insists, in terms of 'law.' Mechanical laws of gradual modification of a continually reproduced germinal matter are imaginable; and other 'laws' of correlation with the various grades of this matter of the specific inner natures of the creatures which successively appear, can be conceived.

The pre-existence and permanence of material germs also plays a great part in a bold and interesting speculation which closes the book. M. Renouvier, comparing the cosmical speculations of our generation with our rational demands on the Universe, naturally finds them unsatisfying. The materialistic ones (of cyclical periods of formation and destruction of worlds) are inhuman; and the teleological ones (of optimistic progress) are inane. In casting about for something better, he comes upon the notion of an originally entirely animated world, from which this partly dead one is a fall, and the return to which will be redemption. In an appendix to the book he prints an essay on the same subject by an anonymous friend, which is an elaborate, ingenious, and extremely striking piece of work. It would be unjust to these speculations to abridge them. They are so out of the line of thought to which we are accustomed that a brief statement might make readers smile who yet, on reading the originals, would probably agree with the present critic, that if we are to have cosmogonies at all, (and with Spencer, Haeckel, & Co., we are well in for it) we had better take a wide view of all their possible variety, and that these writers really do gather together in their speculation many elements commonly kept apart. Moral teleology, material evolution, and religious tradition, all are cared for on their theory. It is congruent, moreover, with a biological hypothesis of which we seem likely to hear more: I mean the notion that dead matter has evolved from living rather than living matter from dead. Finally, it is in its way a genuine theodicy, and proceeds on the assumption that in this universe something is really *wrong*. It is a little odd, just at the time when Oriental cosmogonies and doctrines of rein-

carnation are in many quarters replacing Christianity in our English-speaking world, that these Frenchmen, with intellectual motives and a mental temper so entirely dissimilar to those of our theologians, should urge such kindred doctrines upon our consideration.

WILLIAM JAMES.

Beiträge zur Experimentellen Psychologie, von HUGO MÜNSTERBERG. Freiburg i. B., 1892. — J. C. B. MOHP — Heft 4, pp. 228.

Vergleichung von Ton-Distanzen. — pp. 147-177.

Of the ten studies which make up this fourth volume of Dr. Münsterberg's "Beiträge," the study on the comparison of tone-distances has been chosen for consideration, not because it is especially meritorious beyond the rest, but because it takes for granted certain matters of methodological interest which, it seems to me, are still open to discussion. The author first draws the question of the estimation of tone-distances out of the cloud of controversy in which Stumpf and Wundt had left it, finds Stumpf right in ascribing the 'middle judgments' of Lorenz's¹ experiments to the interfering play of the consciousness of musical intervals, but nevertheless regards the experiments themselves as valuable in showing that, whatever the determining influences, unlike musical intervals may appear like when compared as distances. The object of the present 'Beitrag' is, in great measure, to test Stumpf's opinions by taking such intervals between tones, that the tone arising from a rate of vibration forming the arithmetical mean of the rates of the extreme tones would be so far removed from making musical intervals with the extremes as to exclude the hypothesis of the inductive action of musical intervals. In part, three tones were used as in Lorenz's experiments, and in part two pairs of tones, the first tone of the second pair being variable, but in each case the interval was changed *by successive steps* till the distances seemed like. It is somewhat remarkable that Dr. Münsterberg should have found this method of gradations trustworthy when Lorenz found it valueless: "Not merely *one* tone was felt as the middle between the terminal tones," says Lorenz, "but often an entire series."² Accordingly he varied the middle tone irregularly, now high, now low, now in the middle, but always so that no judgment could give the observers clue as to the nature of the succeeding judgment. Dr.

¹ Ph. St. VI. pp. 26-103.

² Ph. St. VI. p. 44.

Münsterberg asserts that such continual change is disturbing and confusing (p. 150), but it does not appear that he gave the method an extended trial.

Now the difficulty with the method of gradations is, that if we make the size of the steps roughly proportionate to the distance between the terminal tones, so as to cover with the variable approximately a relatively like stretch within each interval, with the same number of steps, we introduce a sort of 'dressur' into our experiments; the observers, unless warned by a marked change in interval, become used to judging 'middle' at a certain point in the course of the variable.

But if the excursions of the variable are not made with about the same number of steps in the several intervals, if for example we take ten steps in one interval to pass over relatively the same ground that in a succeeding interval we cover in twenty steps, we are destroying those conditions of mental equipoise which are indispensable for trustworthy judgments. In short, regularity of gradation leads to mechanically formed judgments, and irregularity of gradation, between different rows of steps, destroys the conditions for forming trustworthy judgments.

Again, it has been customary to give no further thought to the size of the steps, than to see to it that they were 'minimal,' and then perhaps to arrange them so as to make possible a symmetrical series of experiments during the hour of experiment. Indeed it is a curious feature of psycho-physical experimentation in general, that so little attention has been given to the size of the steps in gradation methods, or what amounts to the same thing, the rate of change of the variable. Initial thresholds, and difference thresholds have been determined time after time with no farther definition of the step of the variable than is implied in the vague term 'minimal,' and yet every experimenter has found that in determining difference thresholds for different intensities of any given modality of sensation, he had to make the size of the steps approximately proportional to the intensity of the corresponding terms in order to get consequent results. The size of step of the variable seems also to affect the judgment in the method of mean gradations, and this influence, joined to the stereotyping process spoken of above, was so strong as to make possible, even with so critical and conscientious an observer as Dr. Külpe of the Leipzig laboratory, a regularly recurring series of middle judgments of sound intensities for almost any point in a comparatively wide stretch of the path of the variable, that the experimenter might fix upon.

It is obvious that the same disturbing influences would be active in reaching distance comparisons in all cases of regular gradation of the variable with successive stimuli, whatever the modality or quality of sensation. But to all these arguments the first part of Dr. Münsterberg's results appears a flat contradiction: his experiments not only show a close agreement in the position of the estimated middle of the tone interval at the arithmetical mean of the rates of vibration of the terminal tones, for the shorter intervals, but a remarkable accuracy in judging this point; thus for the interval 256-512 (1:2) the tone 384 appeared to observer B to halve the interval 100 per cent, and to observer A 90 per cent of the times it was sounded. If this is surprising, the close agreement with Lorenz's results is simply astonishing. It must be clearly understood that Dr. Münsterberg gets results which agree closely with Lorenz's and which are definite and regular, by using a method which Lorenz discarded, because he could get no definite results whatever from it. It is evident that the chief question at issue here is not one of results, but of method. None of the results can lay claim to validity until this contradiction in method is investigated and explained. But we are only told that the method of irregular gradations to which Lorenz was forced, appears of dubious value (p. 159), and then, without further discussion, the method with which Lorenz could get no results is put in use to get results agreeing with Lorenz's, which, in turn, were gained by a method condemned by our author (p. 159), and then, on the strength of this curious agreement, we are asked to accept generalizations from experiments on intervals not investigated by Lorenz.

As the matter stands, we do not feel that the opinions advanced above in regard to the invalidity of the method of regular gradations are negated by those experiments of Dr. Münsterberg, nor do we consider that his elaborations on the method, *e.g.*, the substitution of two pairs of tones for three tones, and the intercalation of tones in an interval of comparison, have anything more than a suggestive value. The problem of the comparison of tone-intervals is not to be solved in an off-hand way even by a man of Dr. Münsterberg's psychological insight; the first step towards definite solution must consist in a thorough-going investigation of the method to be employed.

The volume contains nine other studies: on Association (five short sections dealing with special questions); chain-reactions; investigations of Memory; the influence of the content of a time-

interval on estimation of its magnitude ; the influence of nervous excitants, narcotics, and antipyretics on mental work ; estimation of magnitude by the sense of touch ; concomitant movements ; a psychophysiological reflexion ; pleasure and pain. FRANK ANGELL.

Die Philosophie der mittleren Stoa in ihrem geschichtlichen Zusammenhange. Dargestellt von A. SCHMEKEL. Berlin, Weidmannsche Buchhandlung, 1892. — pp. viii, 483.

It will probably be long before another great and comprehensive work on Greek philosophy like that of Zeller will appear again. Ritter was supplanted by Brandis, and Brandis in turn has been supplanted by Zeller. But the comprehensiveness of the last named work, united with its unrivalled mastery of details, will for many years make a similar undertaking needless, and it seems probable that for generations the Berlin professor will hold the field against all comers. This, however, by no means precludes the usefulness of monographs on special subjects, and in this way much remains to be done. Several years ago Zeller expressed the wish that especially the post-Aristotelian philosophy might be subjected to a more searching investigation and criticism, and this book on the Middle Stoa comes to us in some measure fulfilling that wish. Schmekel has chosen an interesting subject, and has handled it in a masterful fashion. It is not a German monograph *à la mode*, filled with philological quibbles, learned lumber, and masses of undigested and ill-arranged facts mountain-high. The work is written with philosophical spirit and vigor ; at the same time it exhibits a skilful employment of the right canons of historical criticism, and the hand of the precise philologist is not missed. Susemihl, in the preface to his *History of Greek Literature in the Alexandrine period*, mentions important help derived from Schmekel's volume, the MSS. of which he had used while preparing his history. (The Middle Stoa was published a year later than Susemihl's work.) The field covered by Schmekel is, to be sure, a small one, and at first sight one might be inclined to express both surprise and disapproval that a considerable octavo should be devoted to these later Stoics of whose writings very meagre fragments are extant. The book, however, is by no means a parallel to that monument of painstaking and misdirected genius, Lassalle's *Herakleitos*. In the first place, the fragments which we possess are considerably supplemented by explanations of later writers, and besides we have the fundamental doctrines of the Stoic

school to begin with; in the second place, approved standards of criticism and interpretation are employed instead of ingenious, but erratic, conjecture. The author devotes a score of pages to the few biographical facts which are authenticated. Most of this information is, of course, derived from Diogenes Laertius and Cicero. The philosophers whom he classifies in this so-called Middle Stoa are Panaetius, Posidonius, and the minor writers Hecaton, Mnesarchus, and Dionysius. He then turns his attention to the sources of our information about the philosophers in question. This occupies, if we regard the book as a work in the history of philosophy, a somewhat disproportionate space, and in this portion of the treatise we think Schmekel rather over-ready to see resemblances, and to find evidence of source in similarity of style or thought that is more imaginary than real (*cf.* pp. 104, 110 ff). Thereupon follows his exposition proper of the philosophical doctrines, their relation to preceding systems, and their influence on succeeding speculation, more particularly on skepticism, mysticism, and the Roman Aufklärung.

While the academy was growing more and more dogmatic, the Stoics were becoming more and more skeptical. Both Panaetius and Posidonius were strongly under the influence of Karneades, and owing to the political influence and diplomatic prominence of philosophers like Panaetius and Posidonius, philosophy assumed more and more the form of a propædeutic to oratory, — a preliminary education for state service. Panaetius of Rhodes, the friend of the young Scipio and of Laelius, differed from the earlier Stoics, as Ritter says, in being less stringent in his scientific procedure, in popularizing philosophy, and in making it the subject matter for an elaborate and polished oratory. In this way he skilfully made an entrance for Stoic philosophy into Rome. His lectures were listened to by the celebrated advocates of the everlasting city, and philosophy was carried beyond the precincts of the school proper. Under these circumstances, as might be surmised, logic and physics were neglected, and ethics brought into prominence. According to the few works whose titles we still have, his writing was confined to ethics, and politics; the book on Sokrates and the Sokratics being probably ethical. Panaetius received his philosophical inspiration and instruction chiefly from Diogenes of Babylonia, the Stoic, but more especially from Diogenes' successor, Antipater. Besides, he came under the influence of the peripatetic, Kritolaos, and of the Academician, Karneades. It was just at the time when Karneades laid down his office as head of the academy, that Panaetius became the

Stoic scholar. Panaetius, wealthy and politely trained in the school of the world, the companion of Scipio on his diplomatic mission to the Orient, an habitué of Rome's aristocratic society, was naturally a potent factor in the philosophical propaganda of Greece in Rome, but except in insignificant details his mission was not to create. As head of the Stoic school, however, and as teacher and expositor, he was one of the most efficient spirits in its history. In literary activity and productiveness he was surpassed by his pupil and successor, Posidonius, whose writings, as was the fashion of that time and as the status of science then permitted, were encyclopædic, covering the subjects of ethics, theology, physics, cosmology, psychology. Of the three minor later Stoics mentioned by Schmekel, so little is known of their dogmas and so meagre are the traditions of their influence on the progress of philosophy in general and the development of the Stoic school in particular, that their names in the history of speculation are well-nigh meaningless, unless one should make exception of the polemic of Dionysius against the epistemology of the Epikurean Demetrios.

On the basis of a statement of Phantias in a treatise "On the School of Posidonius," Diogenes Laertius (vii. 33) says that both Panaetius and Posidonius began their philosophies with physics. But we have very few references to the physics of Panaetius. Schmekel, however, simply ascribes to him on the grounds of *a priori* probability such Stoic doctrines as were peculiar to the school and fundamental to it, *e.g.*, as a Stoic he must have accepted the doctrine of the corporeality of everything. These he supplements by such references as subsequent writers make to his physics. Further, every Stoic rejected all purely mechanical theories of the world and established a monism, in which he affirmed the unity of spirit and matter, and which one may label dynamic materialism. This fundamental conception no Stoic could reject without separating himself radically from the school. One cannot, to be sure, go very far on an hypothesis like this. The difficulty very soon presents itself, what doctrines of the school we are to regard as fundamental. Although this is somewhat indefinite and unsatisfactory, it affords us, perhaps, the best working basis we can get for a reconstruction of the system of the philosopher. At the same time, we have always to bear in mind that it is only a reconstructed system, and that the data for such reconstruction are by no means complete; but the judicial and critical way in which the sources are first examined and then employed, furnishes, we admit, well authenticated data (as far

as they go) for reconstructing Panaetius' philosophy. But they are not adequate, and so, like an architectural restoration of the Acropolis, where our information as to details is defective, we must regard such procedure as largely conjectural, admitting at the same time that the conjecture is on the side of probability. In any case, the revived forms, as Schmekel presents them to us, are certainly preferable to ruins, and give us a more edifying and a more correct picture of what was.

To illustrate the internal relationship and relative worth of the several disciplines of philosophy, Posidonius employed the bones, sinews, fleshy parts, and the soul of an animal, saying that these corresponded to logic, physics, and ethics respectively. This illustration, as Diogenes Laertius (vii. 33) says, was used by Zeno, Chrysippos Apollodoros, and others. Schmekel, in misleading fashion, cites it in such way as to leave the impression that it was peculiar to Posidonius. As, in the case of the body, no one of these parts can exist without the others, although they have different values, so, too, in philosophy all three are necessary, albeit ethics is the most important.

Posidonius was a believer in divination. The soul in his anthropology had a pre-existence; this is quite as definitely taught by him as by Plato. The possibility of experience depends, on the one hand, on the fact that there is causality in all process, and on the other, on the nature of human mind. For the human mind, as part of the divine and universal spirit, has the same nature as this, and man is therefore by his nature fitted to recognize through observation this causal rule of God, and in some measure to predict its course. This he does either by means of science or of divination (mantic), the latter of which was rejected by Panaetius. Every science is based on observation. It is through this that thought takes cognizance of cause and effect, and hence the theory that all science is pure product of human thought and of human experience. The perfect science would then consist in a knowledge of the totality of causal relationships. If one knew this, one would have the entire future before one's eyes. This, however, is possible for God only; as compensation for this limitation man has been given mantic or the gift of divination. This rests on the same basis as science, *viz.*, observation. It is not prediction of the accidental, but of the necessary, inasmuch as everything takes place by an inexorable necessity. The world is, moreover, constructed in such way by the divinity that given events are preceded by given signs; these signs are declared

in dreams, oracles, clairvoyance, astrology, the flight of birds, etc., etc.

In the organic world plants occupy the lowest place (*cf.* Aristotle). Next come the lower animals, between which and the vegetable world there are transitional forms, *i.e.*, plant-animals or zoöphytes. Inasmuch as all life depends on the penetration of matter by the cosmical pneuma, the life of plants must be an expression of this same principle; it is the lowest form in which the principle can appear as life. This power in the plant is confined to nutrition and propagation, and to this faculty the name of φύσις is given. On a plane higher than plants, and forming the transition to the animal world, are those organisms to which the desiderative faculty (ἐπιθυμητικόν) attaches. Schmekel criticizes Zeller's statement (p. 257 f.) about this faculty. But Zeller, in the passage quoted by Schmekel, does not make the distinction attributed to him. Schmekel misreads the words of Galen: προσπεφυκότα δίκην φυλῶν πέτραις ἢ τισιν ἑτέροις τοιοῦτοις. The reference is not to plants, but to those animals which have a plant-like nature, to zoöphytes. To the animal kingdom proper ψυχὴ is ascribed. In addition to φύσις and ἐπιθυμητικόν, Posidonius ascribes the Platonic faculty θυμοειδές to the animal kingdom. This, a kind of will-instinct, supplies the impulse to self-preservation and the attainment of the objects of desire. To man alone belongs pure reason (λόγος, νοῦς). Just as the soul is constituted, so will its moral attitude and activity be; ethics is, therefore, made to depend on psychology. The supreme law of conduct with Posidonius, as with the Stoics generally, was the conformity of life and conduct to nature. By nature, Posidonius understands, not the universal cosmical law, as other Stoics, but rather man's own nature. This, however, is double, consisting of an animal and a rational nature. The latter has rightfully the leadership; accordingly the ethical end of life is an attitude of the soul in accordance with reason. This psychical condition includes both the true and the good in their entire extent,—the true in knowledge and the good in choice. Both are included in the conception of the wise man, who, from Chrysippos on, represented to the Stoics the moral ideal. Posidonius, however, rejects Chrysippos' conception of the wise man as something unattainable. On the contrary, he believed that the virtue exemplified in the σοφός is attainable; with Chrysippos virtue made demands which transcend human power, so that the wise man, as embodying the ideal of virtue, never actually existed, and this conception of virtue which could not be realized,

had no practical value. Posidonius, on the other hand, on the ground that there was no such thing as an absolutely wise man, and that progress in knowledge was constant, found his ideal in the relatively wise man. One feels that in these later Stoics the stern, unsympathetic, yet heroic spirit of the old philosophers of the Porch had departed; that their theories of conduct and life were becoming accommodated to ideals regnant in a political decline; that we have here to do with speculation no longer creative, but partly inherited from predecessors, partly adopted from other systems; that the Stoic philosophy was becoming an eclecticism; and that all living and quickening power had departed from it. We have, however, to express to the author of the *Philosophie der mittleren Stoa* our gratitude for an extraordinarily clever and painstaking work, which, from the very nature of its subject-matter, will unfortunately have but a small circle of readers, occupied as it is with a somewhat obscure and uninteresting period, when the philosophy of the Greeks, like Greece herself, was rapidly falling into decay.

WILLIAM HAMMOND.

Einleitung in die Moralwissenschaft. Eine Kritik der ethischen Grundbegriffe von GEORG SIMMEL, Privatdozent an der Berliner Universität. In zwei Bänden. Erster Band. Berlin, Verlag von Wilhelm Hertz (Bessersche Buchhandlung), 1892. — pp. viii, 467.

A book like the above deserves our closest study. Whatever fault may be found with it — and it has its defects — one thing may be said without fear of contradiction: Dr. Simmel's first volume is ingenious, subtle, and highly suggestive. It is a keen and exhaustive investigation of a number of ethical concepts, critical even to a fault. We might characterize it as one of the least dogmatic treatments of moral questions in existence, in this respect, resembling Sidgwick's maturer work. Whatever view the enthusiastic dogmatist may take of such productions, the careful thinker cannot but welcome this book as a useful addition to the discipline with which it deals. Its object is a commendable one, meagre though the positive results may be. The apparently simple concepts of ethics are shown to be far more complicated than would appear on the surface. An acute analysis of such notions lessens one's desire to venture on the high seas of speculation and inspires one with a wholesome kind of doubt, wholesome because of the intellectual vigilance which it begets. The

modern psychologist has removed from the field of his investigation much of the useless furniture of the past. Many cherished notions have found their final resting-place in the spacious lumber room of science. Why should not ethics begin a similar process of elimination?

Of course, Dr. Simmel's contribution is not meant to be an introduction to ethics in the sense of preparing the way for the beginner. It would bewilder one not already initiated into the science. As dogmatism must precede criticism in point of time, and ever after serve as a prolegomenon to speculation, so, too, a work like the one before us is impossible until there exists a stock of positive propositions that can be subjected to the smelting process. But once begun, such an enterprise is of inestimable worth. We can easily understand from the very nature of the task which the author sets himself that the reader of his book will be confronted by serious obstacles. Yet I believe that Dr. Simmel is himself responsible for many of the difficulties which his volume throws in our way. His presentations lack continuity; that, in a word, is their chief defect. We should expect a more systematic treatment, a more coherent arrangement of the material. As it is, the writer often places before us a vast mass of disconnected though brilliant ideas, leaving it to the reader to struggle through a labyrinth whose every turn presents the choicest treasures but makes the starting point seem farther and farther away. Perhaps it is due to the unusual richness of the author's imagination, to his wealth of ideas, that he should find such difficulty in arranging his thought in a clear and well ordered sequence. He might, it is true, plead in partial defense that simplicity of statement is not always possible where the subject-matter is so intricate, that a consecutive order of argument is out of the question in a work which aims to dissect rather than to construct. We must not overlook this fact in our estimate of his book, but still we believe that an improvement can and ought to be made in a second edition, which, it is to be hoped, will not be long in appearing.

The first notion discussed, that of obligation (*Das Sollen*), is one on which the entire trend of one's ethics may be made to depend. Dr. Simmel's views on the subject are, therefore, worthy of consideration. Just as reality or being is not a quality of things, but a quality of ideas, "*eine psychologische Zuthat*," the same thing with different local signs, as it were, so, too, willing, hoping, and obligation are feeling-accompaniments of ideas. Dr. Simmel sometimes calls these functions *feelings*, sometimes, modes of thought (*Denkmodi*), cate-

gories, conceptions (*ct.* pp. 8, 9 and 11). No satisfactory definition of them can be framed for one who has not experienced them. They cannot be proved. The epistemological character of *Sollen* at once betrays the futility of all attempts to derive from the concept itself any definite content, as Kant endeavors to do. That we ought to do a thing can, at best, be proved only by appealing to an obligation which is presupposed as certain. Somewhere, however, we reach an ultimate fact, beyond which we may not logically go. "The last step that can be explained is that before the last" (p. 14). Thus the Utilitarian undertakes to prove the morality of an act by showing that it furthers the public welfare, but that this ought to be furthered remains unproved, a mere dogma. If we identify obligation with any content, this content is as inexplicable logically as *Sollen* itself. All that we can do is to accept obligation as a psychological fact, and then attempt an evolutionistic explanation. Society enforces acts that conduce to its preservation. There is a gradual progress from compulsion to obligation. "It is a peculiar feature of human nature that for it might gradually becomes right, *i.e.*, *Müssen* becomes *Sollen*." Here we have the characteristic features of the writer's philosophy placed side by side; it is an evolutionism tempered by criticism. All the objections that have been raised against this combination will, of course, be urged against Dr. Simmel's work.

The discussion of egoism and altruism makes an interesting chapter, though here, too, there is a lack of coherency in the exposition. The criticism is just, that the reduction of all actions to the egoistic impulse on the ground that this is the simplest and most natural, rests on a misconception of 'the natural.' Why should egoism be any more natural than altruism? Because of its greater frequency? How can we determine the quantitative relations between the two impulses, when the agent himself can give no clear account of his motives? Besides, the individual performs, at every turn, many altruistic acts prescribed for him by custom, law, and the forms of intercourse (p. 89). Or shall we say that egoism is the more natural, because of its earlier appearance? Egoism can arise only after the establishment of society. Of the pre-social man we can form no definite picture (p. 91). Even if it were the earlier impulse, what then? Is the sexual impulse less natural, because it appears later than hunger? By showing how from the same premises contradictory conclusions are drawn, the author convinces us of the utter folly of certain deductions. Since egoism is natural, it must be suppressed, say some. Nay, say others, since egoism is natural,

it ought *not* to be suppressed, indeed all attempts to do so would prove unavailing. In short, altruism is as much a fundamental fact of nature as its opposite, and we might reduce egoism to altruism as easily as we now do the reverse. Egoism may be a strategy on the part of nature to reach altruistic ends (p. 107). At any rate, "when a group acts as a unit, individual egoism as the sole means of race-advancement is dethroned" (p. 114). We cannot help agreeing with the author that even if egoism were the most suitable means of producing social welfare, it might still be rejected as an ultimate ethical principle. An ethical principle needs no proof. Morality is ultimately based on feeling. In view of these results, a sentence like the following is significant. "If any one should maintain that he feels the absolute exercise of egoism as a moral duty, this would have to be accepted as a fact as indisputable as a similar assertion concerning altruism" (p. 119).

After having discussed the egoistic impulse at such length, Dr. Simmel suddenly comes to the conclusion that it is impossible to find a content for the notion. The 'I' is a combination of so many impulses, desires, ideals. To say that the egoist seeks his own interest means "*dass er will was er will*" (p. 135). This, it seems to me, is a merely verbal definition of the notion. If we take it in so broad a sense, it must, of course, become colorless. Every act of will might then be stamped as selfish; selfishness and willing would become interchangeable terms. We might discover ourselves reasoning as follows: an egoist is a man who seeks to further himself. Now his self is composed of a number of impulses, among which the altruistic tendencies belong. An egoist, therefore, would be one who realizes his other-regarding feelings, or, an egoist is not an egoist. These sophistical fallacies we can easily avoid by restricting the meaning of the term. In the selfish man the altruistic impulses are either wanting altogether or not so strongly developed as their opposites. It is true that we define each term by negating the other, but this simply shows the impossibility of defining our feelings.

The chapter on moral desert and guilt regards desert as the correlate of obligation, "it signifies that others ought to do something in reference to me" (p. 214). Ideal ethical desert means that one is worthy of real reward. These are categories created by social intercourse. It is found necessary to reward certain modes of conduct, afterwards these categories are still applied to qualities, even though the original reactions no longer take place. An action is

rated according to the exertion made in performing it. The story of the temptation of Christ shows the delicate tact which manifests itself in the formation of popular mythology. A god who had not been tempted would not arouse our admiration. An evolutionistic explanation is given of the category in question. In early stages of society, great exertions, the surrender of selfish aims, were essential to preservation, and hence valued (p. 219). In the course of time the feelings originally associated with the useful acts came to attach themselves to the exerted effort. But why any value should be set upon an external act, is as inexplicable as that it should be set upon a state of consciousness.

In his discussion of character the author seems to overshoot his critical mark. The notion of character is a mere abstraction, it is held. To refer actions to an underlying inner cause or unity called character, is like hypostasizing a notion of force (p. 269). But, when we speak of an act as the inevitable result of a man's character, we do not necessarily mean that there exists besides the psychological motives or tendencies a something behind, a unified essence, as the source and cause of conduct. All that we can mean is, that a man's actions show a certain similarity, that under certain circumstances his conduct will be of a certain kind. Where there is such similarity, we are led to seek a common ground for it. Character, in this sense, is by no means an "illusion."

Because many moralists make desert and guilt depend on freedom, Dr. Simmel makes freedom depend on desert (p. 286). Such paradoxical utterances do not assist one's understanding of the questions under consideration. But in other respects this short treatment of free-will is perfectly just in its determinism. A number of impulses struggle for mastery. The victorious tendency we afterward identify with the real 'I.' Yet the 'I' is not a power over and above the different tendencies; it is the whole of consciousness. "We should have no idea either of desert or guilt, or of freedom, if there were no conflict."

The last chapter deals at length with the concept of happiness. The author carefully analyzes the view that pleasure is the sole end of life, and reveals the inconsistencies of the happiness-theory as well as the opposition of some of its tenets to the moral consciousness. I cannot refrain from selecting some of the many good points in his argument. The fact that the performance of a moral act is accompanied by pleasure, does not warrant the conclusion that pleasure is the cause of the act. Such a conclusion would be

a fallacy of the *post hoc ergo propter hoc* kind. Again, the Utilitarian argument : the act A is performed because it increases the general happiness, for if it produced sorrow, we should avoid it, completely confuses *conditio sine qua non* and *causa efficiens*. It is like reasoning : I go to the theatre because it is warm there, for if it were cold I should not go. In so far as the Utilitarian theory ignores certain actual ends and actual conditions, it lays itself open to attack. Ethics can never create absolute imperatives, it must discover them as actual facts. Another difficulty Utilitarianism meets with is the problem of the distribution of happiness. To a self-consistent eudæmonism, which cares only for the presence of the greatest possible happiness in the world, the manner of distribution is immaterial. The moral nature demands a certain *equality* of distribution, while the sum of happiness can be increased only on the basis of inequality. Pessimism alone can avoid this difficulty by inserting in the formula in place of happiness, freedom from pain. Dr. Simmel finally concludes that endæmonism presents us with a formula that is wholly without a content, as formal as the categorical imperative itself, which it imagines itself to supplement. The volume ends with an examination of the relation between virtue and happiness. There is no logical connection between the two. The association is a product of evolution.

While the present volume is strictly scientific, and therefore not calculated to appeal to the general reader, it is sure to be read with keenest interest by earnest students. The many examples, which are admirably chosen from various branches of science, are highly suggestive in themselves. In short, while the book must be read with considerable care, in order to be appreciated, it will amply repay one for all the intellectual effort required to master its contents.

FRANK THILLY.

SUMMARIES OF ARTICLES.

[ABBREVIATIONS. — *Am. J. Ps.* = *American Journal of Psychology*; *Ar. f. G. Ph.* = *Archiv für Geschichte der Philosophie*; *Int. J. E.* = *International Journal of Ethics*; *Phil. Mon.* = *Philosophische Monatshefte*; *Phil. Stud.* = *Philosophische Studien*; *Rev. Ph.* = *Revue Philosophique*; *R. I. d. Fil.* = *Rivista Italiana di Filosofia*; *V. f. w. Ph.* = *Vierteljahrsschrift für wissenschaftliche Philosophie*; *Z. f. Ph.* = *Zeitschrift für Philosophie und philosophische Kritik*; *Z. f. Ps. u. Phys. d. Sinn.* = *Zeitschrift für Psychologie und Physiologie der Sinnesorgane*; *Phil. Jahr.* = *Philosophisches Jahrbuch.* — Other titles are self-explanatory.]

PSYCHOLOGICAL.

Das musikalische Gedächtniss. R. WALLASCHEK. *V. f. Mus.-Wiss.*, Heft 2, 1892. — pp. 204-251.

Memory is a function of organic matter, and can be evolutionally studied. The origin of imitation lies in the reflex (*cf.* Wernicke). Memory is a restrained imitatory reflex (Bain). But in the technical sense memory implies consciousness (Ladd).

In the sphere of musical memory the distinction between imitatory reflex and memory proper is important but very difficult. 'Music' in the animal kingdom the author regards as a feeling-reflex in production and reproduction. So with the lower human races (the astonishing musical memory of the Hottentots is merely imitatory) and with idiots. It is otherwise with such a memory as that of Mozart, as is, indeed, experimentally shown by investigations into the musical sense of idiots (Wildermuth-Stetten). At the same time, the imitatory reflex is the foundation of all later musical development.

If memory is a reflex, restrained by other sense-impressions, it is intelligible that in consequence of the inhibition of certain nervous paths or centres the traces of all previous impressions are obliterated, and a single new impression (or uninfluenced trace of an impression), is reflexly effective, being unrestrained by any active combination. Hence the 'cropping up' of memories (*cf.* Forel). This inhibition can arise in a variety of ways: it explains the isolated exhibition of musical power. It is to be noted that musical expression is not bound up with a definite hemisphere or portion of the brain. As

regards continuance of such exhibition we must remember that "the Ego can take the reins, at any time, when a series of ideas is in motion." Some pathological cases of extraordinary musical achievement are explicable on the assumption that a reflex is released in sleep. Inclination to sing or speak in rhythm has been observed in somnambules, hypnotic subjects, and in cases of nervous fever (Perty: all women; *cf.* the fact that female idiots are more musical than male). Music plays a part in the therapeutics of insanity.

In connection with extraordinary memorial achievements, we may note that a reflex-activity often gives us normally better results than conscious effort. When performance has become automatic by usage, the portions of the brain which correspond to its conscious execution are out of practice.

Somnambulism shows us at times a combination of reflex muscular memory with (apparently) partial consciousness. (Jessen; *cf.* Wallaschek, Kieser.) When persons hear only 'through the medium of' other persons, we have probably to do with a complete control of their memory; the patients are tone-deaf, but able to follow music when their attention is directed to it. Echolalia may represent simply a reversion to a primitive condition (*cf.* Wilkes for normal echolalia; Jagor for morbid mania of imitation). The exaltation of phonetic faculty is not only observable in cases of insanity, hypnosis and hysteria; alcohol, tea, coffee and tobacco are impressed into the same service.

The achievements of memory are greatest in the opium or hashish *crapula* (G. Martius, Urquhart, Braid, Preyer). We have only to consider two effects of it; the increase of auditory sensibility and the emotional processes set up (Moreau, Rohlf's). In hashish-intoxication the subject is eminently suggestible (Schrenk-Notzing). The facts prove the associative emotional influence of music, an influence dependent on the personality of the listener.

Similarly in hypnosis: the patient is 'a kind of phonograph' (Berger; *cf.* Richer, Braid, Heidenhain, etc). The sense of hearing is the last to disappear,—a fact turned to account in hypnotic therapeutics. The musical achievements of hypnotized subjects are to be ascribed, again, to the imitatory reflex, aroused by the complete isolation for a definite impression, and by concentration on it. Music has a very great associative influence on somnambules and cataleptic persons. (*Cf.* Moll.) Auditory hallucinations can be called up at will. Indeed, musical suggestion is analogous to the other suggestions. There is nothing in hypnosis which contradicts

our other experience, though its historical connection with mysticism is intelligible. It affords a valuable means to the study of the associative working of music.

In many respects like the mental conditions spoken of is that accompanying dreams. It is stated that we do not, or do not often, dream in terms of auditory sensation. The author cannot confirm this view. It is hard to decide whether we dream in sound or in music; but the question is not of great importance. Perfect musical hallucinations occur (Macnish). Perhaps unique is a case of the connection of visual images with music. We may compare the connection of colors and tones. An association of touch-sensations with tones is known. (*Cf.*, on the whole subject, Gurney, Myers and Podmore. We need not follow these authors as regards telepathic explanation.)

How, and to what extent, do we memorize music? As a general rule, the manner corresponds to the musical structure itself. The memory for harmony is different from that of melody (*cf.* the memory of the Hottentot and that of Mozart). The will to remember melodies facilitates their remembrance; in the author's case, such willing means the calling to aid of auxiliary ideas. Bain's explanation of memorizing is not valid: rhythm is the principal thing. Whether memory is always dependent on the intensity of the sense impression is not easy to decide. More probable is Stumpf's view, even in the face of the fact that the imitatory reflex is conditioned by such intensity. Musical memory is better than other memories; yet the impressions are not stronger. For intensity we substitute "mental working over." *Cf.* reaction-time; the auditory impression is easier associated than others.

Absolute tone-memory is a curious phenomenon. It is not proportional to the relative tone-memory of the same individual. The latter facilitates the appreciation of melody, absolute memory that of harmony. This points to the correlation of a better ear with absolute memory, apart from the question of musical talent. Relative tone-memory is often an indirect tone-memory, which has arisen by association with the time-sense. Relative tone-memory suffices for singing from printed music; the singer may even be disturbed by absolute memory. The latter is not necessary for perfect musical enjoyment. Wagner had no very developed absolute memory (*Die Meistersinger*); Mozart would seem to have possessed it.

Motor ideas form a great assistance to absolute memory of a tone-pitch. The part played by laryngeal sensations and ideas of move-

ment in the estimation of an interval differs in different persons, and in the same at different times. What is the process in the representation of the playing of a melody? Henle said that the melodies ran their course "in an abstract way"; and this is true in some instances. The author's experience would rather say that they have a conglomerate clang-color (*cf.* Stumpf and Stricker). Taine speaks for a close resemblance of ideational image to original sensation. This may be a survival from the primitive condition.

All art took its origin from imitation. Hence the imitative talent of artists. The genius of the artist gives us normally what the ordinary man gives, if at all, only as the result of total arrest of his mentality in other directions (hypnosis, ecstasy, catalepsy, intoxication). The psychical law of artistic creation and of insanity is one and the same.

E. B. T.

Ueber die Grundformen der Vorstellungsverbindung. (Schluss.)

M. OFFNER. Phil. Mon., XXVIII, 9 u. 10, pp. 513-547.

Association by contrast presupposes association by similarity, and at first appears as a secondary process. But on the return of a contrast-presentation, the chief weight inclines to the side of pure contiguous association or word association. The theory which explains contrast-association on the analogy of after images, is untenable from the fact that associations by contrast, always infrequent owing to the relatively few really contrasting presentations, do not appear in the flow of ideas where conditions are most favorable to reaction against a one-sided strain of attention, and do appear where, according to the theory, there is least reason to expect them. In the reproduction of the whole by a part, or *vice versa*, the psychophysical process is quite the same as in so-called 'association by similarity,' so that there is no need of involving a peculiar form as does Höfding. The difference lies within the relations of content in the separate presentations, and the union of the latter is rightly ascribed by Wundt to outer association. This outer association suffices as well for the explanation of associative subsumption, which Wundt reckons as a case of inner association. The consciousness that a particular presentation resembles countless others is built up through association by similarity. Finally, the memory-image blends after the manner of a composite photograph, or gains universality by the concentration of attention upon representative elements, or completely retires behind a mere symbol. The cumulative, representa-

tive, or symbolic concept is then reproduced after the manner of so-called 'association by similarity' through the elements which it has in common with the particular presentation momentarily present. In a similar manner the concept recalls the subsumed particulars; only here, as in the reproduction of a part through the whole, the associative course is ambiguously determined. This does not, however, justify Münsterberg's idea that such a connection ought to be assimilated to association by succession. Association by succession occurs when an impression due to external stimulus joins itself to other impressions or memory-pictures which immediately followed it on a former occurrence. This is attributed to "associative habit" by Wundt, who gives for it the same physiological explanation as for association by simultaneity. Münsterberg first emphasized the noteworthy difference between the two forms, but decided that association by simultaneity remained the only psychophysically explicable connection. To meet the question as to how motion in one centre joins itself to the already vanished excitation of a different centre, he assumed constant ocular or auricular sensations, or a constant visual image, as the common bond between successive disparate presentations. But this explanation, as well as the one which introduces connected complexes of reflex movements, only puts off the difficulty, and leaves still unexplained the fact that the order of reproduction is the same as that of perception. Exception must also be taken to Münsterberg's negative conclusion from the experiments undertaken to test the occurrence of successive association when constant impressions are artificially excluded. The number of orderly reproductions is too great to be ascribed to chance, and Münsterberg himself has carefully shut out the possibility of any constant cause other than pure successive association. A study of the countless forms of association leads to the conclusion that there is no essential difference between inner and outer association, but defeats the tendency to unify so far as to leave un-reduced at least two basal, though closely related, forms of association, simultaneity and immediate succession.

LOUISE HANNUM.

La beauté plastique. L. COUTURAT. Rev. Ph., XVIII, 1,
pp. 53-72.

In his recent article on "Organic Beauty" Naville holds that representations both of material phenomena and of psychic states

and events play an æsthetic role. This is not the case. Strictly speaking, neither material objects nor states of consciousness by themselves can possess beauty, which resides rather in the manifestation of states of consciousness by material phenomena. No sensation as such can be called beautiful, but merely agreeable or disagreeable. Even Naville's examples contain a formal element which overpasses pure sensation. Nor is there moral beauty, if we would preserve the sense of the word 'beauty.' Further, it would be better to distinguish by name literary, musical, and plastic beauty, and apply the term 'beauty' in its technical sense to plastic beauty alone. We must distinguish between the phenomena that Naville classes together as "expression." Natural bodily movements are "expressive" of mental states, language is "significant" of thought, and all the indirect manifestations and products of mental activity are "suggestive" of the latter. The beauty of an object for us does not consist in the sentiments which it suggests, nor in the ideas which it may signify, but in its expression properly speaking, in so far as this is pleasing to the spectator. Not all agreeable expression, however, is beautiful. Uncouth manifestations of joy, for instance, may be pleasing, because they appeal to our human sympathy, but they are clearly not beautiful. Beauty, then, is a kind of agreeable expression. This is the first and most important distinction to make. There are two kinds of expression, each of which may be agreeable or disagreeable: (1) the transitory expression of feeling by the motions of the body, and (2) the permanent expression of consciousness by the body itself. It is for the latter, when its contemplation procures a certain pleasure, that we reserve the name 'beauty,' though of course there is no hard and fast line between the transient and the permanent. It is such expression that we find in the greatest works of Greek sculpture.

E. A.

The Evolution of Consciousness. C. L. MORGAN. Natural Science, Nov. 1892, pp. 659-663.

We can express in two ways a fundamental fact of experience. We say (1) an object in consciousness exists; (2) there is a consciousness of the object. Physical science deals with the former, more objective side of the experience. ('Objective' has two senses. More narrowly, it applies to all that belongs to the "primitive perceptual object-in-consciousness"; this is its signification in physical science: in a wider sense, the word 'object' denotes what

is in the focus of the mind's eye.) Psychology deals with the consciousness-of-the-object. The two sides of experience are inseparably connected.

Metaphysics states, on the one hand, that the Object exists independently of consciousness; on the other, that mind-stuff has this independent existence. Such abstractions should not have it predicated of them that they are "real," but rather that they are "autic" (Stoney).

Science has only to deal with, and separately to deal with, the consciousness-of-the-object, and the object-in-consciousness. In this paper, we are not attempting to get behind phenomena. As a working hypothesis we assume that consciousness is associated in "me" and "my like" with certain complex modes of energy in "my brain or in some part of me." It does not here matter whether this leads to dualism or monism. Evolutionarily, neural modes of energy have been developed from infra-neural modes, and these from the simpler modes of energy of inorganic nature. So states of consciousness have been evolved from infra-conscious states, and these stretch back to the simple infra-consciousness of inorganic nature.

It seems that of the three hypotheses possible—special creation of consciousness, evolution of consciousness from energy, evolution of consciousness from infra-consciousness—we have to accept the third. The only logical alternative is special creation.

E. B. T.

La composition musicale et les lois generales de la psychologie.

F. PAULHAN. Rev. Ph., XVII, 12, pp. 590-602.

Music exemplifies two psychological laws: those of systematic association and systematic inhibition. Our music is characterized by tonality; the tonica predominates, the *morceau* begins and ends (as a rule) with its perfect chord. The aspect and significance of a succession of tones are entirely different, according to the mind's previous preparation for them; and the same holds of tones simultaneously given, whether the chords be complete or incomplete. Dissonance provokes desire for the perfect chord. The influence of tonality, again, can be exerted in the way that the natural significance of chords is inhibited.

One of the ends of melody and harmony is, then, to preserve tonality; hence most of their rules. If, on the other hand, a tone is to be changed by modulation, (1) equivocal combinations or suc-

cessions are employed to effect the transition to another tone : *cf.* association by partial identity. Here two things are necessary : the fading of the memory of the first tone ; the self-insistence of the second. (2) Where the two tones are widely distant from one another, intermediate chords are employed. The mental phenomena of modulation are the same as before. (Example from Lohengrin.) (3) Similar, again, is the mechanism of enharmonic modulation (Lohengrin).

An analogous theory could be applied to cadences (Lohengrin) and to dissonant chords. In both cases our musical sense follows the laws of systematic association and inhibition ; the hearing of certain chords leads irresistibly to the expectation of certain others, and dissonances must be resolved upon a consonant chord. The final question, the 'why' of harmony, still remains ; its physiological causes are not yet definitively known.

Music appears thus as living, organic ; "une sorte d'esprit idéal que nous substituons au nôtre." In the musical drama, music is concretised to express the facts of real life, these facts being in their turn idealized by it. The application is a legitimate one.

E. B. T.

ETHICAL.

Die sittliche Frage eine sociale Frage. F. STAUDINGER. Phil. Mon., XXIX, 1, pp. 30-53.

Philosophy, like all science, is not an end in itself, but a means to an end. Its immediate aim of widening and deepening knowledge must subordinate itself to the universal aim of the harmonious perfection of man. A philosophy which neglects this practical, ideal aim becomes a mere affair of the schools. At the present time the divergence between the scientific and popular thought seems to be giving place again more and more to an approximation. On the one hand, the consciousness of the people is freeing itself from the stupid, uncritical acceptance of the dogmatic philosophy of the church, while on the other hand scientific philosophy is basing itself on the natural sciences and becoming more and more practical. On the theoretical side it is, to be sure, the materialistic philosophy which exercises a great influence on our contemporaries among both the laboring classes and the so-called higher classes. Nor, indeed, should the philosopher regret this, however one-sided and inadequate he may regard materialism. For the materialistic mode of thought

offers a ground on which a complete scientific view of the world, when the conditions of social life permit, may take root far easier and more securely than on the ground of any dogma whatever. For dogma rests on authority and accordingly has nothing to do with reasons, while materialism has, at least, the good will to listen to reasons. On the practical side, too, a development is taking place under our eyes quite analogous to the growth of materialism on the theoretical side. The notion that the moral imperatives were given by authority from above is losing ground constantly. We are in the midst of a transition from the Christian idea that God has resolved to create for men a kingdom of peace and love in the hereafter, to the socialists' idea that men in their own strength may establish a kingdom of justice for all on human ground. Socialism says that the present social order is unjust, not founded on principles of reason, and that it is the laboring class which at no distant date is to raise humanity, materially, spiritually, and morally up to a new and more perfect state. Ethics has two parts: it must first determine whether the given social order is itself good, and then, whether the individual is good. The kind of economic order is of fundamental importance for the moral condition of individuals. The mass of men can become good only in an order which bears within itself the assurance of an education to the good. Here lies the ethical significance of socialism. The social order can be moral and morally binding only when it is itself instituted according to the principles of an order for all. Only on a moral order can human morality be built. The aim of the social movement is to establish such a system of legal and moral principles of society as to secure to all men more equal social conditions of existence, culture, and morality than is the case to-day. The first of all moral tasks is not to preach improvement to individuals, but to help create the conditions of a moral order, a ground in which the seeds of such preaching may take root. The social question is the fundamental question of morals. F. C. FRENCH.

Ethics as a Political Science. ARTHUR T. HADLEY. Yale Rev., I, 3, pp. 301-315.

The two great political theories, based respectively on absolute authority and absolute individual liberty, have been conciliated by the application of Darwinian methods. Liberty and law are held to be compatible, and to have the same source and justification in the necessity of preserving the social organism. In ethics there is a

parallel opposition between the necessity of authority and the right of private judgment. The application of the same methods brings about the solution, that authority and liberty are only justified so far as they preserve the race. Authority is necessary to prevent moral anarchy, liberty to prevent unlimited authority rendering progress impossible. Making survival a test of right substitutes a practical standard for a metaphysical one, and unites the logical vantage ground of authority with the practical vantage ground of liberty. Little use has been made of this test of survival, because ethics in our century has been separated from law and sociology. We can show how this separation arose by tracing the development of law. The justice of savage tribes is based on a body of tribal customs, — neither law nor morals in any sense of the words, — maintained by an organized terrorism, each member of the community being ready to punish transgression. First arose a set of officials to enforce certain customs, then a definite procedure, and finally a definite statement of the customs and rights themselves. Law thus developed as the political authorities came to be entrusted with enforcing certain parts of morals. The residuum in its turn developed and altered in character. The necessity for ethic legal force grew less and less, and when the sovereign could not compel obedience, stress began to be laid on religious and ethical sanction. The scope of human sentiment widened considerably when its precepts were enforced by conscience instead of physical compulsion. As moral authority develops, the part played by fear grows less, that by reason greater. The separation of moral from legal conceptions led to a confusion between the exponent and the source of law. Hence the notion that the court can say anything and it will be law; that conscience can say anything and it will be right. Neither court nor conscience can strike out a new line of decisions apart from the moral sense and traditions of the community. Behind the court, the legislature, the church and conscience, there is something larger and wider which develops and finds embodiment in national law and character.

DAVID IRONS.

METAPHYSICAL AND EPISTEMOLOGICAL.

Die moderne Energetik in ihrer Bedeutung für die Erkenntniskritik. K. LASSWITZ. Phil. Mon., XXIX, 1, pp. 1-30.

It is the aim of this essay to analyze the fundamental concepts of the modern theory of energy and to show their epistemological sig-

nificance as theory of matter. For the theory of energy the content of experience is given as a state which consists in a distribution of qualities in space and a change of the same in time. The general character of every content of experience always appears as a combination in which one can reflect upon either the moment of unity or the moment of multiplicity. As moment of unity there is found in every object the form of determination according to law, as moment of multiplicity the coördination and succession of space and time. Objects of nature are states of space and time determined according to law, and only of these does the theory of energy treat. The forms of determination according to law which as determining unities are constitutive of objects, are called categories. Two sorts of categories, quantity and quality, are discovered according as we distinguish the states of things with respect to multiplicity or with respect to the unities which condition through their combination the states themselves. By quantity and quality objects of nature, *i.e.*, distribution and change of states in space and time, are fully determinable. Each object is represented as a magnitude under the form of unity, while the plurality of unities of the same sort gives a higher unity so that a whole arises. The essence of the whole consists in the fact that it contains all the unities of its parts, no more and no less. Hence the three categories of quantity: Unity, Plurality, Totality. Every object in Physics may be represented as a numerical distribution of magnitudes in space and time. The concept of energy, however, involves beyond this the problem of the representation of qualities as magnitudes. The theory of energy rests on the possibility of representing change as magnitude. Corresponding to the quantitative categories of Unity, Plurality and Totality are the quantitative categories of Identity, Diversity and Variability which are involved in the concept of change.

While these categories of quantity and quality suffice to define objects of nature, they do not determine whether these objects really exist for experience. It is essential to actual objects of experience that they have independent persistence in space and time, that they exercise effect upon one another, and that in these effects our own bodies be included. The law conditioning these characteristics is the concept of relation. We must therefore expect to find in the concept of energy the categories of relation. The physical object is distinguished from the same object as merely thought by the possession of energy. The first characteristic property of energy is that amid all changes it persists. Hence the principle of the conservation

of energy which is seen to be nothing different from Kant's "principle of the persistence of substance." The concept of energy rests throughout on the category of Substantiality. Energy fulfils all the demands which the concept of substance in the philosophical sense involves. Substance in the philosophical sense is in modern physics not mass but energy. The theory of energy teaches that change takes place only when there is a difference of intensity of energy present, and that every form of energy strives to pass over from positions of greater intensity to positions of less intensity. This law of intensity is only the special form which the law of casuality takes on in the theory of energy. The categories of Substance and Cause do not suffice to determine the complex (Gefüge) of different forms of energy in the physical world. The real connection of things involves the further concept of System (Kant's community, reciprocity). Just as, in the categories of quantity, Unity and Plurality find their completion in Totality, and, in the qualitative categories, Ideality and Diversity come to a higher unity in Variability, so, in the categories of relation, System is the higher unity of reality in which Substantiality and Causality are contained as fundamentally constitutive. Thus the analysis of the modern concept of energy shows that the same categories are involved here that Kant derived from the forms of the judgment. The significance of the concept of energy for the theory of matter will be critically examined in a second paper.

F. C. FRENCH.

Das Ich und die Aussenwelt. Zweiter Artikel. Von OSWALD KÜLPE. Phil. Stud., VII, 3, pp. 311-341.

On the nearest plane, the opposition between ego and world, subject and object, 'within me' and 'without me' is visual—spatial, and as such not to be resolved. But the epistemological problem is concerned only with the fact that the same experience is at once referred to the ego and localized without the ego. This apparent contradiction disappears when an experience is referred to the subject in so far as it is conceived to be dependent on one's body, to the object so far as it is found to depend on other objects in space. As every object of perception is determined in these two ways, there arise two closed series of relations, whose complete separation still remains only an ideal. A further separation of ego and non-ego occurs with the recognition of the body as itself an object of presentation. The class of experiences which are never objectified in the sense

defined above, becomes the bearer of the ego-concept, and all further subjectifying arises in relation to this. The opposition between 'within me' and 'without me' has, then, a double significance, participation in a merely subjectified experience being opposed, on the one hand, to the visual-spatial field and, on the other, to dependence on the outer world. And these relations, like those first distinguished, involve no contradiction. The same world of facts belongs, then, alike to psychology and to natural science, the first dealing with experience in its relation to the body, the second with experience in its dependence on the space-world outside the body. But experience itself is neither physical nor psychical, neither objective nor subjective; for the qualities on which these distinctions rest are not immanent within it. The opposition of ego and non-ego is, as Fichte taught, practical rather than theoretical.

LOUISE HANNUM.

HISTORICAL.

Das natürliche System der Geisteswissenschaften im 17. Jahrhundert. III. W. DILTHEY. Ar. f. G. Ph., VI, 1, pp. 60-127.

Catholic theology based itself on tradition. In the 16th century the attempt was therefore made to discover the *true* doctrines of the church. This necessitated an examination of traditions, which in turn led to historical criticism. At the same time arose the science of hermeneutics, a discipline which formed the starting point of modern mental sciences. It is a fruit of Protestantism. Catholicism tried to weaken the foundation of the new religion by revealing the critical uncertainty of Scripture. On Protestantism, therefore, falls the task of interpretation. Flacius represents the new movement in this connection. The Bible is the norm of faith, he asserts. It has, however, been misunderstood, partly on account of our ignorance of languages, partly on account of the false methods pursued in studying it. As auxiliaries to the new science, Flacius uses rhetoric and the exegetical theories existing since the time of Origen. He offers certain *remedia* and *regulae cognoscendi sacras literas*. The Bible is a continuous whole. Every passage must be interpreted with reference to this unity. The tendency of a particular writing is examined, which procedure furnishes a clue to the understanding of its entire substance. From such a study it becomes apparent that the individual parts have a common pur-

pose. This theory forms the basis of our modern philologico-historical methods. Flacius's work manifests the influences of both Protestant and Humanistic thought. Richard Simon is the Catholic opponent of Flacius. The work of Franz rests on the same general presuppositions as that of Flacius, but differs from the latter in its methods. He gets at the meaning of a passage by connecting it with what immediately precedes and follows. The chief significance of hermeneutics lies in the fact that the fundamental methods of mental sciences are here for the first time examined.—Simultaneously with the preceding movement began rationalistic theology, which followed the path marked out by Erasmus. The latter affirmed the freedom and dignity of man, and distinguished the teaching of Christ from the rest of the Bible. This direction of thought pointed to a formal and moral criticism of dogmas. Schools representing the movement sprang up in Southern France and Italy, and formed the beginning of Socinianism. Protestant Christianity had to justify its claims before the Humanistic, historico-critical, formal and moral methods of the age. The truth of Scripture was based on the historico-critical certainty of the important events of the New Testament, of which the resurrection is the chief. Grotius is the best representative of this theology. Man strives after happiness, he says, which Christianity promises him. The spread of this religion and the resurrection are miracles which prove the truth of Christianity.—The theory of accommodation (the divine author of the Bible adapted himself to historical conditions), the first form of historical interpretation, meets us in this school. The criticism of dogmas by Arminians and Socinians shows that human reason has reached its majority. Laurentius Valla really gave Socinianism its first impetus. Man is here to act, he claims, the will forms his real essence on which reason depends. Valla influenced Erasmus. The Socinians attack as irrational and unjust the most important dogmas of the church,—original sin, eternal damnation, vicarious atonement. Servet antaggonized the notion of the trinity as a logical impossibility. Jean Bodin, however, united the transcendental theology with this moral rationalism in his *Heptaplomeres*. He preaches tolerance and expresses his dislike of theological controversies. All religions are regarded by him as akin to each other, they are the daughters of a common mother, natural religion, of which the consciousness of freedom, of immortality, and of retribution forms the content. Bodin despairs of finding the criterion of the true religion. A

criterion is impossible, our judgment must be suspended. But no decision is essential to our salvation.—The passage from such a conception of natural religion to philosophy is easy. The natural system was supported by theology. It rested on the doctrine of universal notions, innate ideas, which presuppositions made it possible to construct a rational theology, jurisprudence, and theory of the state. We must note the influence of Stoicism on this system. Roman conceptions are revived by Petrarca, Salutato, Aretinus, Aeneas Sylvius, Laurentius Valla, Agricola, and Erasmus. Zwingli's *De Providentia* betrays the influence of Stoicism. Dilthey examines the different chapters of this work, and compares them with the views of Plato, Cicero, Seneca, and Plinius. A sentence like the following expresses a Stoical thought: *Providentia est perpetuum et immutabile rerum universarum regium et administratio*. All things spring from one source and this source is God. From this notion of immanence or panentheism Zwingli deduces his determinism. He also sets up a religious universalism. God reveals himself in all religions and in all men. God himself is not subject to law; his nature and *ingenium* are to him what law is to us.

F. T.

NOTICES OF NEW BOOKS.

Le Problème de la Mort. Ses solutions imaginaires et la science positive.
Par L. BOURDEAU. Paris, Félix Alcan, 1893. — pp. 354.

The aim of the book is a rather complete discussion of the origin and the validity of the idea of immortality, together with the ethical implications of a negative conclusion. The author regards the notion of a future life as having developed *pari passu* with that of the soul as a separate, immaterial entity, and as resting logically on the supposed dual nature of man. The conceptions of the most civilized, as well as those of many savage and barbarous, peoples are exhibited in their growth and psychologically explained, while it is maintained that belief in personal immortality was never widespread and has rarely been held with intellectual seriousness by the great thinkers of the race. The arguments for survival after death are divided into those grounded on the alleged simplicity and incorporeity of the soul, and those drawn from the supposed necessity of moral sanctions. The basis of the first class, held to be insufficient even if granted, is criticised from the point of view of Monism, while the ethical arguments are shown to involve an unwarrantable presupposition, and to demand in the name of the moral ideal what is self-contradictory as well as contrary to experience. Viewed as a corollary of certain theistic and religious beliefs, the notion of immortality is classed among the sophistries which use an hypothesis, invoked to account for experience as it is, to overturn the known laws of nature and of human life. A future existence must be conceived, either as like this one, in which case it neither solves problems nor satisfies desires, or as so different in its conditions as to put to confusion both the reason and the moral sense. In a chapter called the Law of Mortality, the writer sums up the positive proofs for the passage of all finite existence into other forms, and then concludes with an exposition of the moral worth of the ideals which remain in growing force when the mind has yielded to the reasonableness and the desirability of personal extinction.

LOUISE HANNUM.

Institutes of Education. Comprising an Introduction to Rational Psychology. Designed (partly) as a Text-Book for Universities and Colleges. By S. S. LAURIE, M.A., LL.D., Professor of the Institutes and History of Education in the University of Edinburgh. New York and London, Macmillan & Co., 1892. — pp. ix, 272.

A theory of education includes the questions of end, of the educative process, of the materials of instruction, and of method. It must rest upon

a philosophy of man, which is nothing but persistent thought on the nature, capabilities, purpose, and destiny of man. To this extent the author can justly claim that the present work is "a practical application of my books on metaphysics and ethics" (vi). This is especially true of Parts I and II (pp. 1-178), though in the remainder of the book there are notes of a philosophical character, and the Appendix (pp. 251-272) is in substance a statement of the author's fundamental positions in psychology and metaphysics. Part II (pp. 53-178) is an acute analysis of the nature of mind. And the author holds "spontaneity" or "pure will" to be "the differentia or idea of man as distinguished from other animals" (p. 85). Though the chapter is much condensed, it is probably the clearest exposition of his Philosophy of Intelligence which this acute and profound thinker has yet given.

J. G. S.

Theorie des Gefühls zur Begründung der Aesthetik. Von Prof. Dr. MAX DIEZ, Docent der Philosophie an der techn. Hochschule in Stuttgart. Stuttgart, Friedrich Frohmann's Verlag, 1892. — pp. xii, 172.

The author believes that æsthetic enjoyment has a peculiar ideal significance. It is the most striking instance of the process which we see everywhere in the mental life, by which the mind rises superior to its content and attains the tranquil sense of its form, *i. e.*, of its freedom. As might be expected, the book is metaphysical rather than psychological. The principal divisions are as follows: (1) Introduction, (2) The Different Possible Points of Departure, (3) Criticism of the Same, (4) An Attempt to Formulate a Theory of Feeling for the Foundation of Æsthetics as a Philosophical Science. The amount of space devoted to these divisions respectively is not such as the title of the book would lead one to expect. To (1) is devoted 52 pp.; to (2), 5 pp.; to (3), 85 pp.; and to (4), which gives the book its title, only 27 pp. As the writer explains in his preface, the fact that this work is his *Habilitationsschrift* for the position of Docent of Philosophy, led him to make the second section of the introduction, which treats of the problem of philosophy, somewhat disproportionately long and thorough. In spite of its lack of proportion, which is really quite noticeable, the book is interesting and suggestive, but it shares to a considerable degree in the vagueness of statement which unhappily characterizes so many works on Æsthetics.

E. A.

Die Suggestionstherapie bei krankhaften Erscheinungen des Geschlechtesinnes. Von DR. A. F. VON SCHRENK-NOTZING. Stuttgart, F. Enke, 1892. — pp. xvii, 314.

A better title for the book would be "Pathologische und suggestiv-therapeutische Studien ueber die krankhaften Erscheinungen des Geschlechtesinnes" (p. vi). It is divided into three sections, which deal respectively

with sexual hyperaesthesia, sexual impotence (and anaesthesia), and sexual paraesthesia.

The first chapter is devoted to an exposition of onanism, and satyriasis and nymphomania. Most important in this section is the second chapter, which gives more than its title ("Bedeutung der Suggestionstherapie für die Behandlung der krankhaften Steigerung des Geschlechtssinnes") would indicate. The writer insists, rightly, on the necessity of individual treatment of sexual neuropaths; it is quite wrong to attempt to lay down rules in anything more than the barest outline. He takes up a sound position as regards prostitution. On the other hand, he tends to outrun his facts at times; *e.g.*, with reference to the effects of onanism. Chapter III is taken up with the casuistry of suggestive treatment.

The second section follows the plan of the first. Three chapters deal with the pathology of impotence, with the role of suggestive therapeutics in the treatment of functional sexual weakness, and with the casuistry of the subject.

The section on sexual paraesthesia contains chapters headed: the phenomena of sexual perversion, with reference to Krafft-Ebing's theory; the development of the contrary sexual sensation in antiquity; the aetiological importance of heredity and education; dia- and prognosis; psychic and suggestive treatment; casuistry of perversion. The author proposes the terms "active algolagnia" for Sadism, and "passive algolagnia" for Masochism. The current theory of the origin of the contrary sex-sensation (Moll) is rightly criticised. There are sound paragraphs on paedophilia among the Greeks. The writer is disposed to ascribe less to heredity than most others who have dealt with sexual perversion. The development of the sex-instinct is depicted in a manner parallel to Wundt's description of that of the nutritive impulse.

As for the main object of the book,—the bringing of proof, that suggestive treatment is successful, where ordinary curative courses are ineffectual,—one must say that though the author has in many respects a strong case, he has not made out all his theses. Much of the casuistry is of too recent a date to be convincing. As patients must be waited for, and those diseases which the physician's hypothesis requires are not always forthcoming, we find some repetition and some lacunae among the cases cited. On the whole, the writer's tone is moderate and his discussions sensible.

E. B. T.

The Sources and Development of Kant's Teleology. By JAMES HAYDEN TUFFTS. The University Press of Chicago, 1892. — pp. 48.

This is an inaugural dissertation which was presented to the University at Freiburg. Although the result does not contain much that is distinctively new, it is seldom that we find so excellent a piece of workmanship compressed into so short a compass. Dr. Tuffts has his problem

constantly clearly before him, and never suffers himself to be drawn away from it; his exposition is always clear, his statements are as a rule fully substantiated by quotations, and his inferences carefully made. He shows, moreover, an intimate acquaintance, not only with Kant's writings and the literature which has grown up around them, but also with the works of those modern philosophers who had previously discussed this problem.

Of the four chapters into which the work falls, the first deals with "Teleology in Modern Philosophy before Kant," the second with "Kant's Early Teleology" (up to 1762), the third traces the growth of the idea between 1763 and 1781, while the fourth and last is occupied with the further development of the problem after the publication of the First Kritik. In the first chapter, we find a brief but very clear indication of the attitude of Descartes, Gassendi, Boyle, Spinoza, Leibnitz, Newton, and other modern writers to this question of teleology. The statement contained in the first part of the following sentence, however, will I am sure be a surprise to readers: "Spinoza's fundamental position, in that it assigned intellect and will to the *natura naturata*, and excluded them wholly from the *natura naturans*, left no ground for applying any such terms as order, confusion, beauty, good or bad, to the world" (p. 5). Of the other chapters, the third is probably the least satisfactory. The survey of Kant's teleology "has shown that its problems were from the first regarded as of the highest importance and were among the first to receive critical treatment, that the development was due mainly to his critical consideration of the results of science, and later of the methods of science and our æsthetic judgments, and that its final stage was no less true than the former stages." (p. 47.)

J. E. C.

Practical Ethics by WILLIAM DEWITT HYDE, D.D., President of Bowdoin College. New York, Henry Holt & Co., 1892. — pp. xi, 208.

We have here a notable addition to the already numerous class of textbooks designed for the instruction of youth in morals. Our author's aim cannot be better described than in the words which he himself uses in the preface in stating the requisites of such a work:—

"The book which shall meet their want must have theory; yet the theory must not be made obtrusive, nor stated too abstractly. . . Such a book must be direct and practical. It must contain clear-cut presentation of duties to be done, virtues to be cultivated, temptations to be overcome, and vices to be shunned; yet this must be done, not by preaching and exhortation, but by showing the place these things occupy in a coherent system of reasoned knowledge. . . The only explicit suggestions of theory are in the introduction and in the last two chapters. Religion is presented as the consummation, rather than the foundation of ethics; and the brief sketch of religion in the concluding chapter is confined to those broad outlines which are accepted, with more or less explicitness, by Jew and Christian, Catholic and Protestant, Orthodox and Liberal."

This plan the author has succeeded in carrying out most admirably. His 'theory' is that of self-realization, but while this has served him as a principle of continuity and harmony throughout the book, it is kept so completely in the background as in no wise to embarrass a teacher who might wish to enforce the moral precepts more from the utilitarian, intuitional, or theological standpoint. Each of the twenty-two chapters take up some specific object to which we stand in moral relations (*e.g.* 'Food and Drink,' 'Dress,' 'Property,' 'Animals,' 'Fellow-men,' 'Family,' 'State,' &c.) and discusses it in every case under the categories of 'Duty,' 'Virtue,' 'Reward,' 'Temptation,' 'Vice of Defect,' 'Vice of Excess,' and 'Penalty.' The chief sanction presented is always that of the intrinsic evil effects and not that of extraneous penalties. President Hyde might have taken as the motto of his book the saying of Plato that the greatest penalty of evil-doing is "to grow into the likeness of bad men."

At first sight the book seems easily open to criticism as arbitrary in the choice of subjects and artificial in its treatment of them; but when we consider the age of the pupils for whom it is intended, the sound and bracing way in which each subject is handled, and its entire freedom from all taint of either ascetism or sentimentality, that first impression gives way to one of admiration for the judicious spirit which pervades the whole. In the chapter on 'Knowledge' there is an unfortunate confusion between truth as the aim of scientific investigation and the duty of speaking the truth. The style is clear and forcible. So excellent is the choice of language in general that the terms 'old codger' (p. 21) and 'dude' (p. 23) seem quite out of place. To those teachers in our High Schools and Academies who make morals a text-book study for their pupils this book can be most heartily recommended. Others, also, who prefer to use less formal methods in giving moral instruction to young under their charge will find the book stimulating and suggestive.

F. C. FRENCH.

Die Hauptgesetze des menschlichen Gefühlslebens. Eine experimentelle und analytische Untersuchung ueber die Natur und das Auftreten der Gefühlszustände nebst einem Beitrage zu deren Systematik: von ALFR. LEHMANN, Dr. Phil., Dozent der experimentellen Psychologie an der Universität Kopenhagen. Von der kgl. daenischen Akademie der Wissenschaften mit der goldenen Medaille preisgekröntes Werk. Unter Mitwirkung des Verfassers uebersetzt von F. BENDIXEN. Leipzig, O. R. Reisland, 1892.—pp. x, 356. Mit einem Farbendruck und fünf photolithographierten Tafeln.

This is an important work on a most difficult subject. The divisions are: a short general introduction; a consideration of the nature of the Feelings (their psychological and physiological conditions; theory of their origin); the special laws of Feeling; contributions to a systematic classification. Unfortunately, the translation is not all that could be wished, as a glance at the Preface will show. Review will follow.

E. B. T.

Die Seele des Weibes. Prof. F. M. WENDT. Korneuburg, J. Kühkopf, 1892.—p. vii, 128.

This is the second edition of a popular work, connecting more or less directly with the teaching of Herbart and Strümpell, which appeared in 1891. The chief difference to note in the new edition is the greater prominence given to certain views of the writer (*e.g.* in connection with will) which are at variance with those of his authorities. His psychologising is typically illustrated by the chapter on the feelings (*cf.*, esp., pp. 42, 43). There is a moving picture of the machinations of the "sittliche Ruine" to gain the affections of the innocent maiden. Four chapters of the eighteen are devoted to dreams. The book recalls those of Mantegazza: certain remarks in it are useful; but the whole is a curious mixture. E. B. T.

A Review of the Systems of Ethics Founded on the Theory of Evolution.

By C. W. WILLIAMS. New York and London, Macmillan & Co., 1893.—pp. xv, 581.

The first portion of this book is devoted to a mere presentation, in a condensed form, of the ethical doctrines of the most important English and German evolutionary writers. The authors whose views are thus summarized are, in order: Darwin, Wallace, Haeckel, Spencer, Fiske, Rolph, Barratt, Stephen, Carneri, Höffding, von Gizycki, Alexander and Ree. Part II, however, contains independent discussions of the chief ethical questions, and the author's criticism of theories from which he differs. Mr. Williams is firmly convinced that it will be of advantage to apply the ideas of evolution to ethical theory. "If it is true that we learn wisdom and morality from human history, . . . we should suppose that a still wider knowledge of our mental and physical evolution must be of greater worth to us in the same manner" (p. 270). This second portion of the volume contains, besides an introduction, the following nine chapters:—I. The Concepts of Evolution. II. Intelligence and "End." III. The Will. IV. The Mutual Relations of Thought, Feeling, and Will in Evolution. V. Egoism and Altruism in Evolution. VI. Conscience. VII. The Moral Progress of the Human Species as Shown by History. VIII. The Results of Ethical Inquiry on an Evolutional Basis. IX. The Ideal and the Way of its Attainment. (A review will follow.) J. E. C.

Die Aussichtslosigkeit des Moralismus. Von ADOLPH GERECKE. Zürich, J. Schabelitz, 1892.—p. xvi, 226.

The present volume is nothing if not radical. Without the preface, which is of the nature of a personal confession, one would hardly understand the author's motive in writing and publishing the book. He believes that morality in the ordinary sense is an illusion, an impossibility. He began as a "devout moralist," full of intolerance and obstinate convictions.

When he found himself unable to live what he conceived to be the moral life, he was at first inclined to regard himself as a moral monster; but a closer examination of the conduct of his fellow-men convinced him that they were substantially like himself. The book is the result,—written at intervals, and in the first instance less for publication than for the author's own satisfaction. The first part is critical; the second, constructive. The so-called virtues are regarded as obviously dependent upon the conditions of life. Now these latter vary not only in different countries, but even in the same community; hence there is no real standard. Although so radical, the book cannot be called in any large degree original or striking. It contains a number of careless allusions and statements of fact, which sometimes border upon absurdity as, *e.g.*, on p. 216, where the author casually remarks that all terrestrial objects are “essentially the results of atmospheric pressure.”

E. A.

The following books have also been received :—

Der Pessimismus im Lichte einer höheren Weltauffassung. Von DR. J. FRIEDLÄNDER und DR. M. BERENDT. Berlin, 1893, S. Gerstmann's Verlag. — pp. 111.

Der echte und der xenophontische Sokrates. Von KARL JOËL. Berlin, 1892, R. Gaertner. — pp. xii, 554.

Die Hauptprobleme der Philosophie in ihrer Entwicklung und theilweisen Lösung von Thales bis Robert Hamerling. Von VINCENT KNAUER. Wien und Leipzig, Wilhelm Bräuml, 1892. — pp. xviii, 408.

Apologetics; or Christianity Defensively Stated. By ALEXANDER BALMAIN BRUCE. New York, Charles Scribner's Sons, 1892. — pp. xvi, 552.

Das Ich als Grundlage unserer Weltanschauung. Von GUSTAV GERBER. Berlin, 1893, R. Gaertner. — pp. vii, 429.

Platon, sa philosophie, précédée d'un aperçu de sa vie et de ses écrits. Par CH. BÉNARD. Paris, 1892, Félix Alcan. — pp. viii, 543.

Guide to the Knowledge of God. A Study of the Chief Theodicies. By A. GRATRY, Professor of Moral Theology at The Sorbonne. Translated by Abby L. Alger, with an Introduction by Wm. R. Alger. Boston, 1892, Roberts Brothers. — pp. xi, 469.

La suggestion dans l'art. Par PAUL SOURIAN. Paris, 1893, Félix Alcan. — pp. 345.

Les transformations du droit. Par G. TARDE. Paris, 1893, Félix Alcan. — pp. 242.

Grundriss einer einheitlichen Trieblehre vom Standpunkte des Determinismus. Von J. DUBOC. Leipzig, 1892, Otto Wigand. — pp. xiv, 308.

Der Allgewaltige und Alleserschaffende Unsichtbare in der Natur. Von J. BÖHMER. Baumholder, 1892, Böhmer's Verlag. — pp. 212.

System der formalen und realen Logik. Von DR. GEORG ULRICH. Berlin, 1892, Ferd. Dümmler. — pp. 87.

Les éléments du beau. Par MAURICE GRIVEAU, Paris, 1892, Félix Alcan. — pp. xx, 582.

The Mission of the Church. By CHARLES GORE, M.A. New York, 1892, Charles Scribner's Sons. — pp. xii, 123.

Der Materialismus, eine Verirrung des menschlichen Geistes widerlegt durch eine zeitgemässe Weltanschauung. Von DR. EUGEN DREHER. Berlin, 1892, S. Gerstmann. — pp. vii, 83.

Über sittliche Dispositionen. Von DR. ANTON OELZELT-NEWIN. Graz, 1892, Leuschner & Lubensky. — pp. 92.

La philosophie de Hobbes. Par GEORGES LYON. Paris, 1893. Félix Alcan. — pp. 220.

Der Gegenstand der Erkenntniss. Ein Beitrag zum Problem der philosophischen Transcendenz. Von DR. H. RICKERT. Freiburg i. B., 1892, J. C. B. Mohr. — pp. vii, 91.

History of the Reformation. By PHILIP SCHAFF (Vol. II). New York, 1892, Charles Scribner's Sons. — pp. xvii, 890.

Geschichtsphilosophische Gedanken. Ein Leitfadens durch die Widersprüche des Lebens. Von CARL JENTSCH. Leipzig, 1892, Fr. Wilh. Grunow. — pp. viii, 467.

Die Grundbegriffe der Gegenwart. Historisch und kritisch entwickelt. Von Professor RUD. EUCKEN, 2. Aufl., Leipzig, 1892. Veit & Co. — pp. vii, 318.

Principles of Education. By MALCOLM MACVICAR, Ph.D., LL.D., Boston and London, 1892, Ginn & Co. — pp. 178.

NOTES.

To the Editor of the Philosophical Review:—

DEAR SIR, — The news of George Croom Robertson's death reaches me in this distant place ; and, not knowing what obituary or other notices of my friend may have appeared or be in process of appearing, I feel impelled to send you two lines to express my sense of the worth of the life which is gone. *Edel sei der Mensch, hilfreich und gut*, says the poet ; and Croom Robertson might have been the model for the description. Whom did he not help whom he could help, — even when most needing help himself? I, for one, can never forget what I owe to his encouragement and indefatigable kindness many years ago, in an otherwise dark London winter. For ten years he fought a losing battle against an intensely painful disease, yet never put on a plaintive tone, nor spoke tragically (however he may have felt) about the ruin of his professional career. With his convictions, his scholarship, and his energy, he would surely have influenced his generation in other ways than by editing *Mind*, had strength been left him. As it was, he clung to that drudgery almost to the end ; and those fourteen admirably edited volumes are now, inadequately enough, almost his only monument. The perfume which his manliness leaves is, however, his truer monument. He was *magnanimous* ; and his life forces on one the trust that “defeats” of which such good spirits as his can be elements are not in their ultimate significance as evil as to our phenomenal vision they seem to be.

WILLIAM JAMES.

PALLANZA, ITALY, October 1, 1892.

THE AMERICAN PSYCHOLOGICAL ASSOCIATION.

THE second meeting of the American Psychological Association was held at Philadelphia, on the invitation of the University of Pennsylvania, Dec. 27 and 28, 1892. The intended three sessions were increased to four, in view of the number of contributions sent in. At the first, four papers were read: *Errors of Observation in Physics and Psychology*, by Prof. J. McK. Cattell; *Certain Phenomena of Rotation*, by Dr. H. Nichols; *Tactile Estimates of Thickness*, by Prof. E. Pace; and *Some Experiments upon the Aesthetics of Visual Form*, by Prof. L. Witmer. Prof. Fullerton, who was associated with Prof. Cattell in the investigation of the Perception of Small Differences, to which the latter's communication had reference, spoke at some length upon its results. Prof. Witmer's remarks, which were continued at the opening of the second session, called forth a discussion. The remaining papers read on this day were: *Experimental Psychology at the World's Fair*, by Prof. J. Jastrow; *History and Prospects of Experimental Psychology in America*, by Pres. G. S. Hall.

On the morning of the 28th, the order was: *Note upon the Controversy Regarding the Relation of the Intensity of the Stimulus to the Reaction-time*, by Prof. W. M. Bryan; *Minor Studies at the Psychological Laboratory of Clark University*, by Dr. E. C. Sanford; *Experimental Psychology at Cambridge*, by Prof. Münsterberg; and *Preliminary Notes upon Psychological Tests in the Schools of Springfield, Mass.*, by Prof. W. M. Bryan. Dr. Münsterberg's views of the aims and methods of the new Psychology were criticised by Prof. Cattell.

At the last sitting, there were presented: *Experiments upon Pain*, by Dr. H. Nichols; *Demonstration of Apparatus, etc.*, by Dr. E. C. Sanford; *Psychology and Anthropology*, by Prof. Chamberlain; *On Causation*, by Dr. Aikens; *A new Instrument for the Control of Chronometrical Experiments, and Investigations of the Reaction-times of Various Classes of Persons*, by Prof. L. Witmer.

The meetings were presided over by Pres. G. S. Hall. If this fact ensured their success from the point of view of scientific work, the generous hospitality of city and university did no less on the social side. This year the association will come together in New York, under the auspices of the Columbia University, with Prof. Ladd as chairman.

E. B. TITCHENER.

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THE
PHILOSOPHICAL REVIEW.

BIBLIOGRAPHY OF WRITINGS BY AND ON KANT
WHICH HAVE APPEARED IN GERMANY UP TO
THE END OF 1887.

PREFACE.

THE arrangement of the works is chronological in both parts of the Bibliography. The conclusion will consist of an *alphabetical* list of persons and a *systematic* index. The latter will give, *first*, a much more careful division of material than would have been possible in a systematic arrangement of the whole Bibliography. *Secondly*, the systematic survey given by the index will be more exact than it would have been in the other case, because the works about Kant can be assigned not only to the department in which their chief content places them, but also to heads suitable to the particular discussions which they contain. *Thirdly*, a chronologically arranged bibliography will be more easily carried on, and, *fourthly*, will form a much better preliminary to an exhaustive presentation of the history of the Kantian Philosophy than could one systematically arranged. In the first part (works by Kant) the various issues of the several writings are not chronologically arranged, but are all enumerated under the first original edition; first the editions which appeared during Kant's life-time (or soon after his death, when issued by the first publisher), then—in brackets—their order in the complete editions and collections (whose designation is to be found in the list of abbreviations at the end of the Preface), and finally the separate editions.

In the second part (works on Kant) I have first arranged the writings of some authors chronologically or systematically, and

secondly ascribed them to *one* year, especially when it appeared more convenient to characterize several works in common than to consider the content and worth of each separately. Under the first classification they are numbered continuously, while afterwards, when they are mentioned according to the year of publication, only the name of the author is given and a further reference is made to the former numerals. In order to make such a reference intelligible, information is given with the first number as to how far it extends, *e.g.*, "241-291: Reinhold," whereupon "241) Reinhold, C. L.: Letters, etc." begins the series as R.'s earliest work. In the case of such works, mentioned under another year than that of their appearance, the order of bibliographical data is as follows: Size of volume; place of publication; year; publisher; number of pages (Arabic numerals indicate the pages of the text, Latin numerals those of the preface, which could not always be ascertained). In the case of works cited according to the year of their publication, the date is always omitted from 1784 on. Instead of this, it is placed first on a separate line and under it the writings of that year are chronologically arranged. Anonymous writings are cited by the first substantive of the title as catch-word, the place of the latter being then indicated by a dash, *e.g.*, B: No. 310) "On the Axioms, by . . . rn" is cited thus: "Axioms, On the —, by . . . rn." Exception is made, when several works of *one* author, belonging to different years, are mentioned in *one* place. Then, in the case of anonymous writings, the name of the author precedes, enclosed in brackets, the title following with its original wording.

My remarks on the content and worth of the works will naturally vary in length. The content of minor writings, themselves valueless and insignificant, I have often given more in detail than would appear necessary, in order—at least in many cases—to make a future reading of them unnecessary. While in the case of whole systems (*e.g.*, Moral Philosophy, Logic) I have most often indicated only briefly the writer's point of view. Had I attempted to do such systems even partial justice, at least three times as much space would have

been required, and the Bibliography would have grown into a complete history of the Kantian Philosophy.

My original intention of reading through everything myself has been given up in the case of works earlier than the middle of this century, on account both of lack of time, and of the impossibility of obtaining writings, some of which have become very rare. I have then been forced to confine myself in many cases to book-reviews (usually several). But all judgments on important publications rest on my own reading.

I have included the reviews of Kant's works, so far as they have come within reach, because they are valuable supplements to the history of Kantian Philosophy, and in part not without worth in themselves. They are arranged according to the periodical in which they appeared. Following "Das Allgemeine Repertorium der Litteratur" (1785-1800) I have placed after reviews an * when the book is commended, a † when it is condemned, an *† when it is more praised than censured, a †* when it is more censured than praised; if there is no sign, the book is regarded as mediocre or no definite judgment is passed on it. At the end of the Bibliography, preceding the indexes, I shall publish corrections and additions, and shall be very grateful to all readers for any suggestions and assistance through the medium of the PHILOSOPHICAL REVIEW; completeness in a Kant Bibliography can be attained only through united effort.

LIST OF ABBREVIATIONS EMPLOYED.

- I. D.* = Inaugural Dissertation.
A. D. B., 50, I, 17 = Allgemeine deutsche Bibliothek. Vol. 50, Part 1, p. 17.
A. G., II, 30 = Archiv für Geschichte der Philosophie, 1884. Vol. II, p. 30.
A. L. Z., 1791, III, 345 or 1791. *I. B.* 3 = Allgemeine Literatur-Zeitung. Jena, 1791. Vol. III, p. 345 or 1791. Intelligenzblatt, p. 3.
A. M., II, = Altpreuussische Monatsschrift, 1864. Vol. 2, et seq.
A. R. = Kant: Metaphysische Anfangsgründe der Rechtslehre (No. 90).
A. T. = Kant: Metaphysische Anfangsgründe der Tugendlehre (No. 90).
Athr. = Kant: Anthropologie in pragmatischer Hinsicht (No. 98).
B. M., 1789, 14, S. 49 = Berlinische Monatsschrift, 1789. Vol. 14, p. 49.
Eck., 1794, III, 3, S. 7 = Ik. Gr. Rdf. Eckermanns Theologische Beyträge, 1794. Vol. III, Part 3, p. 7.
Elz., 1791, I, 1 = Erlanger Literaturzeitung, 1791. Vol. 1, p. 1.
Erf. 1791, S. 1 = Erfurter gelehrte Zeitung, 1791, p. 1.
Ex. Ph., 17, 3 = Zeitschrift für exacte Philosophie. Vol. 17, p. 3.

- Fr.* = Kant: Zum ewigen Frieden (No. 84).
- G. g. A.* 1785, I, 1 = Göttinger Anzeigen von gelehrten Sachen. 1785. Vol. I, p. 1.
- Gr.* = Kant: Grundlegung zur Metaphysik der Sitten (No. 58).
- Grfw.*, 1785, S. 1 = Neueste kritische Nachrichten, ed. by J. G. Pt. Möller. Greifswald. 1785, p. 1.
- Gth.* 1785, I, 1 = Gothaische gelehrte Zeitungen. 1785. Vol. I, p. 1.
- Ha* = Kants sämtliche Werke, ed. by Hartenstein, 1838-9.
- Hb* = The same, in chronological order; ed. by Hartenstein, 1867-8.
- J. z. A.*, 1799, I, 1 = Journal zur Aufklärung über die Rechte und Pflichten der Menschen und Bürger von K. C. E. Schmidt, K. Grolmann und F. W. D. Snell. 1799. Vol. I, p. 1.
- J. A.*, 1795, 30 = Annalen der Philosophie und des philosophischen Geistes; ed. by L. H. Jakob. 1795, p. 30.
- J. ph. A.*, 1795, 3 = Philosophischer Anzeiger zu dem vorigen Werk. 1795, p. 3.
- K.*, *K'r.*, *K's.*, *K'sch* = Kant, Kantianer, Kants, Kantisch.
- K. A. M.*, 1791, I, 1, S. 7. Allgemeines Magazin für kritische und populäre Philosophie; ed. by J. W. A. Kosmann. 1791. Vol. I, Part I, p. 7.
- K. G. Z.* = Königsbergische gelehrte und politische Zeitungen.
- Ki* = Kants sämtliche Werke; ed. by I. H. v. Kirchmann.
- K. ph. B.*, 6 = Philosophische Bibliothek, oder Sammlung der Hauptwerke der Philosophie alter und neuer Zeit (Philosophical Library, or Collection of the Chief Works of Philosophy of later and earlier Times); with the coöperation of well known scholars; edited, translated, explained, and furnished with biographical sketches by I. H. v. Kirchmann. Part 6.
- Kr. J. Ph.*, I = Schellings und Hegels kritisches Journal der Philosophie. (1801-3.) Vol. I.
- L.*, 1785, I, 1 = Neue Leipziger gelehrte Zeitungen. 1785. First Quarter, p. 1.
- L. J.*, 1800, I, 1 = Leipziger Jahrbuch der neuesten Litteratur. 1800. Vol. I, p. 1.
- M. A.* = Kant: Metaphysische Anfangsgründe der Naturwissenschaft. (No. 64.)
- Mrg.* = Jakobs Prüfung der Mendelssohnschen Morgenstunden nebst einer Abhandlung von Imm. Kant. (No. 63.)
- Mtr.*, I, S. 3 = Materialien zur Geschichte der kritischen Philosophie in 3 Sammlungen. Erste Sammlung, p. 3.
- N.*, 1791, S. 1 = Nürnberger gelehrte Zeitungen. 1791, p. 1.
- No. 12 = No. 12 of this Bibliography.
- N. A. D. B.*, 83, I, 3 = Neue allgemeine deutsche Bibliothek. Vol. 83, Part I, p. 3.
- N. D. M.*, 1789, I, S. 31 = Neues deutsches Museum. Vol. I, p. 31.
- N. ph. Mgr.*, 1790, II, 1, S. 33 = Neues philosophisches Magazin, Erläuterungen und Anwendungen des Kantischen Systems bestimmt; ed. by I. H. Abicht and F. G. Born. 1790. Vol. II, Part I, p. 33.
- N. Pr. Pr. Bl.* = Neue preussische Provinzial-Blätter. Königsberg. 1846 et sqq.
- N. Th. A.* = Neue theologische Annalen.
- N. Th. J.*, I, 1, 3 = Neues theologisches Journal. Vol. I, Part 1, p. 3.
- Nth. Ph. J.*, I = F. Im. Niethammers philosophisches Journal (1795-1800; vol. 5-10, ed. in conjunction with J. Gli. Fichte), Vol. I.
- N. T. M.* = Der neue Teutsche Merkur.
- Obd.*, 1788, I, S. 1 = Oberdeutsche allgemeine Literaturzeitung. 1788. Vol. I, p. 1.

Ph. A., 1794, II, 3, S. 30 = Philosophisches Archiv, ed. by J. A. Eberhard. 1794. Vol. II, Part 3, p. 30.

Ph. B., I, 3 = Philosophische Bibliothek von Feder und Meiners. Vol. I, p. 3.

Ph. J., 1793, II, 3, S. 17 = Philosophisches Journal für Moralität, Religion und Menschenwohl; ed. by C. Chr. E. Schmid and (both the first volumes) Fr. W. D. Snell. 1793. Vol. II, Part 3, p. 17.

Ph. Mg., 1792, IV, 10 = Philosophisches Magazin; ed. by J. A. Eberhard. 1792. Vol. IV, p. 10.

Ph. Mh., 1890, XXVI, 3 = Philosophische Monatshefte. 1890. Vol. XXVI, p. 3.

Pr. J. = Preussische Jahrbücher.

Pr. I. = Kant: Prolegomena zu einer jeden künftigen Metaphysik, etc. No. 49.

Pr. V. = Kant: Kritik der praktischen Vernunft (No. 67).

R. = Kants sämtliche Werke; ed. by Rosenkranz und Schubert.

Rel. = Kant: Religion innerhalb der Grenzen der blossen Vernunft. (No. 79.)

R. V., a oder b oder c = Kant: Kritik der reinen Vernunft. First or second or third edition.

Str. = Kant: Der Streit der Fakultäten. (No. 96 a.)

T., 1785, S. 1 = Tübinger gelehrte Anzeigen. 1785. p. 1.

T. M. = Der Teutsche Merkur.

Th. A., II = Annalen der neuesten theologischen Litteratur und Kirchengeschichte. Vol. II.

U. = Kant: Kritik der Urtheilskraft. (No. 71.)

V. A. = Vaterländisches Archiv für Wissenschaft, Kunst, Industrie und Agriculture oder Preussische Provincial-Blätter. Königsberg.

V. w. Ph., 1878, II, S. 18 = Vierteljahrsschrift für wissenschaftliche Philosophie. 1878. II., p. 18.

W., 1791, I, 1 = Würzburger gelehrte Zeitungen. 1791. Vol. I, p. 1.

Z. f. Ph. (*N. F.*, 1878, 72, S. 3.) = Zeitschrift für Philosophie und speculative Theologie, von 1847 an; Zeitschrift für Philosophie und philosophische Kritik. (Neue Folge.) 1878. Vol. 72, p. 3.

PART I: WRITINGS OF KANT, NOS. 1-159.

A. Complete Editions, Nos. 1-4.

1) *Kant's Werke*; carefully revised complete edition, in 10 vols.; ed. by Hartenstein. 8vo. Leipzig: Modes and Baumann. Vols. 1-8, 1838; vols. 9-10, 1839.—Vol. I: Writings on Philosophy in general and on Logic; with a preface by G. Hartenstein. xxxiv, 487 pp. (containing nos. 32, 34, 35, 39, 51, 62, 83, 86-87, 96a, 104).—Vol. II: Kant's Critique of Pure Reason. 698 pp.—Vol. III: Minor metaphysical writings. xvi, 499 pp. (containing nos. 22, 40, 41, 42, 49, 70, 88, 110).—Vol. IV: Principles of a Metaphysic of Morals; Critique of practical Reason; together with the Treatise on the Philosophy of History. xvi, 358 pp. (containing nos. 50, 52-4, 58-9, 67).—Vol. V: Metaphysic of Morals, in two parts; Doctrine of Rights; Doctrine of Virtue; together with the

short treatises on Morals and Politics. xvi, 484 pp. (containing nos. 48, 56, 61, 78, 84, 90, 92, 97).—Vol. VI: Writings on the Philosophy of Religion. xvi, 408 pp. (containing nos. 30, 33, 63, 73, 79, 81).—Vol. VII: Critique of Judgment; Observations on the Feeling of the Beautiful and the Sublime: 439 pp.—Vol. VIII: Writings on Natural Science, 1st division; with three plates. xxiv, 568 pp. (containing nos. 17–18, 20–21, 23, 29, 64).—Vol. IX: Writings on Natural Science, 2d division; Physical Geography. xviii, 466 pp. (containing nos. 106, 19, 25–28, 55, 80, 109).—Vol. X: Writings on Anthropology and Pedagogics. Also a collection of letters and public announcements, with a chronological list of Kant's complete works and a portrait engraving. xxx, 610 pp. (containing nos. 31, 36–7, 44, 57, 66, 69, 89, 98, 75, 77, 91, 93, 101, 108, 14a [II, IV, V], 47, 129a, 111, 126, 118, 112, 127, 119, 121, 117, 129).

2) *Kant: Sämmtliche Werke*; ed. by Karl Rosenkranz and Friedr. Wilh. Schubert. 8vo. Leipzig: Voss. Vols. 1–4, 7–10, 1838; vols. 5, 6, 1839; vol. 12, 1840; vol. 11, 1842.—Part I: Minor Logico-Metaphysical Writings; ed. by Karl Rosenkranz. xlii, 661 pp. (containing nos. 22, 30, 32–35, 39, 42, 47, 62, 63, 70, 110, 83, 86–88).—Part II: Critique of Pure Reason; ed. by Rosenkranz. xviii, 814 pp.—Part III: Prolegomena to any Future Metaphysic; Logic; ed. by Rosenkranz. xi, 344 pp.—Part IV: Critique of Judgment; Observations on the Feeling of the Beautiful and the Sublime; ed. by Rosenkranz. xiii, 472 pp.—Part V: Writings on the Philosophy of Nature; ed. by Schubert and Rosenkranz. xvi, 437 pp. (containing nos. 17, 21, 23, 29, 41, 64).—Part VI: Writings on Physical Geography; ed. by Schubert. xi, 808 pp. (containing nos. 18–20, 25–28, 44, 55, 57, 66, 80, 109).—Part VII, division 1: Minor Practical and Anthropological Writings; ed. by Schubert. xviii, 430 pp. (containing nos. 14a II, 31, 37, 40, 48, 50–52, 54, 56, 59, 61, 69, 73, 78, 81, 84, 89, 92).—Part VII, division 2: Anthropology in its Pragmatic Relations; ed. by Schubert. 279 pp.—Part VIII: Principles of a Metaphysic of Ethics; Critique of Practical Reason; ed. by Rosenkranz. vii, 319 pp.—Part IX: Metaphysics of Ethics, in two parts; Pedagogics; ed. by Schubert. xvi, 440 pp.—Part X: Religion within the Limits of mere Reason; Controversy between the Faculties; ed. by Rosenkranz. xi, 388 pp.—Part XI, division 1: Kant's Letters, Announcements, and Fragments from Posthumous Writings; ed. by Schubert. 280 pp. (containing nos. 130 [II–VII], 129a, 111, 112, 117–121, 126–129, 36, 14a [IV, VI], 77, 93, 91, 106; also pp. 217–220, concerning Kant's Posthumous Writings).—Division 2: Kant's Biography; compiled by Schubert, mainly from manuscripts; with portrait, fac-simile, and medallions (on two pages). viii, 220 pp. (containing no. 130 [VIII and part of III] and no. 131).—Part XII: History of the Kantian Philosophy by Rosenkranz. 498 pp.

3) *Kant: Sämmtliche Werke*; ed. in chronological order by G. Hartenstein. 8 vols., 8vo. Leipzig: Voss. Vols. 1–5, 1867; vols. 6–8, 1868.—Vol. I, with three lithographed plates: xix, 487 pp. (containing nos. 17–

27).—Vol. II : xvi, 464 pp. (containing nos. 28–45).—Vol. III : xv, 619 pp. (containing no. 46).—Vol. IV : xii, 507 pp. (containing nos. 48–59, 61–64, 66, 130 [IV]).—Vol. V : xvi, 500 pp. (containing nos. 67, 71).—Vol. VI : xii, 498 pp. (containing nos. 70, 69, 73, 78, 81, 83, 84, 86–89).—Vol. VII : xvi, 663 pp. (containing nos. 90, 92, 96–98, 102–103, 130 [V]).—Vol. VIII : xviii, 821 pp. (containing nos. 104, 109, 130 (I), 108, 110, 75, 77, 91, 93, 101, 106, 130 [II, III, VI–VIII], 47, 111, 129a, 131, 126, 118, 76, 112, 127, 121, 14a [VI], 119–120a, 117, 129).

4) *Kant: Sämmtliche Werke*; ed. by J. H. von Kirchmann. 8 vols. in 57 parts. 8vo. Berlin : Heimann. From 1874 on, Leipzig : Koshny. From 1880 on, Heidelberg : Weiss. (Only a new titular-edition of the corresponding parts of K. ph. B., the several reprints of which I am about to mention.) Vol. I. Parts 1–6 : Critique of Pure Reason. xii, 720 pp. (= K. ph. B. Parts 2, 4, 6, 9–11. Vol. 2, 1868 ; 2nd edition, 1871 ; 3rd edition, 1873 ; 4th edition, 1877 ; 5th edition, 1881 ; 6th edition, 1884). Vol. II.—Parts 7–8 : Critique of Practical Reason. viii, 196 pp. (= K. ph. B. H. 15, 16. Vol. 7, 1869 ; 2nd edition, 1871). Parts 9–12 : Critique of Judgment. xii, 382 pp. (= K. ph. B. H. 17, 20, 21, 24. Vol. 9, 1869 ; 2nd edition, 1873). Vol. III.—Parts 13–14 : Prolegomena. vi, 152 pp. (= K. ph. B. H. 53, 54. Vol. 22, 1869 ; 2nd edition, 1876). Part 15 : Ground Principles. vi, 95 pp. (= K. ph. B. H. 61. Vol. 28, 1870). Parts 16–19 : Metaphysic of Morals. x, 351 pp. (= K. ph. B. H. 66, 67, 73, 81. Vol. 29, 1870).—Vol. IV. Parts 20, 21 : Logic, VI, 164 pp. (= K. ph. B. H. 55, 56. Vol. 23, 1869 ; 2nd edition, 1876). Parts 22–24 : Anthropology. xiii, 266 pp. (= K. ph. B. H. 28, 30, 31. Vol. 14, 1869 ; 2nd edition, 1873 ; 3rd edition, 1880). Parts 25–27 : Religion. viii, 242 pp. (= K. ph. B. H. 35, 37, 39. Vol. 17. 1869 ; 2nd edition, 1875) (containing also no. 14a IV).—Vol. V. Parts 28–35 : Minor Works on Logic and Metaphysics. Divisions 1–4 : viii, 176 ; 156 ; vi, 176 ; 179 pp. (= K. ph. B. H. 92–5, 100–3. Vol. 33, 1870) (containing nos. 32, 34, 35, 39, 51, 62, 83.—86, 87, 96a, 130 [V].—22, 40–2.—70, 88, 110).—Vol. VI. Parts 36–40 : Minor Writings on Ethics and the Philosophy of Religion. Divisions 1–2 : viii, 224 pp. ; vi, 178 pp. (= K. ph. B. H. 105, 106, 110. 1870. H. 138, 139. 1871. Vol. 37) (containing nos. 50, 52–4, 59, 48, 56, 61, 78, 84, 92, 97.—30, 33, 63, 73, 81).—Vol. VII : Minor Writings on the Philosophy of Nature. Division 1. Parts 41–44. viii, 306 pp. (= K. ph. B. H. 143–6. 1872). Division 2. Parts 45–50, 461 pp., with wood engravings (= K. ph. B. H. 164–9. 1873, vol. 49) (containing nos. 20, 64.—17–19, 21, 23–9, 43, 55, 80).—Vol. VIII. Parts 51–7 : Miscellaneous Essays and Correspondence. viii, 562 pp. (= K. ph. B. H. 170–6, vol. 57, 1873) (containing nos. 36–8, 44–5, 57, 66, 69, 89, 102–3, 108, 14a [II, VI] 130 [II–IV, VI–VIII], 75, 77, 91, 93, 101, 106, 31, 47, 111, 129a, 131, 126, 118, 76, 112, 127, 121, 14a VI, 119–120a, 117, 129).—Vol. IX. Supplement. Division 1 : Physical Geography. ix, 322 pp. (= K. ph. B. H. 249–53. 1877). Division 2 : Kant's Four Latin Dissertations. vi, 122 pp. (= K. B. H., 261, 262. 1878, vol. 76).

The edition of Ros. and Schub. is more complete than Hartenstein's first, and is especially valuable on account of K.'s Biography and the history of the Kantian Philosophy. But Hartenstein's first edition is noticeably more exact and trustworthy. This is still more true of the second, in which the later additions of Ros. and Schub. are reprinted. The chronological arrangement of K.'s works is decidedly the best, as may be seen, *e.g.*, from the fact the systematic arrangement disconnects writings of the sixties which from the standpoint of historical development are intimately related. As regards the accuracy of the text, correction of typographical errors in the original editions, and enumeration and comparison of legitimate and illegitimate re-issues, the second edition of Hartenstein is by far the best, but is still far from perfect. Greater bibliographical accuracy is found in the new separate editions of the chief works. Kirchmann's edition should be avoided. It is a faulty reprint of Hartenstein's second; there is even left standing a reference by Hartenstein to his first edition (Ki. viii, pp. 290-1, note) in which this is mentioned as "my earlier complete edition." In the translation of the Latin Dissertations the grossest errors occur; *e.g.*, (No. 42 § 14, 5) *connatus* is translated as *Versuch*, etc.

B. *Incomplete Collections of Kant's Works*, Nos. 5-16.

5) *Kant: Kleine Schriften* (without Kant's knowledge). 8vo. Neuwied 1793. Haupt. ii, 239 pp. (containing nos. 50, 51, 55, 59, 62, 66, 73).

6) *Kant: Zerstreute Aufsätze*. 8vo. Frankfurt and Leipzig. 1793. ii, 220 pp. (without Kant's knowledge; containing nos. 50-1, 55-7, 59, 63, 62, 66, 73).

7) *Kant: Zwo Abhandlungen über moralische und politische Gegenstände*. 8vo. Frankfurt and Leipzig. 1795. 158 pp. Second edition, Königsberg and Leipzig. 1796. 158 pp. (containing nos. 78, 81).

8) *Kant: Neue kleine Schriften*; reprinted from the Berliner Monatschrift. Place of publication lacking. 1795. 110 pp. Sometimes "Frankfurt and Leipzig" seems to be given as the place of publication (without K.'s knowledge; containing nos. 81, 80, 78).

9) *Kant: Neue kleine Schriften*. 8vo. Lingen. 1795. Jülicher (without K.'s knowledge), Heinsius and Kayser mention, of the year 1795, only this collection, without bracketing place or publisher — no. 8 not at all; probably nos. 8 and 9 are identical, the real publisher of no. 8 being Jülicher in Lingen.

10) *Kant: Frühere noch nicht gesammelte kleine Schriften.* Large 8vo. Lintz. 1795. At the cost of the editor (Really Zeitz, Webel). viii, 350 pp. (containing nos. 17, 25, 42, 44, 57). A second part came out in 1797 with Frankfurt and Leipzig as place of publication (Zeitz, Webel). Large 8vo. xviii, 130 pp. (In this only no. 20 is reprinted.)

11) *Kant: Opera ad philosophiam criticam;* trans. into Latin by Fr. Gl. Born. Large 8vo. Leipzig: Schwickert. — Vol. I (587 pp. 1796) containing no. 46. — Vol. II (555 pp. 1797), nos. 49, 64, 58, 79. — Vol. III (xxviii, 516 pp. 1797), nos. 67, 71. — Vol. IV (vi. 820 pp. 1798), nos. 78, 84, 40, 34, 59, 51, 59, 66, 57, 73, 62, 38, 81, 86, 88, 33, 90.

12) *Kant: Sämmtliche kleine Schriften;* arranged in chronological order. 4 vols., 8vo. Königsberg and Leipzig. (Really Voigt in Jena.) Counterfeit edition. — Vol. I (494 pp. 1797) contains nos. 17, 20. — Vol. II (526 pp. 1797), nos. 25, 34, 32, 33, 38, 40, 35. — Vol. III (612 pp. 1797), nos. 42 (translated), 44, 47, 50, 51, 55, 56, 52, 54, 61, 59, 62, 63, 66, 73, 78, 81, 57, 89, 86, 87. The page-numbers, 317–337, are passed over. — Vol. IV, first division (152 pp. 1798), nos. 88, 92, 93, 96, 80, 97; also pp. 99–138, a treatise falsely ascribed to Kant; *Betrachtungen über das Fundament der Kräfte und die Methoden, welche die Vernunft anwenden kann darüber zu urtheilen.* Also ascribed to Kant by Borowski (no. 14a, pp. 73–4) and J. G. Wald (second contribution to the Biography of Professor Kant, no. 28, 1804); v. Elditten being the real author (cf. K.'s letter to Schütz, Sept. 13, 1785).

13) *Kant: Vermischte Schriften;* authentic and complete edition (ed., with introduction and notes, by J. H. Tieftrunk). 3 vols., Large 8vo. Halle. 1799. Renger. — Vol. I (cxxxviii, 676 pp., containing nos. 17, 20, 25, 32, 34; pp. 577–584, Tieftrunk's preface to no. 32. For the introduction, cf. Part II of this Bibliography under Tieftrunk, 1799). — Vol. II (iv, 700 pp., containing nos. 35, 33, 40, 38, 42 [Latin and German], 47, 57, 50, 51; pp. 230–46, Tieftrunk's appendix to no. 33). — Vol. III. (vi. 594 pp., containing nos. 55, 56, 59, 62, 63, 66, 73, 78, 81, 80, 89, 86–8, 93, 97, 96; pp. 577–94, Schlettwein's challenge, cf. no. 93).

13a) *Kant: Vermischte Schriften;* authentic and complete edition. 4th vol. With the subordinate title, *Sammlung einiger bisher unbekannt gebliebener kleiner Schriften von I. Kant.* Second much enlarged edition; Large 8vo. Königsberg. 1807. Nicolovius. VIII, 424 pp. (the second edition of no. 14 up to p. 80 agreeing with this) (containing no. 29, 31, 37, 39, 41, 18, 19, 22, 26, 23, 27, 28, 30, 14a II, 48, 69, 52, 54, 61, 111).

14) *Kant: Sammlung einiger bisher unbekannt gebliebener kleiner Schriften;* ed. by Fr. Theod. Rink. Large 8vo. Königsberg. 1800. Nicolovius. 80 pp. (containing nos. 29, 31, 37, 39, 41).

14a) *Kant: Beilagen zu der "Darstellung des Lebens und Charakters I. Kants.* By L. E. Borowski." 8vo. Königsberg. 1804. Nicolovius. I) pp. 206–210, reprint from no. 36.

II) pp. 211–25. Letter concerning Swedenborg to Fr. v. Knoblich,

Aug. 10, 1763, with the title: "Wie dachte Kant über Swedenborg im Jahre 1758?" (Date incorrect.) Reprinted: Ha. X, pp. 453-459; R. vii, 1, pp. 3-11; Hb. ii, pp. 27-34; Ki. viii, pp. 277-284. No. 13a, pp. 362-70. Also by J. F. J. Tafel in 1) the Preface to Swedenborg's Revelations, vol. i, 1823, pp. ccxxxiii, et sq., 2) Collection of original Records concerning the Life and Character of E. Swedenborg. 1839. pp. 106-12 (incomplete), 3) "The Supplement to Kant's Biography," etc. 1845. pp. 14-20., 4) "Swedenborg and his Opponents," etc. Part V. 1856. pp. 108-114. Also by Fr. Zöllner in *Wissenschaftliche Abhandlungen*, vol. i, 1878, pp. 194-198. These facts are stated by K. Kehrbach, pp. xxvi-vii of his edition of *Träume eines Geistessehers*, etc. Small 8vo. Leipzig. 1880. Ph. Reclam, jun., where the letter also is found pp. 69-75. The third supplement III (in Bor's Biography, pp. 226-232, is a reprint from no. 69. IV), pp. 233-7. (*Kant's Censurleiden*.) Kant's contribution to Bor's Biography (Ha. x, pp. 544-6; R. xi, 1, pp. 199-201; Hb. vi, pp. 103-4 [Note]; Ki. iv, Parts 25-7, pp. 8-10 [Note]; Kehrbach's edition of no. 79, pp. iv to vi). v, pp. 238-50. Reprint from no. 48. Also vi, pp. 5-7. Reprinted letter of Kant to Borowski (Ha. x, pp. 539-40; R. xi, 1, pp. 130-1; Hb. viii, pp. 785-7. Ki. viii, pp. 513-4.

15) *Kant: Vorzügliche kleine Schriften und Aufsätze*; ed. with notes by Fr. Chr. Starke (pseudonym für I. A. Bergk); nebst Betrachtungen über die Erde und den Menschen aus ungedruckten Vorlesungen von Imm. Kant. In 2 vols. Large 8vo. Leipzig. 1833. Expedition des europäischen Aufsehers. 1st vol. xii, 307 pp. 2nd vol. viii, 326 pp. New titular edition entitled: *Kant: Vorzügliche kleine Schriften und Aufsätze, nebst Betrachtungen über die Erde und den Menschen*, with notes; ed. by F. Ch. Starke. Large 8vo. Quedlinburg. 1838. Ernst. 1st part, xii, 302 pp. 2nd part, viii, 335 pp. (Only the preface to the 1st part is new, and in place of the last section of this is a notice of Ernst's book-business. The literary advertisements of the editor's publications, which in 1833 were appended to the 1st vol. (pp. 303-7), stand in 1838 at the close of the 2nd Part, pp. 327-335.) The 1st vol. (i) contains nos. 50, 59, 44, 57, 51, 62, 66, 78, 80, 73, 88, 80, 55, 96, 69. The conclusion, pp. 290-302 (Kant's Thoughts on the State and its Government, on Revolutions and Reforms, etc.), is an extract from the 1st section of the 2nd part (which deals with political rights) of the Doctrine of Rights. The 2nd vol. (ii) contains nos. 92, 56, 86, 38, 40, 96a (in part), 89, 37; pp. 262-282 contain "Observations on the Earth and Man," from the unprinted lecture-notes on Physical Geography, dating 1791, as worthless and trivial as Bergk's notes on the works of Kant, and offering nothing not already known. pp. 284-302: Short sketch of the Critical Philosophy. (Reprint of the greater part of the "Architektonik" in R. V. and several passages from Hippel's "Lebensläufen nach aufsteigender Linie." 1779.) pp. 302-8. Kant's Thoughts on the Church (extract from the 3rd part of no. 79). pp. 308-321: How and in What Order should Kant's Critical Writings be studied? Together with

a historico-literary account (the last quite inadequate). pp. 322-6: How should Philosophy be taught? (Reprint of the general part of no. 39.)

16) *Kantiana: Beiträge zu Immanuel Kant's Leben und Schriften*; ed. by R. Reicke, in N. Pr. Pr. Bl., 3rd series, vol. V., 1860, pp. 97-176. Also separate. Large 8vo. Königsberg. 1860. Theile (Beyer). vii, 83 pp. (containing in the 2nd appendix nos. 43, 45, 102, 103; for the other contents, cf. the 2nd part of this Bibliography under Reicke, 1860).

C. *Kant's Detached Writings.* Nos. 17-159.

17) *Kant: Gedanken von der wahren Schätzung der lebendigen Kräfte und Beurtheilung der Beweise, deren sich Leibnitz und andere Mechaniker in dieser Streitsache bedient haben, nebst einigen vorhergehenden Betrachtungen, welche die Kraft der Körper überhaupt betreffen.* 8vo. Königsberg. 1747 (Title-page incorrectly gives 1746; cf. Hartenstein's edition). Dorn. xxiv, 240 pp. Ha. viii, pp. 1-206; R. v, pp. 1-231; Hb. i, pp. 1-177; Ki. vii, 2, pp. 1-231; no. 10, pp. 129-350; no. 12, i, pp. 1-294; no. 13, i, pp. 1-282.

18) *Kant: Untersuchung der Frage: ob die Erde in ihrer Umdrehung um die Achse, wodurch sie die Abwechselung des Tages und der Nacht hervorbringt, einige Veränderung seit den ersten Zeiten ihres Ursprungs erlitten habe; welches die Ursache davon sei, und woraus man sich ihrer versichern könne?* (Granted the prize for the current year by the Royal Academy of Science in Berlin); Die Königsberger wöchentlichen Frag- und Anzeigungs-Nachrichten. 1754. nos. 23-24. (Ha. viii, pp. 207-216; R. vi, pp. 1-12; Hb. i, pp. 179-186; Ki. vii, 2, pp. 257-265; no. 13a, pp. 81-90.)

19) *Kant: Die Frage, ob die Erde veralte, physikalisch erwogen.* Same place. 1754. Parts 32-7 (Ha. ix, pp. 1-24; R. vi, pp. 13-37; Hb. i, pp. 187-206; Ki. vii, 2, pp. 233-56; no. 13a, pp. 91-120).

20) *Kant: Allgemeine Naturgeschichte und Theorie des Himmels, oder Versuch von der Verfassung und dem mechanischen Ursprunge des ganzen Weltgebäudes, nach Newton'schen Grundsätzen abgehandelt.* Anon. 8vo. Königsberg und Leipzig. 1755. Petersen, liv, vi, ii, 200 pp. An extract from this, extending to the fifth main division of the 2nd part, was handed over by Kant himself to Gensichen and incorporated in Herschel, Will; Ueber den Bau des Himmels; translated from the English by G. M. Sommer, together with an authentic extract from Kant's General Natural History and Theory of the Heavens by Joh. Friedr. Gensichen. 8vo. Königsberg. 1791. Nicolovius. pp. 161-204.

A counterfeit edition of the work itself appeared with the additional designation: New edition with the author's recent Emendations. 8vo. Frankfurt and Leipzig. 1797. xviii, 130 pp. (identical with no. 10, II). A new issue of the counterfeit edition came out. Large 8vo. Zeitz. 1798. Webel. xxii, 143 pp. (corrected by the editor, M. F. Frege

after Gensichen's extract, and furnished with notes [confirmations by recent astronomers] and a short sketch of the Newtonian system [pp. 1-6]. The description, "with . . . recent ementations" is not justified). There appeared still another issue of the counterfeit edition, described as the 4th, counting the original edition. Large 8vo. Zeitz. 1808. xxii, 149 pp. Webel. The same reprinted in Ha. viii, pp. 217-381; R. vi, pp. 39-226; Hb. i, pp. 207-345; Ki. vii, 1, pp. 1-169; no. 12, vol. I, xxxviii pp, and pp. 295-494; no. 13, i, pp. 283-520. The Natural History and 2 supplements were edited separately by K. Kehrbach. Small 8vo. Leipzig. 1884. Ph. Reclam, jun. xxi, 191 pp. Universal-Library, no. 1954. 955. (Supplement 1: pp. 171-188 = the 7th discussion of the 2nd division of the "only possible Ground of Proof" (no. 33). Supplement 2: pp. 188-191: Gensichen's preface and appendix to his extract. Trustworthy edition, even if, according to the editor's own statement, it makes no claim to philological exactitude. The paging of the original edition is given as well as that of Ha., R., Hb., Ki. The same edited by H. Ebert. 8vo. Leipzig. 1890. Engelmann. 101 pp. in Oswald's *Klassiker der exakten Wissenschaften*, no. 12.

21) *Kant: Meditationum quarundam de igne succinta delineatio.* (Doctor-dissertation.) 1755. First published from the Proceedings of the Faculty by Schubert, and at the same time by Hartenstein from a copy. (Ha. viii, pp. 383-404; R. v, pp. 233-254; Hb. i, pp. 347-363; Ki. ix, 2, pp. 1-22; translated in Ki. vii, 2, pp. 267-294.)

22) *Kant: Principiorum primorum cognitionis metaphysicæ nova delucidatio* (Kant's Habilitations-Schrift). Quarto. Königsberg. 1755. Hartung. ii, 38 pp. (Ha. iii, pp. 1-44; R. i, pp. 1-44; Hb. i, pp. 365-400; Ki. ix, 2, pp. 43-84; translated in Ki. v, 3, pp. 1-51; no. 13a, pp. 121-172; translated, pp. 173-248.)

23) *Kant: Metaphysicæ cum geometria junctæ usus in philosophia naturali, cujus specimen I. continet monodoiologiam physicam.* Quarto. Königsberg. 1756. Hartung. 16, pp. (Ha. viii, pp. 405-424; R. v, pp. 255-274; Hb. i, pp. 457-472; Ki. ix, 2, pp. 23-41; translated in Ki. vii, 2, pp. 295-318; no. 13a, pp. 261-284; translated, pp. 285-316.)

24) *Kant: Von den Ursachen der Erderschütterungen bei Gelegenheit des Unglücks, welches die westlichen Länder von Europa gegen das Ende des vorigen Jahres (1755) betroffen hat*, in den Königsberger Frag- und Anzeigungs-Nachrichten. 1756. Parts 4-5 (Hb. i, pp. 401-411; Ki. vii, 2, pp. 319-331).

25) *Kant: Geschichte und Naturbeschreibung der merkwürdigsten Vorfälle des Erdbebens, welches an dem Ende des 1755ten Jahres einen grossen Theil der Erde erschütteret hat.* 4, Königsberg (February) 1756. Hartung. 40 pp. (Ha. ix, pp. 25-64; R. vi, pp. 227-68; Hb. i, 413-445; Ki. vii, 2, pp. 333-372; no. 10, pp. 45-86; no. 12, ii, pp. 1-52; no. 13, i, pp. 521-574.)

26) *Kant: Fortgesetzte Betrachtung der seit einiger Zeit wahrgenom-*

menen Erderschütterungen; in den Königsberger Frag- und Anzeigungs-Nachrichten. 1756. No. 15 and 16 (Ha. ix, pp. 65-76; R. vi, pp. 269-80; Hb. i, pp. 447-456; Ki. vii, 2, pp. 373-383; no. 13a, pp. 249-260.)

27) *Kant: Neue Anmerkungen zur Erläuterung der Theorie der Winde, wodurch er zugleich zu seinen Vorlesungen einladet.* 4, Königsberg (April). 1756. Driest. 12 pp. (Ha. ix, pp. 77-92; R. vi, pp. 281-98; Hb. i, pp. 473-487; Ki. vii, 2, pp. 385-401; no. 13a, pp. 317-336; also in no. 105, iv, pp. 37 et sqq. From this a special reprint, large 8vo, Hamburg, 1805, Vollner).

28) *Kant: Entwurf und Ankündigung eines Collegii der physischen Geographie nebst dem Anhang einer kurzen Betrachtung über die Frage: ob die Westwinde in unsern Gegenden darum feucht sind, weil sie über ein grosses Meer streichen.* Quarto. Königsberg. Date lacking. (1757, cf. A.M. 1890, p. 230.) Driest. 8 pp. (Ha. ix, pp. 93-106; R. vi, pp. 299-312; Hb. ii, pp. 1-11; Ki. vii, 2, pp. 403-415; no. 13a, pp. 336-350.)

29) *Kant: Neuer Lehrbegriff der Bewegung und Ruhe und der damit verknüpften Folgerungen in den ersten Gründen der Naturwissenschaft, wodurch zugleich seine Vorlesungen in diesem halben Jahre angekündigt werden.* 4, Königsberg (April) 1758. Driest. 8 pp. (Ha. viii, pp. 425-437; R. v, pp. 275-289; Hb. ii, pp. 13-25; Ki. vii, 2, pp. 417-432; no. 13a, pp. 1-23; no. 14, pp. 1-23).

30) *Kant: Versuch einiger Betrachtung über den Optimismus, wodurch er zugleich seine Vorlesungen auf das bevorstehende halbe Jahr ankündigt.* 4, Königsberg (October), 1759. Driest. 8 pp. (Ha. vi, pp. 1-10; R. i, pp. 45-54; Hb. ii, pp. 35-43; Ki. vi, 2, pp. 1-10; no. 13a, pp. 351-361).

31) *Kant: Gedanken bei dem frühzeitigen Ableben des Herrn Johann Friedrich von Funk, in einem Sendschreiben an seine Mutter.* 4, Königsberg. 1760. Driest. 8 pp. (Ha. x, pp. 460-7; R. vii, 1, pp. 125-134; Hb. ii, pp. 45-52; Ki. viii, pp. 349-357; no. 13a, pp. 24-33; no. 14, pp. 24-33).

31b) *Kant: Brief über Swedenborg an Frl. von Knobloch.* 1763. cf. No. 14a, ii.

32) *Kant: Die falsche Spitzfindigkeit der vier syllogistischen Figuren erwiesen.* 8vo. Königsberg. 1762. Kanter. 35 pp. Counterfeit edition. 8vo. Frankfurt and Leipzig. 1797. (Zeit, Webel) (Ha. i, pp. 1-18; R. i, pp. 55-74; Hb. ii, pp. 53-68; Ki. v, 1, pp. 1-18; no. 12, ii, pp. 113-144; no. 13, i, pp. 575-610 [pp. 577-84, Tieftrunk's introduction]).

33) *Kant: Der einzig mögliche Beweisgrund zu einer Demonstration des Daseins Gottes.* 8vo. Königsberg. 1763 (more precisely, Michaelmas, 1762). Kanter. xiv, 205 pp. New titular edition, 1770, according to Schwab, Ph. A. 1792, i, 2, p. 4. According to Hb. ii, p. v, the preface is lacking, and the title reads: "The only possible Proof of the Existence of God."—The same: New unchanged re-issue with the original title, but false ascription of the original edition to the year 1783. Königsberg, 1794. Hartung.—Counterfeit edition; Leipzig. 1794. (Ha. vi, pp. 11-128; R.

i. pp. 161-286; Hb. ii, pp. 107-205; Ki. vi, 2, pp. 11-128; no. 11, iv, pp. 428-538; no. 12, ii, pp. 145-288; no. 13, ii, pp. 55-229 [pp. 230-46, Tieftrunks' note in criticism of the "Ground of Proof"']. The 7th discussion of the 2d division is reprinted (pp. 171-188) as supplement I in Kehr-
bach's edition of the *Allgemeine Naturgeschichte*, etc. (cf. no. 20).

34) *Kant: Versuch, den Begriff der negativen Grössen in die Weltweisheit einzuführen.* 8vo. Königsberg. 1763. Kanter, viii, 72 pp. New edition, 1794. Counterfeit edition; Gratz, 1797 (Ha. i, pp. 19-62; R. i, pp. 113-160; Hb. ii, pp. 69-106; Ki. v, 1, pp. 19-61; no. 11, iv, pp. 161-199; no. 12, ii, pp. 53-112; no. 13, i, pp. 611-676).

35) *Kant: Untersuchung über die Deutlichkeit der Grundsätze der natürlichen Theologie und der Moral.* In answer to the question proposed by the Royal Academy of Science of Berlin in the year 1763. (First part completed 1763); published by the Academy together with Mendelssohn's, under the title: *Abhandlung über die Evidenz in metaphysischen Wissenschaften*, which obtained the prize offered by the Royal Academy of Berlin in the year 1763; together with a Treatise on the same subject, which the Academy regarded as the second best. 4. Berlin. 1764. Haude and Spener, pp. 67-99 (Ha. i, pp. 63-96; R. i, pp. 75-111; Hb. ii, pp. 281-309; Ki. v, 1, pp. 63-95; no. 12, ii, pp. 479-526; no. 13, ii, pp. 1-54).

36) *Kant: Ueber den Abenteurer Jan Pawlikowicz Zdomożyrskich Komarnicki; in the Königsberger (Kanter's) gelehrten und politischen Zeitungen; 1764.* No. 3 (Ha. x, pp. 1-4; R. xi, 1, pp. 197-9; Hb. ii, pp. 207-209; Ki. viii, pp. 63-5; no. 14a, pp. 206-210).

37) *Kant: Versuch über die Krankheiten des Kopfes.* The same. 1764. nos. 4-8 (Ha. x, pp. 5-22; R. vii, 1, pp. 13-30; Hb. ii, pp. 211-225; Ki. viii, pp. 67-83; no. 13a, pp. 34-55; no. 14, pp. 34-55; no. 15, ii, pp. 206-222).

38) *Kant: Beobachtungen über das Gefühl des Schönen und Erhabenen.* 8vo. Königsberg. 1764. Kanter, 110 pp. 2d edition, same place, 1766. 3d edition, Riga. 1771. Hartknoch (both with a number of serious typographical errors.) Latest edition (counterfeit) Grätz. 1797. (Ha. vii, pp. 377-439; R. iv, pp. 397-472; Hb. ii, pp. 227-280; Ki. viii, p. 1-62; no. 11, iv, pp. 325-380; no. 12, ii, pp. 298-378; no. 13, ii, pp. 347-434; no. 15, ii, pp. 42-107.)

39) *Kant: Nachricht von der Einrichtung seiner Vorlesungen im Winterhalbjahr.* 1765-66. 8vo. Königsberg. 1765. Kanter. 16 p. (Ha. i, pp. 97-108; R. i, pp. 287-299; Hb. ii, pp. 311-321; Ki. v, 1, pp. 97-108; no. 13a, pp. 56-70; no. 14, pp. 56-70; Reprint of the general part in no. 15, ii, pp. 322-6.)

40) *Kant: Träume eines Geistesehers, erläutert durch Träume der Metaphysik.* Small 8vo. Königsberg. 1766. Kanter, Riga and Mietau. 1766. Hartknoch. 128 pp. (Anon.) (Two reprints were made by Hartknoch in 1766. cf. Kehr-
bach's edition, pp. ix, et sq.) The same, ed. by K. Kehr-
bach. Text of the edition (A) 1766 with consideration of editions

B and C. Small 8vo. Leipzig. Ph. Reclam, jun. xxxiii, 75 pp. Universal library, no. 1320. (Very trustworthy edition; the paging of the original edition as well as that of the editions of Ha., R., Hb., Ki., is reprinted, pp. 69-75, are appended to no. 111.) (Ha. iii, pp. 45-112; R. vii, 1, pp. 31-107; Hb. ii, pp. 323-381; Ki. v, 3, pp. 53-119; no. 11, iv, pp. 97-160; no. 12, ii, pp. 379-478; no. 13, ii, pp. 247-346; no. 15, ii, pp. 107-178).

41) *Kant: Von dem ersten Grunde des Unterschiedes der Gegenden im Raume*, in the Wöchentlichen Königsberger Frage- und Anzeigungs-Nachrichten. 1768. nos. 6-8. (Ha. iii, pp. 113-122; R. v, pp. 291-301; Hb. ii, pp. 383-91; Ki. v, 3, pp. 121-130; no. 13a, pp. 71-80; no. 14, pp. 71-80.)

42) *Kant: De mundi sensibilis atque intelligibilis forma et principiis dissertatio pro loco professionis logicae et metaphysicae ordinariae rite sibivindicando*. 4, Königsberg. 1770. Hartung. 38 pp. (Ha. iii, pp. 123-162; R. i, pp. 301-341; Hb. ii, pp. 393-425; Ki. ix, 2, pp. 85-122; translated, K. v, 3, pp. 131-176; no. 10, pp. 1-44; no. 12, iii, pp. 1-63 [translated]; no. 13, ii, pp. 435-88 [from pp. 489-566 translated]).

43) *Recension der Beckmannschen Uebersetzung der Schrift von Moscati über den Unterschied der Structur der Menschen und Thiere*, from the Königsberger gelehrten und politischen Zeitungen. 1771. no. 67 (Hb. ii, pp. 427-431; Ki. vii, 2, pp. 433-7; no. 16, pp. 66-68 [N. Pr. Pr. Bl. pp. 158-161]).

44) *Kant: Von den verschiedenen Racen der Menschen, zur Ankündigung der Vorlesungen der physischen Geographie im Sommerhalbjahr*, 1775. 4, Königsberg. Hartung. 12 pp. Altered and extended in Engel's *Philosoph für die Welt*. Leipzig. 1777. Part II, pp. 125-164 (not in the later editions). (Ha. x, pp. 23-44; R. vi, pp. 313-332; Hb. ii, pp. 433-51; Ki. viii, pp. 85-107; no. 10, pp. 87-106; no. 12, iii, pp. 65-90; no. 15, i, pp. 38-56.)

45) *Kant: 3 Aufsätze über das Dessauer (Basedowsche) Philanthropin*, from the Königsberger gel. und polit. Zeitungen. 1776. no. 26, pp. 101 et sqq.; 1777, no. 25, pp. 97-8; and 1778, supplement to no. 68. Only in the case of the middle essay is Kant's authorship certain; this is reprinted in "Pedagogical Conversations, by Basedon and Campe." Dessau. 1777. no. 3, pp. 296-301, and in K. v. Raumer: *History of Pedagogics*, second part, 5th edition, 1879, pp. 234-6. (Hb. ii, pp. 453-464; Ki. viii, pp. 109-122; no. 16, pp. 71-81 [N. Pr. Pr. Bl. pp. 163-173]).

46) *Kant: Kritik der reinen Vernunft*. Large 8vo. Riga. 1871. Hartknoch. xxii, 856 pp. Second edition, corrected here and there, same place, 1787, xlv, 884 pp. The 3d to the 7th editions (1790, 1795, 1799, 1818, 1828, from 1799 on, Leipzig: Hartknoch) are reprinted word for word, though incorrectly, from the 2d edition. From the 4th edition on, a table of contents of eight pages is added to the preface; from the 5th edition on, a notice of corrections, two pages in length, stands at the end of the work. In order to make room for this, the last four pages are so closely printed that

the text numbers only 822 pp. — Counterfeit, 3d edition. Frankfurt, 1791; Frankfurt and Leipzig, 1794. The greater part of the *Architektonik* was reprinted in no. 15, ii, pp. 284–294. The later editions are based either on the 1st or the 2d edition, variations from the others being printed in and beneath the text, and in special supplements. The following take the text of the 1st edition: R. ii, and Kehrbach; Kant's *Critique of Pure Reason*, text of the edition of 1781 with addition of collected variations from the edition of 1787; ed. by Karl Kehrbach. Small 8vo. Leipzig. Ph. Reclam, jun. xxiv, 703 pp. (Universal Library, no. 851–5); 2d corrected edition, 1878, xxvi, 703 pp. (A very exact edition, but badly got up; the paging is given of R. Va. and R. Vb., as well as of the Rosenkranz, Hartenstein, and Kirchmann editions.) The following adopt the text of the 2d ed.: Ha. ii, Hb. iii, Ki. i; also the following separate editions: *G. Hartenstein*. Large 8vo. Leipzig, 1853. Voss. xviii, 668 pp. *The same*: same place, 1868, xv, 619 pp. (identical with Hb. iii.) The most reliable of the older editions. *B. Erdmann*. Large 8vo. Same place. 1878. xvi, 676 pp. 2d stereotype edition. Same place. 1880. xvi, 676 pp. 3d abundantly corrected, stereotyped edition. Large 8vo. Hamburg and Leipzig. 1884. Voss. xxii, 680 pp. pp. 649–680: editor's appendix in revision of the text. Precise, but hypercritical; style, orthography, and punctuation modernized; the paging of R. Vb. (as well as that of R. Va. in its variations from R. Vb.) is given on the margin. *E. Adickes*, Ed. with introduction and notes. 8vo. Berlin. 1889. Mayer and Müller. xxvii, 723 pp. (The paging of R. Vb. and of R. Va. in its variations from R. Vb. is indicated on the margin.)

The marginal notes give continuously the content of the separate sections, arranging, referring backwards or forwards, and indicating the repetitions which with Kant so often add to the difficulty of comprehension. A part of the notes under the text presents the content and worth of the more important sections, their place in and relation to the whole Kantian system, taking account of whether they owe their origin and nature to really philosophic or merely systematic and architectonic considerations; in the latter case they are naturally without scientific value. With this formal, there occurs in particular cases also material criticism. Another part of the notes carries out in detail the proof that the work of several years is pieced together in the *Critique*,—the sole hypothesis which renders the many contradictions and repetitions of the text psychologically explicable. An attempt is made to separate the products of different times, which are put together sometimes skillfully, sometimes unsatisfactorily, and, whenever it is possible, to

arrange them chronologically. From this it is seen that the problem proposed in the introduction is connected with the analytico-synthetical formula only as an after-thought, and that the transcendental deduction in A is put together from six separate deductions belonging to different times.

Meyers Volksbücher. Nos. 761-9. (Merely a reprint of the second edition and therefore worthless for scientific purposes.) 8vo. Leipzig. Wien. 1890. Bibliographical Institute. 643 pp. With an introduction to Kant's life and work by R. Zimmermann (taking up the first 14 pages).

47) *Kant's: Briefwechsel mit Lambert, in J. H. Lambert's deutscher gelehrter Briefwechsel*; ed. by J. Bernoulli. Berlin. 1781. Vol. I. pp. 333-68. (Ha. x, pp. 468-492. R. i, 343-370. Hb. viii, pp. 649-670. Ki. viii, pp. 358-382. No. 12, iii, pp. 91-128. No. 13, ii, pp. 607-632.)

47a) *Kant: Nachricht an Aerzte*, in the supplement to No. 31 of the *Königsberger gelehrten und politischen Zeitungen* of April 18, 1782, (concerning the influenza epidemic in the year 1782). Reprinted in Reicke, Rud. I. *Kant's Nachricht an Aerzte über die Frühlings-Epidemie des Jahres 1782.* (N. Pr. Pr. Bl. 3rd series, 1860, vol. vi, pp. 184-190, more exactly, pp. 186-7.)

48) *Kant: Ueber Schulz' Versuch einer Anleitung zur Sittenlehre für alle Menschen ohne Unterschied der Religion.* Part I, in the "Raisonnirendes Bücherverzeichniss." Königsberg. 1783. Hartung. No. 7, pp. 93-104. (Ha. v, pp. 337-344. R. vii, 1, pp. 135-142. Hb. iv, pp. 133-9. Ki. vi, 1, pp. 68-76. No. 13a, pp. 371-8. No. 14a, pp. 238-250.)

49) *Kant: Prolegomena zu einer jeden künftigen Metaphysik die als Wissenschaft wird auftreten können.* Large 8vo. Riga. 1783. Hartknoch. 222 pp. Counterfeits: Frankfurt and Leipzig. 1791, 1794. Also very probably two arranged by Hartknoch himself, with the date 1783. (Cf. Erdmann's edition, p. vii.) Ha. iii, pp. 163-316. R. iii, pp. 1-166. Hb. iv, pp. 1-131. Ki. iii. no. 11, ii, pp. 1-138. The same, ed. and historically explained by B. Erdmann. Large 8vo. Leipzig. 1878. Voss. x, cxiv, 155 pp. pp. 145-152, appendix for revision of text; pp. 153-5, comparative table of the various editions.

Like all Erdmann's editions, very exact, but with the form of the text quite modernized; original paging given. The passages which Erdmann suspects of having been interpolated in the original explanatory extract from the R. V. as a consequence of the criticism of the R. Va. in the Gg. A. are bracketed and printed in smaller type. Cf. further the 2nd part of this Bibliography under Kant, 1878.

The same ed. by *K. Schulz*. Small 8vo. Leipzig. 1888. Ph. Reclam, jun. 230 pp. Universal-Library, nos. 2469-70.

The edition is much inferior to that of Kehrbach. The appendix (pp. 177-214) for textual criticism is thoroughly dilettante, unnecessarily diffuse, making a display of quite irrelevant points of Germanistic philology, which seem after all to offer nothing which could not be obtained without any previous training from Weigand's Lexicon. The formal treatment of the text is thus quite unsatisfactory. The preface (pp. 1-24) has value only through the reprint of the Garve-Feder criticism from the *Gg. A.* 1782 (pp. 4-11).

As supplement are added (pp. 215-228) K's correspondence with Garve, reprinted from A. Stern's article, "On Garve's Relation to Kant" (cf. no. 151), and 2 Figures by Prof. Cantor toward comprehension of the geometrical illustrations in § 13. The paging of the original edition as well as that of R., Hb., Ki., and Erdmann is reprinted; that of Ha. is lacking.

50) *Kant: Idee zu einer allgemeinen Geschichte in weltbürgerlicher Absicht.* B. M. 1784. Nov., pp. 386-410. (Ha. iv, pp. 291-310. R. vii, 1, pp. 315-335; Hb. iv., pp. 141-157; Ki. vi, 1, pp. 1-19; no. 5, pp. 1-33, no. 6, pp. 1-25; no. 11, iv, pp. 200-216; no. 12, iii, pp. 131-158; no. 13, ii, pp. 661-686; no. 15, i, pp. 1-19; an extract in no. 134, pp. 5-8).

51) *Kant: Beantwortung der Frage: Was ist Aufklärung?* B. M. Dec., 1784, pp. 481-94. (Ha. i, pp. 109-118; R. vii, 1, pp. 142-154; Hb. iv, pp. 159-168; Ki. v, 1, pp. 109-19; no. 5, pp. 34-50; no. 6, pp. 25-37; no. 11, iv, pp. 217-224; no. 12, iii, pp. 159-172; no. 13, ii, pp. 687-700; no. 15, i, pp. 75-84; no. 134, pp. 9-17.) Literal separate reprint without the concluding note. Large 8vo. Potsdam, 1845. Stuhr. 8 pp. Cf. also no. 124.

52) *Kant: Recension von Herders Ideen zur Philosophie der Geschichte der Menschheit.* A. L. Z. 1785, i, pp. 17a-22b.

53) *Kant: Erinnerungen des Recensenten der Herderschen Ideen zu einer Philosophie der Geschichte der Menschheit, über ein im Februar des deutschen Merkur (1785) gegen diese Recension gerichtetes Schreiben.* A. L. Z. 1785. Appendix to March number (last page of the first vol.).

54) *Kant: Recension des 2ten Theils der "Ideen."* A. L. Z. 1785, iv, pp. 153a-156b. (Ha. iv., pp. 311-338; R., vii, 1, pp. 337-362 (only 52-54); Hb. iv, pp. 169-191; Ki. vi, 1, pp. 21-47; no. 12, iii, pp. 207-233 (only 52 and 54); no. 13a, pp. 383-414 (only 52 and 54).

55) *Kant: Ueber die Vulkane im Monde.* B. M. 1785, März, pp. 199-213. (Ha. ix, pp. 107-18; R. vi, pp. 391-402; Hb. iv, pp. 193-202; Ki., vii, 2, pp. 439-450; no. 5, pp. 51-68; no. 6, pp. 37-50; no. 12, iii, 173-188; no. 13, iii, pp. 1-16; no. 15, i, pp. 248-57.)

56) *Kant: Von der Unrechtmässigkeit des Büchernachdrucks.* 1785, May, pp. 392-417. (Ha. v, 345-56; R., vii, 1, pp. 155-67; Hb. iv., pp. 203-13; Ki. vi, 1, pp. 77-88; no. 6, pp. 50-64; no. 12, iii, pp. 189-206; no. 13, iii, pp. 17-32; no. 15, ii, pp. 9-19.)

57) *Kant: Bestimmung des Begriffs einer Menschenrace.* B. M. 1785, Nov., pp. 390-417. (Ha. x, pp. 45-64; R., vi, pp. 333-54; Hb., iv, pp. 215-231; Ki. viii, pp. 123-142; no. 6, pp. 64-89; no. 10, pp. 107-128; no. 11, iv, pp. 271-288; no. 12, iii, pp. 531-558; no. 13, ii, pp. 633-660; no. 15, i, pp. 65-75.)

58) *Kant: Grundlegung zur Metaphysik der Sitten.* Large 8vo. Riga. 1785. Hartknoch, xiv and 28 pp. Second edition, 1786. Same place, xiv and 128 pp. (with some changes of Kant's own). Third edition, 1792. Fourth edition, 1797. Same place. (Unchanged reprint of the second. Counterfeit: 8vo. Frankfurt, 1791. (Ha. iv., pp. 1-94; R., viii, pp. 1-101; Hb. iv., pp. 233-311; Ki. iii; no. 11, ii, pp. 251-346.)

59) *Kant: Muthmasslicher Anfang der Menschengeschichte.* B. M. 1786. Jan., pp. 1-27. (Ha. iv., pp. 339-358. R. vii, 1, pp. 363-83; Hb. iv, pp. 313-29; Ki. vi, 1, pp. 49-68; no. 5, pp. 69-103; no. 6, pp. 90-115; No. 11, iv, pp. 225-241; no. 12, iii, pp. 245-274; no. 13, iii, pp. 33-60; no. 15, i, pp. 20-38.)

60) *Kant: Schluss der Recension von Mendelssohns Morgenstunden.* A. L. Z. 1786, i, pp. 55-6; according to J. E. Erdmann: Versuch einer wissenschaftlichen Darstellung der Geschichte der neueren Philosophie, iii, 1, 1848, pp. 241. B. Erdmann: Kant's Criticism, 1878, pp. 144-6. According to Vaihinger (Ph. Mh. 1880, xvi, p. 194, note), the passage of the criticism, placed in square brackets (A. L. Z., pp. 1-6, 49-56) give evidence of having utilized Kantian passages.

61) *Kant: Ueber Hufelands Grundsatz des Naturrechts.* A. L. Z. 1786, ii, pp. 113-116. (Ha. v. pp. 357-62; R. vii 1, pp. 169-174; Hb. iv, pp. 331-6; Ki. vi, 1, pp. 89-94; no. 12, iii, pp. 239-44; no. 13a, pp. 414-19.)

62) *Kant: Was heisst: sich im Denken orientiren?* B. M. 1786, Oct., pp. 304-330. (Ha. i, pp. 119-136; R. i, pp. 371-390; Hb. iv, pp. 337-53; Ki. v, 1, pp. 121-139; no. 5, pp. 104-38; no. 6, pp. 122-147; no. 11, iv, pp. 308-324; no. 12, iii, pp. 275-304; no. 13, iii, pp. 61-88; no. 15, i, pp. 85-102; extracted in no. 134, pp. 18-21.)

63) *Kant: Einige Bemerkungen zu Jakobs Prüfung der Mendelssohn'schen Morgenstunden* (in eben dieser Schrift). 8vo. Leipzig. 1786. Heinsius, pp. li-lx. (Ha. vi, pp. 129-135; R. i, pp. 391-8; Hb. iv, pp. 463-8; Ki. vi, 2, pp. 129-136; no. 6, pp. 115-122; no. 12, iii, pp. 305-14; no. 13, iii, pp. 89-98.)

64) *Kant: Metaphysische Anfangsgründe der Naturwissenschaft.* Large 8vo. Riga. 1786. Hartknoch. xxiv, 158 pp. 2nd edition, 1787. Same place. (Some typographical errors corrected.) 3d edition. Leipzig. 1800. Hartknoch. (Reprint of the second) Counterfeit. Frankfurt and

Leipzig. 1787. Latest edition. Same place. 1794. (Ha. viii, pp. 439-568; R. v, pp. 303-436; Hb. iv, pp. 355-462; Ki. vii, 1, pp. 171-306; no. 11, ii, pp. 139-252.)

65) *Kants Beispiele von Widersprüchen der puren Vernunft, die auf alle Rücksicht auf Erfahrung Verzicht thut, in: Sokratische Unterhaltungen über das Aelteste und Neueste aus der christlichen Welt.* 2nd vol. 1788. pp. 116-161 (Reprint of the Antinomies).

66) *Kant: Ueber den Gebrauch teleologischer Principien in der Philosophie.* T. M. 1788, Jan., pp. 36-52, Feb., pp. 123-135. (Ha. x, pp. 65-98; R. vi, pp. 355-389; Hb. iv, pp. 469-496; Ki. viii, pp. 143-175; no. 5, pp. 139-199; no. 6, pp. 148-193; no. 11, iv, pp. 242-270; no. 12, iii, pp. 337-384; no. 13, iii, pp. 99-144; no. 15, i, pp. 103-135.)

67) *Kant: Kritik der praktischen Vernunft.* Large 8vo. Riga. 1788. Hartknoch, 292 pp. Second edition, 1792. Same place; 3d edition—? 4th edition, 1797. Same place; 5th edition. Leipzig, 1818. Hartknoch; 6th edition, 1827. Same place. (All editions nearly identical; in the 2nd only insignificant corrections; the 4th reprinted from the 1st.) Counterfeit: New edition. Frankfurt. 1791-8. Grätz. 1796. (Ha. iv, pp. 95-290; R. viii, pp. 103-318; Hb. v, pp. 1-169; Ki. ii, no. 11, iii, pp. i-xxviii, 1-168.) *The same*, ed. by K. Kehrbach. Text of the edition of 1788 (A), with consideration of the 2nd edition, 1792 (B), and the 4th edition, 1797 (D). 8vo. Leipzig. 1878. Ph. Reclam. jun., xiv, 196 pp. Universal-Library, no. 1111-12. (Trustworthy edition; the 3rd edition has never existed according to Kehrbach; paging given of the original edition and of R., Ha., Hb., Ki.)

68) *Kant: Recension von Utrichs Eleutheriologie.* A. L. Z. 1788, ii, no. 100, pp. 177-184, made by Kraus on the basis of an essay by Kant, which Vaihinger tries to reconstruct in Ph. Mh., 1880 xvi, pp. 192-208 (an hitherto unknown essay of Kant on Freedom), in doing which he credits Kant with too much, since Kraus speaks of a *short* essay of Kant from which he had to make out the criticism.

69) *Kant: Ueber Schwärmerci und die Mittel dagegen, in Borowskis Schrift: Cagliostro, einer der merkwürdigsten Abenteurer unseres Jahrhunderts.* Königsberg. 1790. pp. 160-6. 2d edition, pp. 186-92. (Ha. x, pp. 99-104; R. vii, i, pp. 109-113; Hb. vi, pp. 69-73; Ki. viii, pp. 177-189; no. 13a, pp. 379-82; no. 14a, pp. 226-32; no. 15, i, pp. 285-290.)

70) *Kant: Ueber eine Entdeckung, nach der alle neue Kritik der reinen Vernunft durch eine ältere entbehrlich gemacht werden soll.* 8vo. Königsberg. 1790. Nicolovius. 126 pp. 2d edition. Same place, 1791 (unchanged except for correction of a few typographical errors). (Ha. iii, pp. 317-394; R. i, pp. 399-482; Hb. vi, pp. 1-68; Ki. v, 4, pp. 1-78.)

71) *Kant: Kritik der Urteilskraft.* Large 8vo. Berlin and Liebau. 1790. Lagarde and Friederich, lviii, 476 pp. Second edition. Same place, 1793, lviii, 482 pp. (much corrected by Kehrbach and an unknown proof-reader). 3d edition. Berlin. 1799. Lagarde, lx, 482 pp. (A number of

deviations from the second edition, which cannot with certainty be attributed to K.) Counterfeits; Frankfurt. 1792. Frankfurt and Leipzig. 1794. Grätz. 1797. (Ha. vii, pp. 1-376; R. iv, pp. 1-395; Hb. v, pp. 170-500 [reprint, not of the 2d, as H. incorrectly says, but of the 3d edition]; Ki. ii; no. 11, iii, pp. 169-516). The same, ed. by K. Kehrbach. Text of the edition of 1790 (A) with addition of all the variations of the editions of 1793 (B) and 1799 (C). 8vo, Leipzig. 1878. Ph. Reclam., jun. xxix, 392 pp. Universal-Library, nos. 1027-1030. (First discovered the true relations of the three editions; index of variations not wholly complete; paging given of the original editions and of the editions of R., Ha., Hb., Ki.) The same, ed. by B. Erdmann. Large 8vo. Hamburg. 1880. Voss. xlii, 421 pp. (pp. 374-421; editor's appendix for textual revision. pp. 341-73 is no. 83 reprinted.) 2d stereotype-edition. Large 8vo. Hamburg and Leipzig. 1884. Voss. (In the main, a reprint of the second edition; in particular places the text of the 1st or 3d editions is preferred; very exact index of variations; text modernized in style, punctuation and orthography; original paging given; cf. the 2d part of this Bibliography under Kant, 1880.)

72) *Kant: Recension des* Ph. Mg. Vol. ii, in der A. L. Z. 1790, iii, no. 281-4, pp. 807 *et seq.* von Schultz auf Grund mehrerer Aufsätze Kant's geschrieben. Cf. no. 158.

73) *Kant: Ueber das Misslingen aller philosophischen Versuche in der Theodicee.* B. M. 1791, Sept. pp. 194-225. (Ha. vi, pp. 137-158; R. vii, 1, pp. 385-408; Hb. vi, pp. 75-93; Ki. vi, 2, pp. 137-159; no. 5, pp. 200-39; no. 6, pp. 194-220; no. 11, iv, pp. 289-307; no. 12, iii, pp. 385-416; no. 13, iii, pp. 145-176; no. 15, i, pp. 203-224.)

74) *Kant: Vom radicalen Bösen in der Menschennatur*, in B. M. 1792, April. pp. 323-385. This is incorporated also in "Religion" as the first section.

75) *Kant: Ueber den Verfasser des Versuchs einer Kritik aller Offenbarung*, in Intelligenzblatt of the A. L. Z. 1792. no. 102, p. 848. (Ha. x, p. 553, note; Hb. viii, p. 595; Ki. viii, p. 287.)

76) *Kant: Brief an Maimon, in dessen Lebensgeschichte, von ihm selbst geschrieben und herausgegeben von K. P. Moritz.* Berlin. 1792. Part II, p. 257. Same place, pp. 255-6 of the second paragraph of the letter to Herz dated May 26, 1789. (R. xi, 1, p. 60, note; Hb. viii, pp. 761-2; Ki. viii, p. 486.)

76 a) *Kant: 1 Brief an Jung-Stilling in Snell, Ih. Pt. Ldw: Kritik der Volksmoral für Prediger nach Kantischen Grundsätzen bearbeitet.* 8vo. Frankfurt and Leipzig. 1793. Pech. 2d edition. Heidelberg. 1796. (According to K. Kosenkranz: Geschichte der Kant'schen Philosophie. 1840. p. 313. Ros. confuses Ih. Pt. Ldw. Snell with Fr. W. D., who wrote no "Volksmoral"—as the title reads according to Ros. I have not been able to get sight of the book. Cf. further the communication to Jung-Stilling in no. 142.)

77) *Kant: Ueber die von dem Buchdrucker Haupt unternommene Sammlung seiner kleineren Schriften*, in the *Intelligenzblatt* of A. L. Z. 1793. No. 61, pp. 486-7. (Ha. x, pp. 609-10, note; R. xi, 1, pp. 201-2; Hb. viii, pp. 595-6; Ki. viii, pp. 287-8.)

78) *Kant: Ueber den Gemeinspruch: Das mag in der Theorie richtig sein, taugt aber nicht für die Praxis*, in B. M. 1793, Sept. pp. 201-84; Counterfeited with the title: *I. Kant's politische Meinungen, oder über die Redensart: dies mag zwar theoretisch wahr sein, ist aber in Praxi nicht anwendbar*. 8vo. (Place of publication lacking.) 1794. 86 pp. (Ha. v, pp. 363-410; R. vii, 1, pp. 175-228; Hb. vi, pp. 303-346; Ki. vi, 1, pp. 95-145; no. 7, pp. 1-120; no. 8, pp. 39-110; no. 11, iv, pp. 1-46; no. 12, iii, pp. 417-490; no. 13, iii, pp. 177-248; no. 15, i, pp. 136-186; some passages under the title: "*Vom Verhältniss der Theorie zur Praxis im Staatsrecht [gegen Hobbes]*," in no. 134, pp. 22-4.)

79) *Kant: Die Religion innerhalb der Grenzen der blossen Vernunft*. Large 8vo. Königsberg. 1793. Nicolovius, xxii, 296 p. 2d enlarged edition. Same place. 1794. xxviii, 314 p. 2 counterfeits: 8vo, Leipzig and Frankfurt. 1793. xxvi, 248 pp. and xxiv, 296 pp. (Ha. vi, pp. 159-389; R. x, pp. 1-247. [Text of the 1st edition with addenda of the 2d edition under the text]; Hb. vi, pp. 95-301; Ki. iv [like Ha. text of the second edition, with the variations of the 1st under the text]; no. 11, ii, pp. 347-555; extract from the third part in no. 15, ii, pp. 302-8.) *The same*, ed. by K. Kehrbach: Text of the edition of 1793 (A), with the variations of the edition of 1794 (B). Small 8vo. Leipzig. 1879. Ph. Reclam, jun., xxxii, 220 pp. Universal-Library no. 1231-32. (Very trustworthy edition; the paging of both original editions is given as well as that of the editions of Ha., R., Hb., Ki.)

80) *Kant: Etwas über den Einfluss des Mondes auf die Witterung*. B. M. 1794, May. pp. 392-407. (Ha. ix, pp. 119-128; R. vi, pp. 403-14; Hb. vi, pp. 347-56; Ki. vii, 2, pp. 451-61; no. 8, pp. 25-38; no. 12, iv, pp. 81-98; no. 13, iii, pp. 275-90; no. 15, i, pp. 239-247.)

81) *Kant: Das Ende aller Dinge*, in B. M. June, 1794. pp. 495-522. (Ha. vi, pp. 391-408; R. vii, 1, pp. 409-27; Hb. vi, pp. 357-72; Ki. vi, 2, pp. 161-178; no. 7, pp. 120-158; no. 8, pp. 1-24; no. 11, iv, pp. 381-396; no. 12, iii, pp. 491-530; no. 13, iii, pp. 249-274; no. 15, i, pp. 187-203.)

82) *Kant: Schreitet die Menschheit zum Bessern fort?* A fragment of a longer treatise in the *Berliner Monatsschrift* in: J. Sam. Fest's *Beyträge zur Beruhigung und Aufklärung über unangenehme Dinge, etc.* 8vo. Leipzig. Weidmann. 1794. Vol. IV. Part 1. (Partial reprint from no. 50?)

83) *Kant: Anmerkungen zur Einleitung in die Kritik der Urteils-kraft*, at the end of the 2d volume of *Jac. Sigim. Beck's Auszug aus den kritischen Schriften des Herrn Prof. Kant*. 8vo. Riga. 1794. Hartknoch, pp. 541-590. First reprinted again in no. 15, ii, pp. 223-262 under the title: *Ueber Philosophie überhaupt und über die Kritik der Urteils-kraft insbesondere*; then Ha. i, pp. 137-172, and R. i, pp. 579-617 under

the title: *Ueber Philosophie überhaupt*; Hb. vi, pp. 373-404 and Ki. v, 1, pp. 141-176, under the title: *Ueber Philosophie überhaupt zur Einleitung in die Kritik der Urteilskraft*, and finally by B. Erdmann in his Edition of U. (cf. no. 71) pp. 341-373, under the title: *J. S. Beck's Auszug aus Kant's ursprünglichem Entwurf der Einleitung in die Kritik der Urteilskraft*. (Cf. as to the relation between K. and Beck, and the original of the *Auszug* to be found in Rostock, nos. 155 and 156.)

84) *Kant: Zum ewigen Frieden, ein philosophischer Entwurf*. 8vo. Königsberg. 1795. Nicolovius, 104 pp. New enlarged edition, 1796. 112 pp. (Little except the "second appendix" is new.) A counterfeit of the first edition was published by Nicolovius in 1795, with only very slight changes; also, 8vo, Frankfurt and Leipzig, 1796. 95 pp. 8vo, same place, 1797. 93 pp. Grätz, 1796. In 1796 appeared also a French translation under the auspices of Kant, who was dissatisfied with the one edited in Bern in 1795 with the title: *Projets de paix perpétuelle*. It bears the title: *Projet de paix perpétuelle: Essai Philosophique par Emmanuel Kant. Traduit de l'Allemand avec un nouveau supplément de l'auteur*. 8vo. Königsberg. 1796. Nicolovius. 114 pp. *The same* reprinted in Ha. v, pp. 411-466; R. vii, 1, pp. 229-291; Hb. vi, pp. 405-454; Ki. vi, 1, pp. 147-205; no. 11, iv, pp. 47-96; no. 136; passages therefrom in no. 134, pp. 25-28. *The same*, separate edition by K. Kehrbach. Text of edition A (1795) with consideration of the manuscript of editions Aa (1795) and B (1796). Small 8vo. Leipzig. 1881. Ph. Reclam, jun., xxxii, 56 pp. Universal-Library, no. 1501. (Most trustworthy edition; paging of both original editions as well as of editions Ha., R., Hb., Ki.) The second appendix of 1796 is also reprinted in F. Schmidt-Warneck: "*Die Sociologie Fichtes*." Large 8vo. Berlin. 1884. Puttkammer and Mühlbrecht, Supplement, pp. 205-8.

85) *Kant: Constitutio principiorum metaphysicæ morum, in latinum convertit*. J. C. Zwanziger. 8vo. Leipzig. 1796. Comptoir für Literatur.

86) *Kant: Von einem neuerdings erhobenen vornehmen Tone in der Philosophie*. B. M. 1796, May. pp. 387-426. (Ha. i, pp. 173-194; R. i, pp. 619-642; Hb. vi, pp. 463-82; Ki. v, 2, pp. 1-24; no. 11, iv, pp. 397-416; no. 12, iii, pp. 569-608; no. 13, iii, pp. 301-34; no. 15, ii, pp. 20-42. Also in the Communications of J. G. Schlosser to a Young Man, etc. Leipzig. 1797. pp. 124-168.)

87) *Kant: Ausgleichung eines auf Missverständnis beruhenden mathematischen Streits*. B. M. 1796, Oct. pp. 368-70. (Ha. i, pp. 195-8; R. i, pp. 643-6; Hb. vi, pp. 483-6; Ki. v, 2, pp. 25-28; no. 12, iii, pp. 609-612; no. 13, iii, pp. 335-8.)

88) *Kant: Verkündigung des nahen Abschlusses eines Tractats zum ewigen Frieden in der Philosophie*. B. M. 1796, Dec. pp. 485-504. Anon. Published separately by J. G. Heynitz. 8vo. 1798. 29 pp. Place of publication lacking (really Ulm. Wohler). (Ha. iii, pp. 395-408; R. i, pp.

647-661; Hb. vi, pp. 487-498; Ki. v, 4, pp. 79-92; no. 11, iv, pp. 417-427; no. 12, iv, pp. 1-20; no. 13, iii, pp. 339-356; no. 15, i, pp. 224-239. Also in the second Communication of J. G. Schlosser to a Young Man, etc. Leipzig. 1798. pp. 142-167.)

89) *Kant: Schreiben an Sömmering über das Organ der Seele* (at the end of Sömmering's work with that title). 4, Königsberg. 1796. Nicolovius. pp. 81-6. (Ha. x, pp. 105-112; R. vii, 1, pp. 115-122; Hb. vi, pp. 455-61; Ki. viii, pp. 183-190; no. 12, iii, pp. 559-568; no. 13, iii, pp. 291-300; no. 15, ii, pp. 200-206.)

90) *Kant: Die Metaphysik der Sitten. Erster Theil: Metaphysische Anfangsgründe der Rechtslehre.* xii, 235 pp. *Zweiter Theil: Metaphysische Anfangsgründe der Tugendlehre.* x, 190 pp. Large 8vo. Königsberg. 1797. Nicolovius. Second enlarged edition of the Rechtslehre, with an appendix of explanatory notes and additions. Same place. 1798. xii, 266 pp. The corrections, written with regard to a criticism in the G. g. A., Feb. 18, 1797, had been already published separately under the title: *Erläuternde Anmerkungen zu den metaphysischen Anfangsgründen der Rechtslehre.* 8vo. Same place. 1798. 32 pp. 2d edition of Tugendlehre. Same place. 1803. x, 190 pp. (Few changes, nearly all without essential interest, the division of the Elementarlehre is changed.) Counterfeit edition of the Rechtslehre. Frankfurt, 1797. Counterfeit of the Tugendlehre; 2d edition. Small 8vo. Kreuznach. 1800. Kehr. (Ha. v, pp. 1-193, 195-336; R. ix, pp. 1-366; Hb. vii, pp. 1-173, 175-303; Ki. iii; no. 11, iv, pp. 539-694, 695-820; an extract from the Staatsrecht in no. 15, i, pp. 290-302.)

91) *Kant: Ueber seinen angeblichen Antheil an den Schriften Th. Gottlieb von Hippel's unter dem Titel: Wegen der v. Hippelschen Autorschaft,* in the Intelligenzblatt of the A. L. Z., 1797, no. 9, p. 72, and in the Allgemeinere litterarischer Anzeiger, for the year 1797, no. 16. (Ha., x, pp. 570-1; R. xi, 1, pp. 204-6; Hb. viii, pp. 596-8; Ki. viii, pp. 288-90. Hippel's Biography, separately reprinted from Schlichtegrolls' Nekrologie. 8vo. Gotha. 1801. Perthes. pp. 458-59.)

92) *Kant: Ueber ein vermeintes Recht, aus Menschenliebe zu lügen.* Berl. Blätter. 1797, pp. 301-14. (Ha. v, pp. 467-76; R. vii, 1, pp. 293-301; Hb. vii, pp. 305-312; Ki. vi, 1, pp. 207-215; no. 12, iv, pp. 21-32; no. 15, ii, pp. 1-8.)

93) *Kant: Erklärung gegen Schlettwein,* in the Intelligenzblatt of the A. L. Z., 1797, no. 74, June 14, p. 616; again reprinted in Berl. Blätter, 1797, vol. i, pp. 350-2. (Ha. x, pp. 586-8; R. xi, 1, pp. 202-4; Hb. viii, pp. 598-9; Ki. viii, pp. 290-2; no. 12, iv, pp. 33-36; no. 13, iii, pp. 369-374.)

94) *Kant: Antwortschreiben an den Abt Sieyès in Paris.* 1796; translated from the Latin original. 8vo. Basel. 1797. Flick. The same in another translation. 8vo. Frankfurt on the Main. 1797. Behrens. The same. Place of publication lacking. 1797, 112 pp. (Gross forgery which, however, is disclosed at the conclusion by the anonymous author himself.)

95) *Kant*: Προλεγομένων metaphysicae cuilibet, inveniendae ab Im. Kanto praemissorum quaestionem primam latine reddidit. Henricus Kunhardt. 8vo. Helmstädt. 1797. Fleckeisen, 74 pp.

96) *Kant*: *Von der Macht des Gemüths, durch den blossen Vorsatz seiner krankhaften Gefühle Meister zu sein. Ein Antwortsschreiben an Hrn. Hofr. und Prof. Hufeland*, in C. W. Hufelands Journal der praktischen Arzneykunde und Wundarzneykunst. 1798, vol. 5. Part 4, pp. 701-51 (with notes by Hufeland). Reprinted in no. 96a as the third section, pp. 163-205; no. 12, iv, pp. 37-80; no. 15, i, pp. 257-285. *The same*, ed. separately. 8vo. Jena. 1798. Academische Buchhandlung, 54 pp.; 2nd corrected edition, ed. and furnished with notes by C. W. von Hufeland. 8vo. Leipzig. 1824. Lauffer, 80 pp.; 3d-5th editions. Same place. 1836, 1851, 1851; 6th-21st corrected editions. Leipzig. Geibel. 78 pp. 1852, 54, 56, 57, 58, 59, 61, 64, 68, 70, 72, 74, 76, 80, 80, 81. *The same*. New edition. Quedlinburg. 1838. Ernst. *The same*, under the title: *Von der Macht des Gemüths, oder die hochwichtige Kunst, durch den blossen festen Vorsatz seiner krankhaften Gefühle Meister zu sein. Von dem scharfsinnigsten Denker, I. Kant, ehemaligem Professor in Königsberg*; published by the admirers of his system after the first complete edition of 1798, in *Kreuzer-Bücher aus allen Gebieten*. 16mo. Stuttgart. 1856-7. Scheible, vol. iv, 46 pp. *The same*, translated into Russian. Large 8vo. Leipzig. 1862. Gerhard. 85 pp. *The same*, completed by confirmatory opinions from Herder, W. v. Humboldt, Goethe, etc. Large 8vo. Berlin; 1st and 2nd editions, 1872. Sacco Nachf.; 95 pp. *The same*. Ein Schreiben an Chr. Wlh. Hufeland über dessen Buch: "Die Kunst, das menschliche Leben zu verlängern" (ed. by J. Rigler). Large 8vo. Berlin. 1872. Staude, 40 pp.; 2nd reprint, 1873. *The same*, enlarged by opinions from Alcott, Combe, Fowler, etc. With an appendix: Talisman gegen das Unglück. Large 8vo. Schwelm; 1st and 2nd reprints, 1873. Wortmann. 148 pp. *The same*. 16mo. Minden. 1873, 71 pp. *The same*. New complete edition. 8vo. München. 1878. Unflad, 48 pp. *The same* in Bücher-Schätze; Auslese von Werken der bedeutendsten Schriftsteller des In- und Auslandes; 24th vol. 16mo. Leipzig. 1879. Junge, 46 pp. New edition, 1888. *The same*. Small 8vo. Leipzig. 1879. Ph. Reclam., jun., 54 pp. Universal-Bibliothek, no. 1130. *The same* in Haus-Bibliothek; Auslese von Werken der bedeutendsten Schriftsteller des In- und Auslandes; 2nd vol. 16mo. Leipzig. 1881. Goldhausen, 46 pp. *The same*, in Meyers Volksbücher, no. 325. 16mo. Leipzig. 1887. Bibliographisches Institut. 31 pp. *The same*. 16mo. Leipzig. 1888. Fock. 46 pp. *The same*. Ein Schreiben an Christoph Wlh. Hufeland über dessen Buch "Makrobiotik" etc., in Bibliothek der Gesammt-Litteratur des In- und Auslandes, no. 247. 8vo. Halle. 1888. Hendel; 38 pp. *The same* seems to be entirely or partly incorporated in Bergk: Die Kunst, Krankheiten vorzubeugen; nebst Kant's Ideen über moralische Diätetik. Leipzig. 1824. Expedition des europäischen Aufsehers.

96a) *Kant: Der Streit der Fakultäten in drey Abschnitten.* Large 8vo. Königsberg. 1798. Nicolovius, xxx, 205 pp. (Ha. i, pp. 199-319; R. x, pp. 249-387; Hb. vii, pp. 321-428; Ki. v, 2, pp. 29-154; no. 13, iii, pp. 389-576 (pp. 389-428; no. 96, pp. 429-56: The Controversy of the Philosophical Faculty with the Jural., pp. 506-574 with the Theological; pp. 456-505, with the others); no. 15, ii, pp. 179-200; Controversy of the Philosophical Faculty with the Jural; passages therefrom in no. 134, pp. 29-32, 43-8.) The same, ed. by K. Kehrbach. Text of the edition of 1798. 8vo. Leipzig. 1881. Ph. Reclam, jun., 140 pp. Universal-Library, no. 1438. (Trustworthy edition; pp. 1-16, editor's preface, with exact textual criticism and bibliographical notes; paging of the original edition given, as well as that of Ha., R., Hb., Ki.)

97) *Kant: Ueber die Buchmacherei. Zwei Briefe an Hrn. Fr. Nicolai.* 8vo. Königsberg. 1798. Nicolovius. 22 pp. (Ha. v, pp. 477-84; R., vii, 1, pp. 303-312; Hb. vii, pp. 313-320; Ki. vi, 1, pp. 217-224; no. 12, iv, pp. 139-152; no. 13, iii, pp. 375-389.)

98) *Kant: Anthropologie in pragmatischer Hinsicht.* Large 8vo. Königsberg. 1798. Nicolovius, xiv, 334 pp. 2d corrected edition. 1800. Same place, xvi, 332 pp. 3d edition. 1820. Same place. Universitäts-Buchhandlung. 4th edition, with a preface by J. F. Herbart. Large 8vo. Leipzig. 1833. Müller. 21½ Bogen. (The second edition is essentially more correct and exact; the 3d and 4th are unchanged reprints of the 2d.) (Ha. x, pp. 113-377; R. vii, 2; Hb. vii, pp. 429-658; Ki. iv; some passages in no. 134, pp. 33-6.)

99) *Rätze, J. G.: Kantische Blumenlese oder solche Stellen aus Kants Schriften, die für Jederman fasslich, interessant und lehrreich sind. Nebst einer Abhandlung über die Hauptresultate der kantischen Philosophie.* 8vo. Zittau and Leipzig. 1799. Schöps, xvi, 150 pp. 2d edition. 1813. 2d vol., 1801. Same place, viii, 192 pp.

100) *Kant: Elementa metaphysica juris doctrina Latine vertit. L. G. Koenig.* 8vo. Amsterdam. 1799. von den Hengst, 235 pp. 8vo. Gotha. 1800. Ettinger. 8vo. Gröningen. 1820. v. Boekeren.

101) *Kant: Erklärung in Beziehung auf Fichte's Wissenschaftslehre,* in the Intelligenzblatt of A. L. Z. 1799. no. 109, pp. 876-8. (Ha. x, pp. 565-7; R. xi, 1, pp. 153-5; Hb. viii, pp. 600-1; Ki. viii, pp. 292-4. Also in J. G. Fichtes' *Leben und litterarischer Briefwechsel*, herausgegeben von seinem Sohne I. H. Fichte. 2d part. Sulzbach. 1831. v. Seidel. pp. 175-7.)

102) *Kant: Vorrede zu Jachmanns Prüfung der kantischen Religionsphilosophie in Hinsicht auf die ihr beigelegte Aehnlichkeit mit dem reinen Mysticismus.* Königsberg. 1800. (Hb. vii, pp. 661-2; Ki. viii, pp. 205-6; no. 16, pp. 81-2 [N. Pr. Pr. Bl. pp. 173-4].)

103) *Kant: Nachschrift eines Freundes zu Heilsbergs Vorrede zu Mielkes liththausischem Wörterbuch.* Königsberg. 1800. Hartung. Hb. vii, pp. 662-3; Ki. viii, pp. 206-7; no. 16, pp. 82-3; (N. Pr. Pr. Bl. pp. 175-6.)

104) *Kant: Logik, ein Handbuch zu Vorlesungen*; at Kant's request ed. and in part revised from the manuscript by Glb. Benj. Jäsche. 8vo. Königsberg. 1880. Nicolovius, xxiv, 232 pp. (Ha. i, pp. 321-487; R. iii, pp. 167-344; Hb. viii, pp. 1-143; Ki. iv.)

105) *Kant: Physische Geographie*, ed. by Vollmer. 4 vols. Large 8vo. Mainz and Hamburg. Vollmer. Vol. I, 1st and 2d divisions, contains the mathematical introduction and the general description of the sea. 1801. vi, 264 pp. and 324 pp. The first division appeared again, revised in part, without date. — Vol. II. 1st division: General description of the land. 2d division: The outline and configuration of the land. 1802. The 2d division appeared in a second edition. Hamburg. 1816? 1817? Herold. Under the title, *Beschreibung des Jüdischen Landes*. Vol. III. 1st division; The description of rivers, lakes, and the atmosphere, 1803. 2d division: containing the conclusion of the part on the atmosphere and that of the whole work, 1804. Vol. IV, contains new notes in explanation of the theory of winds, additions, corrections, and an index to the whole work. 1805. (Cf. no. 27.) Arranged from 3 lecture manuscripts of the years 1778, 1782, and 1793. Kant protested against Vollmer's illegitimate procedure, in the *Intelligenzblatt* of A. L. Z. 1801. No. 120, p. 968; and in N. A. D. B. 1801. lix, 2, *Intelligenzblatt*, p. 481.

106) *Kant: Nachricht an das Publicum, die bey Vollmer erschienene unrechtmässige Ausgabe der physischen Geographie von Imm. Kant betreffend*. (Ha. ix, pp. x-xi; R. xi, 1, pp. 206-7; Hb. viii, pp. 601-2; Ki. viii, pp. 294-5.)

107) *Kant: Metaphysik, zum Handbuche für Vorlesungen*; prepared by J. B. Jäsche. Large 8vo. Königsberg. 1802. Göbbels and Unzer. (This is advertised in the catalogues of Heinsius, Kayser, and Enslin; but it can be judged with tolerable certainty that it was only announced and never appeared.)

108) *Kant: Ueber Pädagogik*, ed. by Fr. Th. Rink. Small 8vo. Königsberg. 1803. Nicolovius vi, 146 pp. Counterfeit: Königsberg. 1803. (Ha. x, pp. 379-450; R. ix, pp. 367-438; Hb. viii, pp. 453-513; Ki. viii, pp. 209-276; several passages in no. 134, pp. 37-42. *The same*, finished with introduction and notes by O. Willmann in *Pädagogische Bibliothek, eine Sammlung der wichtigsten pädagogischen Schriften älterer und neuerer Zeit*; ed. by K. Richter in coöperation with contemporaries of the same school. Vol. X, 2d series, parts 1 and 2. 8vo. Leipzig. 1873. Sigismund and Volkening. 128 pp. 2d edition, 1874. 3d edition, 1875. *The same*, with Kant's Biography; ed. by Th. Vogt in *Bibliothek pädagogischer Classiker, eine Sammlung der bedeutendsten pädagogischen Schriften älterer und neuer Zeit*; ed. by Frdr. Mann, with the coöperation of several educators and scholars. 56th and 57th parts. 8vo. Langensalza. 1878. Beyer and Sons. 124 pp. 2d edition, 1883. Same place, v, 127 pp. *The same*, with the title: *Kant, bearbeitet von G. Fröhlich und Fried. Körner* in *Die Klassiker der Pädagogik*; ed. by G. Fröhlich, with the coöperation

of Böckler, Schumann, Pappenheim, and others. 8vo. Langensalza. 1890. Schulbuchhandlung, xvi, 402 pp. with portrait.

109) *Kant: Physische Geographie*; ed. and in part revised at the author's request, from his own manuscript, by Fr. Th. Rink. Large 8vo. Königsberg. 1802. Göbbels and Unzer. 1st vol. xvi, 312 pp. 2d vol., 248 pp. Counterfeit: Königsberg. 1802. Publisher not given. (Ha. ix, pp. 129-466; R. vi, pp. 415-775.) (Schubert has omitted much as the addition of Rinks, but the separation is not carried out in a very careful manner.) (Hb. viii, pp. 145-435; Ki. ix, 1, cf. also Schelle's edition, under Kant, 1804, in the second part of this bibliography.)

110) *Kant: Ueber die von der königl. Akademie der Wissenschaften zu Berlin für das Jahr 1791 ausgesetzte preisfrage: Welches sind die wirklichen Fortschritte, die die Metaphysik seit Leibnitz's und Wolf's Zeiten in Deutschland gemacht hat?* Ed. by Fr. Th. Rink. Small 8vo. Königsberg. 1804. Göbbels and Unzer. 204 pp. (Ha. iii, pp. 409-99; R. i, pp. 483-578; Hb. viii, pp. 515-592; Ki. v, 4, pp. 93-179.)

111) *Kant: Ein Brief an Chrichton*, first published in no. 13a, pp. 420-4. (Ha. x, pp. 495-6; R. xi, 1, pp. 72-5; Hb. viii, pp. 724-5; Ki. viii, pp. 443-5.)

112) *Kant: Ein Brief an Jacobi*; in Fr. H. Jacobi's Werke, Vol. III. Leipzig. 1816. pp. 520-4. (Ha. x, pp. 533-5; R. xi, 1, pp. 118-120; Hb. pp. 762-4; Ki. viii, pp. 486-9.)

113) *Kant: Vorlesungen über die philosophische Religionslehre*. Large 8vo. Leipzig. 1817. Franz. viii, 214 pp. 2nd edition. Large 8vo. Leipzig. 1830. Taubert, xx, 235 pp. Title-page with the addition: ed. by K. H. L. Pölitz. (From lecture notes dating from the eighties, which were formerly in the possession of Rink.)

114) *Kant: Vorlesungen über die Metaphysik*; published by the editor of the Kantian lectures on philosophical religious doctrine [K. H. L. Pölitz]; together with an introduction containing a short review of the important changes in Metaphysics since Kant. 8vo. Erfurt Kayser. 1821. lxiv, 343 pp. Rather uncritical compilation from two manuscripts, on the older of which is based the Cosmology, Psychology, and Theology; nevertheless valuable material, especially according to the hypothesis proposed by:

115) *Erdmann, Benno*: A neglected Source of the History of Kant's Development, in Ph. Mh. 1883. xix, pp. 129-144. (The older of the two manuscripts treats of the restriction of the categories to possible experience, but holds to knowledge of things-in-themselves through concepts of the understanding [Verstandesbegriffe]). (It was written in the winter of 1773-4 under the influence of Hume, as was also a manuscript essentially similar, but differing in many particulars, which belongs to the library of the University of Königsberg.) As to the time, cf. B. Erdmann: Reflexionen zur Anthropologie. 1882. pp. 48 and 58, and against this, Arnoldt, A. M. 1890. xxvii, pp. 97-110.

This hypothesis is highly unsatisfactory, to be adopted only *faute de mieux*, and demanding a repeated and thorough examination. Cf. Arnoldt, A. M. 1889, xxvi, p. 127. It appears improbable that Kant maintained one day what he denied the next. May not the Königsberg manuscript and that of Pölitz be identical and yet be composed from two lectures belonging to different years? Or, in case they originate from one lecture, may not the author have misunderstood Kant as regards the contradictory passages (cf. Kant's letter to Herz, Aug. 28, 1778)? Or may not Kant have been in general more dogmatic in the later lectures than in his books (Pöl. Einl. viii; according to pp. vi-vii the two manuscripts in the main agreed)?

116) Erdmann, B.: *Mittheilungen über Kant's metaphysischen Standpunkt in der Zeit um 1774*, in Ph. Mh. 1884. xx, pp. 65-97. (From the Ontology of the Königsberg manuscript; interesting matter, as are also E.'s remarks on the history of the development of the particular teachings in both essays.)

117) Kant: *Aufsätze, vier Briefen an Tieftrunk entnommen, theils die Denklehre überhaupt, theils die Fichtesche Philosophie betreffend*, in J. H. Tieftrunk: *Die Denklehre in reindeutschem Gewande*. Large 8vo. Halle and Leipzig. 1825. Reinicke & Co. pp. v-xiv. (Ha. x, pp. 572-8; R. xi, 1, pp. 182-190; Hb. viii, pp. 807-812; Ki. viii, pp. 536-43.)

118) Kant: *Neun Briefe an K. L. Reinhold, in K. L. Reinhold's Leben und litterarisches Wirken, nebst einer Auswahl von Briefen Kant's, Fichtes, Jacobis und anderer philosophirender Zeitgenossen an ihn*; ed. by E. Reinhold. Large 8vo. Jena. 1825. Frommann. pp. 127-159. (Ha. x, pp. 504-532; R. xi, 1, pp. 84-117; Hb. viii, pp. 738-61; Ki. viii, pp. 459-485.)

119) *Drei Briefe an C. Fr. Stüudlin in dessen Geschichte des Rationalismus und Supernaturalismus*. Large 8vo. Göttingen. 1826. Vandenhoeck and Ruprecht. pp. 469-76. In the complete editions only the first of the three letters, dated May 4, 1793, is reprinted; not the others, dated Dec. 4, 1794, and July 1, 1798. (Ha. x, 141-3; R. xi, 1, pp. 159-161; Hb. viii, pp. 791-3; Ki. viii, pp. 519-21.)

120) Kant: *Ein Brief an Schiller in Schiller's Leben, von C. von Wolzogen*. Stuttgart. 1830. Vol. ii, pp. 125-8. (R. xi, 1, pp. 169-171; Hb. viii, pp. 798-800; Ki. viii, pp. 527-9.)

120a) Kant: *Zwei Briefe an Erhard*; in *Denkwürdigkeiten des Philosophen und Arztes, Joh. Benj. Erhard*; ed. by K. A. Varnhagen von Ense. Large 8vo. Stuttgart and Tübingen. 1830. Cotta. pp. 349-50, 458-9. (R. xi, 1, pp. 121-4; Hb. viii, pp. 787-9; Ki. viii, pp. 515-8.)

121) *Kant: Drei Briefe an J. G. Fichte; in J. G. Fichte's Life and Literary Correspondence*; ed. by his son, J. H. Fichte, 2nd part. Sulzbach. 1831. v. Seidel. pp. 160-62, 168-9, 174-5. (Ha. x, pp. 549-51, 558-9, 564-5; R. xi, 1, pp. 136-8, 144-5, 150-1; Hb. viii, pp. 769-71, 777, 782-3; Ki. viii, pp. 495-7, 503-4, 508-9.)

122) *Kant: Anweis zur Menschen- und Weltkenntniss*; ed. according to the lectures of the winter of 1790-91 by Fr. Chr. Starke (pseudonym for J. A. Bergk). Large 8vo. Leipzig. 1831. Expedition des europäischen Aufsehers, x, 127 pp. New edition. Large 8vo. Quedlinburg. 1838. Ernst. (Valueless and scanty.)

123) *Kant: Menschenkunde oder philosophische Anthropologie*; ed. after the manuscript lectures by Fr. Chr. Starke (pseudonym for J. A. Bergk). Large 8vo. Leipzig. 1831. Expedition des europäischen Aufsehers. 400 pp. New edition. Large 8vo. Quedlinburg. 1838. Ernst. (More in detail than Kant's own edition; probably after the first lecture of the winter of 1772-3, for according to this things can still be known by the understanding as they are in themselves.)

124) *Kant: Ueber Aufklärung, eine Stimme der Vorzeit an die Gegenwart*; furnished with notes by a Catholic priest. Large 8vo. Leipzig. 1831. Hartmann. 32 pp. Cf. no. 51.

125) *Kant: Goldenes Schatzkästlein oder Anweisung wie man sich und andere ausbilden, kennen lernen, und bessern, und die Natur erforschen kann*; ed. by J. A. Bergk. 8vo. Leipzig. 1833. Expedition des europäischen Aufsehers. 128 pp. New edition with the title: *Gold. Schatzk. oder das Schönste und Geistreichste aus dessen Schriften*; in 74 sections; ed. by J. A. Bergk. 8vo. Quedlinburg. 1838. Ernst. 128 pp.

126) *Kant: Drei Briefe an Schütz*, in Chr. G. Schütz' account of his life. Halle. 1834. Vol. II, pp. 207-11. (Ha. x, pp. 497-503; R. xi, 1, pp. 78-83; Hb. viii, pp. 733-8; Ki. viii, pp. 454-459.)

127) *Kant: Zwei Briefe an Biester*, in Dorow's memoirs and letters in characterization of life and literature. 8vo. Berlin. 1838. Duncker. Vol. I, pp. 117-20. (Ha. x, pp. 536-8; R. xi, 1, pp. 125-7; Hb. viii, pp. 764-6; Ki. viii, pp. 489-91.)

129) *Kant: Ein Brief an A. Richter*, in Raumer's historisches Taschenbuch. 1838. p. 534 (cf. 2d part of this Bibliography, under F. W. Schubert. 1838). (Ha. x, pp. 592; R. xi, 1, pp. 194; Hb. viii, p. 815; Ki. viii, pp. 545-6.)

129a) *Kant: Briefe*, first ed. by Hartenstein. One to Nicolai. (Ha. x, pp. 493-4; R. xi, 1, pp. 70-1; Hb. viii, pp. 723-4; Ki. viii, pp. 442-3.) One to Selle. (Ha. x, pp. 568-69; R. xi, 1, pp. 128-9; Hb. viii, pp. 784-5; Ki. viii, pp. 511-12.)

130) *Kant: Kleinere Inedita*; published by Schubert, 1839: I. Supplements to Physical Geography. (R. vi, pp. 777-805; Hb. viii, pp. 436-452.)—1842: II. Memorial words for deceased colleagues. (R. xi, 1, pp. 209-213; Hb. viii, pp. 603-6; Ki. viii, pp. 297-301. The memorial to

Lilienthal also in no. 148.)—III. Remarks concerning the Observations on the Feeling of the Beautiful and the Sublime. (R. xi, 1, pp. 221–260; in addition come occasional remarks of Kant which Schubert has inserted in his biography. R. xi, 2, pp. 142–4, 156–60. Hartenstein collected and added them to the larger compilations in: Hb. viii, pp. 607–641, 641–4, and also Ki. viii, pp. 303–340, 340–5.)—IV. Seven short essays. (R. xi, 1, pp. 260–272; Hb. iv, pp. 497–507; Ki. viii, pp. 191–202).—V. First draft of his letter to Friedr. Wilh. II. (R. xi, 1, pp. 272–5; Hb. vii, pp. 325–7 [note]; Ki. v, 2, pp. 33–6 [note].)—VI. Political Rhapsody. (R. xi, 1, pp. 276–7; Hb. viii, pp. 644–5; Ki. viii, pp. 345–6.)—VII. Four letters to Mendelssohn; nineteen to Herz. (R. xi, 1, pp. 5–68; Hb. viii, pp. 671–723; Ki. viii, pp. 383–441.) One to Engel. R. the same, pp. 76–7; Hb. pp. 726–7; Ki. pp. 445–6.) One to Spener. (R. pp. 157–8; Hb. p. 790; Ki. pp. 518–19.) Two to Lichtenberg. (R. pp. 163–5; Hb. pp. 794–6; Ki. pp. 522–4.) One to Lindblom. (R. pp. 174–5; Hb. pp. 804–5; Ki. pp. 534–5.) One to Meierotta. (R. pp. 176–7; Hb. p. 806; Ki. pp. 535–6.) Three to Sömmering. (R. pp. 178–181; Hb. pp. 800–3; Ki. pp. 529–531.) Two to Kiesewetter. (R. pp. 191–3; Hb. pp. 813–14; Ki. pp. 543–5.)—VIII. Fragments from five letters to Reusch. (R. xi, 2, pp. 74–8; complete in Hb. viii, pp. 727–731; Ki. viii, pp. 447–51; other elsewhere unprinted fragments: R. xi, 2, pp. 162–5, 166–7, 169–170.)

131) *Kant: Zwei Briefe an Hippel*, in Dorow's records and letters in characterization of the world and literature. New series. Berlin. 5th vol. of the earlier collection, 1841. pp. 161–4. (R. xi, 2, pp. 107–8; Hb. viii, pp. 732–3; Ki. viii, pp. 452–3.)

131a) *Kant: Fragmente eines Briefes an J. H. L. Nicolovius*, in memory of Z. H. L. Nicolovius, by Alf. Nicolovius. 8vo. Bonn. 1841. Weber. pp. 62–3.

132) *Kant: 68 Interessante Definitionen*; collected from his various works by C. G. . . . ch in Darmstadt. Large 8vo. 1842. Kern. 16 pp.

133) *Kant: Zwei Briefe an Hamann, vom 6. und 8. April, 1774*, in the appendix to I. H. Ratjen; Johann Friedrich Kleuker und Briefe seiner Freunde. 8vo. Göttingen. 1842. Dieterich. pp. 206–212. Reprinted in Hamann's writings; ed. by Fr. Roth, 1842, viii, 1, pp. 234–242.

134) *Kant: Ueber die religiösen und politischen Fragen der Gegenwart*. (Ed. by A. H. Hoffmann von Fallersleben.) 8vo. Darmstadt. 1847. Leske. 48 pp. (contains no. 51, and passages from nos. 50, 62, 78, 84, 96a, 98, 108.)

135) *Kant: Einige Blätter aus seinen Vorarbeiten zur Anthropologie*, contributed from the manuscripts, by F. W. Schubert, in N. Pr. Pr. Bl. Another series. Königsberg. 1857. Vol. XII, pp. 51–61. (A lecture given before the Kantian Society, Apr. 22, 1857; some communications from Kant's manuscript of the "Observations on the Feeling," etc., from which passages were already published in Vol. XI of no. 2.)

135a) *Kant: Zwei Briefe*; ed. by D. Minden (under the designation ♂)

in N. Pr. Pr. Bl. 3d series. 1859. Vol. III, pp. 109-114. (A letter to Rehberg without date, cf. no. 153, pp. 53-5, 64-7; a letter of Apr. 10, 1794, recipient unnamed.)

136) *Kant: Zum ewigen Frieden, nebst Auszügen aus andern kantischen Schriften betreffend den nämlichen Gegenstand.* New edition, with a preface by G. Vogt. Large 8vo. Bern. 1867. Fiala. viii, 63 pp. (cf. no. 84).

137) *Kant: Ein Brief an Spener und ein Brief an Nicolai (?), in Drei Hundert Briefe aus Zwei Jahrhunderten;* ed. by Karl von Holtei. Vol. I, Part 2. Hannover. 1872. Rümpler. pp. 88-92. (Already in part reprinted in Hoffmann v. Fallersleben's "Findlingen." Leipzig, 1860. Engelmann.)

138) *Kant: Ein Briefwechsel zwischen Kant und Kampe;* contributed by Herm. Hettner, in *Zeitschrift für deutsche Kulturgeschichte.* New series, i, 1872. Hannover. pp. 128-132 (2 letters from Kant of Oct. 31, 1777, and July 16, 1794). Reprinted in Leyser, J.: Joach. H. Kampe. Braunschweig, 1877. Vol. II, pp. 320-3, 326-7; also the second letter of Kant in Vossischen Zeitung of Oct. 2, 1884, no. 461, 1st supplement, and in the Königsberger Hartungsche Zeitung, no. 233, 1884, evening issue.

139) *Kant: Lichtstrahlen aus seinen Werken, mit einer Biographie und Charakteristik Kant's,* by Jul. Frauenstädt. 8vo. Leipzig. 1872. Brockhaus. v, 210 pp.

140) *Kant; Brief an K. Morgenstern, in Briefe von Goethe, Schiller, Wieland, Kant, Böttiger, Dyk, und Falk an K. Morgenstern;* ed. by F. Sintenis. 8vo. Dorpat. 1875. Gläser. 50 pp.

141) *Kant: Ein Brief an Hartknoch, in Riga, vom Jan. 28, 1797;* in Teichmüller's *Ungedruckte Briefe von Kant und Fichte.* (Z. f. Ph., N. F. Vol. 66, 1875, pp. 173-185, especially pp. 174-5.)

142) *Kant: Entwurf einer Antwort auf einen Brief Jung-Stilling's;* in fifteen letters of J. G. C. Kiesewetter an Kant; four letters from Daniel Jenisch to Kant; a letter from Heinrich Jung-Stilling to Kant, together with the draft of Kant's answer and four letters from Joh. Benj. Erhard to Kant; ed. by F. Sintenis (A. M. 1878. xv, pp. 193-268). Cf. the 2d part of this *Bibliography* under Sintenis, 1878, and the letter to Jung-Stilling in no. 76a.

143) *Kant: Ein Brief an K. G. Hagen in Königsberg; in Freudenthal J., Ein ungedruckter Brief Kant's und eine verschollene Schrift desselben wider Hamann.* (Ph. Mh. 1879, Vol. xv, pp. 56-65.)

144) *Kant: Rede de Medicina corporis, quae Philosophorum est.* (Unedited.) Contributed by Ths. Reicke. Large 8vo. Königsberg. 1881. Beyer. 19 pp. Separate reprint from A. M. 1881, xviii, pp. 293-309. (Review of Kant's public speeches; reprint of the only one still extant, delivered in 1786 or 1788, carefully corrected by K. himself. The title received its present form after two changes [*De regimine corporis*, etc., and *De cura et disciplina corporis*]).

145) *Kant: Nachträge zu Kant's Kritik der reinen Vernunft*; ed. from Kant's posthumous writings by Benno Erdmann. Large 8vo. Kiel. 1881. Lipsius and Fischer; 59 pp. (184 additions and corrections to R. Va. from Kant's own copy through which many difficult passages are explained. Cf. the 2nd part of this Bibliography under Erdmann, 1881.)

146) *Kant: Ein ungedrucktes Schreiben (über Isaak Euchel)*; contributed by L. Friedländer, in A. M., 1882, xiv, pp. 309-312. Again reprinted: Königsberger Hartungsche Zeitung, 1882, no. 183 (supplement); Frankfurter Zeitung, 1882, no. 124 (supplement); Das Jüdische Litteraturblatt, xi, no. 33 (Kant as Dean of the philosophical faculty gives it as his opinion that *facultas legendi* must be denied to the Jewish student Euchel, both on the ground of the statutes which require a profession of the Augsburg Confession and in order to avoid conflicts between Jewish and Christian students incited by Rabbinical interpretations of the Scripture).

147) *Kant: Reflexionen zur kritischen Philosophie*; ed. from K's posthumous manuscripts by B. Erdmann. 1882. 1884. See further the 2nd part of this Bibliography under Kant. 1882.

148) *Kant: Zwei Gedichte Kant's*, on the death of the Professor of Theology, Lilienthal (1782), and on the death of the Professor of Law, Christiani (1780) in Sitzungsberichte der Alterthumsgesellschaft, Prussia, im 37ten Vereinsjahre, pp. 63 A. M., 1882, xix, pp. 677-678. Reprinted: Frankfurter Zeitung, 1883, no. 30 (supplement). Insterburger Zeitung, no. 27. Cf. no. 130, ii.

149) *Kant: An unprinted work belonging to the last years of Kant's life (Uebergang von den metaphysischen Anfangsgründen der Naturwissenschaft zur Physik)*; ed. as Manuscript by Rud. Reicke in A. M., Vol. XIX, 1882, pp. 66-127, 255-308, 425-479, 569-629. Vol. XX, 1883, pp. 59-122, 342-373, 415-450, 513-566. Vol. XXI, 1884, pp. 81-159, 309-387, 389-420, 533-620. (The publication comprises two-thirds of the whole.)

150) *Kant: Das nachgelassene Werk Imm. Kant's*. On the Transition from the metaphysical Principles of Natural Science to Physics; popularly presented, with proofs from science by Albrecht Krause. 8vo. Frankfurt a. M. and Lahr. 1888. Schauenburg, xvii pp. and 213 double-pages.

Krause has used only that part of the manuscript which treats of the "Transition." The other part contains in outline a world-system, or system of Transcendental Philosophy in three sections (God, World, and Man in the world as moral being); the "Transition" appeared in scattered passages as part of the last section. Krause gives on one side of the double page his popular presentation, on the opposite side the references, which are oftentimes too much detached

from their connection. He deserves great credit for showing that the purpose of the work was not due to a senile whim, and that there appears in it much more plan and unity than had been commonly supposed. But it is certainly a great exaggeration on the part of Krause when, following Kant's own opinion, he regards this as his masterpiece ; it does not really occupy any important place in his philosophy. It only carries on, in behalf of an explanation of the necessity and universality of scientific knowledge, the attempt to establish the *a priori* elements of mind, and seeks to narrow the great chasm between — on the one hand — the most universal laws of experience, which the Critique of Pure Reason sets forth in its ground principles, and which the metaphysical principles of natural science predicate of matter as the movable in space, and — on the other hand — the endless manifold of the empirical content of experience. To this end it recounts the possible forces of matter according to the categories, showing *a priori* the existence of matter and seeking to deduce the notion that no sensibility can be thought of without active and reactive powers of the subject, and that a self-affection of the subject in accordance with the categories must precede the exercise of these powers, so that the possible moving forces of matter (and thus also to a certain extent the content of experience) can be deduced from the table of categories. But the division of moving forces got by Kant in this manner furnishes only a purely formal scheme, which obviously arises from the simplest observation and needs no deduction ; while the entire multiplicity of forces, their combinations, and the laws according to which they work, stand over against the *a priori* laws of experience laid down by Kant as unmediated after as before, and not to be deduced from them or reduced to them. But by far the greater part of this work shows unmistakable traces of old age, especially in the doctrine of self-affection, where Fichte appears to have influenced him, and in the doctrine of the "phenomenon of phenomenon," where there seems to arise the problem — insoluble for K.'s system — how movements can proceed from "outside" objects which *we* have first made, which move-

ments cause sensations in us through whose relation to transcendental apperception the objects which are the source of these sensations first arise. For according to this work, and in contradiction to the Critique, it is the phenomena which affect us, not the things-in-themselves. But in every case the Critique must furnish the explanation for the "Transition" and cannot in turn be explained from the latter. In many passages it seems as though Kant had written in order to set himself thinking and then had lost the thread. In continually renewed attempts there is shown an inability to grasp the problem and to give it expression which arouses the deepest sympathy.

151) *Kant: Ein Brief an Garve*, in A. Stern: Ueber die Beziehungen Ch. Garves zu Kant; together with several hitherto unprinted letters of Kant, Feder, und Garve. I. D. Large 8vo. Leipzig. 1884. Denicke, 98 pp. (The letter occupies pp. 43—5 and is again reprinted in K. Schultz' edition of K.'s Prolegomena. 1888, pp. 220—8. Cf. also Arnoldt in A. M. 1888, xxv, pp. 193—226.)

152) *Kant: Ein Brief an J. S. Beck, sowie mehrere auf Beck's Briefe geschriebene Erläuterungen der jenem schwierigen Punkte*, in Reicke, Rud.: Aus Kant's Briefwechsel. Lecture delivered on Kant's birthday, April 22, 1885, before the Kant society of Königsberg. With an appendix containing letters from Jac. Sigism. Beck to Kant and from Kant to Beck. Large 8vo. Königsberg. 1885. Beyer, 73 pp. (separate reprint from the A. M., 1885, xxii, pp. 377—449 and the Frankfurter Zeitung). Cf. further the 2d part of this Bibliography under Reicke, 1885; also no. 156.

153) *Reicke, Rud.: Lose Blätter aus Kant's Nachlass*. First number. Large 8vo. Königsberg. 1889. Beyer's Buchhandlung (Oppermann. Thomas) iii, 302 pp. Separate reprint form: A. M., 1887, xxiv, pp. 312—360, 443—481, 648—675. 1888, xxv, pp. 263—332, 513—628. (These Blätter, for the most part from the posthumous writings found in the university library of Königsberg, which usually have no inner connection with each other, embrace Kant's entire development from the beginning of the fifties to the time of his death; very valuable; printed with extreme care.)

154) *Kant: Zwei Briefe aus dem Nachlass Borowski's*, contributed by B. Erdmann, in: A. G. 1889, ii, pp. 249—256. (Both to Borowski: 1761, 1791.)

155) *Dilthey, W.: Archive der Litteratur in ihrer Bedeutung für das Studium der Geschichte der Philosophie*, in A. G. ii, 1889, 343—367 (pp. 356—61, D. calls attention to Kant's posthumous manuscripts and also to the Rostock manuscripts, which were in part published by him in the archives).

156) *Dilthey, W.: Die Rostocker Kant-Handschriften.* I: eight letters from Kant to Jakob Sigismund Beck. The same, pp. 592-650. To the reprint of the letters D. adds a presentation of Beck's philosophical development, place in the transcendental movement, and relation to Kant. (Cf. no. 152.)

157) *Dilthey, W.: Aus den Rostocker Kant-Handschriften.* II: An unprinted essay of Kant's on the treatise of Kästner. A. G. iii. 1890. pp. 79-90 (directed against Kästner's three treatises in Eberhard's Ph. Mg. 1790. ii, pp. 391-430.) (Cf. the 2d part of this Bibliography, under 1788: "Philosophisches Magazin.")

158) *Dilthey, W.: Kant's Aufsatz über Kästner und sein Antheil an einer Recension Von Johann Schultz* in the *Jenaer Literaturzeitung.* (A. G. iii, 1890. pp. 275-81.) To this third article D. was led by the information of R. Reicke that the criticism of Ph. Mg. vol. II in the A. L. Z. 1790, iii, no. 281-4, pp. 785-814, was written by Schultz on the basis of several essays by Kant of which one was the essay on Kästner published by D. (Cf. no. 72.)

159) *Dilthey, W.: Der Streit Kant's mit der Censur über das Recht freier Religionsforschung:* third part of the contributions from the Rostock Kantian manuscripts, A. G. iii, 1890, pp. 418-50. (History of the contest from the prohibition of the essay on original sin to the controversy of the Faculties; communication of two drafts of a writing from K. to the Königsberg theological Faculty concerning the freedom to print his "Rel."—the one in extracts, the other word for word; contribution of two unprinted prefaces to the last named writing.)

THE EPISTEMOLOGY OF NEO-KANTIANISM AND SUBJECTIVE IDEALISM.

IN a preceding article¹ I traced the insidious extension given by Kant to the term "experience," in virtue of which it comes to mean a quasi-independent world, identified neither with the facts of subjective consciousness nor with trans-subjective realities. We have now to follow the development of this conception of experience in the hands of the Neo-Kantians. In their hands it soon comes to figure as the exclusive reality, and the nature of their results will show us the danger of departing from the trans-subjective reference in knowledge.

In Kant, as we have seen, this reference remains, but the experience-object thrusts the trans-subjective reality more and more into the background. Its existence became, therefore, the first point upon which the Kantian system was assailed. Jacobi, Aenesidemus-Schultze, Maimon, and Beck agree in pointing out the inconsistency of the thing-in-itself with other fundamental principles of Kant's philosophy. Jacobi's saying is well-known, that '*without* the supposition of the thing-in-itself it is impossible to find one's way into the system, and *with* this presupposition it is impossible to remain in it.' For if causality is a category of subjective origin and merely immanent application, it must be a flagrant transgression of the first principles of Criticism to apply it, in this transcendent reference, to the action of things-in-themselves. To Fichte it was simply incredible that Kant could ever have meant to make such an assertion; and accordingly he regarded the thing-in-itself as posited by the ego, that is to say, merely as a reflection of the ego, as a moment in the ego's own creative thought. The

¹ This article follows closely upon the paper on "Epistemology in Locke and Kant" in the March number of this Review.

development of speculative thought which immediately followed Kant in Germany presents, indeed, an interesting parallel in some respects to the fate of Lockianism in England—a parallel which may just be alluded to in passing. If Kant with his fundamental dualism may be regarded for a moment as a new edition of Locke, then Fichte may be compared to Berkeley. Like Berkeley his main polemic is against the object as a thing-in-itself, but he leaves, or seems to leave, the subject as a metaphysical reality and force. With Hegel, however, the subject — “the empty ego,” as he calls it — is merged in the process of its own predicates; and the way in which the Hegelians of the Left substantiate categories as the only real existences recalls Hume’s resolution of the universe into naked ideas. But the Neo-Kantians belong to our own generation, and the lesson of their speculations will, therefore, be more instructive.

Neo-Kantianism admits the necessary reference of perception to a thing-in-itself, but this very reference, the Neo-Kantians go on to say, is itself a subjective necessity. It is a form of our thought, comparable to the necessity we feel to employ the category of substance to unify qualities or the category of causality to bring connection into a world of detached objects. In like manner, the thing-in-itself is the ultimate notion or category by which we round off external experience. In short, Kant has proved that *the idea of the thing-in-itself* or the transcendental object is a necessary element in experience; but to treat this idea as a thing is a lapse into Dogmatism at which the Neo-Kantian holds up his hands in pious horror. In support of this rendering of the critical theory, several passages are adduced from Kant which, though susceptible of an entirely different interpretation, undoubtedly seem to favor such a view. Thus, for example, in the chapter on Phenomena and Noumena in the first edition of the *Critique*, Kant speaks of “the transcendental object” as “a something = x , of which we know nothing at all and can know nothing (according to the present structure of our understanding), *but which can only serve as a correlate of the unity of apperception*, to establish that unity

of the manifold in sensuous perception, by means of which the understanding unites that manifold in the conception of an object. This transcendental object cannot be separated from the data of sense, because in that case nothing remains over by which to think it. It is therefore not an object of knowledge in itself, but *only the idea of phenomena under the conception of an object in general*, which is determined by the manifold of the phenomena." I have italicized the most striking phrases, and it will be observed that there is little here to distinguish the so-called "transcendental object" from that permanent in perception (*substantia phenomenon*) which Kant proves elsewhere to be the foundation of our experience of objects and a correlate or reflex of the unity of apperception. The thing-in-itself is described as the correlate of the unity of apperception, and the functions of the two are not distinguished. Both the unity of apperception and the transcendental object are there "to establish a unity in the manifold of sense-perception."

Founding on this and similar passages, and combining them, as he believes, into a consistent meaning, Cohen says that the transcendental object, as distinct from the idea of the transcendental object, does not concern us at all. Such an object would be transcendent, and in this positive sense is to be denied. The object is called transcendental to signify that, by the constitution of our thinking function, it necessarily intrudes itself. But this notion of an object-in-general which underlies, as it were, all particular empirical objects is nothing but the formal unity of consciousness expressing itself through the categories, and now reflecting itself back from the objective world of perception thus constituted. He quotes a passage from Kant which, taken by itself, agrees almost verbally with what he has just said: "The pure notion of this transcendental object (which really in all our cognitions is the same = x) is that which in all our empirical notions is able to yield reference to an object, that is, objective reality. Now this notion can contain no definite percept, and will therefore refer to nothing except the unity which must be met with in a manifold of cognition, so far as it stands in relation to an object. *This*

reference, however, is nothing else than the necessary unity of consciousness."¹ "When the Copernican criticism," Cohen proceeds, "brought to light the true movement of the object round the forms of the mind, it disclosed at the same time the ground of the natural phenomenon that we make the common correlate our senses and our understanding into an absolute (*zum Absoluten der Natur*). And this phenomenon of our thought proves itself to be so natural that, although it is recognized, it still retains its deceptive power. Just as, in spite of Copernicus, the sun still appears to the senses to move, so the transcendental illusion of the absolute object remains, although we know perfectly well that it radiates from the forms of our self." "The noumenon of substance is, and is intended to be, nothing more than the extended category (*die erweiterte Kategorie*)." "The object in the background, the absolute thing-in-itself, the supposed cause of the phenomenon . . . has shown itself to be the veritable creature of the understanding — has shown itself indeed so veritable a creature that the illusion cannot be dispelled. In possible experience, that is, in constructive perception and in the self-thought (*selbstgedachten*) notions of the understanding, lies all reality, even that reality which would fain be more."² In exactly the same spirit, Lange, who was largely influenced by Cohen, denies that our perceptions come about through affection of the sensibility by transcendent things-in-themselves; he only allows that our mental organization is such that it appears so to us. Our whole experience is in Lange's phrase, "the product of our organization." "A judgment referring to the thing-in-itself has no other meaning than to round off the circle of our ideas."³

So far, however, the ego still remains as a reality — a bearer or supporter of this subjective world of experience; or, to use

¹ Deduction of the Categories in the first edition. Werke III, 573 (ed. Hartenstein, 1867).

² Kant's Theorie der Erfahrung, p. 253. I quote from the first edition of 1871. I do not know how far Professor Cohen may have modified his views or expressions subsequently. I am concerned with his position only as illustrating the consistent development of a particular line of thought.

³ Geschichte des Materialismus, II, 126.

the Copernican metaphor of which Cohen is so fond, the ego remains as the central sun round which objects revolve. And certainly it does not at first appear how this self-contained subjective world is to subsist without at least this amount of foothold upon reality. That only proves, however, that we have not realized the inexorable logic of this line of thought. It will be noticed that Cohen is careful, in the above quotations, to speak of Kant's discovery as making the objects revolve 'round the forms of the mind,' round notions, not round the ego or subject. To speak of the ego in this explicit fashion as a reality would be to assert the existence of the ego as something more than simply a function or aspect of conscious experience; and that would be to commit the unpardonable sin (in Neo-Kantian eyes) of 'overstepping the bounds of possible experience,' and setting up a transcendent thing-in-itself as substance or cause. For, in point of fact, the reality of the subject stands here upon exactly the same basis as the reality of the object. The transcendental *object*, according to the argument we have just followed, is merely a notion or category which gives the finishing touch to our subjective experience-world — by which, as Lange says, we round it off — but which cannot possibly carry us out of this experience-world to a Beyond. According to this purely immanent Criticism, such a Beyond simply does not exist. Now the *subject* is in like manner a notion or category — the notion of notions, the category of categories, if you will — but still just the ultimate notion which puts the dot upon the *i*, and gives the finishing touch to experience. Many passages may be quoted from Kant as evidence that he regarded the transcendental unity of apperception as a form evolved in the process of experience, and a pure abstraction, therefore, when separated from the process whose formal unity it constitutes. Ignoring the difference which exists for Kant between the transcendental unity and the noumenal self, Cohen is not slow to utilize such passages. "The ego," he says, "is so far from being a substance, understood as a special productive faculty, that it is resolved into a process in which it arises and which it is. The unity of

the action is at the same time the unity of consciousness.”¹ He recalls to us that Kant even abstracts from the actual existence of the ego — in his frequent references, namely, to the ‘I think’ which must be *capable* of accompanying all my thoughts. What kind of faculty is that, asks Cohen, whose actual existence or non-existence may be disregarded? Taking Kant’s own example, he proceeds: “The transcendental ego is a form of synthesis . . . The unity of consciousness arises in the synthesis of the drawing of a line, and this synthesis consists in the notion of quantity under which the line is subsumed. Thus the transcendental apperception falls together with the synthetic unity which is contained in the category. . . . As space is the form of external perception and time of internal, so the transcendental apperception is the form of the categories. . . . The synthetic unity is the form which lies as a common element at the basis of all the separate kinds of unities thought in the categories. The transcendental unity of apperception (in Kant’s own words) is *the unity through which all the manifold given in perception is united in a notion of the object.*”

Here the wheel has come full circle. The transcendental object was first reduced to a radiation or reflection of the subject, and now the subject has become merely the unity of the object. Both, in fact, are simply forms assumed by this “one all-embracing experience” (to use a phrase of Kant’s on which Cohen naturally lays stress). They are not really separate facts or even separate forms; they are the Janus-faces of a single fact called experience. Subject and object are forms which this experience necessarily takes, and, as such, they are described as transcendental conditions of the possibility of experience, but they have no existence or meaning apart from this immanent reference to the experience whose forms they are. As Cohen says, summarizing his own position, “the form is not a primitive action; it is a form in the sum of psychical occurrence (*im psychischen Gesamtgeschehen*), a form which

¹ Kant’s *Theorie der Erfahrung*, p. 142.

presupposes other processes and coincides with part of them.”¹ The transcendental subject, therefore, as a real source and locus of experience, goes the way of the transcendental object. It is just a form which the current of psychical events has a way of taking, but from which we can infer no real being behind the psychical flux, whose the experience is, or to whom the appearance appears. As soon as we attempt to do so, we become the victims, according to Neo-Kantianism, of an illusion precisely similar to that described by Cohen in the case of the object. But though Cohen, as we have seen, follows the same line of argument in both cases, and reduces subject and object alike to forms of thought to which no trans-subjective reality corresponds, he stops short of branding the subject also as an illusion. He does not write in a sceptical interest; he proposes this self-rounding world of *Erfahrung* or experience as the one and all-sufficient reality. Kant’s supposed “theory of experience” is consistent Criticism—the latest birth of philosophy; and accordingly it would be stultifying himself to speak of illusion, in so many words, in connection with the supreme form of experience.

Nevertheless it is perfectly apparent that the whole structure hangs in the air. This purely immanent reference of the categories and forms of thought leaves us with no real being whose the experience is. This ‘experience’ or *Erfahrungswelt* has no locus; it evolves itself *in vacuo*, and in the course of its evolution evolves the form of personality. Lange, who otherwise adopted Cohen’s results as true Kantianism and true philosophy, was disturbed by this lack of any real basis, and entered a mild protest against it. “If the emphasizing of the merely transcendental standpoint be carried too far, we arrive at the tautology that experience is to be explained from the conditions of possible experience in general—that the synthesis *a priori* has its cause in the synthesis *a priori*.”² By the merely transcendental standpoint Lange means what I have just called the purely immanent or inward reference of the categories and forms of thought—the proof, for example,

¹ *Ibid.*, p. 162.

² *Geschichte des Materialismus*, II, 126, 131.

which deduces a unity as the condition of synthesis, but which can say nothing of the unity apart from the act or movement of synthesis of which it is, as it were, the moving form. Such a proof, Lange says, in analyzing experience or knowledge into conditions which are confessedly abstractions except as realized in the act or fact of knowledge, is really explaining experience by itself—is at all events giving no account of the *real conditions* on which the existence of experience at all depends. Hence, he says, if the transcendental deduction is to be more than the tautology indicated above, “the categories must necessarily be *something more* than simply conditions of experience.” In other words, he is seemingly not content to speak with Cohen of “the notions” round which objects revolve. The realistic basis of the categories lay for Kant himself, of course, in the noumenal self; but for this Lange proposes to substitute “the physico-psychic organization” as the source from which spring all the forms, notions, and Ideas which give rise to the appearance of a world in space and time. The physico-psychic organization is thus the cause or ground of the appearance, and at the same time it is that to which the appearance appears, and thus we seem to secure a certain anchorage. But Lange has learned his Neo-Kantian lesson too well to admit that this organization is a thing-in-itself. The physico-psychical organization is itself only an appearance or phenomenon, though it *may* be the appearance of an unknown thing-in-itself. Hartmann has wittily but not unjustly dubbed this position of Lange’s mere Confusionism.¹ If the organization is mere appearance, we are no better off than we were with Cohen; if, on the other hand, we are going to speak of a real being at all, this problematical way of referring to it is absurd. It is impossible to blow hot and cold in this fashion with a ‘perhaps.’ Our view must either be frankly immanent, in which case the subject is merely an epistemological category, or it must be frankly transcendent, in which case the subject is the real being in whom and for whom the whole process of experience or knowledge takes place.

¹ In his *Neukantianismus, Schopenhauerianismus und Hegelianismus* (1877).

Lange's recoil from the consequences of Cohen's reasonings throws an instructive light upon the nature of these consequences, and therefore I have dwelt upon his position perhaps longer than its own merits justify. This whole Neo-Kantian point of view is reduced to consistency by Vaihinger,¹ who exposes the contradiction latent in Lange's idea of the physico-psychic organization. He points out with inexorable logic that to hypostatize the subject, even in this half-hearted way, is to fall back into what Cohen calls Dogmatism; the subject has in this respect no prerogative over the object, both being alike epistemological categories, limitative conceptions. So far, it may be said, Cohen had already gone. Vaihinger differs from him, or advances beyond him, in that his attitude is essentially sceptical. "Critical Scepticism," he says, is the real result of the Kantian theory of knowledge. The result of Criticism is purely negative; it is the self-dissolution of speculation (*Selbstzersetzung der Speculation*), inasmuch as it restricts us rigorously to the immediate world of subjective states. All philosophy, he says again, has only intra-subjective significance; all thought moves in subjective forms whose objective validity can never be verified, and whatever instruments we employ to know reality, they are still subjective in their nature. Criticism, therefore, or consistent Kantianism denies the trans-subjective validity of every category and form of thought, and thus brings us back, in a more refined form perhaps, to the position of Hume. Hume devoted the greater part of his industry to showing how *the illusion* of a real world and a real self would naturally arise, in the absence of the corresponding realities; how these illusions would weave themselves out of the dance of detached and homeless ideas. Similarly Hartmann has appropriately labelled this last result of Neo-Kantian thought Illusionism. "Ideas," said Reid, "in view of Hume's results, "were first introduced into philosophy in the humble character of images or representatives of things. . . . But they have by degrees supplanted

¹ In his book, *Hartmann, Dühring und Lange* (1876).

their constituents and undermined the existence of everything but themselves. . . . These ideas are as free and independent as the birds of the air. . . . Yet, after all, these self-existent and independent ideas look pitifully naked and destitute when left thus alone in the universe, set adrift without a rag to cover their nakedness." In exactly the same way, though along different lines, 'experience,' which was introduced into philosophy in a doubly dependent character, as the experience by a real being of a real world—experience, which by the very structure of the term seems to cry aloud for a real subject and a real object—has substantiated itself as the sole reality. First the object disappears before negative criticism, and the world, as Hartmann puts it, is transformed into the dream of a dreamer; at this stage we have a purely subjective Idealism or Solipsism. Then the subject shares the fate of the object, and the dream of a dreamer becomes a dream which is dreamt by nobody, but which, if one may say so, dreams itself, and among its other dream-forms dreams the fiction of a supposed dreamer.¹ This self-evolving, unsupported, unhoused illusion is all that exists.

I am not aware that absolute scepticism or absolute illusionism admits of any direct logical reply. But it has hitherto been regarded, not only by the common sense but by the enlightened common reason of mankind, as a *reductio ad absurdum* of the line of thought which leads to it. It is a result which we deliberately refuse to accept as true. In face, however, of such a sceptical dissolution of reality, we do not merely intrench ourselves in this deliberate refusal, leaving the sceptic in possession of the intellectual field. The nature of the result leads us to examine the nature of the premises and the principles of argumentation which have led to it. This was what Kant and Reid both essayed to do in face of the Humian sceptic. Now that a definite development of the Kantian Criticism brings us face to face with a subtler sceptic of the same description, a similar course must be adopted; we must endeavor to lay our hand

¹ Cf. Hartmann's *Kritische Grundlegung des transcendentalen Realismus*, p. 47.

upon the fundamental presuppositions which predetermined the evolution of thought toward this end. In a preceding article we saw reason to believe that this was to be found in the unwarrantable extension given by Kant to the term 'experience,' and in his view of the merely immanent use of the categories and forms of thought. It is this idea of immanence which, in the hands of his idealistic followers, swallows up the transcendent reference involved in knowledge—a reference still maintained by Kant himself—and leads to the fiction of an experience which is experienced by nobody and is an experience of nothing.

The first essential, then, is to restrict 'experience' to its true and proper meaning. As soon as this is done, it becomes apparent how impossible it is to take experience as something self-contained, self-explaining, and self-existent. Those who profess to do so make matters plausible only by illicitly importing into their professedly pure experience a multitude of trans-subjective elements. Where, then, is the boundary-line to be accurately drawn between pure experience and what transcends experience, between the subjective and the trans-subjective? It is accurately drawn only when by pure experience is understood my own conscious states—the 'stream' of ideas which constitutes my mind in a phenomenal or psychological reference. Everything else is trans-subjective or extra-psychological, *i.e.*, epistemologically transcendent. Limiting ourselves thus, let us look at the nature of this immanent world. There is a passage in Clifford's well-known essay 'On the Nature of Things-in-themselves' which seems to me to illustrate in an apt and vivid way the characteristics of our actual consciousness. It may be quoted without prejudice, as it is introduced by Clifford and used by him in quite another reference. "In reading over a former page of my manuscript," he says, "I found suddenly upon reflection that, although I had been conscious of what I was reading, I paid no attention to it; but had been mainly occupied in debating whether faint red lines would not be better than blue ones to write upon; in picturing the scene in the shop when I should ask for such lines to be ruled,

and in reflecting on the lamentable helplessness of nine men out of ten when you ask them to do anything slightly different from what they have been accustomed to do. This debate had been started by the observation that my handwriting varied according to the nature of the argument, being larger when that was diffuse and explanatory, occupied with a supposed audience, and smaller when it was close, occupied only with the sequence of propositions. Along with these trains of thought went the sensations of noises made by poultry, dogs, children, and organ-grinders, and that diffused feeling in the side of the face and head which means a probable toothache in an hour or two."

Now all this sounds perfectly intelligible when the different elements in the section of consciousness examined are referred to their real causes, and recognized as the effects of an independent world of causally connected things. But the richly variegated scene which Clifford conjures up may serve to bring home to us the hopelessly disconnected appearance which the simultaneities and sequences of our psychological life would present, were they not constantly pieced out and connected—interpreted in a thousand ways—by reference to a system of extrapsychological realities. If the train of thoughts and images seems to proceed for a time with a certain orderliness, under the guidance of association, this sequence is accompanied by a mass of changing organic sensations, which arise and disappear without any reference to the chain of thoughts, and so far as consciousness is concerned, have an absolute beginning out of nothing and an absolute end. Or it may be that our meditations are abruptly interrupted by a sight or a sound—the sound of a street-fight, the entrance of a friend, "the noises made by poultry, dogs, children and organ-grinders"—by a percept of some kind, in short, which, so far from having any connection with my immediately preceding states of consciousness, is shot from a pistol, as the saying is—projected headlong into their midst in an utterly inexplicable fashion. The same discontinuous and irregular character of subjective experience as such is exemplified every time I turn my head and bring into view

objects undreamt of the moment before. It seems hardly necessary to add that this complete incoherence of the contents of consciousness as such is recognized by modern psychologists as irresistibly impelling us to the hypothesis of a world of trans-subjective realities.¹ It requires, in fact, a strong effort of abstraction to realize at all what the state of affairs would be without such a supposition ; for we involuntarily read a trans-subjective meaning into these apparitions of our perceptive consciousness. An intruding percept, which has no causal connection with what preceded it in my consciousness, we yet accredit as a messenger from a world beyond — the sign of a fact whose appearance just at this particular time and place is perfectly determined by the real causal connections of the trans-subjective world to which it belongs. It is only as thus correlated with an orderly trans-subjective world that I can possibly bring order and connection into my psychological experiences. Without this reference they are fitly compared to “a feverish dream, which constantly breaks off and tacks on afresh, without any indication how the individual pieces are connected with one another, or whether they are connected at all.”² To talk of immanent causality as existing in such a world is an abuse of language. Nobody asserts a causal connection between his idea of the sun and his idea of the warmed stone. The percept of the sun may often undoubtedly precede the percept of the stone, but just as often I may see the stone first and the sun second. Moreover I often have the percept of the sun without that of the stone, and, similarly, I may perceive the stone and a multitude of things may intervene to prevent my perceiving, or even thinking of, the sun. Between the one idea and the other there is no regular connection, and indeed no man thinks of asserting a causal relation between them. The causal relation is between the real facts which are the condition of these two ideas — between the trans-subjective sun and the trans-subjective stone. In this sense all our causal judgments

¹ Cf., for example, Mr. Stout's article on the Genesis of the Cognition of Physical Reality. *Mind*, XV, p. 32.

² Hartmann, *Grundproblem der Erkenntnisstheorie*, p. 55.

are transcendent, until we begin, as psychologists, to study the subjective mechanism on its own account. It is doubtless simultaneities and sequences among our ideas that put us upon the track of these trans-subjective connections ; but, once established, no appearance of A in consciousness without B, or of B without A, or of A and B separated by various intervening ideas — no one, in short, of the hundred casualties to which the conscious sequence is exposed — shakes in the least our belief in the continued validity of the relation in the real world. And, it may be added, unless from the beginning we transcended the immediate data of consciousness — unless from the outset they were taken not for what they *are*, but for what they *mean* — we should not fasten either upon the regularities or upon the irregularities of our experience as calling for explanation. There would be nothing to explain ; we should simply take everything as it came. We should be mere *historians* of the course of conscious occurrences that had made up our individual existence. ¹

Such then is pure experience ; this is what is actually immanent. The actual world of subjective experience only requires to be exhibited thus in its nakedness to have its essentially dependent and symbolic character recognized. It is only when related to a world of independent realities that these subjective phenomena become intelligible. Nay, it is only in this relation that *knowledge*, or the very conception of knowledge, could arise. Such an independent and essentially trans-subjective world is therefore necessarily assumed by every philosophy. An examination of the various theories of pure experience or pure immanence would show that, however they may disguise it from themselves, they all make this realistic assumption. But it is not necessary for us to go further than Mill's well-

¹ So Volkelt says that "knowledge" from the purely immanent point of view would consist simply "in einem Erzählen der von Moment zu Moment in seinem Bewusstsein vorkommenden Einzelvorstellungen." Properly speaking there would be neither thought nor knowledge "sondern lediglich ein Berichten über den absolut zusammenhangslosen Spectakel den ich unbegreiflicherweise in meinem Bewusstsein antreffe." Compare the fourth section of his *Immanuel Kant's Erkenntnislehre*, to which I am indebted in the foregoing paragraph.

known 'psychological theory of matter'—the modern version of Berkeley and Hume. Berkeley's own theological idealism is, of course, not here in point, because sense-phenomena are there referred to the divine will as a trans-subjective real cause, and so the all-important epistemological step is made. But Mill, with Hume's example before him, will not wittingly overstep the line which severs experience from what is and must be beyond experience. He has thus to supply a background to the tangled confusion and abrupt inconsequences of our actual sensations and at the same time to seem to avoid making the epistemological transition from sensation to something different in kind from sensation. Though not itself actual sensation, this explanatory supplement must be in a manner homogeneous and continuous with sensation; though *ex hypothesi* not itself experience, it must hoist the colors of experience, and so avoid the appearance of transcendency which your true Empiricist shuns like the very plague.

Mill states the necessities of the case in a sufficiently candid way, "What is it which leads us to say that the objects we perceive are external to us and not part of our own thoughts? We mean that there is concerned in our perceptions something which exists when we are not thinking of it, which existed before we had ever thought of it, and would exist if we were annihilated; and further, that there exist things which we never saw, touched, or otherwise perceived, and things which never have been perceived by man. This idea of something which is distinguished from our fleeting impressions by what, in Kantian language, is called Perdurability; something which is fixed and the same while our impressions vary; something which exists whether we are aware of it or not—constitutes altogether our idea of external substance. Whoever can assign an origin to this complex conception, has accounted for what we mean by the belief in matter."¹ Mill's own explanation is his celebrated theory of 'Permanent Possibilities of Sensation.' No undue stress need be laid here on the use of

¹ Examination of Hamilton, p. 221 (3d ed).

the term 'sensation,' as we are not discussing the merits or demerits of a purely sensationalistic theory of knowledge. Let us take it without prejudice in the widest sense as equivalent to percepts; for we find a substantially similar theory in some of the German Neo-Kantians, who refer in this connection to Mill, and use indifferently such expressions as 'potential sensations,' 'potential perceptions,' 'possibilities of perception,' 'possible consciousness.'¹ It is altogether, therefore, upon the 'permanent possibilities' that the stress is here laid. Mill makes matters so far easier for himself at the outset by the trans-subjective assumption of other selves. He then proceeds to resolve the physical universe into actual and possible sensations, repeating Berkeley's analysis in so many words: "I see a piece of white paper on a table. I go into another room. . . . Though I have ceased to see it, I am convinced that the paper is still there. I no longer have the sensations which it gave me; but I believe that when I again place myself in the circumstances in which I had those sensations, I shall have them again; and further that there has been no intervening moment at which this would not have been the case. . . . The conception I form of the world existing at any moment thus comprises, along with the sensations I am feeling, a countless variety of possibilities of sensation. . . . These various possibilities are the important thing to me in the world. My present sensations are generally of little importance, and are moreover fugitive; the possibilities, on the contrary, are permanent, which is the character that mainly distinguishes our idea of Substance or Matter from our notion of sensation." "These certified or guaranteed possibilities of sensation" — possibilities guaranteed not only for me but for other human beings — constitute, then, according to Mill, all that is real in the physical world, when we abstract from the actual sensations being experienced by the aggregate of sensitive creatures at any given moment.

We cannot, however, too carefully bear in mind that, according to the immanent view of subjective idealism, these possible

¹ For examples compare Volkelt, *Kant's Erkenntnisstheorie*, pp. 160-189.

sensations or perceptions are only actual, *i.e.*, only *exist*, in the moment of actual perception. Minds and the experiences of these minds are, with Mill as with Berkeley, the only two modes of existences (if, indeed, Mill would distinguish between the mind and its 'states of consciousness'); the essence of sensations is *percipi*. Consequently possible sensations are not to be conceived as constituting a separate *genus* or mode of existence; a sensation unfelt, a perception unperceived, is a contradiction in terms. The possibilities of sensation have, therefore, a merely imaginative or fictitious permanence, for, so long as they are not realized, they simply do not exist at all, — they are nothing. That is, be it understood, what consistency imperatively dictates. They cannot be more than this, unless we leave the ground of immanency altogether, and pass to the real thing of which sensation is the evidence. It is certain, however, that to Mill the permanent possibilities mean a great deal more than the 'naked possibilities'¹ which consistency allows him. Mill's possibilities have functions assigned them which only real existences can discharge. Modifications take place, Mill tells us, in our possibilities of sensation, and these modifications "are mostly quite independent of our consciousness and of our presence or absence. Whether we are asleep or awake, the fire goes out, and puts an end to that particular possibility of warmth and light. Whether we are present or absent, the corn ripens and brings a new possibility of food. Hence we speedily learn to think of Nature as made up solely of these groups of possibilities, and the active force in Nature as manifested in the modification of some of these by others." Now, we may fairly ask how a change can take place in a possibility at a time when it is admittedly only a possibility, that is to say, at a time when it does not exist. "A change in nothing," as Mr. Stout puts it, "is no change at all." Equally baseless is the notion of one of these possibilities causally modifying another at a time when, *ex hypothesi*, both are non-existent. The truth is that, under cover of the

¹ The phrase is Mr. Stout's, in an acute criticism of Mill's doctrine (*Mind*, XV, 23-25), to which I am indebted in this paragraph.

ambiguous term 'possibility,' Mill has covertly re-introduced the trans-subjective reality. Real things may very well be described, in reference to our experience, as 'permanent possibilities of sensation,' that is to say, they are the permanent real conditions which, in appropriate circumstances, are ever ready to produce sensations. We may even go further and say that, if any one is determined to be a purist and to define things solely in their relation to sensitive experience—solely from the effects which he finds them to produce—this definition of them as permanent possibilities of sensation is, perhaps, the most accurate we can hope for. And, of course, if Mill's phrase is to be so understood, there is no further difficulty about the extra-conscious existence and the extra-conscious causality of these possibilities, for we are back again upon the solid ground of trans-subjective reality. But it is plain enough that this cannot have been Mill's conscious meaning. "Otherwise," as Mr. Stout says, "he would have committed a *circulus in definiendo* of the most inexcusable kind." It is equally evident, however, that though Mill may not have intended it, no other meaning will suit the assertions he makes about his possibilities. Under cover of the ambiguity of language, and impelled by the realistic instinct, Mill has simply reinstated the trans-subjective reality in a different form of words. "*Ungefähr sagt das der Pfarrer auch, nur mit ein bischen andern Worten.*" The theory, therefore, which seems so ingenious and plausible indicates in truth the breakdown of subjective idealism. The realist may feel tolerably easy when the talk is of "modifications" taking place in our possibilities of sensation "mostly quite independent of our consciousness and of our presence or absence." But he would be a pedant indeed, who, instead of talking of real things, insisted on substituting the circumlocution 'permanent possibilities of sensation.'

It is not difficult to see how Mill, from his general standpoint in these matters, was led to the phrase and the theory. It is only in sensation, or say rather in perception, that the thing reveals its existence to me or to others. I can only describe it, therefore, in terms of perception; when I do not perceive

it, it does not exist for me. So far as experience goes, I can thus manifestly never get beyond the rubric of perception, past, present, or to come. Hence Mill identifies the thing itself with present and possible sensations. Exactly the same line of thought leads to the substantiation of experience and possible experience in the writings of the Neo-Kantians. The nature or predicates of the thing can only be learned in experience; the Neo-Kantian accordingly generalizes his different experiences of any trans-subjective thing, and substantiates these as a phenomenal object. The world of such objects assumes with him the same independent and trans-subjective position as Mill's world of permanent possibilities, and with just as little right. What we are to think of this professedly immanent world we have already seen. This phenomenal world, which will neither be subjective appearance nor the frank trans-subjective thing, but suspends itself *in vacuo* between the two, is a philosophical hybrid to which no real existence or fact corresponds. These so-called phenomena, in complete detachment from the subjective consciousness of mankind, are epistemologically transcendent, not immanent, and the causality which obtains between them is likewise transcendent; it is the causal action of one real thing upon another.

Is it not the case, in short, that the term 'experience,' as used throughout this epistemological discussion, whether by Neo-Kantian or by English Empiricist, covers a huge *petitio principii*? The question at issue is the possibility of a *knowledge* of the trans-subjective, but I cannot *experience* the existence of another being. I can be aware that another being exists, but its existence can be experienced by itself alone. I know that you exist; my experience furnishes ground for believing as much. But you are not part of my experience: I do not experience your states. In short, I am not you. Similarly, I know that something which I call the table exists, because it resists the pressure I exert against it. The table is the trans-subjective explanation of certain features of my experience; the table itself cannot strictly be said to be

experienced. The reality of everything beyond my own existence is thus of necessity beyond experience, for the experiences of each being are simply its own states, its own life. By the use of this term, therefore, in connection with knowledge, the trans-subjective reference is cut off in advance before the formal discussion begins.

This is so neatly illustrated in our home-grown philosophy that I make no apology for using Professor Bain's position to drive my argument home. Professor Bain shall be answered out of the mouth of Mr. Spencer. As is well known, Professor Bain lays great stress, and rightly so, on the contrast between passive and active sensation as a source of our belief in an external world. "Movement," he says, "gives a new character to our whole percipient existence." "The sense of resistance is the deepest foundation of our notion of externality."¹ In this Mr. Spencer is quite at one with him. But Mr. Spencer accepts this experience as the sufficient evidence of 'an existence beyond consciousness'—of 'something which resists.' Professor Bain is more subtle. The sense of effort and of effort resisted is no doubt contrasted with 'purely passive sensation,' but the contrast is still within consciousness. Our experiences of resistance are, after all, just so many 'feels,' so many subjective changes. "The exertion of our own muscular power is the fact constituting the property called resistance. Of matter as independent of our feeling of resistance, we can have no conception; the rising up of this feeling within us amounts to everything that we mean by resisting matter." Those 'feels,' then, *are* the material world. "We are not at liberty to say without incurring contradiction that our feeling of expended energy is one thing, and a resisting material world another and a different thing; that other and different thing is by us wholly unthinkable."² Or as he puts it more generally—"knowledge means a state of mind; the notion of material things is a mental fact. We are incapable even of discussing the existence of an independent material world; the very act is a contradiction."³

¹ *Senses and the Intellect*, pp. 376-7.

² *Mental Science*, p. 199.

³ *Senses and the Intellect*, p. 375.

All that Professor Bain asserts is true, is even obvious. Unquestionably, so far as experience goes, actual and possible perceptions sum up the case, and in the present instance our feelings of impeded effort are all the experiences we have to show. The independent thing; the 'something which resists,' is admittedly a rational construction, a hypothesis to explain our experience; *ex vi termini*, therefore, it is beyond experience, though necessary to it as its causal explanation. In short, the Berkeleyian analysis of Mill and Professor Bain is absolutely true *as psychology*; but that the attempt should have been made to substitute the psychological facts for their trans-subjective conditions, and thus to pass off psychology as ontology or metaphysics, is one of the strangest results of super-subtle analysis. As Mr. Spencer puts it, "the very conception of *experience* implies something of which there is experience."¹ The 'contradiction' of which Professor Bain speaks is of his own making, and lies in the impossible nature of the demand he formulates. Mr. Spencer's retort is simply to state what the position amounts to. It amounts to "a tacit demand for some other proof of an external world than that which is given in states of consciousness" — "some proof of this outer existence other than that given in terms of inner existence."² States of consciousness, in short, not only exist, as experience; they have a meaning, an evidential value, and can testify to the existence of that which they are not. Only in this respect, as symbolic and self-transcendent, are 'mental facts' to be called knowledge. But this whole aspect of consciousness is suppressed in advance by Professor Bain, who is really dominated by the curious but deeply rooted idea that, in order to know a thing, it is necessary actually to *be* the thing.

The horror of the transcendent, which we have thus seen alike in followers of the English and of the Continental tradition, undoubtedly owes its wide diffusion at present very largely to the influence of Kant, with whose idealistic followers it has become a philosophic superstition. But their doctrine of immanency, it may be added, completely obscures the truth

¹ *Principles of Psychology*, II, 349.

² *Ibid*, II, 444.

that is contained in Kant's doctrine of the categories. These principles of reason were originally intended to lift us out of the subjective individualism of Hume or any purely empirical theory. This purpose is necessarily frustrated if they are taken entirely in an immanent reference. Subjective matter of sense may be transfixed as we please with subjective principles of thought, but two subjectives do not make an objective;¹ the outcome is as purely subjective as Hume's, though it bears a different complexion. Kant's own expressions, however, are not so unambiguously immanent as his idealistic followers would have us believe. They waver in a way which is significant of two conflicting lines of thought in his mind; and in his doctrine of judgment, and of the categories as the forms of judgment, he was at one time upon another track. In truth he had struck here upon the only path which can lead us out of subjectivity. The passivity of sense does not carry us beyond ourselves; only the activity of reason avails to do so. Mental activity is summed up in the judgment and the categories are different forms of judgment. In them reason expresses its own necessities—its necessities of connection and explanation. Through them it may be said both to posit an objective world as an explanation of experience and progressively to render that world intelligible. In perception the conscious judgment re-affirms the instinctive judgment of feeling, and refers the subjective affection to its origin in the real. From the outset the stimuli of sense are thus projected—attached as predicates to a real world, of which they are at once the qualities and the effects. In this primitive judgment the categories of substance and cause are combined, and these basal categories involve all the rest. In this causal judgment we once for all overpass the limits of the individual self. It was not without reason, therefore, that Kant recognized in the judgment, and in the thoughts of

¹ It is this difficulty, doubtless, which leads Kant at one time to say that it is the addition of the categories to the pure subjectivity of sense that yields us objects, while at another time he tells us that it is their application to the matter of sense which confers objectivity on the categories.

which judgment is the vehicle, the instrument of our enfranchisement from subjective bonds. But it becomes so only when it is frankly taken in this trans-subjective reference. The categories do construct for us an objective world, but only when they are transcendently employed. Transcendental Realism rather than transcendental Idealism was the result to which the Kantian theory of judgment fairly pointed, and many of his expressions may be read in this sense. "All experience,"¹ he tells us, for example, "in addition to the perception of the senses by which something is given, contains besides a *notion* of an object which is given, or which appears, in perception." So he says again, "Cognitions consist in the definite reference of given ideas to an object."² The notion of the object is doubtless itself subjective, as Neo-Kantian subtlety urges; how, we may ask, could it be otherwise? But it is the notion of a real object, a trans-subjective thing. It is the presence of this notion that differentiates what Kant calls knowledge, cognition or experience from sensation or what he calls mere perception. Or, as we have been led to express it in the last few pages, the trans-subjective reference constitutes the very essence of knowledge as distinguished from experience as a series of subjective happenings which take place but which mean nothing. Kant himself did not consistently follow out this line of thought. But it is perhaps not too much to say that a fresh interpretation of the categories in the realistic sense just indicated is at the present time the only promising basis of a sound philosophy.

ANDREW SETH.

UNIVERSITY OF EDINBURGH.

¹ *Werke*, III, 112 (ed. Hartenstein). Experience is here used in the specific Kantian sense as opposed to mere perception and the associative play of ideas in the soul.

² *Ibid.*, p. 118.

MENTAL MEASUREMENT.

1. *Mathematics and the material sciences rest upon quantity and measurement.*

THE history of science is the history of measurement. Those departments of knowledge in which measurement could be used most readily were the first to become sciences, and those sciences are at the present time the furthest advanced in which measurement is the most extended and the most exact. Mathematics is concerned entirely with number and quantity, and it has always been allowed a position more secure and permanent than the physical sciences. Mechanics holds a place in the hierarchy of the sciences next to pure mathematics, and mechanics consists of measurements and the relations of quantities. Physics, as its measurements are made more complete and exact, becomes mechanics. The late development of the biological sciences was due to the difficulties in the way of applying measurement to the living body. But each step in advance has consisted in overcoming these difficulties. As experiment and measurement are extended to the organism, biology becomes a branch of physics. We may affirm without hesitation that quantity is the beginning and end of material science.

2. *Increasing use is made of measurement in daily life.*

Clocks, balances, and foot-rules seem indispensable to our present civilization. Thermometers, barometers, lactometers, etc., are no longer looked upon as scientific instruments, and these and other means of measurement will soon be used by everyone. The applications of machinery and the development of the useful arts rest on the increasing use of mechanics and quantitative relations. The history of words used to express magnitudes bears witness to the progress of exact measurement.

The length of a human foot, a thousand paces, a field, an interval of time, a stone—these show how inexact were the originals of our foot, mile, acre, hour and stone. The artificial origin of second, minute, ounce, and inch indicates the late introduction of finer measures. Modern knowledge and ways of thought seem to depend more and more on quantity and measurement. We no longer speak of the boundless sea and the innumerable host of the Argives. We ask, how many? how much? Questions of matter of fact, such as may be answered by yes or no, are rather the presuppositions of science than science itself. Only facts which are newly discovered, or which are remote from common interest, are a part of science. The line between science and everyday knowledge is, indeed, continually shifting. The scientific discoveries of one generation become the common heritage of the next. Not only matters of fact, but also methods of measurement and their more important results take their place in the widening circles of common knowledge and daily life.

3. *Measurement has been but little used in the mental and social sciences.*

While everyone will admit the ruling place of measurement in the material sciences and in their application to the affairs of daily life, facts of mind and relations of men are commonly supposed to be outside the range of experiment and measurement. This point of view seems, indeed, to be confirmed by the history of the sciences dealing with such subjects. We are here concerned only with psychology. Students of physics and biology point out the necessity of measurement to science, and claim that as mental phenomena are not subject to measurement, psychology cannot become an exact science. They tell us only the brain may be studied by scientific methods. Students of philosophy, on the other hand, absorbed in the questions of speculative philosophy—What is the mind? What is its destiny and meaning?—are apt to look upon any attempt at measurement as trivial, if not profane. But it must be admitted that the material sciences, resting upon measurement, hold a much

more secure position than psychology, resting upon casual introspection, anecdote, definition, and metaphysic. Indeed, speculative psychology is so largely taken up with things uncertain and unknown that it scarcely deserves to be called a science. We may well ask, what will be the end of this? Shall we ever have exact and systematic knowledge of mental phenomena? If so, will it be with or without measurement?

4. *Psychology may be following in the path of the material sciences.*

We have seen that as these advance, they depend increasingly on measurement and quantity. But they once consisted of careless observations and crude speculations. The psychology of the Greek philosophers was better than their physics and biology. Methods of experiment and measurement were but slowly devised and applied in the material sciences. Astrology and alchemy in their day were thought more important than astronomy and chemistry. It was once considered a satisfactory explanation to say that water rises in the pump because nature abhors a vacuum, or that a body is hot because it is filled with caloric. The interest in biology was once confined to stories of the phoenix and ant-lion, or in a search for simples and the elixir of life. Later, biology consisted of artificial classifications and dubious anecdotes and of medicine allied to quackery. It is only during the last forty years that vitalism is being slowly expelled from biology and scientific work is being slowly done in physiology and pathology. It seems still to be commonly held that the survival of the fittest explains the origin of the fittest. The history of the material sciences throws light on the present condition and future outlook of psychology. If Bacon sought to develop astrology, and Newton busied himself with alchemy, it is no wonder that some men of genius now-a-days take peculiar interest in telepathy, etc. If material science once consisted of definitions, anecdotes, and speculations, it is no wonder that these make up a large part of psychology at the present time.

Biology was of later development than physics, because it is easier to subject inert matter to experiment and measurement than the living body. But mental phenomena are more multi-form, complex, transient, and obscure than those of the living body. It is natural, therefore, that psychology should be the last of the sciences.

5. *Mental phenomena are highly complex, but the phenomena of the physical world are not so simple as is commonly assumed.*

There are certain physical laws, those concerned with the attraction of gravitation, the dispersion of light, etc., which depend on the geometrical nature of space ; others, such as the indestructibility of matter and the correlation of energy, which depend largely on our sense of the fitness of things. Neither of these sorts of laws can be exactly proved by experiment, while it is likely that the first sort will be found to be inexact. We can, however, best consider the boundless complexity of nature by taking laws depending on measurements. Thus the experiments made by Boyle and by Mariotte discovered an apparently simple relation between the volume of a gas and its external pressure. More careful experiments showed that the law held only for certain gases and pressures. Still more exact measurements show that the law is only approximate, the relations between the volume of a gas and its external pressure being as numerous as there are gases, pressures, and temperatures. The movements of the planets may serve for a second example. By Copernicus their orbits were supposed to be circles and their motion uniform. Kepler discovered the less simple relations, which still serve as a convenient generalization. But it is evident that the relative motions of the planets are complex beyond the limits of measurement or mathematical expression. Students of physics are not discouraged by the difficulties involved in the undulatory theory of light, and students of biology continue to work over the intricate problems of heredity. Students of mathematics do not give up their

science, because they are able to treat only a few equations amid an indefinite number. The complexity of both physical and mental phenomena is very great, but the order of the universe is perfect.

6. *Mental measurements must be of consciousness, not of the brain.*

The psychology with which this paper is concerned is not a part of physiology. Measurements of the mind, on the one hand, and of the body, on the other, may teach us that there is a complete correlation between the mental and the physical order. Should this correlation be established and its nature determined, it would be possible to measure either the physical or the mental phenomena, as might be found the more convenient. But the measurements to be treated here are of mental quantities or, at all events, of quantities which are functions of mental conditions. It seems, indeed, that our knowledge of the mind is less partial and uncertain than our knowledge of the nervous system. We have, for example, a considerable mass of fact and systematic knowledge concerning the nature and interaction of sensations. Starting from this knowledge, theories have been elaborated concerning the physiological processes in the eye and ear. The mental data are admitted by all, while the physiological hypotheses are in dispute. There is, again, some settled knowledge concerning feeling, attention, etc., whereas we are in absolute ignorance concerning the molecular changes in the brain which may accompany these mental processes. The advance of science will demand a more exact definition of the subject-matter of physics, of physiology, and of psychology, in which psychology must be allotted the measurements and quantitative relations considered in this paper.¹

¹ The writer does not agree with Professor James concerning the domain of psychology as a natural science, when he writes (*Principles of Psychology*, I. 182) "a blank unmediated correspondence, term for term, of the succession of states of consciousness with the succession of total brain-processes" is "the last word of a psychology which contents itself with verifiable laws." Mental processes are

7. *The magnitudes of physical science are, on the one hand, number and direction, and, on the other hand, time, mass, and distance.*

We are not here concerned with the metaphysics of these magnitudes, nor even with such critical discussion as may fall within the limits of a scientific theory of knowledge. Students of the physical sciences would disagree entirely as to such matters, and yet they coöperate everywhere in attempting to express the material world in terms of these magnitudes. As regards number and direction, it is evident that the units of measurement are given in the nature of things, and these units were used in the beginnings of science. As regards time, mass, and distance, the units of measurement are conventional, and are being slowly adjusted as science advances. Astronomy seems to have been the earliest of the sciences, and consisted at first of the relative positions and times due to the movements of the heavenly bodies. Distance was soon measured in surveying, architecture, and music. Mass was measured somewhat later, and the development of the idea of energy belongs to modern times. The question we have to consider is, whether there are mental magnitudes analagous to those of the physical world, and, if so, whether they may be measured and correlated. Is a mental mechanics possible?

8. *Number and statistics may be used in psychology.*

Number occupies a peculiar position, all measurement depending on ratios. The place of pure enumeration in the physical sciences has not perhaps been exactly defined. But it seems to be mostly unimportant, as when it is said that there

sui generis, and even though quantitative determinations were impossible, the laws governing the interaction and sequence of changes of consciousness could be determined apart from any question of the relation of mind to body. Aristotle might hold that the chief use of the brain is to supply the eyes with tears, and yet be a far better psychologist than M. Luys, who is considered an authority on the brain, but who writes: "Judgment is the principal operation of cerebral activity, etc. (*The Brain and its Functions*, 289.) Nor is psychology an art to "charm a chronic insane delusion away" (James: *Phil. Review*, I. 153). Professor James's Psychology would not be the important work it is, were it confined to the correlation of brain changes and consciousness, and the therapeutic value of hypnotism.

are seven colors or sixty-four elements. Enumeration is evidently possible in psychology. Thus the assumption of seven colors is mental, not physical. We are said to have five senses, because we are supposed to have five sorts of sensations, not because there are five sorts of sense-organs. The number of harmonious intervals in music is a true psychological constant. The number of equally noticeable differences between the minimum and maximum sensation may turn out to be an important constant. Attention has recently been called to moral statistics, and these are psychological measurements of a sort. Thus, it is something to know that, out of a million mothers, so many are infanticides. The lack of great scientific value consists in the fact that we do not measure or even define the conditions under which this percentage obtains. But if we find the percentage to be so much greater in winter or when the offspring are illegitimate, we are making some progress. There seems to be scientific value in the collection of statistics concerning the inheritance of mental traits, and in other directions. If we say that, when one idea suggests another, there are a certain number of classes among which all cases may be distributed, the distinctions are logical and the number of classes is not of much scientific importance. If, however, after the classes have been defined, we are able to determine the actual proportion of associations falling into each, we are making determinations of some value. If, further, the percentages are found to vary under fixed conditions, according to the occupation of the individual, for example, then such determinations have scientific interest. A still further advance is made, when we are able to correlate the frequency of an association with the time it takes. Here we have, indeed, the beginnings of a mental mechanics.

9. *The possibility of measuring time depends on the flow of individual thought.*

The motions of the heavenly bodies happen to be so well adapted for the measurement of time that most men will agree

with Plato in his naïve assertion (Timaeus, 37), "God created time, and the parts of time—days, months, and years." But we cannot define time in terms of motion, when motion is defined in terms of time. If beings exist whose rate of thought is entirely variable, they have no science such as ours. If elsewhere in the universe there are rational beings whose rate of thought increases as the square of the time (terrestrial) during which they exist, they may have a system of mechanics, which would differ from ours in ways possible for us to calculate. It is true the intervals between certain physical changes are more constant than the intervals between thoughts, but this is a discovery made by using changes in thought as a standard of measurement. Indeed, the motions of physical bodies used to measure time are not so entirely accordant as is often assumed. There is no physical fact corresponding to the idea of uniform motion. A consciousness is conceivable to which the movements of the solar system are as irregular as the changes of the weather are to us. As the possibility of mechanics rests on the constancy of the rate of mental change, it is evident that this rate is sufficiently constant to admit of measurement.

10. *Length of life is measured by rate of thought.*

Should all our suns and pendulums begin to move faster and faster (time being measured by revolution of the sidereal universe, and dynamical relations of space and mass being adjusted to fit), and all our thoughts and movements increase at the same rate, it would neither concern us, nor be noticed by us. Should our objective measures of time move faster, while the rate of physiological and mental change remain the same, we should live more days and years before we die, but none the longer. Should we live as many solar years as now, while the rate of thought and movement were increased, we should live so much the longer. The measurement of the rate of thought in the current units of physical science would seem, therefore, to be a matter of considerable interest. We need to know the time of physiological and mental processes, and the conditions

on which variation depends. Such knowledge has not only theoretic interest, but has, also practical bearings in adjusting education, occupation, and mode of life. The measurement of mental time is proved possible by the measurements of mechanics, while its rate would seem to have as much theoretic and practical interest as the durations of any physical motions. Let us see what has actually been accomplished by experiment.¹

11. *There is a time-threshold of consciousness, and the nature of a sensation depends on the time of stimulation.*

An impression must last a certain time in order that it may be perceived. Inertia and diffusion in the sense-organs and paths of conduction may partly account for this fact, but it can be shown by experiment that stimuli lasting too short a time to be distinctly perceived still affect the course of mental life. Such sub-conscious mental modifications should not be relegated to physiology; they may prove as fruitful for psychology as has been the study of sub-tangible phenomena for physical science. The time a stimulus must work in order that it may just be perceived, may be measured. Thus, it has been found that colors such as we see in daily life must work on the retina from about .001 to .003 sec., varying with the color and observer. If the time be shorter than this, no color is seen: as the time is taken longer, the intensity and saturation of the color increase, until, the time being about $\frac{1}{10}$ sec., a maximum is reached. As the time of stimulation is further increased, the intensity and saturation of the color decline and after a certain time disappear altogether. A similar relation obtains with the

¹ Prof. Ladd, who has accomplished so much for the advancement of experimental psychology, yet seems to the writer to betray a misapprehension of its domain when he writes (*Outlines of Phy. Psy.* 380) "We should be warned against imagining that researches in psychometry explain the origin or nature of our ideas of time." "Upon the origin and nature of this idea [succession] the so-called science of psychometry throws no light." In a text-book of astronomy there would scarcely be found such a statement as: "We should be warned against imagining that the so-called science of astronomy explains the origin and nature of time."

other senses. The noise and smells of cities are not noticed and cannot be fully perceived by those who dwell among them. The dependence of sensation on the time of stimulation may be represented by a curve, and its equation determined. The relation is of special importance as regards feelings of pleasure and pain. These soon reach a maximum and then decline. The Greeks might have called the gods pitiful as well as envious for both pain and pleasure consume themselves. If *fortune physique* is to be distributed so as to produce the maximum *fortune morale*, it should not be supplied continuously to one individual.

12. *The time of physiological and mental processes can be measured.*

If the hand by accident touch a piece of hot metal, it will be withdrawn, but not before it has been in contact with the metal long enough to be burned. The time is, indeed, about $\frac{1}{10}$ sec. During this short interval a complex series of physiological processes must take place. The physical motion is converted into a nervous impulse, the impulse travels along the nerve and through the brain, a movement is released, the impulse travels back, and the muscle is innervated. The time required for such a reaction under varying conditions may be measured with great exactness. It is usually between one tenth and one fifth of a second, being longest in children, in the aged, and in disease. A reaction of this sort must be regarded as a physiological process, but it has psychological interest, as its length depends on mental conditions. Indeed, a reaction and its duration throw light on two of the most important problems before rational psychology — the nature of volition and the relation between body and mind.

13. *The time required for perception, movement, and thought may be measured.*

A simple reaction may be modified so as to include the time it takes to perceive a sense-stimulus or to choose a movement.

It takes about $\frac{1}{10}$ sec. to perceive a color and a little longer to recognize a picture or word. A word can be recognized as quickly as a single letter. A word is named more quickly than a letter, and much more quickly than a color or an object. The processes of perception and movement may be regarded as psycho-physical, but it is also possible to measure the time needed to remember, to form a judgment, and in the association of ideas. These times are purely mental; we know of them only on the side of consciousness, being in complete ignorance of the cerebral processes which may accompany them. It takes about $\frac{1}{4}$ sec. to translate words into a foreign language with which the observer is familiar, $\frac{2}{3}$ sec. to call to mind the language of a given author, $\frac{1}{2}$ sec. to multiply the numbers of the multiplication table, etc.; $\frac{1}{2}$ sec. is required to estimate the length of a given line or to decide which of two eminent men is thought the greater. The time required for one idea to suggest another under conditions similar to those of ordinary thought may be measured, and the times are of use in studying the laws of association. Psychology is a science, not an art, but time-measurements such as we have been considering have practical applications in æsthetics (as in the rhythm of music and poetry); in medicine (as in the diagnosis of diseases of the nervous system); in political economy (as in distributing wealth so as to secure the maximum amount of happiness), and in education (as in adjusting methods so as to increase the rate of thought).

14. *There is a least noticeable difference in intervals of time.*

Intervals of time may seem the same to common observation, while a difference may be readily measured with a clock. Savages living near the equator would not notice that days are longer in summer than in winter, nor do we notice the variation in the solar day. It is possible to measure the error made in comparing intervals of time, and to study its variation under varying circumstances. $\frac{3}{4}$ sec. has been found to be the interval, which can be most accurately perceived. An interval

of time seems shorter when the mind is occupied than when idle, and to the old than to the young, and the quantitative relations can be determined. The accuracy and limits of the perception of intervals of time is an important factor in the composition and appreciation of music and poetry. The appreciation of intervals of time may depend on a rhythm of attention. The attention may be concentrated by an effort, but it will soon relax, and must be again concentrated only to relax again. These waves of attention seem to follow each other at constant intervals, and are an important factor in our mental life.

15. *If mental processes have only one magnitude, psychology cannot become a mathematical science.*

This was urged by Kant, who claimed that mental processes are extended in time only. If this be the case, it is evident that a mental mechanics is not possible. Astronomy could not be treated as "celestial mechanics," did it not measure the positions and masses of the heavenly bodies as well as the times of their movements. But Locke claimed that mental processes are not extended even in time,¹ and later writers may be mistaken in holding that they have no other dimension. Indeed it would be commonly admitted that sensations and feelings vary in intensity, but it is claimed that this intensity is not measurable. The measurement of mental intensity is certainly beset with greater theoretical and practical difficulties than the measurement of mental time. A starting point is found, however, in the fact that the intensity of a sensation is a function of the intensity of the stimulus, otherwise it would never have been discovered that one light is brighter, one sound louder, or one weight heavier than another. Even in physical science the brightness of lights and the loudness of sounds are only measured by the comparison of sensations.

¹ Locke is not consistent in this matter, but he wrote (*Human Understanding*, Bk. 2, Ch. 9, 10), "for as itself [the mind] is thought to take up no space, to have no extension, so its actions seem to require no time."

Weight can be measured with great accuracy by the balance, but the balance is an invention like the clock. It was the need of weighing which led to the invention of the balance, not the balance which led to the discovery of weight. Apart from our sensations of varying intensity, physical science can only define weight in terms of size and density, density in terms of force, and force in terms of time and space.

16. *There is a threshold of intensity.*

When stimuli are very weak, they are accompanied by no distinct sensation. This may be partly a physiological fact, due to inertia of the sense-organ and nerve. But such stimuli may in certain cases be perceived by an effort and in other cases affect the course of mental life, although no amount of effort can call them to distinct consciousness. The intensity of a stimulus which can just be perceived (or perceived in a given percentage of cases) may be measured. This *minimum perceptible* is a function of the time of stimulation and of the degree of attention. Thus it has been found that the time a color must work on the retina in order that it may be just recognized, tends to vary as the logarithm of the intensity of the light. If we learn to measure the effort of attention, it may in like manner be correlated with the intensity of the stimulus which can just be perceived. It is, also, possible to compare the effects on mental life of stimuli too faint to be perceived with the effects of such as are distinctly perceived, and thus to correlate the intensity of sub-consciousness with that of consciousness.

17. *The error of observation is a function of the intensity of sensation.*

Stimuli may be so nearly alike in intensity that no difference can be detected by common observation. By proper methods the error of observation may be determined, and this is an important anthropometric test. It measures class and individual

differences, and demonstrates the results of education, occupation, etc. The error of observation is found in most cases to become greater as the intensity of the sensation becomes greater. Thus we can distinguish (by lifting) 6 ounces from 5, but not 26 ounces from 25. When we determine the curve and equation representing the relation between the error of observation and the intensity of the stimulus, we define mental relations in the units of physical science. We can, again, determine the relation of the error of observation to the time of stimulation and to the time of perception, and the correlation of the time and intensity of sensation. Through the error of observation the rate at which a simple sensation fades from the memory may be measured. If we could do this one thing only, the possibility of a mental mechanics would be demonstrated. It is thought by Fechner and others that we can measure the intensity of sensation by means of the difference which can just be noticed. If this difference, as some experiments seem to show, is proportional to the intensity of the stimulus, and if it may be regarded as a unit for measuring sensation, it follows that the intensity of a sensation varies as the logarithm of the intensity of the stimulus. It is, further, possible that the intensity of a sensation, and more especially of an emotion, may be measured by the resulting or accompanying bodily movement.

18. *The intensity of pleasures and pains may, perhaps, be measured.*

In this case the just noticeable difference is a more likely unit than in the case of sensations, for even though the just noticeable change may not be an equal change at different degrees of intensity, it would seem to be an equally desirable change. Some approximation to the logarithmic relations seems, indeed, to hold as regards the intensity of pleasure, and the wealth which purchases certain pleasures. With an income of \$1000, \$1 will go about as far as \$10 with an income of \$10,000. A man in public life would scarcely be affected by

a newspaper notice which might give much pleasure or pain to a man in private life. Such facts must be taken into account by any economic theory which seeks to determine the best distribution of wealth. The relation between the duration and intensity of pleasures and pains seems to be of special importance. Supposing the intensity to remain the same, the amount of pleasure is directly measured by the time it lasts. Pleasures from disparate sources, *e.g.*, eating one's dinner comfortably at home or going out to a concert, may be more or less exactly compared by noticing which is habitually chosen. We can further (as is done in physics) define intensity in terms of time. If a pleasure (*e.g.*, eating a pear) last half as long as another (*e.g.*, eating two apples), and yet the two pleasures be regarded as equal (*e.g.*, to a child having five cents to spend and being in doubt whether to buy one pear or two apples) the former pleasure may be regarded as having double the intensity of the latter. Pleasures and pains are also correlated, as when one decides to attend an opera, knowing it will be followed by headache. Money spent in the purchase of pleasures lasting equal or commensurable times, measures roughly the intensity of pleasure, and (when money must be obtained by painful labor) correlates pleasures and pains.

19. *Extensity, if it be a mental magnitude, is still more obscure than intensity.*

It has been recently urged¹ with much force, that sensations must have a quality corresponding to the size of external stimuli. Attempts to explain the perception of space apart from such a quality in sensations, certainly seem unsuccessful. In any case there is a threshold of size as there is a threshold of time and intensity of stimulation. The area must be increased as the time and intensity are decreased, and the quantitative relations may be determined by experiment. Such determinations may also be made for sensation-areas on the

¹ By Prof. Stumpf in Germany, Prof. James in America, and Dr. Ward in England.

skin. Objects nearly alike in size cannot be distinguished by common observation, and the error of observation may be measured as in the case of time and intensity. The correlation of the area of the stimulus with its intensity, and with the time of perception, may be determined through the error of observation. The perception of distance may be studied by similar methods, as, also, the perception of space by disparate senses. In the latter case apparently incommensurable sensations are correlated, somewhat as heat and mechanical work are correlated in physics.

20. *Mental complexity may be analogous to the configuration of a physical system.*

We have seen that there are mental magnitudes corresponding to time, force, and space. But physical science is also concerned with the assemblage of relative positions of the parts of a material system, and the contents of the individual mind have at a given instant a certain complexity. Mental complexity and mental extensity (as their physical correlates) are closely related, the latter being perhaps an abstraction from the former. Whatever may be thought of these theoretical matters, certain experimental determinations must be acknowledged as valid. We can measure the amount which can be simultaneously perceived, — *e. g.*, 5 disconnected letters, 15 letters when they make words, and 30 letters when the words make sentences. Complexes at first sight incommensurable are thus correlated. We can also determine the time or the number of repetitions needed to learn a complex too large to be perceived at once, and the rate at which such a complex fades from memory. The complexity of the contents of consciousness is correlated with its intensity and clearness. The less we attend to, the more exactly can we attend to it. In addition to the contents of consciousness distinctly given, there is a penumbra of mental processes indistinctly recognized, and beyond this, it may be, a vast range of sub-conscious mental processes, which would account for memory, association, etc. It can be shown by ex-

periment that a difference may be so small that it seems to the observer entirely imperceptible, and yet it will be correctly given by guessing more than half the time, or that an impression which entirely escapes consciousness the first time may become apparent by repetition. Sub-consciousness is thus correlated with distinct consciousness.

21. *The idea of mental extensity is important in ethics.*

Pleasures and pains differ not only in time and intensity, but also in extensity. More mental elements are involved in some feelings than in others. A pleasure (*e.g.*, eating) may be intense, but not extensive. Another (*e.g.*, doing one's daily duty) is not intense, but it is massive. An infant crying may suffer intense pain, in fact it is all pain, but the pain is not extensive because the mind is 'small.' With greater mental development the intensity of feelings may be less, but their extensity is greater. The idea of mental complexity throws light on the nature of emotions, in which some elements are in pleasure, some in pain. Through the phenomena of choice, and through our moral judgments, the extensity of pleasures and pains is correlated with their intensity, and duration. The greatness of a pleasure is the product of its extensity, intensity, and duration. What writers on morals mean by higher and lower pleasures is thus explained without mysticism. The idea of extensity of feeling reaches beyond the individual. Those pleasures (*e.g.*, creation in art and science, or love) are the greatest which affect many elements in the individual, and extend to other individuals, being at the same time intense and enduring.

J. McKEEN CATTELL.

COLUMBIA COLLEGE.

REVIEWS OF BOOKS.

La Pathologie des Emotions. Études physiologiques et cliniques.
Par CH. FÉRÉ, Médecin de Bicêtre. Paris, Alcan, 1892. — Large
8°, pp. 605.

Dr. Féré is the author of many books and of innumerable communications to learned journals. Taken together, these show him to be one of the most indefatigable hospital experimenters and ransackers of neurological literature of our day. But he lacks the fine, flowing literary talent of his nation, and his doctrinal conclusions in this work, instead of being set forth with amplitude and emphasis, must be gathered piecemeal by the reader from the midst of the cases, quotations, and experiments with which the pages are filled. When the ethics of scientific publication shall have taken shape (as human nature will ere long demand) it will be regarded as an unpardonable sin for an author of established reputation, like M. Féré, to offer to the overburdened reader what at bottom is only a collection of classed and indexed note-books about a certain subject. The work is hardly more than raw material. As such it can of course interest those capable of using neurological raw material; but for other readers its main interest will probably be the spectacle which it affords of a mind like M. Féré's at work. That men are machines (whatever else they may be) has long been suspected; but not till our generation have men fairly felt *in concreto* just *what* wonderful psycho-neuro-physical mechanisms they are. M. Féré's interest in the secrets of the machinery may fairly be called devout. The thoroughness of his acquaintance is extraordinary. No disorder in the working is too minute, no reaction too unimportant, to fascinate him. 'Points' first caught sight of in hysteria or mental disease rivet his attention in that exaggerated form, and presently are noticed as elements in the normal life. His curiosity never tires of poking and testing the organism to see how it will behave, and still keeps returning with fresh experiments. The result is what may be called a decided *intimacy* with human nature on its mechanical side.

The book deals so much with details that no analysis of it is possible. Having indicated the general character, I will simply string together a few of its facts and opinions that seem worthy of

special attention. The first 170 pp. have little direct connection with the emotions. They deal with the special effects on the organism of such influences as the air, temperature, amount of sensorial stimulation, fatigue, shocks, exhaustion, etc. M. Féré's observations on the dynamogenic effects of sense-stimulation in hysterics and other enfeebled subjects are well known. The muscular contractions become stronger under the influence of light, etc. He now shows us the counterpart of this fact in the "nocturnal paralysis" which he has observed in a number of enfeebled subjects. The light withdrawn, they lapse into excessive muscular weakness, which sometimes departs only after some hours of exposure to the sun.

M. Féré suggests that the morning languor of which so many neurasthenics complain is of this sort. — He finds that, when a finger, *e. g.*, has been exhausted by repeated muscular contractions, its vigor returns again the moment the muscles of the opposite arm or of the leg are voluntarily set in motion at the same time (p. 105).¹ — He gives many reaction-time measurements. Peripheric excitations, other than the expected signal, so far from always distracting the attention, often act as "condiments" thereto (p. 111) and shorten the reaction-time. Many persons react more slowly with closed eyes. A general state of muscular tension favors both the rapidity and the strength of a reaction. The recumbent attitude, *e. g.*, lengthens the time (p. 115). — Stammering is often due to mere debility of innervation of the tongue. By gymnastic exercise *à la* Demosthenes (giving the tongue an ivory ball to play with for a certain time each day) M. Féré has cured a case. — Hysteria has many analogies with fatigue — motor weakness is the original sin of hysterics (pp. 158–164). — The current stories about patients charged with electricity, emitting sparks, etc., may be true. One such case was observed by M. Féré, and the condition found to be due to abnormal degrees of the skin (p. 188).

With Chapter V the emotions come upon the scene, but M. Féré has no general philosophy of them. He does not even consider the psychological question which has been discussed of late, as to whether all emotional feeling be reducible to peripheral sensation, though in several places this would seem to be his view. He lays great stress on the division into sthenic and asthenic emotions,

¹ His comments on the perception of resistance, *à propos* to these experiments (p. 106), are too laconic and obscure for my comprehension. Other subjects (p. 127) show an opposite law.

anger being the type of the one and fear of the other. In anger the pulse becomes more frequent and the arterial tension may increase by a quarter of its amount (p. 176). The volume of the limbs augments in consequence of the afflux thither of blood (p. 178), and as a consequence of this irrigation the electric resistance diminishes (p. 180). In self-satisfaction, produced by suggestion in hypnotic subjects, the reaction-time was considerably shortened. In asthenic emotions all these symptoms are reversed. One of M. Féré's most interesting observations is relative to the rate of reduction of arterIALIZED blood in various conditions. He finds it slower on the paralyzed side in hemiplegics, and slower in mental depression (hypnotically suggested—p. 198). Connecting this change in the 'chinitaxy' of the blood with certain observations by other authors and with experiments of his own on infection, he opens the way (pp. 264-7) to a possible explanation of the bad effects of depressing emotion on the vitality of the subject. The white blood-corpuscles are nowadays understood to protect the organism by devouring microbes. The shrunken peripheral blood-vessels in depressed states form an obstacle to the emigration of these corpuscles, and in pigeons and rabbits which he employed imbecile patients to frighten systematically, he found that poisonous inoculations were much more rapidly virulent than in unfrightened animals. Introducing under the skin of the two sets of creatures capillary tubes full of virulent cultures, he found them after twenty-four hours hardly altered in the frightened individuals, whereas in the others the microbes were mostly gone and the tubes filled with white corpuscles.—In the course of the book M. Féré gives a vast number of examples of nervous and other diseases dating from emotional shocks of a depressive kind, but is disposed to think that sudden joy, however disturbing its immediate effects may be, is never known to produce any protracted danger.—In Chapter V an account, in some respects minuter than that of other authors, of the physical 'expression' of various emotions is given. M. Féré has a mechanical theory, somewhat similar to that of Spencer, for explaining which muscles are most apt to be affected by emotion. They are, he says, those whose innervation is most frequently called into play in the course of ordinary function. The shortness of the nerves, and especially their thickness, and the vascularity of the parts also are determinants (p. 206). Thus the *eye* is the first organ to be affected in emotion.—The rest of the work may be best summarized by the heads of some of its chapters, as pathological and curative effects of emotions ;

influence of states of excitement and exhaustion on the mind; physical signs and emotional *status* in mental disease; physical concomitants of hallucination; morbid emotivity (all the various 'phobias,' etc.); the organ of emotional life (M. Féré, like Dr. Bucke, thinks it to be mainly the sympathetic nerve); individual predispositions and idiosyncracies in emotional disease; diagnosis; social bearings; and finally treatment—some 400 pages of detail, and little of it, except some highly interesting cases, very new. Let me say that M. Féré's pathological experience leads him to look with mistrust on all lively emotional susceptibility. "L'homme bien constitué et absolument en bonne santé est incapable d'éprouver des émotions violentes" (p. 494). Neither does he believe that mental disease should constitute an exemption from punishment for crime—this is a very radical doctrine (pp. 557–566)! He has had no success in trying to treat morbid emotional states by hypnotism (p. 549), and he refuses to subscribe to the formula that genius is a 'neurosis' (p. 529).

The main impression that emanates from the book is the somewhat unsympathetic one that man is primarily a museum-specimen; but the author's curiosity, granting that basis, is worthy of unqualified praise.

WILLIAM JAMES.

Die Hauptgesetze des menschlichen Gefühlslebens. Von A. LEHMANN. Uebersetzt von F. BENDIXEN. Leipzig, O. R. Reisland, 1892.—p. x, 356.

A stout octavo volume, with Feeling for its subject, is, perhaps, more apt to repel than to attract the psychologist. But Dr. Lehmann does not serve up the *crambe peretita* of descriptive Psychology; and his scheme of classification of the emotions occupies no more than five and thirty pages. The two principal sections of his book are devoted to a discussion of the nature of Feeling, as psychological and psychophysical process, and to the elucidation of the "special laws" (dependencies) of Feeling. Under both heads, much is said that deserves careful consideration.

The book has defects of form and arrangement. Based on an Essay which gained the gold medal of the Danish Royal Academy of Sciences,—and which itself included elements of an earlier investigation,—it has suffered curtailment and received accretions at many points, and bears the marks of its growth. Moreover, the author's way of recapitulating every few sections, and italicising each

résumé, tends to place on the same plane of importance results of very various worth. The use of a third set of type would have greatly assisted the reader, at the cost (as there are comparatively few foot-notes) of but a slight defacement of the page.

But these faults are not essential. More serious is an objection suggested by a glance at the Table of Contents. We find there references to paragraphs dealing with the relations of the affective process to bodily states, to expressions of volition and to sensation or idea, and with its dependence on ideational content. Nothing is said as to a possible correlation with stimulus.¹ And yet I believe it can be shown, that the quality of sense-feeling is directly conditioned by stimulus-intensity: while the other properties of stimulus either admit of translation into terms of intensity (time, and, though not so simply, space); or are inoperative as regards affective quality, except in so far as their differences imply different points of origin of the feeling-curve above the intensity-*abscissa*,—different values for just noticeable pleasure,—and, consequently, a displacement of the whole movement along this *abscissa*, from liminal pleasure to pain (quality). It is impossible to set down one's reasons for adopting such a theory, within the limits of a review. The maintaining of it would simply involve, in many cases, the alteration of Dr. Lehmann's word "idea" to "stimulus": in others, there is more at issue than a choice of expressions.

We may pass over the brief *Introduction*, which contains paragraphs on the development of the doctrine of Feeling from Sulzer to Wundt, and proceed at once to consider the first chapter of Section I: *The relation of Feeling to Sensation and Idea*. The initial difficulty is, of course, terminological. The author reserves the word "feeling" for the concrete mental process; the pleasure and unpleasantness which are the outcome of psychological abstraction he calls "emotional elements" or "feeling-tones." Neither phrase seems so good as the terms "affection," "affective elements." To the orthodox or Kantian theory of Feeling, as here stated in outline, and to the objections urged against the Herbartian position, I can readily subscribe: though I do not think that the latter could be affiliated to any of the modern forms of the Kantian view (p. 31). Dr. Lehmann is admirably clear as to the nature of pain (p. 39). Pain is neither sensation, nor abstract affection,—unpleasantness: it is a fusion of unpleasantness with sensation, and is always specially colored by its sensational constituent. The reaction-times

¹ See, however, p. 144 ff.

quoted (pp. 40, 42) tend, from the conditions of experimentation, to be of sensorial rather than of muscular length. This might have been mentioned. As regards the Weber experiments, I was led by their repetition for lecture purposes to the same conclusion which the writer has reached : namely, that there are four elements in each, and not two only. The ordinary explanation correlates not S with F, S¹ with F¹, but S with F¹. Does this argument, if correct, invalidate the pathological evidence? At any rate, it becomes a necessity to scrutinize this latter with extreme care. A case of "complete" anaesthesia of a patient trained in introspection would be a godsend to the psychologist.¹

The relations of the Feelings to bodily states.—The "definition" of the Emotion (p. 59) is only a description, though Dr. Lehmann's analysis is correct enough. Certainly the suddenness of the impression is not essential,—unless we make it so by the terms of a definition. What we have to start with, is a strong feeling; *i.e.*, a sensation-affection fusion, in which the affection is very intense. The presence of this in consciousness implies either polyideism or (practically) monoideism (p. 128), according to its quality. The various changes in the bodily state, concomitant or succeeding, also have their mental parallel. What of all this content constitutes the Emotion? By genus, I should be tempted to say, it is just the primary feeling, the intensely toned ideational complex. What we regard as the *differentia*, is largely a matter of taste. The author appears to ascribe equal importance to all the three moments.—I shall return to the point later.

The criticism of Lange's views need not detain us²: nor need we spend much time on Dr. Lehmann's own experimentation. That his theses are all made out in detail one cannot say. But his general conclusion confirms and amplifies our previous knowledge.³ It is as follows: Pleasurably toned states of every kind are accompanied by dilatation of the superficial vessels, by intensification of the innervation of the voluntary (especially of the respiratory) muscles, and, probably, by increase of the extent of the heart-movements: un-

¹ Külpe has, I believe, given up the argument from the organic "feelings" (pp. 52 ff.), while retaining that from pathology.

² One may compare Wundt's remarks, *Phil. Stud.*, VI, p. 349 ff.

³ To mention one or two points. The reasoning on p. 87, as regards the raising of the pulse-curve in Joy, does not seem very cogent. The remarks on pp. 90, 91 show how complex the factors may be, which the arm-curve registered as totality; and p. 96 suggests the possibility of extraneous sources of error.—On the whole subject, *cf.* James, *Principles*, II, p. 447.

pleasantly toned states, by constriction of the superficial vessels, by various disturbances of the innervation of the voluntary and organic muscles, and, probably, as a rule by vascular atony within the organism, conjoined with diminution of the extent of heart-movement (pp. 112, 113). This statement tells with equal force against all the special physiological theories of Feeling, such as those of Meynert (cortical eupnœa and dyspnœa), Lange (vasomotor changes), Münsterberg (reflexly excited sensations of flexion and extension).

Important is the confirmation, by the author's experiments, of what those of Lange (p. 73) and others, as well as general psychological considerations, had already made probable,— the identity of the affective element in the sense-feeling and the emotion (p. 112). Surely this fact does away with any such dual theory as that of Professor James.¹ But it does more ; it shifts the ground of discussion of the sensational hypothesis of Feeling from emotion to the simplest concrete form of affection. If the affective factor in Emotion is only a fusion of organic sensations, then that is also the case in the instance of Sense-feeling (p. 122). Defending the orthodox view from this standpoint, Dr. Lehmann adduces four arguments against Professor James's contention. There is the infinite *regressus*; the organic sensation itself can be sensed as well as felt; whence its tone?—and whence isolation at one time, fusion (to affection) at another? Then again, the addenda are different in different cases; whence the uniformity of the sum? Thirdly, there should be a time-interval between the sensation and its tone, in the Sense-feeling (*cf.* pp. 46, 47). Lastly, the tone may be present, in Emotion, before the organic sensations have been excited.— Plainly, arguments of various value. The fourth, *e.g.*, is answered with the answer to the third. And presentationists might be disposed to deny the uniform nature of pleasure and pain. But arguments which raise definite (and mostly experimental) issues; and which certainly reinforce the objections to heterogenesis.

Emotion disturbs the normal train of ideas. Kant regarded the disturbance as the effect of the primary feeling; Herbart deduced the emotion from the disturbance; Wundt follows Kant, while adding to his view the fact of the reaction of the disturbance on the sum of conscious content. In the rule that the pleasure-emotion implies polyideism (play of imagination), the pain-emotion monoideism, the writer sees an indication of the correctness of the

¹ *Op. cit.*, p. 468. Perhaps the dualism should not be emphasized, pending the publication of the promised Pleasure-Pain chapter.

ascription of these ideational disturbances to vasomotor changes. He tests the matter by an appeal from the normal to the "unmotivated" emotions,—the emotions of intoxication, poisoning, or those due to pathological conditions,—and concludes that the disturbances are "mainly caused by changes in the innervation of the cerebral vessels, whereby the central nervous activity is furthered or inhibited" (p. 132). There is a want of clearness in this analysis, conditioned partly by the separate consideration of the two *differentiæ*,—if one may term them so,—the ideational interruption and the involuntary bodily changes, partly by exclusive adherence to the psychophysical point of view. In the language of Parallelism, we have: primary (complex) stimulus = strong feeling (toned perception, or toned idea or ideational complex); cortical reaction (diffusion or local limitation of stimulus) = toned polyideism (with affective fusion) or toned monoideism; peripheral reaction ('bodily reverberation') = organic sensations. Wundt is, therefore, quite right in making the disturbance of ideas consequent on the primary feeling; psychologically, the Kantian view holds,—except that it is bold, even where Association is at work, to talk of mental causation. The criticism of p. 132 is, so far, wrong; it applies the rule of psychophysics to another science. Herbart is condemned with presentationism in general.

As for the special thesis,—the reference of the ideational disturbance to the state of innervation of the cerebral vessels,—it is tenable enough; though the unmotivated emotions give it no more support than that of analogy (*cf.* p. 131). The fact that in their case the ideas are toned, hints plainly at the necessity of the correlation of affection with stimulus (*cf.* p. 127).

The relation of Feeling to expressions of Will.—How is emotional expression to be distinguished from that of Impulse and Instinct? In the former case occur movements of the involuntary muscles, together with vague, undirected movements of the voluntary. In the latter instances, the movements are always of the voluntary muscles, and are directed to a certain end (pp. 136, 137). This distinction may serve for classification; as a matter of fact, neither Emotion, Impulse nor Instinct is ever found 'pure' (p. 141). Every emotion is an impulse; for among the changes of innervation constituting the organic resonance will certainly be present some which will issue in instinctive action. And every impulse is an emotion (Wundt): for the first thing in the impulse is a feeling, and this will certainly have for consequence some of the ingredients of emotion.

Two points require notice here. The first is Dr. Lehmann's view of the relation of Instinct to Impulse. On p. 133 we are told that the latter is more complex in character than the former. On p. 141 and elsewhere the two seem to be regarded as standing practically on the same psychological level. This vacillation may be due to the other questionable position taken up: that these processes are to be defined in terms of their end or object (p. 137). Many — perhaps most — psychologists would accept this *differentia*. It seems to me that the emphasizing of it tends towards a confusion of Psychology with Biology. The Impulse is a fusion of the three conscious elements, with Conation preponderating: as such it is coördinate with the Perception and the Feeling. The Instinct is a fusion of the same three elements, showing an equilibrium of the two, Affection and Conation. As such it is coördinate with the Emotion (Sensation and Affection), and with Attention (Sensation and Conation). It is, therefore, by analysis, not less, but more, complex than the Impulse. The reference to an end can only concern us indirectly; it shows that the third process (sensation) is *there*, is necessary for the arising of an instinct, — just as conation¹ is necessary for emotion, or affection for attention.²

The chapter concludes with the formulation of two corollaries. With one of these, — that in many cases the energies of simultaneous voluntary and emotional expression are inversely proportional to one another, — and to its educational implication (p. 142), I am inclined to agree. Of course, the author states it in very round terms. We must begin education on the affective basis: through the Feeling and the "eindeutig bestimmter Trieb." The question is, how to work with these, so as to motive rightly the later emerging voluntary attention and the (external and internal) voluntary act. However, that is a question for Pedagogy. — The other conclusion, that feeling-expression is primary, impulsive expression derivative, I cannot assent to, as a general principle. It follows, surely, from the author's premises, only in so far as he himself "is exclusively regarding the final stage of the process of development" (p. 143). And even there, as he admits, it is not universally valid.

Theory of the Feeling. — Is affection a mental reaction upon idea? The proposition implies either a special psychophysical process, be-

¹ Passive apperception only for the true emotion.

² Of course, the word *Trieb* is used to designate conscious processes of very different developmental value. Cf. Wundt, *Phys. Psych.* II, 465, 471, 475; *Phil. Stud.*, VI, 379, etc. Only let us describe it in terms of content.

side the ideational; or the presence of a purely mental activity, without physical substrate. The first hypothesis must be judged on grounds of probability; nothing definite can be urged against it (p. 145: but *cf.* p. 159). The second does not come within the ken of the new Psychology.¹

It is a matter of experience that what excites pleasure conduces to the welfare of the psychophysical organism, what excites unpleasantness, to its harm. Pleasure arises from the harmony of the bodily changes caused by stimulus and the conditions of the life of the organism, or of intellectual states and the conditions of conscious life; unpleasantness, from their discordance.

There is, in all probability, no physiological process underlying Feeling, other than that which underlies Idea. The lifting of loads by the crane typifies the production of ideas; the ease or difficulty of the lifting corresponds to pleasure or pain. Pleasure and unpleasantness are in all cases "the mental results of the relation between the consumption of energy necessary at a given moment to the system at work, and the renewal of energy by the activity of nutrition" (p. 160).

The biological discussion on pp. 146, 147 is acuter than some others, but wears rather a formal look. The analysis on p. 149 finds a curious setting. Certain poisons are sweet in the mouth (S and F), but bitter in the belly (S' and F'). But it is the mouth-sweetness by which the poor organism stands or falls. Pleasure and pain, weal and woe, *do* they correspond "durchweg" under these circumstances?

Though he is at such pains to formulate the biological correlation, Dr. Lehmann expresses himself as being very sceptical of its actual value (p. 160). It really is of no assistance to the psychologist. Why Wundt's psychological view of Feeling² should be held to involve, psychophysically, a *new* brain-process, I do not understand. Nothing that the writer adduces makes against that view itself. The "work of an organ" (p. 156) is perception or idea: its activity, like that of the crane on p. 158, may be likened to the activity of apperception.³ Wundt's analysis might have been the text of the argument here.

¹ *Cf.* Külpe, in *Arch. f. Geschichte d. Philosophie*, VI, p. 177. Very refreshing is the frank recognition here, and by Dr. Lehmann (pp. 167, 168), of Fechner's services to modern psychology.

² As the reaction, by the way, not of mind, but of apperception, upon perception and idea. See *Phil. Stud.*, VI, p. 364.

³ Haltingly, of course, and misleadingly, if the phrase "production of ideas" ascribes to voluntary attention the power of raising ideas over the limen.

The explanation of "logical" unpleasantness on p. 160 is, *pace* the author, logical and not psychological. The point will need to be considered in detail, when we reach the chapter on the so-called "Emotions of Relation." In the meantime it may be noted that the unpleasant tone of the strain-sensation content has been left wholly out of account.

The second and third divisions of the work I hope to deal with in the next number of this *Review*.

E. B. TITCHENER.

Der echte und der xenophontische Sokrates. VON KARL JOËL.

Erster Band. Berlin, R. Gaertner's Verlagsbuchhandlung Hermann Heyfelder, 1893. — pp. 554.

The present volume, the first of two on the same subject, contains — besides an Introduction, describing the state of Socratic learning at the present time and the purpose, criteria, and method of the work — discussions of: (A) The Religious Views, genuine and Xenophontic, of Socrates, including chapters on 'the *δαιμόνιον* and divination,' 'piety and religious life,' 'nature and activity of the gods'; (B) The Individual Ethics of Socrates, comprising chapters on (i) 'the main features of Socraticism,' (ii) 'the Socratic individual ethics in the *Memorabilia*,' with sub-divisions under (i) entitled, 'General Characterization and Explanation of the Socratic Principle,' and 'The Socrates of Aristotle,' under (ii) entitled, 'The Socratic Theory of Virtue,' and 'The Socratic Activity.'

Recent criticism, our author shows, has thrown doubt upon the traditional view of the sources of information regarding the genuine Socrates and his work, and necessitates a considerable revision of that view. The *Protagoras* of Plato, the notices of Socrates and of his doctrine and work by Aristotle, and the *Memorabilia* all become, in consequence of the attacks made upon the text of the *Memorabilia*, for the time being at least, uncertain authorities. Textual rejection has been carried too far, and the way out of the difficulties of the present situation appears to be to separate, on the basis of sound *psychological* as well as mere textual criticism, what in the *Memorabilia* came from Xenophon as a reporter or would-be historian from what he wrote as an apologist for Socrates, as a man of action rather than contemplation, a believer in and follower of traditional opinion and custom. It being shown that the personality of Xenophon forces itself into his account of Socrates and his doctrine and life, we may take as a criterion for the separation of the genuine and the

merely Xenophontic Socrates, the theory of virtue and of the conceptual dialectic assured to us as really Socratic by the testimony of Aristotle and the agreement of the followers of Socrates. By means of this criterion we can, by the comparison of the *Memorabilia* with the other writings of Xenophon, arrive at the separation sought; we also secure the text of the *Memorabilia* against unjustifiable changes, besides obtaining a standpoint for a juster view than has hitherto been possible of the Platonic Dialogues as historic accounts of Socrates. — Joël gives a very full and clear showing as to the main point in his argument, — that the personality of Xenophon must have intruded itself into the accounts given by him of Socrates. A particularly faithful report of discourses and dialogues corresponds, he points out, neither to the individuality of Xenophon, to the custom of antiquity, to universal psychological experience, nor, finally, to the testimony of the ancients, who rate the *Memorabilia* as lower in historical value than the Socratic Dialogues of Plato, or of the philosopher Aeschines. The dialogical portions of the *Memorabilia* are probably more fictitious than the non-dialogical, as the new criticism makes out. The very shortness of the Xenophontic dialogues is an evidence against their historical fidelity; for how could Socrates, in a few words (containing as a rule only shallow wisdom), reconcile foes, establish friendships, refute Sophists, convert atheists, reform voluptuaries and effeminate persons, instruct generals, statesmen, artists, and others? Xenophon, as himself participating in Socratic dialogues, is mentioned by himself only once. Further, Xenophon shows a defective knowledge of the *life* of Socrates, — for instance, he neither mentions the Leon episode, nor cites the Delphic oracular saying, and passes lightly over the military deeds of Socrates. Why should a special knowledge of the doctrine of Socrates be ascribed to him? Xenophon clearly partakes of the character of an age in which declamatory oratory, apology-writing, encomiastic discourse, Sophisticism, demagoguery, were special fashions; he is a panegyric *rhetor* rather than a historian. The fact that Xenophon's own personality distinctly colors his reports of Socrates is so clearly revealed by a comparison of his various writings as to deprive the advocates of the traditional view of Socrates of their last support.

The general result reached by our author, by the criterion and method above outlined, is that Socrates was, in his doctrines and his activity, a pure rationalist, and that the accounts given by Xenophon which would represent him as anything other are pure "fictions." To begin with the religious opinions of Socrates, — the daemon was

for Socrates not a familiar spirit attending him, nor the voice of an indwelling deity, but the personal remnant or overplus of his psychical nature remaining after the recognition and deduction of the purely rational or intellectual element of that nature. Conceiving the psychical subject as fundamentally intellectual, and not fully comprehending, intellectually, tact, conscience, feeling, instinct, he styled it, metaphorically, in allusion to the external oracle at Delphi, a, or the, "daemon." Any other view of the daemon given in the Xenophontic account is *purely* Xenophontic and "fictitious." — Of piety and worship we can properly attribute to Socrates only an ethical conception: for him mere observances were not of serious import. Prayer had, as its proper object, not any special good but the good in general (a doctrine peculiar to the *Memorabilia* alone of all Xenophon's writings, and therefore all the more certainly Socratic). The purely anthropopathic conception of the gods, common in the *Memorabilia* (and other writings of Xenophon), is Xenophontic. With Socrates, on the contrary, this conception gives place to that of a moral world-order: the 'favor of the gods' depends not upon material sacrifices, but upon ethical excellence. And, in general, in their religious opinions Xenophon and the real Socrates have little in common.

The religious views of Socrates form but a subordinate part of his philosophy. That philosophy was *ethical rationalism*, rationalism being the primary, ethicism the secondary, element of it. The fact that the rationalism of Socrates applied itself essentially to human life alone is explained by the nature of the rationalistic principle: historically, reason first perceived itself in the mind of man and in human action, and hence upon its first stage rationalism is anthropologico-practical. The principle of the Socratic philosophy precisely corresponds to the conditions of Attic life as the centre and centralization of Greek life in the age of Socrates. While the life of the colonies was a life of the senses, of action, a life with *nature*, Attic life was a life of thought, of historical reminiscence, of social intercourse: it was an *intensive*, spiritualistic, rather than an *extensive* and naturalistic life. The rationalism of Socrates was already immanent in Greek art, in Greek education and industry as forms of art. It was the *first* form of the philosophy of spirit, and as such was one-sided; *i.e.*, *purely* rationalism, the first step in any form of philosophical knowledge being, universally, the bare conception of phenomena under a *single, simple* principle.

Neither Xenophon nor Plato excites confidence as a principal

authority for the philosophical doctrine of Socrates. Owing to this fact and to the want of agreement among authorities, we naturally turn to Aristotle's notices, which at least possess the advantage of having yet in the eyes of sceptical investigation the best warrant. Though widely scattered, these notices combine into a graphic and consistent picture—afford a precise *outline* of Socraticism, which may be filled in by reference to Plato and Xenophon. Now the best attested principle of the Socratic "Ethics" is, "Virtue is Knowledge" (Aristotle, *Magna Moralia*, I, 1, 1182 a¹⁵). By this dictum Socrates did not mean that virtue is a condition of the soul under the *ruling participation of knowledge*, nor that it is a condition that *accords with knowledge*: he simply *identified* knowledge and virtue. In this consisted his pure rationalism, which recognized no being whatever independent of thought. He is the ancient *Hegel*. He treated the so-called alogistic, or non-rational, part of the soul not as anything positive in itself, but as merely *negative reason*. By virtue of this conception of the relation existing between knowledge and virtue, he was *primarily* a dialectician, and only secondarily an ethical philosopher: and he was not in any sense a conscious and purposed ethical pedagogist. The Ethics of Socrates had in view not the individual, but the universal self, self as *full subject*. It was this formal, negative character of Socrates' thought that made his characteristic attitude that of testing the knowledge of others, and his vocation that of searching and trying the would-be wisdom offering itself about him. The formal principle of Socrates naturally specified itself in objectivity by means of the rule of analogy. In relation to the idea of happiness, the Socratic principle remained unaltered. Eudaemonistic the Socratic Ethics in a certain sense was; even the Platonic ethics was so. But Socrates neither attempted to prove the value of virtue, nor did he inquire concerning the motive of action: neither 'the useful' nor 'the good' is his principle, but 'the true,' *i.e.*, the object of conceptual knowledge. As compared with the true, the good, useful, and agreeable are secondary, whether attributive or relative. There is only one psychical function,—conception; but one principle of life,—thought. As regards his historical position, Socrates is not so far removed from the Sophists as Plato makes out, nor so closely related to them as Aristophanes and Hegel assume, though he stands nearer to them than to Plato.

To compare, now, the 'Socrates' of the *Memorabilia* with 'Socrates' of the notices of Aristotle as regards Individual Ethics

—we find, indeed, in the *Memorabilia* (III, 9) the assertion that Socrates did not distinguish between wisdom and the other virtues; but Xenophon knows nothing of the mighty import of the investigation of concepts, regarded by Aristotle as the unquestionable peculiar wont of Socrates,—though he concedes that the entire activity of Socrates consisted in the formation of concepts. Xenophon recognizes the connection between the formation of concepts and social converse, and hence the origin of dialectic. Beyond the definitions of the virtues, however, only a little fruit of the Socratic investigation of Concepts appears from the *Memorabilia*. The dialectic of Xenophon contradicts the definitory dialectic of Socrates (described by Aristotle) in three respects: (1) it deals with the *how* and not the *what*; (2) it is tendentially and parenetically argumentative; (3) it *begins* rather than *ends* with definitions. Xenophon makes the *differentiation* of concepts a part of the Socratic dialectic: but this is to be regarded as an erroneous idea, borrowed in all probability from a work of Antisthenes, not genuinely Socratic. Of the most characteristic aspect of the Socratic dialectic, the Elenchus, (which originated with him and not with the Sophists), Xenophon gives an inaccurate representation, also borrowed from Antisthenes. His report as to the eudaemonism of Socrates is not so much false as incomplete, one-sided.

As to the practical side of Socrates' work, Xenophon gives conflicting accounts. His statements regarding the 'profiting' or 'improving' effect of Socrates' dialectic are hardly of a historical character: there is no proof that Socrates employed parenetic or hortatory discourse as Xenophon implies. Xenophon corrupts the Socratic dialectic in various ways: *e.g.*, by employing monologue to excess or by making 'Socrates' indulge in dogmatic, rhetorical discourse. The activity of Socrates was merely a continual inquiry or investigation, together with a confession of ignorance. If there were a 'protreptic' influence in his conversation, it concerned only knowledge, not virtue: he did not preach,—in his principles there was no such thing as preaching on the pedagogical arts of working upon the 'feelings' and thus reaching the 'will.' The representations in the *Memorabilia* in which Socrates appears as *exhorting* to virtue are therefore unhistorical, 'fictitious.'

It is hardly necessary to say that the volume of the contents of which the foregoing is but an imperfect summary, is a candid, careful, learned, and able study, so far as it goes, of the subject of which it treats. Of the philological learning of it, it is not necessary to

speak in detail—even if we felt competent to do justice to it. As to the philosophical content of the book,—it is in our opinion hardly possible, *for the historian*, to rationalize completely, as our author aims to do, the Socratic doctrine and life. The author has undoubtedly done just the right thing in emphasizing the testimony of Aristotle, and so ridding the name of Socrates of a large portion of the burden of vulgarity left upon it by the philosophically incompetent hands of Xenophon; but it seems a rather too violent abstraction from the conditions of Greek life and society at any period of their existence to make of Socrates all but a complete modern ethical rationalist. One cannot help admiring, however, the clearness and strength of the philosophical conviction which, in part at least, Herr Joël reads into the life and teaching of Socrates. Criticism would be more in place at this time if we had before us the promised second volume which is to deal with the individual and social ethics of the *Memorabilia*. We must note, however, that the present volume, which is (necessarily) very largely purely philological in character, would have been more serviceable for the *philosophical* student if the author had given in every section of it a careful summary of results obtained. We also note a certain degree of diffuseness and unnecessary repetition, due in part, no doubt, as intimated in the author's preface, to the external circumstances of the composition of the work. On the whole, the work, though largely philological, merits careful attention from philosophical students.

B. C. BURT.

Die Hauptprobleme der Philosophie, in ihrer Entwicklung und theilweisen Lösung, von Thales bis Robert Hamerling. Von VINCENZ KNAUER. Wien & Leipzig, 1892, W. Braumüller.—pp. xxvi, 408.

This book consists of a course of fifty-three lectures given to beginners in philosophy in the university of Vienna. They extended over the whole academic year, and are apparently published exactly as they were delivered, without the excision either of the 'asides' in which the professional mind loves to dispose of the topics of the day, or of the witticisms which form so effective a *κάθαρσις* of the *ennui* which the gravity of the subject may have engendered in the hearers. Hence the book is distinguished by a greater lucidity and liveliness of style than we are wont to expect from a German work, while the defects of its qualities appear in the air of hasty dogmatism which the absence of fuller discussion, references, and notes sometimes gives to its summary treatment of very disputable points. It may be

doubted whether publication in such a form was needful or desirable at all, and there can be no doubt that it puts great obstacles in the way of serious criticism. For though the critic make every allowance for the excellent reasons which the author no doubt reserves *in petto*, he cannot but feel the insufficiency of the actual statements made. It is unfortunate, also, that the title of the book should be decidedly misleading. It is *not*, as one might have expected, a history of philosophic problems, but a history of philosophy in outline, and the title simply serves as an excuse for a divergence from the traditional estimates of the relative importance of the various systems. Up to Aristotle the narrative follows the customary lines, but the interval between Aristotle and Descartes is all but ignored, as are the English philosophers, with the exception of Bacon (who is regarded as the founder of modern science), and the successors of Kant, with the exception of Herbart. It is clear, therefore, that the book does not supply a satisfactory sketch of the history of philosophy. And still less is it adequate as an account of the history of the chief philosophic problems. It raises the question, —What is philosophy?— answers it provisionally by ‘the opinions of the philosophers,’ and fails to give not only any final reply, but also a definite list of the chief philosophic problems, which the learner is left to piece together as best he may in the course of the lectures. Even so, he will hardly find anything bearing on what is surely not the least of these problems, *viz.*, that of the relations of man and God, while the whole subject of epistemology is left obscure by the author’s persistent suppression of the skeptical objections, which the various and curious theories of knowledge were designed to meet. Of course, if nothing is said of the Pyrrhonists and Hume, if the sophists are met with the pooh-pooh of ‘common-sense,’ the theories of the Neo-Platonists and Neo-Kantians may well seem to have been prompted by mere superfluity of naughtiness. On the other hand the account, *e.g.*, of Plato and Aristotle contains a good deal of detail which is irrelevant to any particular ‘problem of philosophy.’ But to descend to the criticism of particulars. Professor Knauer, who is an ardent partisan of Aristotle, is inclined to exaggerate his difference from Plato, and so overlooks the fact that at the end of much criticism the great disciple has a habit of re-stating his master’s doctrine in somewhat different words. This is probably the explanation of the trouble which Aristotle’s psychology has at all times given to his commentators. It begins, as usual, by a polemic against the Platonic doctrine of the pre-existence of the soul. The soul is the “form,” *i. e.*, the moulding principle, of a *particular* body.

and not transferable. But upon Aristotelian, no less than upon Platonic, principles the form is "prior to" the "matter." On other occasions this priority does not create a stumbling-block, owing to the co-eternity of form and matter, which guards against a temporal interpretation, but in the case of the soul the temporal succession is just the *datum explicandum*. Is it, then, astonishing that Aristotle should have discovered no better way out of the difficulty, no better way of harmonizing the strict individuality of the soul with the priority of the form, *which must here be taken temporally*, than his obscure doctrine of the *νοῦς ποιητικός*? It is true that he ascribes to it all the attributes he had censured in the Platonic doctrine of pre-existence; but does he not do precisely the same thing in his doctrine of the universal after his criticism of the Platonic ideas, and is not the relation of the *δευτέρα* to the *πρώτη οὐσία* just as obscure as that of the *νοῦς ποιητικός* to the *νοῦς παθητικός*? Professor Knauer, who follows Brentano rather than Zeller in his account of the *De Anima*, tries to read modern Creationism into Aristotle, according to which the immortal part of the soul is created out of nothing and combined with the body by the will of God. And this in spite of the facts that Aristotle elaborately refutes the idea (*e.g.*, *Metaph.*, XI, 9) that the perfect would be in any way conscious of the imperfect, that there is not the least trace of a conception of creation in Aristotle, and that the idea of creationism is assuredly no less difficult than that of the *νοῦς ποιητικός*! Professor Knauer appears to greater advantage in his treatment of the problem of the One and the Many. He is a decided opponent of Monism, admires Leibniz and Herbart, and considers Fichte, Schelling, and Hegel to have added nothing to Spinoza. Monism, as he rightly insists, is helpless in face of the problem of change, which begins to be intelligible only when a plurality of existences has been admitted. But it may not be amiss to remark that, even according to Herbart, change is only appearance, which does not affect the inner nature of the "reals," and that the possibility of a real and intrinsic change is what we are concerned to assert for many scientific and ethical purposes. Moreover, as already stated, pluralism cannot be regarded as established until the question of the relation of God to the Many has been discussed, and such discussion is here entirely lacking. The book concludes with an extremely eulogistic account of the philosophic writings of the poet Hamerling, who, however, does not seem to offer anything of sufficient originality and interest to justify his admirer's claim that he has for the present said the last word in philosophy.

F. C. S. SCHILLER.

SUMMARIES OF ARTICLES.

[ABBREVIATIONS.—*Am. J. Ps.* = *American Journal of Psychology*; *Ar. f. G. Ph.* = *Archiv für Geschichte der Philosophie*; *Int. J. E.* = *International Journal of Ethics*; *Phil. Mon.* = *Philosophische Monatshefte*; *Phil. Stud.* = *Philosophische Studien*; *Rev. Ph.* = *Revue Philosophique*; *R. I. d. Fil.* = *Rivista Italiana di Filosofia*; *V. f. w. Ph.* = *Vierteljahrsschrift für wissenschaftliche Philosophie*; *Z. f. Ph.* = *Zeitschrift für Philosophie und philosophische Kritik*; *Z. f. Ps. u. Phys. d. Sinn.* = *Zeitschrift für Psychologie und Physiologie der Sinnesorgane*; *Phil. Jahr.* = *Philosophisches Jahrbuch*; *Rev. de Mét.* = *Revue de Métaphysique et Morale.*—Other titles are self-explanatory.]

PSYCHOLOGICAL.

'*Modern*' *Psychology: a Reflexion.* J. WARD. *Mind*, No. 5, pp. 54-82.

The founder of 'modern' psychology is Wundt; but the development of its doctrines has not been along the lines laid down by him. Wundt's theory of apperception or will (conscious activity or spontaneity) is not accepted by the Sensationalists (Associationists, Presentationists, Intellectualists), who hold that "all the elements of psychical life are primarily and ultimately cognitive elements, and that all the laws of their combination are reducible to association."

Either side has a special difficulty. That of the Presentationist "consists in the agent and the activity which thought and consciousness imply." It is met by the relegation of their consideration to another science. The opponents of Presentationism make the antithesis of subject and object essential: feeling and will are irreducible to cognitions. Then arises the problem: Do we know about them, but not know them? Or do we know them, but know nothing about them? Both statements are current.

There is (1) an ambiguity in the use of *know*, and (2) something akin to 'immediate knowledge' of feeling. Most psychologists recognize a difference between the immediacies of feeling and presentation. It may be one of degree (Kant, Hamilton, Horwicz, Kröner): it is more probably one of kind.

We must clear the ground by examining the term 'consciousness.' It has four senses. (1) There are the distinctions between it and self-consciousness; (2) between state and content of consciousness;

(3) between fact of consciousness and consciousness of a fact : and
 (4) there are the collective and distributive uses of the word. In the phrase 'state of consciousness,' the term is used collectively. In 'content of consciousness' it may be distributive or collective. We may suspect that the more general employment of either phrase modifies the sense of subordinate terms (cognition, feeling, volition). The 'content' psychologist speaks from the standpoint of reflexion. Self-consciousness is the cognitive element in a conscious state ; the state being completed by elements of feeling and action. But here is apparent the clumsiness of our terminology : "the whole is contained cognitively in what is but a part of itself existentially."

Knowledge implies (1) a subject knowing and an object known, (2) a necessary dependence of the subject on the object so far as its knowing goes, and (3) no such dependence of the subject so far as its being goes. Of the two alternatives offered, absolute limit (subject and object one), and infinite regress (the two distinct), we must, with Kant, prefer the latter.

For self-consciousness, the duality of consciousness is a fact of presentation. Let O symbolize all that is cognized or presented ; S the non-O constituents. The duality of consciousness is then a name for the relation S-O. The cognition of their duality is $S-\left\{ \begin{matrix} S' \\ O \end{matrix} \right.$. The infinite regress is S-O, $S-\left\{ \begin{matrix} S' \\ O \end{matrix} \right.$, $S-S'-\left\{ \begin{matrix} S'' \\ O \end{matrix} \right.$, etc.

If feeling and activity are distinct from presentation, they belong to S, knowledge of them to O : this knowledge is first possible at $S-\left\{ \begin{matrix} S' \\ O \end{matrix} \right.$. Two questions arise. (1) What immediacy have these elements, if not the presentative immediacy? They have that other immediacy which is necessary to this. They are the immediate being to which known being is the immediate counterpart. (2) If not known presentatively, how can they be known? Diametrically opposite conclusions have been reached (Mansel, Kant). It seems plain that, presentation and representation being ruled out, "any knowledge we have must be in some way constructive or mediate." However far such knowledge is extended, it advances by the discernment of new relations, not by the acquisition of new sensations.

Let us turn to the presentationist difficulty. It is sought to be minimized by the extension of the use of 'content,' and by relegation of the 'form' of consciousness to other sciences. The psychological standpoint is treated as though essentially the same as a physical standpoint ; presentationism is epistemologically absurd.

The physicist can say : *There is* this or that, *a, b, c, or d.* The psychologist, unless he will abolish altogether that which is characteristic of psychology, must say : *He has* such and such presentations, feels so, acts so. There is a second methodological objection to presentationism. It identifies psychology and physics where they differ in standpoint : it treats them differently where they are alike. The presentationist "allows the meaning to hold in objective knowledge, but ignores everything but the etymology in subjective knowledge." —Dr. Münsterberg's psychology (typical presentationism) furnishes us with instances of these two errors. Modern psychology correlates psychosis with neurosis, and will resolve feeling and activity into sensations. But for feeling, at least, the evidence is dead against this resolution : apart from the fact that teleology is opposed to it. Much the same holds of activity. In a machine we distinguish mechanical arrangement from motive power and efficiency. Presentationism is adequate to nine-tenths, perhaps, of each psychological fact. It might be made a special branch of psychology. But we can neither take the fraction for the whole, nor reduce the tenth. The problem of subjective knowledge, which is unique in character, remains. "I am disposed to maintain that the Ego is both an unknown and an unknowable for sense : the non-Ego partly an unknown, but not an unknowable, so far as the possibilities of sensational *rapport* are unlimited."

E. B. T.

The Respective Spheres and Mutual Helps of Introspection and Psycho-Physical Experiment in Psychology. A. BAIN. *Mind*, No. 5, pp. 42-54.

In our desire to know ourselves we work at first by Introspection purely, and if at a later stage we find other means of extending and improving our knowledge, Introspection is still our main resort, it is alone supreme, everything else subsidiary. Its compass is ten times all the other methods put together and fifty times the utmost range of psycho-physics alone. Beginning with the grand meta-physical issue—thought and reality, knowing and being—its exclusive dependence on introspective method speaks much for the ascendant position of that method in our inquiries, when we consider the enormous significance so long attached to this great issue. The question of Origins cannot be dealt with by one single method, but where Introspection fails, the other methods cannot be said to make

good the deficiency. When we come to the *Qualitative Analysis* of the complex products of our mental life, much valuable aid has been obtained from experiments properly styled psycho-physical, in the lower region of Sense and Instinct. But in the domains of Intellect, Feeling, and Will we are landed on Introspection almost exclusively. True, the experimental method has made attempts to grapple with the problems of Attention and Association, yet they only cover ground accessible to Introspection, although they may to a slight degree correct some of the inadvertencies of the introspective observer. It is only in so far as *Quantitative Analysis* is possible that we can speak of Psychology as a science in the proper sense. When we avail ourselves of outward signs, our means of measurement approach the precision of the objective departments of knowledge and a great enlargement of this resource is promised by the methods of psycho-physics. For Psychology we need (1) a mode of estimating the intensity of individual feelings in special moments and of recording that estimate, each of us operating on self; (2) a similar estimate of the states of other persons; (3) the generalizing of those estimates for definite circumstances in order to arrive at provisional laws of cause and effect in the region of feeling; (4) a summation of occasions of feeling throughout so as to deal with it in masses as regards both quantity and intensity. In the following fields B. thinks psycho-physical experiments may profitably be used as aids to Introspection: (1) In investigation concerning the muscular mechanism. (2) In the problems which Memory, Retentiveness, Reproduction, etc., present. (3) Memory lapses, or the momentary fluctuation of ideas in and out of consciousness. (4) The determination of the conditions of permanent association as against temporary or so-called 'Cram.' (5) Plurality of simultaneous impressions in each of the senses. (6) The influence exerted by Fixed Ideas. — "By the very nature of the case, the initiative in the most fruitful lines of inquiry will be most frequently taken by Introspection, which also by its powers of analysis will still open the path to the highest generalities of science."

J. E. C.

Hedonic Aesthetics. II. HENRY RUTGERS MARSHALL. *Mind*, No. 5, pp. 15-42.

The hedonic aesthetic theory may be stated as follows. The beautiful is that which produces effects in us that are (relatively) permanently pleasurable in revival. In the case of the ugly, of

course, the reverse is true. Two points are clear: (1) pain is incompatible with pleasure; (2) there is a field of non-pleasure which is not painful. This, while theoretically narrow, is practically wide in extent. The first principle of aesthetics, then, is the exclusion of pain,—the elimination of the ugly. There are two great classes of pains: (1) the pains produced by the repression of activities, and (2) the pains produced by excess of active functioning. A. *The Avoidance of Repressive Pains*. Repressive pains are caused by the failure in consciousness of a content which would normally have appeared. This may happen as follows: (1) Where contents habitually arise in any rhythmical manner in answer to stimuli, repressive pains will be engendered, if the stimuli fail to appear at the usual time. (2) Repressive pains will appear, if contents arise which would normally act as stimulants to a content x , this content x failing to appear. (3) Where contents often appear in definite relations of succession, repressive pains will be engendered whenever the usual order of their rise is not fulfilled. (4) It may be noted that the existence of repressive pains is an indication that the content which fails would appear pleasurable if it appeared at all. B. *The Avoidance of Pains of Excessive Functioning*. This is so important that works of art in all cases are developed on lines in which excesses may be shunned with little difficulty. So soon as the work of the artist begins to tire us, we must be able to turn away from its consideration.—*Positive Aesthetic Laws*. The problem is to discover the means necessary to the production of a pleasure field which shall be relatively permanent. Now pleasure occurs whenever surplus stored force is utilized. Hence it arises: (a) When there appears in consciousness a content which has appeared before, but which has lately been absent, because no stimulus to its production has arisen. (b) When a content appears after inhibition of its normal appearance. (c) When a content appears with unusual vividness after normal absence from consciousness. But the pleasure field must be permanent. In general we may say that the conditions of pleasure permanence are the shifting of a focus in consciousness over a wide pleasure field. Moreover, by compelling a judicious recurrence of a special interest, the artist marks a unity of the manifold, which unity gives to his work its distinctive character.

E. A.

The Scope and Methods of Comparative Psychology, 1. C. L. HERRICK. Denison Quarterly, I, 1, pp. 1-10.

Comparative Psychology seeks the genealogy and genesis of mental phenomena. It recognizes that between mind and body there exists an intimate relation. We may, therefore, address ourselves first to that branch of it which connects most directly with the physical sciences,—to Neurology. We must notice: the structural unit of the nervous system,—the *neuron*; the representation of parts of the body in the nervous system; kinesodic and æsthesodic centres and systems; the functions of the nervous system in general; the nutritive property of centrifugal nerves. All our knowledge points to the interdependence of mind and brain. Does the brain grow after the individual has reached maturity? Certain parts of the proliferating epithelium persist late, and continue to form cells. How long does this go on, and what are the conditions of the proliferation of new nerve cells? The migrations, development, and successive modifications of the (ultimately) brain cells are of great practical importance. *Cf.* the cerebellum, an organ without psychological significance, but serving as a “reservoir of nervous energy, which backs up the feeble mandates of the will.” Not only the origin, but the subsequent nutrition of nerve centres is an interesting problem. We must look to the lymph and to auxiliary cells for an explanation. An overdraft on the proliferating power may permanently limit the sources of future nervous supply. Moderate mental activity is essential to cell-multiplication. Senile degeneration may be due to loss of nerve power, dependent on exhaustion of the proliferating centres. This latter is an important problem. Through the organic sensations, neurologically considered, we may hope to study the emotions. Neurology, then, throws light on the subjects of health, persistence of mental power, and on the problems of Psychology itself.

E. B. T.

On the Development of Voluntary Motor Ability. WM. L. BRYAN. *Am. J. Psy.*, V, 2, pp. 125-204.

After a preface defending experimental psychology against the charge that its results are fragmentary and without bearing on the general problems of mind; and an introduction emphasizing the importance to physiology, psychology, and sociology of a study of the development of will; the writer contributes towards such a study

a research into the development of voluntary motor ability in children, with respect to (1) maximum rate of rhythmically repeated movement, (2) precision of movement, (3) bilateral development. Under the first head, experiments on adults show that a person's rate, as tested for shoulder, arm, wrist, and finger joints, suffers slight variations due to local and subjective conditions, is greatly diminished by fatigue, and unaffected by amplitude of movement. Experiments on some eight hundred school children show that the mean rate of growth of rate between six and sixteen is from .15 to .3 taps on a Morse key per second; that periods of accelerated and retarded growth appear; that the hand outgrows the arm; and that the mean rate of boys slightly exceeds that of girls. Precision was tested with two movements, one familiar (writing); the other unfamiliar (probing). The results indicate that (1) in normal individuals precision is subject to greater variation than maximum rate; (2) absolute size of errors decreases most rapidly between the ages six and nine; (3) errors are greater in the unfamiliar movement; (4) there is little difference between the sexes. From these experiments and those on rate, the following results are obtained concerning bilaterality. (1) In right-handed persons the right hand and arm excel the left in strength, rate, and precision. (2) The effects of effort through either upper extremity are probably shared by both. This is concluded from the facts that (a) between the ages tested the right hand does not outgrow the left in rate-ability; (b) the mean error in precision-tests is reduced by a greater absolute amount for the left hand; (c) the amount and duration of exertion with one hand depend upon previous or simultaneous exertion with the other, and (d) the maximum rate of a joint is possibly affected by immediately previous exertion of the corresponding joint on the other side. (3) Corresponding joints have generally the same periods of accelerated and retarded growth, but there is usually bilateral asymmetry of development. The fact that, in general, periods of rapid growth involve increasing asymmetry shows that asymmetry is a normal attendant of growth. In addition the following theoretical conclusions are drawn from the experiments on rate. (1) The maximum rate of voluntary rhythmically repeated movement is probably a critical test of voluntary control. It is apparently identical with innervation rate, and a test of (a) the power of arrest and reversal, (b) the general condition of the central nervous system, and (c) the condition of motor centres involved. (2) The periods of acceleration, decline, and recovery of rate-ability in children

from twelve to sixteen are probably due to nervous conditions caused by functional changes. (3) The fact that at first the arm exceeds the hand in rate, is perhaps explained by the observation that in children of five the clasping tendency is still strong.

M. F. WASHEURN.

Die Grundempfindungen in normalen und anomalen Farbensystemen und ihre Intensitätsvertheilung im Spektrum. A. KOENIG und C. DIETERICI. Z. f. Ps. u. Phys. d. Sinn., IV, 4 & 5, pp. 241-347.

(1) INTRODUCTION.—§ 1. *Formulation of the Problem.* We must reduce the manifold of color-sensations to as few as possible elementary sensations. (These are not in concept the "fundamental" colors of Donders, which represent a simple peripheral process.) In other words, we must reduce the spectral colors to such elementary sensations. Their curve has for abscissa a solar diffraction spectrum, for ordinates their own intensities in that spectrum. § 2. *The color-mixer.* § 3. *Transformation of gaslight dispersion values into sunlight diffraction values.* § 4. *Monochromatic, dichromatic, and trichromatic systems* (Donders) are to be investigated.

(2) MONOCHROMATIC COLOR SYSTEMS.—§ 5. *General properties* of such systems. The literature of total color-blindness contains some 40 names. Characteristic are diminished keenness of vision and avoidance of light. § 6. *The elementary-sensation curve.* There is here only one elementary sensation. The maximum of intensity in the system examined lay in green. The form of the curve tallies fairly well with those obtained by Donders and Hering.

(3) DICHROMATIC SYSTEMS.—§ 7. *General properties* of such systems. "Dichromates," in the sense of the present paper, are red-blind and green-blind persons. Characteristic are the terminal spectral distances, where only differences of intensity are present, and the mixture of which gives the intervening spectrum. Either these end-colors are the two elementary sensations, or these are excited within one or both of them in a constant relation. The neutral point of the spectrum corresponds to the sensation white. §§ 8, 9. *Determination of the elementary-sensation curve.* § 10. *Deductions.* If we denote the elementary sensations by *W* (warm) and *C* (cold), the *C*-curves show one type, the *W*-curves two distinct types. There are, therefore, two forms of dichromate systems. The position of the neutral point denoted by the wave-length of the abscissal spectral light at the point of intersection of the two ele-

mentary-sensation curves, is not a certain criterion of the two types, because of the individually different absorption of light in the pigment of the *macula lutea*.

(4) TRICHROMATIC SYSTEMS.—§ 11. *General properties* of such systems. Nearly all women, and 96 p. c. of men are trichromates. Common to all these systems is the possibility of expression in terms of Newton's color-table. The construction of this latter makes the assumption of at least three elementary sensations necessary. But the relations of saturation show that there are at most two such represented in the spectrum; the triangle must be ideally supplemented. The "terminal distances" are present here, as for dichromatic systems. Inwards from these come the intermediate distances,—as it were, dichromatic spaces. Centrally lies the trichromatic middle distance. No shade of the intermediate distances can be produced by mixture of the light of the terminal distances; the former point to a new elementary sensation, and to the same: since else there would be four elementary sensations,—which is contradicted by experience.—Trichromatic systems are normal and anomalous. § 12. *Complementary colors*. These are either homogeneous or mixed (with white): the former use of the term is that of this paper. They were determined for the gas-light employed in the investigation. The form of the curve agrees with that of Helmholtz, and of von Kries and von Frey. § 13. *The two groups of trichromatic systems*. (Cf. § 11.) The test is the mixture of (lithium) red and (thallium) green to equal (natrium) yellow (Rayleigh, Donders). Mixtures which have reference only to the blue and violet parts of the spectrum are valid for both forms of the system. (a) Normal trichromatic systems. § 14. *The choice of color equations and the direct results of the observations*. The color equations were obtained in the face of two difficulties. For accuracy of judgment whitish colors must be avoided, and therefore parts of the spectrum mixed, which lay tolerably near one another. For accuracy of calculation, the parts must lie as far from one another as possible. Three forms of equation were obtained: for the terminal distances; where a mixture of two components gave the intermediate color without noticeable diminution of saturation; where there were two components on either side of the equation. §§ 15, 16. *Calculation of the elementary-sensation curves R, G, and V* § 17. *Survey of results: testing of the elementary-sensation curves by complementary colors*. The ordinates of the curves refer to the dispersion gas-light spectrum; they are transformed into diffraction

values for gas- and solar light. The curves of the two observers agree, when differences of absorption in the *macula lutea* are allowed for. Their correctness is controlled by the comparing of the color complementary to a terminal color with the light corresponding to the point of intersection of two elementary-sensation curves. (b) Anomalous trichromatic systems. § 18. *The color equations: their immediate results; and the calculation of the elementary-sensation curves R' , G' , and V' .* § 19. *Survey and transformation of the results: testing by complementary colors.* § 20. *Comparison with normal trichromatic systems.* The anomalous curves run less evenly than the normal; but this is to be ascribed to errors of observation only. As regards the R' curve: its maximum coincides with that of R , but the forms of the curves differ somewhat. As regards G' : the curve differs greatly from G . Its maximum (in both gas-light spectra) is shifted towards the red end of the spectrum, and its form is intermediate between those of R and G . In the solar (diffraction) spectrum, the maximum nearly coincides with that of G , but the form of the curves is different. As regards V' : there is no difference between it and V .

(5) THE GROUND-SENSATIONS.—§ 21. *Definition of ground-sensation, and its relation to elementary sensation.* A ground-sensation is a sensation to which corresponds a simple peripheral process of the *N. opticus*. (Donders' fundamental color). There cannot be fewer ground-sensations than elementary sensations; there is no proof that there are more; we assume that there is an equal number of both. The intensities of the ground-sensations of a color system are homogeneous linear functions of the intensities of its elementary sensations: § 22. *The mutual relations of the different color systems.* The most obvious assumption is, that the ground-sensations of monochromatic and dichromatic systems are identical with ground-sensations of trichromatic systems; or at least, that this holds for monochromatic and dichromatic systems. The assumption can be tested experimentally and calculatively. Experimentally, tri- and dichromatic color equations must be valid for monochromates; trichromatic for dichromates. The converse need only occur as an exception. Calculatively, a similar result must be gained by aid of the elementary-sensation curves and color equations already obtained. (a) As regards monochromatic systems: the assumption is not valid. Connate monochromatism cannot be explained as arising by the elimination of one or two of the ground-sensations of the dichromatic and trichromatic systems hitherto investigated. This fact refutes

Hering's theory that the monochromatic ground-sensation is identical with the white-sensation of other color systems. (*b*) As regards dichromatic systems: the assumption holds, experimentally. That the calculative confirmation of it by the present results is only partial, is explicable. Hering assumes a similar relation between dichromates and trichromates, but regards the division of the former into two distinct types as secondary. Such a position is invalidated by this investigation. (*c*) As regards anomalous and normal trichromatic systems: it follows experimentally that they must so differ from one another, in the case of at least one ground-sensation, that this ground-sensation of the one group can in no way be represented as a homogeneous linear function of those of the other group. Calculation shows also that only two similar ground-sensations are possible; and that these are the two obtained in the comparison with dichromatic systems. § 23. *The relations of the determined ground-sensations to the elementary-sensations; and their intensity-curves in the spectrum.* One can explain the origin of the two investigated types of dichromatic systems from normal trichromatic systems by the absence of the ground-sensations \mathbb{R} and \mathbb{G} respectively. The third ground-sensation of anomalous trichromatic systems is different in its spectral distribution from the third in normal systems; and there is no possibility of expression in terms of homogeneous linear function. § 24. *The color-table, and the quality of the ground-sensations.* For the ground-sensations we obtain from the results of the research: for \mathbb{R} a red, inclining a little from spectral red towards purple; for \mathbb{G} a green of about $505\mu\mu$ wave-length; for \mathbb{B} a blue of about $470\mu\mu$ wave-length. It is clear from the triangle that \mathbb{B} is most saturated, \mathbb{G} least saturated, in the spectrum; and that spectral violet is more saturated than any mixture of spectral red and spectral blue. An anomalous trichromatic system is given, if the quality of \mathbb{G} is retained, but the form of its intensity curve approximates to that of \mathbb{R} . A dichromatic system of the first type is given, if the coincidence with \mathbb{R} be complete. There remain the ground-sensations Blue (of about $470\mu\mu$) and Yellow (of about $575\mu\mu$); differently saturated. A similar explanation is possible in the case of the second dichromatic type.

If we draw a perpendicular through \mathbb{U} of the normal color triangle, from the \mathbb{B} angle to the opposite side, the sensations of the dichromate systems will be arranged on this perpendicular. The colors confused by dichromates lie on straight lines, which have a common point of intersection at the place of the absent sensation.

In the construction of the color triangle, the points **R** and **G** have been so chosen, that the straight line **RG** coincides as nearly as possible with the curve of the spectral colors. As for the position of **B**, it can only be said that the triangle **RGB** contains the whole of the real portion of the color table.

E. B. T.

ETHICAL.

Die sittliche Frage eine sociale Frage. (II) F. STAUNDINGER.
Phil. Mon., XXIX, 3 u. 4, pp. 197-219.

After speaking of Ellissen's biography of Lange, S. goes on to discuss Lange's views on the social problem. Lange acknowledged the fact that we possess an ideal of the world and life which reality only imperfectly satisfies, but which, if vividly grasped, is the most powerful motive for social reform. Whether, with him, we call devotion to this ideal religion or not, is of no importance. If we understand by religion the regulation of our relations to supersensuous *Beings*, then, inasmuch as we have no knowledge of any such, we have no religion; but if by religion we mean devotion to the ideal, which men must still to-day regard as the highest just as much as in the past, when they thought that ideal personified and embodied in *Beings* of another world, there is no objection to the name 'religion.' We must avoid, however, the error of Lange in supposing that we can still receive vital motives to action from the mythology of religion after this mythology is recognized as such. This is to confuse the aesthetic exaltation which we feel in sublime myths as in effective works of art, with the devotion to the ideal which can come only with the full conviction of its truth. Lange's ideal was: "Human perfection in human society." He was far in advance of the socialists of his time in seeing that this ideal could not be realized by riots and revolutions, but that it must come as the organic development of already existing social conditions. The growth of the spirit of community he regarded as the chief means to the victory of the socialistic tendencies. In all this the socialism of Lange and of the modern social-democracy are quite at one. But in one essential point there is a marked difference. The social-democrats are bending all their efforts toward the organization of the working classes and the possession of political power. Lange, on the other hand, addressed himself to the cultured classes, taught them to regard the movement of the people not as a danger, but as the beginning of

salvation from a great danger, and urged them to do all in their power to mitigate the evils of the transition. Lange stands fully on the ground of social ethics in the thought that improvement cannot come to-day by moral preaching to individuals, but only by changing the conditions out of which evil necessarily grows.

The rest of the article is occupied with the recently published books of Th. Ziegler entitled: *Die sociale Frage eine sittliche Frage*. This work shows the influence of Lange to a considerable extent. It differs, however, in that it does not set out, as is the case with Lange, from general springs of human action and from the struggle for existence, and show the economic causes out of which definite efforts arise, but rather takes its start from ethics, which it declares to be a neighboring province to social science. It maintains that the social question is "perhaps primarily an ethical question," and on this ground handles the problem from the standpoint of ethics. A brief outline and criticism of the work chapter by chapter follows. S. agrees in the main with Ziegler, and gives high praise to the book, but finds that it does not carry out the author's ethical principles as fully and fruitfully as the title and expressed aims of the book would lead one to expect.

F. C. F.

The Relation between Ethics and Economics. J. S. MACKENZIE.

Int. J. E., III, 3, pp. 281-308.

All will agree that ethics is concerned with the value of conduct in respect to its goodness or badness. There is not a similar agreement as to the sphere of economics. Most of the views current on this subject are found unsatisfactory. After an examination of the different views, the conclusion is reached that economic science is concerned with that which we value simply as *means* to something else. Art-products, virtues, etc., are ends in themselves, or the indispensable conditions of ends in themselves. They are not consumed in order to reach some other ends as are economic goods. The fact of exchangeability is a mere accident of economic goods. The fact of being valued as *means* is of the essence of such goods. Objects cannot be rigidly divided into economic and non-economic. All objects may be regarded from an economic point of view. Nevertheless moral, æsthetic, and philosophical *values* are never regarded as mere means, and this distinguishes them from economic *values*. Ethics deals with ends, and economics with means, and there is a grave danger, in studying the latter, of losing sight of the end and regarding the means as end. The relations between ethics and

economics are specified as follows : (1) The Place of Economics in Social Science. Economics is distinguished from the other social sciences as the science of relative values. Economics deals with simpler and more calculable elements, but it must not be given undue prominence over the other social sciences which deal with incalculable elements. (2) Method of Studying it. There are three methods : first, the method which studies what tends to be ; second, the Historical, which studies what is and what has been and third, the Ethical, which studies what ought to be. The study of tendencies must always form a larger part of economic science. It must be understood that it is only tendencies that we are studying, and their moral values should be constantly kept in mind. Economic tendencies are neither laws of nature nor moral imperatives. They must conform to human reason. If they be tendencies towards evil, their direction may be changed. (3) The Relative Importance of Different Parts of Economic Science. Consumption is the central point in economic theory. The older Economists under the influence of the 'fallacy of saving' advocated a minimum of consumption and failed to discriminate between good and evil consumption. What is desired is not to suppress wants but to direct them wisely. The development theory in ethics teaches us that goods have not merely subjective value as ministering to the desires of individuals, but also objective or intrinsic value, which has reference to the power of different kinds of objects—to promote self-realization. In dealing with consumption from an ethical point of view, there are two main considerations: (*a*) the importance of the wants which are satisfied in the act of consumption; (*b*) the effect of the supply of the means of satisfying these wants upon the life of the producer. (4) Practical Application of Economic Doctrine. Having determined the directions of the various tendencies, we must ask where we ought to go. Here we must be guided on the one hand by the value of different goods, determined by purely theoretical considerations, and on the other hand by our conception of economic justice. Society is an organic whole. In such a whole there can be no absolute freedom of parts. Justice here is a reciprocity of services. Each individual is at once end and means. There are two great economic imperatives, "Thou shalt not exploit" and "Thou shalt not pauperize." We must steer clear of both abstract individualism and abstract humanism. We must have concrete thought on the basis of the conception of society as an organic whole. The larger interests must be made as clear as self-interest has already been made.

J. A. LEIGHTON.

METAPHYSICAL AND EPISTEMOLOGICAL.

Métaphysique et morale. F. RAVAISSON. Rev. de Mét., I, 1, pp. 6-25.

Even before the appearance of Positivism, the author of the Critical Philosophy had sought to demonstrate the impossibility of metaphysic. But the sentence pronounced by Kant and by Comte should not be without appeal. The particular sciences, which study the facts of human experience, obey rules and follow general paths. There is need of a science which shall investigate the methods and the ultimate assumptions of the particular sciences. R. gives a very condensed résumé of the course which philosophical thought has taken from the earliest times to the present day, his object being to show that the instinctive beliefs of primitive man appear again in the doctrines of some of the most profound philosophers. From this one may perhaps conclude that an epoch is approaching when those holding the most diverse views will see that their differences of opinion may be explained by the different aspects of things, when observed from different points of view. But this is not all. As Pascal said, in most things it is culpable to obtain the approval of men through feeling rather than through reason; but with truths of the divine order it is different. One must love in order to understand. It is the heart that instructs and judges. Hence the true metaphysic is not the privilege of the learned; it is also the portion of the ordinary man. From a metaphysic which holds to the idea of a first and universal principle which gives even to the extent of giving itself, a moral code should be derived which would be the application of this idea to the conduct of life. The ideal of such a code would be magnanimity. This was the moral ideal of the earliest times and that which prevailed during the great epochs of Greek and Roman civilization. The institution of chivalry bears witness that it was also the ideal of the Middle Ages. To its revival we must look for the remedy of the evils and the solution of the difficulties of the present.

E. A.

L'unité de la philosophie. P. JANET. Rev. Phil., XVIII, 2, pp. 113-123.

Philosophy has, according to common consent, a double task. It must deal with the facts of the human consciousness and at the

same time seek to answer the problems presented to it by the external world concerning its origin and ultimate principles. The question is, How can two objects so essentially different be included in the same science? Philosophy, in dealing with the facts of consciousness, must be *reflective*, but in seeking to get a view of the world, as a whole, it is necessarily *synthetic*. In the *act of thinking*, however, we find the spirit of reflection and the spirit of synthesis united. Philosophy can then be defined as the science of thought, or, with Aristotle, as thought of thought. This definition will apply to all the philosophical sciences. Metaphysics, indeed, which seeks the highest possible universal must be regarded as seeking to embrace in this not only thought in the psychological sense, but also Being. It is concerned with the object, with nature, but it seeks in it the thinkable, the intelligible. Nature is an unconscious thought, a thought *in itself*. The problem of Metaphysics is to show how the thought *in itself*, corresponds with the thought *for itself*. In this sense we can say that Metaphysics, too, is the thought of thought. Using this definition as a criterion, J. finds that, beginning with the lowest, the following order indicates the relative values of the different systems: Materialism, Positivism, Subjective Phenomenalism (J. S. Mill, Taine), Criticism, Idealism. This latter philosophy is higher than the Critical in that it does not leave subject and object standing apart, but unites them both in an absolute thought. It may, however, be given either a Spiritualistic or a Pantheistic, interpretation. The former is the higher and truer doctrine, for it frees the infinite thought from the limits of the finite thought, and it emphasizes the subject rather than the object.

J. E. C.

La croyance métaphysique. J. J. GOURD. Rev. Phil., XVIII, 1, pp. 33-52.

Metaphysical belief deals with that which is beyond phenomena, that is, beyond consciousness. Its justification does not lie in its necessity to a completed system of knowledge. It has its source outside of pure logic in the exercise of free will. Belief is not always voluntary, but an act of free will may confirm a belief in the first instance involuntary. Will alone cannot make belief, for belief is a judgment. It has power, however, over the facts of consciousness on which judgment is founded. The part played by the will is greater, as there is less preparation for the belief in the facts of the phenomenal world, as it is more difficult to characterize the reasons for belief,

and as there is less unanimity in the belief. In the affirmation of the existence, independent of our consciousness, which we attribute to the physical world and other beings like ourselves, we obey a strong causal determination. The element of will is small, therefore, and the belief is universal. In religious beliefs a strong effort of will is required, and the beliefs are in consequence less general. Metaphysical belief may be justified despite the theoretic illusion it involves. In the case of sensation we have a legitimate affirmation of the reality of that which can never be an object of thought. Further, metaphysical belief, being produced by the principle of indetermination in the will, is not without its foundation in reality. This principle, though unlike any other source of knowledge, has its value. Objection may be taken to the assumption of two opposed kinds of truth. All that is necessary, however, is to reduce them to a superior term. As reality contains simultaneously the determined and the undetermined, which oppose without excluding one another, so it allows room for two affirmations, the one practical the other theoretical. Both are founded on reality, though on different aspects of it, and, though seemingly contradictory, are really complementary. As belief deals with what is beyond consciousness, it can establish nothing new. No new duties can be founded on it, and morality is established independently of it. It strengthens morality, however, and increases activity by bringing before the mind a large number of new facts, such as the past, the future, and other centres of existence. This is its justification. As the element of free will becomes greater, however, general reasons of the practical order fail, and the vivacity of practical interest must be a sufficient justification of belief. It would be absurd to justify beliefs by the single fact that they are willed. Justifiable belief must be the expression of exceptional intensity not febleness of will. Those due to caprice and slavish submission to authority are therefore illegitimate. Fanaticism, being the slavery of the mind to a fixed idea, cannot give rise to justifiable belief. We can thus be satisfied with the results of the twofold movement of philosophy. The theoretical deviates progressively from ordinary opinion and narrows the world of matter and of spirit to two facts of consciousness. The practical returns to ordinary opinion, and enlarges the field of existence. This return, though a confirmation, at the same time makes possible a rectification. The two movements are necessary and complementary.

DAVID IRONS.

HISTORICAL.

Metaphysik und Asketik. I. Alte und mittelalterliche Philosophie. II. Neuere Philosophie. WILHELM BENDER. Ar. f. G. Ph., VI, 1 and 2, pp. 1-42, and 208-224.

Two fundamental forms of practical morality are found in antiquity, — the ascetic and the natural, — and survivals of the former are found in most modern systems. 'Natural' morality requires only an anthropological explanation, in which the determination of man by his environment is taken into account. The so-called metaphysical explanation of ethics appears, on the other hand, to have arisen with the development of ascetic morality. Asceticism and metaphysic occur in history as complements of each other; and in modern ethical theories, when one goes beyond an anthropological explanation and metaphysic is employed in the establishment of an ethical system, the ascetic tendency shows itself, for the most part without the representatives of the 'Metaphysik der Sitten' being conscious of it. Asceticism implies a pessimistic conception of the world, and, like it, is determined by unsatisfactory economical, social, or political conditions. One must note, however, that asceticism is not necessarily united, as in the earliest Buddhism, with a nihilistic metaphysic. Ancient asceticism was not everywhere united with a metaphysical pessimism, any more than pessimism in modern times implies an asceticism (*cf.* Schopenhauer). The pessimism of the Platonists, of the apocalyptic Jews, and of the Christians, has reference to this world only, and finds compensation for its sacrifice by an optimistic faith in another world. Amongst the ancients there were especially two systems or schools, which developed a formal metaphysic of morals, — Platonism and Stoicism. Plato, it is true, like all the ancients, and like every one nowadays religiously disposed, regarded natural morality under a religious aspect, *i. e.*, he regarded it from the standpoint of man's dependence on a world-ruling power. This 'natural' ethics, directed, as it is, exclusively to the organization of the commonwealth, is established by Plato entirely anthropologically. Over against this 'natural' morality is the 'ascetic.' Plato is led to the establishment of this 'ascetic' ethics by a metaphysical doctrine, which in a certain sense has served as a type for every metaphysic of morals. With Plato the necessary reciprocal relation between asceticism and metaphysic comes clearly to light. The moral consists neither in moral acts

and adjustments, nor in public opinion, nor in moral laws, nor in the motives which are behind these and are their producers. The moral exists *an sich, i.e.*, apart from empirical reality. The means to the realization of the moral ideal is not the moral organization of the empirical world, but the liberation of the relatively good (the higher soul) from the world of sense. In view of the absolute opposition that exists between the ideal world and the world of sense, there is only one way to the realization of the idea, *viz.*, abnegation of the world (*Entsinnlichung*), or asceticism. This is the highest form of morals. It is that which puts the soul into direct communication with the absolute good. One may say that asceticism is the practical, and metaphysic the theoretical, way in which the soul attains to the idea of the good. If one takes the notion of asceticism in the sense of renunciation of the world, as historically one must, Stoicism would appear to have been established in direct opposition to it. The Platonic dualism of ideal and empirical world disappears here altogether. The Stoics know only a single infinite world. Their materialistic pantheism brings the ideal back into the real and finds the divinity in the world. What the hypostasis of the good was for Plato, the hypostasis of the moral law was for the Stoics; to Plato the highest form of morals was abnegation of the world and becoming like God; to the Stoics it was abnegation of the world and obedience to the absolute moral law, which is identical with the rule of the divinity in the cosmos. In this way the Stoics found a metaphysical basis for their asceticism. The Stoics of the Roman period, under the influence of Platonism, furnished to every succeeding metaphysic of morals the most important points of view. One may distinguish two periods in the development of morals in the ancient and mediæval church: in the first period asceticism, through the desolate economical and social conditions in the decaying Roman Empire, almost entirely took the place of 'natural' morality; in the second period natural morality, assisted by the general development of culture and the foundation of states not controlled by church power, gained a certain prominence, though secondary to asceticism. The first period is illustrated in Augustine, the second in Thomas Aquinas.

II.

It is characteristic of the Middle Ages that the ascetic form of morality takes precedence of the 'natural,' while in modern times asceticism is in practice abandoned, but in theory supernaturalism

in the guise of religious belief or of transcendental metaphysics continues. Wherever the latter is employed for the explanation of morality, the ascetic conception of the moral process always creeps in. Bacon, standing as he does, half way between scholasticism and modern science, distinguishes between the 'natural' and ascetic forms of morality. But he believes 'natural' morality to be incapable of a satisfactory explanation on the ground of inborn social impulse and desire. The *lex naturalis*, which, as the active will of the deity, is immanent in the created nature of man, furnishes the basis of the entire moral process. Way for the anthropological explanation of morality was made by the English empiricists, while in opposition to them Cudworth and Clarke sought for a metaphysical explanation. With the Platonist Cudworth the moral *an sich* exists before, and independently of, all actual morality. It belongs to the eternal truths which exist in the mind of God as creative realities. It is neither produced nor destroyed. Eternal moral truth is innate in man as an *a priori* function, independent of all sense-experience. The moral process, which could take place on this basis, would only be the process of personal contact with the absolute good, *i.e.*, the process would be asceticism. It is, however, on the Continent that the metaphysical direction in ethics has maintained itself longest and most energetically. The inheritance from scholasticism of the idea that universal moral law is the expression of the will of God, falls to both Descartes and Bayle. Even Voltaire and Rousseau acknowledge a morality, original and inborn, given with the nature of man, and object to the idea that morality is a product of the reciprocal relations of the human reason and the outer world. The ascetic consequences of this isolation of absolute morality from the actual is, however, drawn only by those who, like Geulincx and Malebranche, were religious mystics. Of Spinoza it is boasted that he emancipated ethics from theology. With Spinoza, however, morality has no direct or necessary relation to society. His ethics is summed up in the doctrine of the emotions and the supremacy of the intellectual emotion of divine love over the emotions of sense. Preservation of self is conceivable only in the form of the surrender of self to the All, *i.e.*, to God. This intellectual emotion of divine love, or love of the absolute, which looks away from the world, is not distinguishable from the knowledge of the world *sub specie aeternitatis*. One finds in Spinoza no real contribution to the explanation of morality, when one regards his conception of the subject as a whole. The derivation of the moral process from the impulse to self-preservation

stands in decided contradiction to the end of the process, which is found in the surrender of the individual to the absolute. These three, asceticism, mysticism, and metaphysics, are inseparably connected; where one appears in history, we find the others.

W. H.

Ueber Descartes' Urtheilslehre. F. SEYRING. Ar. f. G. Ph., VI, 1, pp. 43-59.

According to Descartes there are four elements necessary for judgment: (1) ideas; (2) the perception; (3) the decision of the will; (4) the determination of the will in an affirmative or negative direction. The ideas, as ideas of subject and predicate, form the material of judgment; the perception of the ideas, as the activity proceeding from the intellect, is a necessary condition of judgment. The will, finally, as active power, completes the act of judgment, and in affirming or denying the connection of ideas constitutes the act of judgment. Descartes distinguishes sharply two different classes of judgment, true and false. Truth and falsehood are only found in judgments. Ideas can only be called true and false in so far as they give occasion to true or false judgments. Truth and error are to be found neither in the ideas nor in the will, but only in the union of these in a judgment. The understanding is limited in its sphere, while the will is free and subject to no such limitations. Every judgment is thus a voluntary act, and so arises the possibility of error. It is clear that Descartes has rather dealt with a moral lack of veracity than explained the nature of error. Also, this explanation itself is in evident contradiction with other passages in his works, *e. g.*, when he shows that illusions of sense may be the source of involuntary error. Although Descartes makes freedom and will identical, yet according to his own view the will possesses authority over the confused ideas, but it is in its turn controlled by the clear and distinct knowledge of the understanding.

J. E. C.

NOTICES OF NEW BOOKS.

Hume's Treatise of Morals: and Selections from the Treatise of the Passions. With an introduction by JAMES H. HYSLOP, PH.D., Instructor in Logic, Ethics, and Psychology, Columbia College, New York. Boston, Ginn & Co., 1893. — pp. 275.

This volume is the first of the Ethical Series, edited by Dr. Sneath, of Yale University, and published by Ginn & Co. As stated in the prospectus, each of the volumes of the series will be devoted to the presentation of a leading system in the history of modern ethics, in selections or extracts from the original works. Each volume will contain a bibliography, a brief biographical sketch of the author of the system, and a critical introduction, explaining the main features of the system, and showing its relation to preceding and subsequent ethical thought. Besides this volume on Hume's Ethics, the series will contain volumes on the ethical systems of Hobbes, Clarke, Locke, Kant, and Hegel. The names of the editors, among whom are President Patton and Professor Watson, are a sufficient guarantee of the care with which these volumes will be prepared.

It will be remembered that Henry Holt & Co. have already published several volumes of a series of Modern Philosophers, also under the general editorial supervision of Dr. Sneath, the object of which is to do the same thing for the history of modern philosophy that this series aims to do for the history of modern ethics. Of course, whatever objections may be urged against the one series will apply equally well to the other. But however little one may believe in the principle of representing a philosopher by selections from his works, neither series should be condemned off-hand. For instance, the present volume on Hume's Ethics, edited by Dr. Hyslop, can hardly be called a volume of selections. It contains the whole of Hume's original treatise on "Morals" (Bk. iii of the *Treatise of Human Nature*) together with a portion of his work on the "Passions" sufficient to indicate his position on the subject of "free-will," which, it will be remembered, is neglected in the treatise on "Morals." Probably it was wise, on the whole, to choose the original work, rather than the revised form of 1751; but it is to be noticed that the book on "Morals" in the *Treatise* is about sixty per cent longer than the *Inquiry concerning the Principles of Morals*, while the style in which it is written is distinctly inferior to that of the *Inquiry*. Moreover, the present volume's excuse for being is not so evident as would have been the case, if the *Inquiry* had been chosen. There is no respectable cheap edition of Hume's *Essays*, while the Clarendon Press edition of the *Treatise*, with its valuable sixty-page index, can be purchased for a sum

not greatly exceeding the cost of the present volume. Dr. Hyslop's critical introduction is a careful and suggestive piece of criticism; but for the very reason that it is a criticism rather than an exposition, it can hardly be of great service as an introduction to the text.

E. A.

The Germ Plasm: a Theory of Heredity. By AUGUST WEISMANN, Professor in the University of Freiburg-in-Baden. Translated by W. Newton Parker, Ph.D., and Harriet Rönfeldt, B.Sc. New York, Charles Scribner's Sons, 1893.—pp. xviii, 477.

This book contains the first complete statement that Weismann has given us of his views on heredity and the hereditary substance. The "germ plasm" is here analyzed into its ultimate constituents, the "biophors." Groups of these minute vital units form "determinants," units of the second order, each of which is to control an independently variable cell or group of cells in the mature body. The determinants are themselves grouped into "ids," each id containing all the determinants necessary to produce a complete organism. Ontogeny takes place through the gradual breaking up of the ids in cell-division into simpler combinations of determinants, until finally every independently variable cell of the body is controlled by a single determinant, which stamps its character upon the cell by distributing its constituent biophors through the cell-substance.

To explain the phenomena of regeneration we are required to assume that the cells at each ontogenetic stage contain as inactive, "accessory idioplasm," the determinants of all succeeding stages. Moreover, part of the germ-plasm contained in the nucleus of the ovum remains unchanged during the whole of ontogeny, being passed through a definite series of cells, the "germ-track," to the point where it forms the nucleus of a germ-cell of the next generation.

The treatment of amphimixis contains nothing essentially new except the section on "The Struggle of the Ids in Ontogeny," where the share which each parent has in the determination of the offspring is held to depend on the success of the ids derived from that parent in obtaining control of the cells. The relative strength of the ids is measured partly by their rate of assimilation and multiplication, and partly by the number of "homologous" determinants they contain that are also "homodynamous," *i. e.*, not only controlling the same cell, but impressing the same character upon it.

Two hypotheses suffice to explain the phenomena of reversion: first, that in the course of phylogeny all homologous determinants are not modified at once, so that the nucleus of a germ-cell may contain determinants in various stages of transformation; and second, that the "reducing division" may occur in such a way as occasionally to leave the older determinants in the majority. The theory reaches a rather appalling complexity, when, to account for alteration of generations and sexual dimorphism, we are obliged to assume that nearly all determinants in a germ-cell are double or multiple.

In the chapter on the transmission of acquired variations, cases where such transmission apparently occurs are explained by supposing the action of an external influence simultaneously upon a body-cell and its corresponding determinant in the germ-cell. Finally, variation in general is referred to the cumulative effect of natural selection and amphimixis upon slight variations in the determinants, produced by influences such as varying nutrition.

MARGARET WASHBURN.

Der Pessimismus im Lichte einer höheren Weltauffassung. Von DR. J. FRIEDLÄNDER und DR. M. BERENDT. Berlin, S. Gerstmann's Verlag, 1893. — pp. 111.

This little work is one of the popular attempts at religio-philosophical construction with a view to reconcile diverse world-conceptions and furnish a system which shall satisfy all ideals, intellectual, volitional, and emotional. Spinozism is offered as the new gospel, the authors believing that it alone is fitted to replace Christianity and to become the world-religion as well as the world-philosophy. This fitness consists chiefly in its capacity for assimilating the modern science of nature and for uniting the spiritual and the sensuous in human life into one complete whole. By a liberal use of the words "divine" and "free" in speaking of natural and conscious energy, and by insistence on a "purpose" in nature whose fulfilment in human society is a quality of life elevated above all servitude to particular pains and pleasures, an effort is made to carry the discussion between optimists and pessimists to a higher plane, and to give a religious form to the social ideal. The attempt is perhaps not altogether successful. Though certainly far enough from the facile optimism of the eighteenth century, it occasionally suggests Voltaire's well-known protest :

Ainsi du monde entier tons les munbres gémissent :
Nés tous pour les tourments, l'un par l'autre, ils périssent :
Et vous composerez dans ce chaos fatal
Des malheurs de chaque être un bonheur général !

After the rather fanciful parallel between the relation of Spinoza's teaching to modern life and that of Christianity to the Roman world, comparatively little is said of the Spinozistic philosophy itself, which seems to have been used chiefly as a suggestive introduction. Otherwise one might object to the interpretation it has received ; and as it is, some readers will probably find more of Hegel than of Spinoza in the "higher world-conception" which the authors have labored to present. Perhaps the discussion which is invited in the closing paragraph, with the answers which the present writers are willing to offer to possible objections, may bring out something more distinctive than appears in this first presentation.

L. HANNUM.

Grundriss der Philosophie. Von JOHANNES EITLE, Professor am ev.-theol. Seminar in Urach. Freiberg, i. B., J. C. B. Mohr, 1892.—pp. xvi, 304.

This book covers the field described in Germany as *Philosophical Introduction* or *Einleitung*, and represented in this country by Professor Ladd's *Introduction to Philosophy*, published in 1890. The present work suffers from the same general difficulties in its subject-matter and aim as those to which the reviewer called attention in noticing Professor Ladd's book (in *Mind* 62). The one is, no more than the other, an objective or colorless presentation of the subject; each is obviously intended to 'introduce' the student to the author's own philosophic scheme. The danger is felt also, in both cases, that the book will fail of its useful purpose. On the one hand, the beginner in philosophy will be apt to find himself confused by the effort to follow an argument that calls upon him to occupy in quick succession so many and so novel standpoints; on the other hand, the mature student will probably be inclined to suspect the soundness of positions which, had the pace been less rapid, might have been so substantiated as to free them from any seeming dogmatism which they now possess. While, on such grounds, the utility of these and similar treatises (especially in the text-book form) may be doubted, it is well that the experiment should be made. It is an obvious convenience to have a *vade macum* of philosophy, and the question of its value will no doubt be answered by the relation of demand and supply in the philosophical market. Professor Eitle's plan is clear and symmetrical. First comes the *Grundlegung* in Psychology and Epistemology (*Seelenlehre* and *Erkenntnislehre*); then the philosophical superstructure is raised, consisting of (1) Philosophy of Nature (2) Philosophy of Spirit. Under (2) are embraced *Æsthetics*, *Ethics*, and the *Philosophy of Religion*. This scheme suggests several questions. First, is it philosophical to co-ordinate Psychology and Epistemology? Is not Epistemology the obverse side of Ontology, while Psychology is, or seeks to be, strictly scientific and non-metaphysical? Again, no place is found in the scheme for Logic, which cannot be included under Psychology or even under Epistemology. This raises the further question whether, in a classification of the philosophical sciences, it is not proper to distinguish between the 'real' and the 'ideal' spheres of thought. Professor Ladd's scheme was better in this last respect, making *Ethics* and *Æsthetics* the sciences of the ideal. In Epistemology Professor Eitle calls himself a "critical realist," in Ontology he is a theist. Personality in God and in man is his ultimate and guiding certainty. As will be expected, he defends teleology and free will.

The standpoint of the book is pretty well indicated by the names of the authors whose influence is fully acknowledged not only in the preface, but in the notes to the text. These are Dilthey, Lotze, Sigwart, and Wundt. Anything like a detailed discussion of the positions taken on the great

variety of questions so summarily discussed, would be out of place in a notice of a book of this kind, nor is criticism profitable where the reviewer finds himself in the main in agreement with his author. It need only be said that the book gives evidence throughout of a mind of much strength and practised skill, always well informed as to the present alternatives of philosophic thought, and no less candid in facing the difficulties of the case, yet the style is unusually smooth and succinct, and wherever the matter has passed from the speculative to the scientific stage, the exposition is so clear that it ought to be intelligible even by those for whom it is primarily intended.

JAMES SETH.

Die Grundbegriffe der Gegenwart. Historisch und kritisch entwickelt von RUDOLF EUCKEN, o. ö. Professor an der Universität Jena. Zweite völlig umgearbeitete Auflage. Leipzig, Verlag von Veit & Comp., 1893. — pp. vi, 317.

This is the second and completely revised edition of a work that first appeared in 1878. Though the general aim and standpoint of the book remain the same, important changes have been made in both content and form. The historical portions have been curtailed so as to exclude whatever is not directly essential to an understanding of the conceptions of our own age. Besides, these notions are more carefully analyzed and more clearly formulated than in the former volume. The attitude of the author has also become bolder; he is more decided in his convictions than before. The book is not written *sine ira et studio*; it confessedly seeks to convince, to make converts. Dr. Eucken is thoroughly dissatisfied with the modern tendency "which would defraud humanity of both soul and happiness." Our age lacks unity of purpose and firm convictions; we have no complete system of thought, we do not concentrate our forces. The great problems of soul-life are usually treated as subsidiary problems. Our energies are dissipated in routine work, which makes a comprehensive survey of fundamental questions impossible. The attempt must be made to reach a solution of philosophical problems. But first we must understand the present, as it reflects itself in the conceptions of the times. A study of these concepts will show us how the age is thinking in us, how it is using us as "the instruments of its expression;" and "whoever knows where and how he is dependent, is on the way to freedom." In order to advance beyond what is, the philosopher must study the notions prevalent to-day in their historical development. A powerful Naturalism, a weak and insincere Idealism, and a sophistical Subjectivism are the three most marked features of modern thought. An analysis and criticism of these contradictory tendencies will prove the need of a thorough intellectual renovation, and point out the way which philosophy must take in the future. From the foregoing point of view, the author examines the following concepts: subjective—objective; *a priori*—*a posteriori*; development; Monism—Dualism;

mechanical—organic ; law ; individuality, society, socialism ; Utilitarianism (the problem of happiness) ; Idealism, Realism, Naturalism ; freedom of the will ; personality and character ; theoretical—practical ; immanency—transcendency (the religious problem). F. T.

Die Ursachen des Verfalls der Philosophie in alter und neuer Zeit.

VON DR. GIDEON SPICKER, ord. Professor der Philosophie an der königl. Akademie zu Münster. Leipzig, Verlag von Georg Wigand. 1892. — pp. VIII, 280.

A survey of history shows us a periodic rise and fall in philosophy. Classical antiquity, Scholasticism, and Transcendentalism, all have ended in scepticism. Periods of great philosophical activity are invariably followed by periods of doubt and indifference. We are at present passing through such a stage of decline, in which, for example, men either despair of knowing the soul or believe in its materiality. Now, what cannot be known with absolute certainty, may be believed as well as doubted. How comes it, then, that one age believes what another doubts? What produces this periodic change in man's attitude toward the great problems of philosophy? These are questions which the author attempts to answer. He emphasizes the fact that the fundamental faculties of the soul, perception and thinking, feeling and willing, are differently exercised in different epochs. This explains why one age should prize what another holds of little worth. It must also make us suspicious of a philosophy that would regard such facts as religion, morality, etc., as mere objects instead of organs of knowledge. The error common to all philosophy is that it attempts to prove and explain everything apodictically. The law of sufficient reason is a logical law, and where this no longer suffices, apodictic knowledge ends. Shall we say that there is neither freedom nor God, because no proof can be given? Has not moral necessity as great a claim to truth as logical necessity? Indeed, the intellect is a secondary function, and rises merely to a knowledge of facts, which are manifestations of forces or causes beyond the reach of the logical faculty. The final knowable ground consists, therefore, not in the logical, but in the moral function. Religion and morality are not simply the objects, but the "constitutive factors" of philosophy. Only with the aid of these, can philosophy escape scepticism, and reach a knowledge of the absolute. The book is divided into five chapters : Empiricism ; Rationalism ; Religion and Philosophy ; Transcendentalism ; Critical Review. F. T.

Reformed Logic. A System based on Berkeley's Philosophy with an entirely new method of Dialectic. By D. B. MCLACHLAN. London, Sonnenschein & Co. — pp. xi, 233.

It is almost universally admitted to-day that the current theories of Logic are sadly defective and incomplete, and any systematic attempt at reforma-

tion is therefore likely to be gladly welcomed. The attractive title of this book might lead one to expect a scientific discussion of logical problems, but this is far from the author's purpose. He supposes himself in possession of a short and easy method of solving not only logical questions, but almost all the other problems relating to the universe and man. The metaphysical basis of his system, which he calls Substantialism, is a modified Berkeleyanism. The nature of these modifications may be best shown by a few quotations. "The substantial mind consists of two principal parts—a Self and a Plasma—the Atman and the Akaśa of Sanscrit philosophers" (p. 4). "The demiurgic mind is inconceivably greater and more powerful than the human, but it is not necessarily better in quality. It is the origin of all natural forces, and its organic processes are what we term 'physical laws'" (p. 6). "The consciousness pertaining to the plasma left in its primitive state is Sentiment, which generally corresponds to what is termed the moral nature of man" (p. 11). The author does not appear to make any distinction between logical and psychological processes. He declares that the syllogism is based on classification, and that its conclusions are mere tautologies. But yet he maintains that "every argument consists in bringing a case under a precedent and applying to the case ideally the better knowledge possessed of the precedent" (p. 74). The case must resemble the precedent, but Mr. McLachlan does not inform us how great the similarity must be before we are justified in subsuming the one under the other. For a Substantialist the categories are of great importance, and the author mentions six, two of which, Inherence and Association, depend upon the Noumenal Mind, and are called Natural. The other four, Perspection, Concretion, Sequence, Causation, are artificial categories, and are formed by the Subjective mind. The latter part of the work treats of the Redaction of Colloquial Arguments, Fallacies, Academical Dialectic, etc. A sympathetic reader might be able to find much that is admirable, although old, implied in the author's somewhat obscure phraseology.

J. E. C.

Ueber die Zukunft der Philosophie. Mit apologetisch-kritischer Berücksichtigung der Inaugurationsrede von Adolf Exner "Ueber politische Bildung" als Rector der Wiener Universität. Von FRANZ BRENTANO. Wien, Alfred Hölder, 1893.—pp. ix, 74.

This treatise is a reply to the Inaugural address with which Professor Exner entered upon the rectorship of the University of Vienna in October, 1891. It has, however, considerable general interest, both on account of the importance of the questions which it discusses and of the valuable services which Professor Brentano has already rendered to Philosophy. It was claimed in the Inaugural address that philosophical interest had greatly declined, and that the activity of the present age was non-productive and concerned itself exclusively with the systems of the past. Philosophy, in short, is really defunct, and since it is not a practical necessity,

there can be no hope of its revival. The author replies to these charges by pointing to the facts of the case. Although the interest in philosophy shows no signs of diminution, mankind are doubtless learning that there is no ready made answer for all its problems. The present age has to a greater extent than any other shaken itself free from the traditions of the past, and sought an independent start. It is true there are no comprehensive systems being produced, but thinkers are devoting their lives to the investigation of particular problems; and although the number and size of the volumes produced is not so great as it was in the age of Schelling and Hegel, the quality of the work is incomparably better. Nor is it true that philosophy is not a practical necessity. Morality, politics, and most of all theology, require its support and service. Another statement of the address which our author combats is, that the methods of the natural sciences can never be applied to the investigation of philosophical questions. Professor Exner's account of that method makes it clear, that he is thinking exclusively of the mathematico-mechanical method. But as a matter of fact, but few of the natural sciences are in a position to employ this method. Most of them proceed by means of observation, hypothesis, and verification, and this is the procedure which philosophy must adopt if it is to make advances.

J. E. C.

Apologetics; or, Christianity Defensively Stated. By ALEXANDER BALMAIN BRUCE, D.D., Professor of Apologetics and New Testament Exegesis, Free Church College, Glasgow. New York: Charles Scribner's Sons, 1892.—pp. xvi, 522.

This is the third work to appear in the "International Theological Library" edited by Charles A. Briggs and S. D. F. Salmond. The introduction gives a brief historical sketch and a discussion of the functions and method of Apologetics. With respect to the philosophical side of the subject, the author says: "What the Christian apologist is concerned to show is not that a God of some sort exists, but that the Christian idea of God is worthier to be received than that of the pantheist or the deist, or of any rival theory of the universe." Accordingly Book I, consisting of one hundred and eighteen pages, is devoted to a discussion of "Theories of the Universe, Christian and Anti-Christian." The author finds that, according to the Christian theory, God is an Ethical Personality; that man at his worst is a son of God and hence occupies a very important place; that sin is a reality, that it does not originate with God and is not necessary, but consists in choosing the guidance of the lower animal, rather than that of the higher human, nature; and finally that Christianity while fully cognizant of the reality of evil, both moral and physical, is inherently optimistic, confident in the progress and relief of mankind both in this world and in the world to come. This theory of the universe is defended in the next five chapters against 'Pantheism,' 'Materialism,' 'Deism,' 'Modern Specula-

tion,' 'Theism' and 'Agnosticism.' Spinoza is taken as the representative pantheist, and his view of the world is presented as well as could be expected in the space of seven pages. Speculatively this theory is most unsatisfactory, because, on the principle of *determinatio negatio est*, it does not allow the ascription of personality to God. Against this view are brought the arguments of Lotze that limitation by a non-self is not an indispensable condition of self-consciousness, but only a characteristic of a finite consciousness due to its very finitude. "That to which we tend, but never reach, God has in perfection and from eternity, a self-consciousness absolutely independent of outside stimulus, infinite in contents, and utterly unaffected by limits of time and space" (p. 84). As to the doctrine of creation, this need not be insisted on by the theist, provided only the absolute dependence of the world on God be otherwise assured. Ethically, too, pantheism, whether in the Spinozistic or the Hegelian form, fails to satisfy the Christian standard. It degrades man, for with the personality of God falls that of man too. Moral distinctions become purely relative. Human freedom, responsibility, and immortality vanish.

In the chapter on the materialistic theory the distinction between science and materialism is clearly and accurately drawn. With science as such Christianity has no quarrel. Let the physicist prove the mechanical working of natural laws and the evolutionist that man himself, body and mind, is a natural development from the inorganic. "This view may eliminate miracle, or the purely supernatural, but not the divine activity which underlies the whole" (p. 107). Most of the material for the statement of the materialistic theory is drawn from Strauss and Lange. Some attention is also given to the "prudent or moderate materialism" of Bain's double-faced unity, Clifford's mind-stuff, and Huxley's conscious automata. Our author would have served his practical purpose much better, if he had devoted to a discussion of the different forms of the double aspect theory so prevalent now, most of the space given to the dogmatic materialism of Moleschott and Vogt, in which nobody at the present time believes. Agnosticism, as represented by Spencer and Fiske, is very briefly discussed. Then follows a statement of the cosmological, teleological, and ontological arguments, the Kantian argument from the moral consciousness, and the Hegelian argument from the nature of self-consciousness. But as none of the arguments seem absolutely demonstrative, it is proposed that we assume as a datum *that* God is, and restrict our inquiries to *what* he is. From the fact of man's position at the head of creation as taught by evolutionists, it may reasonably be inferred that in man there is a revelation of God as a Being possessing mind and guided by purpose, and again from the teaching of science that all physical forces are convertible into each other it may be inferred that the ultimate force, the Power that is at work in the universe is not unlike the form of power with which we are most familiar in ourselves—will-power. From the moral nature of the highest creature, is argued the moral nature of the Creator. It is frankly acknowledged that these results are

not logically inevitable conclusions from absolutely certain premises. The author claims to have shown only that the essential features of the Christian conception of God are in no wise discredited by the teachings of modern science. "God is the postulate of a soul that finds the world without God utterly dark and unintelligible" (p. 162). The moderation of the author's claims, his fairness toward all opponents, and his ready acknowledgment of all that is good intellectually, morally, and religiously in other theories cannot fail to win the respect of open-minded readers of all schools of thought.

The remaining two-thirds of the work has no direct bearing on philosophy. Book II, "The Historical Preparation for Christianity," gives an admirable account of Hebrew religion and Old Testament literature as constructed by modern scholarship. Book III, "The Christian Origins," does the same for the teachings of Jesus and the literature of the New Testament. The same readiness which we found in the first book to accept the results of natural science, is manifest in the second and third in accepting the conclusions of scientific criticism. Colleges that give courses in Apologetics or Christian Evidences, and that wish to present the subject in the light of modern thought and from the point of view of liberal orthodoxy, will find this an excellent text-book.

F. C. FRENCH.

A Guide to the Knowledge of God. A Study of the Chief Theodicies.

By A. GRATRY, Professor of Moral Theology at the Sorbonne. Translated by ABBY LANGDON ALGER. Boston, Roberts Brothers, 1892.—pp. xi, 469.

This work, by the late Father Gratry, is written from the standpoint of Catholic Philosophy. It was crowned by the French Academy, and has passed through many editions in France. "In order to bring the two volumes of the original within the compass of a single larger volume in the translation, the superfluous appendices and some of the foot-notes containing the texts rendered by the author in the body of his work, have been omitted. The prefaces to the first three editions, abounding with personal and local references, as well as a long and polemical Introduction, have likewise been left out." The treatment falls into two parts, the first being a sketch (colored by a good deal of polemical matter) of the chief theodicies offered in the history of human thought, and the second an independent discussion of the whole subject, critical and constructive. It should be noted that 'Theodicy' is used in the widest possible sense so as to describe the entire doctrine of God, and especially the proofs of the divine existence. The authors whose views on these subjects are discussed at length are Plato, Aristotle, Saint Augustine, Saint Anselm, Saint Thomas Aquinas, Descartes, Pascal, Malebranche, Fénelon, Petau and Thomassin, Bossuet, and Leibniz. The main conclusions reached are these: (1) "The demonstration of the existence of God is the supreme achievement of a general process of the reason, of which the infinitesimal methods of geometry are but a special

application." "The whole process, the entire proof, consists in rising from the finite to the infinite by the negation of the limits of the finite, and in proceeding thus from everything to God, because, according to Saint Thomas Aquinas, everything exists in God infinitely, or God is everything eminently. We apply to the finite this process of elimination, which gives us the idea of the infinite; that is, the idea of God, which, so soon as it is obtained, of itself proves that God exists. This process has the precision of geometrical processes, since the infinitesimal process of geometry is itself but a special application of it to the geometrical finite or infinite" (pp. 343-4). (2) In the language of Saint Thomas, "there are two degrees of truth in the divine intelligible: one attainable by the search of reason, and the other which transcends its efforts . . . this distinction relates only to the human understanding, which has two modes of knowing God. This distinction may be otherwise stated as the distinction between Faith and Reason." Whatever in the history of philosophy refuses to fit into this schematism, is condemned as being not philosophy but "sophistry."

JAMES SETH.

Evolution and Man's Place in Nature. By HENRY CALDERWOOD, LL. D., F. R. S. E., Professor of Moral Philosophy, University of Edinburgh. London and New York, Macmillan & Co., 1893. — pp. xvi, 349.

In the present volume the author undertakes a discussion of man's place in nature. This is a problem that is forced upon us anew by modern biology, in particular by the theory of evolution. The central thought of the book is that man has a dual nature. As far as the physical organism is concerned, all is to be explained by evolution: but from this source we obtain no explanation at all of the rational and spiritual life of man. Again, those who represent body and mind as only two sides of the same thing, see only what biology presents to view, — organism, its laws and functions. This view does not allow for the governing power of intelligence, the grand distinction of humanity. The author endeavors, first, to explain clearly the theory of evolution in its present highly developed condition; second, to show the limits of its application, and to vindicate the rational and spiritual life of man as he understands it. (A review will follow.) E. A.

Zur Herrschaft der Seele. Von PAUL ROBERT. Freie Blicke in die Vergangenheit, Gegenwart und Zukunft des Menschengeschlechts. Leipzig, O. Wigand, 1892. — pp. vi, 93.

This little pamphlet is simply a *sermon*, which takes the growth of social democracy in Germany for its text and preaches. It obtains a certain amount of interest from the fact that it seems more or less to reproduce the ideas of the present *régime* in Germany, to which its panacea for the present ills, *viz.*, 'more state-interference,' will doubtless commend itself

more than to Americans. But it cannot claim to contain anything of philosophic interest or novelty, unless it be that the preëxistence of the soul should be maintained from so 'orthodox' a standpoint, and falls to pieces physically with the slightest handling and logically with the least criticism.

F. C. S. SCHILLER.

Jurisprudenz und Rechtsphilosophie. Kritische Abhandlungen. Von DR. KARL BERGBOHM, Docenten des öff. Rechts an der Universität Dorpat, Associé des Institut de Droit International. Erster Band: Einleitung. — Erste Abhandlung: Das Naturrecht der Gegenwart. Leipzig, Verlag von Duncker & Humblot, 1892. — pp. xvi, 566.

In this first volume of Bergbohm's Jurisprudence and Philosophy of Law there are four prefatory essays: on contemporary Philosophy of Law; on defects in the terminology of the subject; on defects in the fundamental juristic notions; and on the lack of a systematic coördination of fundamental notions in Jurisprudence. The main part of the work contains chapters on the notion of natural law in history, an account of its development and present status, especially in Germany, a criticism of natural law and an emended form of the historical theory of law, with particular reference to the theory of Savigny-Puchtasche. A review of the volume will follow.

W. H.

The following books have also been received:

Die Probleme der Philosophie und ihre Lösungen. Historisch-kritisch dargestellt von O. FLÜGEL. Dritte Auflage. Cöthen, Otto Schulze, 1893. — pp. xiv, 272.

Introduction and Notes to the Fifth Book of Cicero's Tusculan Disputations. By FRANK SMALLEY, A.M., Ph.D. Syracuse, N. Y. S. W. Durston, 1892. — pp. 83.

A Manual of Ethics. Designed for the use of Students. By JOHN S. MACKENZIE. London, W. B. Clive & Co., 1892. — pp. xxvi, 339.

Ethics. An introductory Manual for the Use of University Students. By F. RYLAND, M. A. London, Geo. Bell & Sons; New York, Macmillan & Co., 1893. — pp. x, 220.

Vera Vita. The Philosophy of Sympathy. By DAVID SINCLAIR. London, Dighy, Long & Co., 1892. — pp. 186.

Rousseau und die deutsche Geschichtsphilosophie. Ein Beitrag zur Geschichte des deutschen Idealismus. Von RICHARD FESSER. Stuttgart, G. J. Göschen'sche Verlagshandlung, 1890. — pp. x, 340.

Leibniz als Jurist und Rechtsphilosoph. Von DR. GUSTAV HARTMANN. Tübingen, 1892. H. Laupp'sche Buchhandlung. — pp. 121.

Beitrag zur Darstellung und Kritik der moralischen Bildungslehre Kant's. Von DR. ERNST TEMMING. Inaugural Dissertation. Braunschweig, Friedrich Vieweg & Sohn, 1892. — pp. 55.

Lectures on the History of Philosophy. By GEORG WILHELM HEGEL. Translated from the German by E. S. HALDANE, in three Volumes. Vol. I. [The English and Foreign Philosophical Library.] London, Kegan Paul, Trench, Trübner, & Co., 1892. — pp. xiii, 487.

Hegelianism and Personality. By ANDREW SETH, M.A., LL.D., Second Edition. London and Edinburgh, William Blackwood & Son, 1893. — pp. xv, 242.

Scottish Philosophy. By ANDREW SETH, M.A. Second Edition. London and Edinburgh, William Blackwood & Sons, 1890. — pp. xiv, 222.

Calvinism: Pure and Mixed. A Defence of the Westminster Standards. By WILLIAM G. T. SHEDD, D.D. New York, Chas. Scribner's Sons, 1893. — pp. 164.

Manual of Natural Theology. By GEORGE PARK FISHER, D.D., LL.D. New York, Chas. Scribner's Sons, 1893. — pp. 94.

Schriften der Gesellschaft der psychologischen Forschung. Heft V. *Jean Paul's Seelenlehre*, von DR. v. KOEBER. *Die Psychologie Charles Bonnet's*, von DR. MAX OFFNER. Leipzig, Ambr. Abel, 1893. — pp. 517-727.

The Interpretation of Nature. By NATHANIEL SOUTHGATE SHALER, Professor of Geology in Harvard University. Boston, Houghton, Mifflin, & Company, 1893. — pp. xi, 305.

THE
PHILOSOPHICAL REVIEW.

INTERNAL SPEECH AND SONG.

AN interesting field of exploration has in recent years been opened to us in the sphere of the psychology and physiology of speech. The results accruing from analysis and experiment, and more especially from the study of the pathology of speech, have been most instructive. The similar problems, involved in the reproduction of musical sounds, have had little attention, strange to say, despite the analogous terms in which they may be stated. It is of some aspects of these two facts—"internal speech," the *parole intérieure* of the French, and "internal song," the *chant intérieur*—that I wish to speak in what follows, especially in the way of interpreting the results now widely accepted, in terms of our general psychological theory. What happens, when we have "words in our minds" and "tunes in our heads?"¹

I. INTERNAL SPEECH.

The doctrine of brain function in speech is now pretty clear—thanks to the teaching, principally, of pathological cases. Normal speech is a function which probably involves several so-called 'brain centers,' all in dynamic connection with one another. Given a man with the physical apparatus of the act of speaking intact—vocal organs, nerve connections, and brain seat of discharge (Broca's gyre)—and ask why such a man

¹ A further interesting question concerns "internal writing," *i.e.*, what have we in mind when we think of written words?—visual figures, visual hand- or pen-movements, muscular sensations of movement? This is interestingly discussed by Goldscheider, *Archiv für Psychiatrie*, XXIV, 1892, p. 503, reviewed by the present writer in the forthcoming number of the *American Journal of Psychology*.

speaks, the answer may take several forms. He may name a word-sign which he *sees*, or repeat a word sound which he *hears*, or tell the words he has *written*, or finally, he may speak a word simply from the *habit* of speaking it — from the tendency of his speech-apparatus to operate as it has operated before. Now we ordinarily generalize this diversity in the case in which the man ‘thinks’ the word merely without speaking it, by saying that the word is ‘in his mind,’ internal, *intérieur*; but the question is: What is in his mind? — the printed word (visual image), the spoken word (auditory), the written word (hand-motor), the articulate word (speech-motor) — is it all of these? Is it any of them?

If we agree to call the motor center for speech, the ‘intrinsic’ source of stimulation to the organs of speech, and, on the other hand, to call the other centers pointed out, ‘extrinsic,’ the question now current runs: Are these extrinsic centers capable, each for itself, of arousing the speech center; or does one of them, the center for sensations and memories of actual movement, the ‘kinaesthetic’ word-center, always stand between the motor seat and the other sensory centers? Or, put psychologically, do we, when we remember words and speak them, always recall them in terms of the sensations of movement involved in speaking or writing them; or is it possible to speak simply from remembering the visual form of the word or its sound? Is the kinaesthetic center intrinsic or extrinsic?

The view that verbal memories are always motor (kinaesthetic) is associated with the name of Stricker.¹ Recent results have refuted Stricker. A variety of facts have been adduced to show that the function of speech is not dependent in all cases upon the possibility of reinstating motor experiences. Many of these facts are already common property; but a few of the latest points on this side of the discussion are these: (1) Cases are cited of verbal hallucination, in which the patient hears two (or more) voices, one of which he takes to be his

¹ Stricker, *Ueber die Bewegungsvorstellungen, Ueber die Association der Vorstellungen, Ueber die Sprachvorstellungen, Langage et Musique*. See also G. E. Müller, *Grundlegung der Psychophysik*.

own, the other that of some one else; only the former can be accounted for as due to the incipient stimulation of his own speech centers, the other is probably auditory.¹ This interpretation is supported by the interesting fact, established by Pierre Janet, that some patients can themselves speak during their verbal hallucinations, while others can not. Again, only of the latter class must we hold that the motor memories are necessary to speech.² Indeed, there is a characteristic difference between the two classes—a difference first pointed out, it seems, by Baillarger—*i. e.*, with those patients who are able to speak without interrupting the voice which they hear, we have a hallucination of *objective* speech: they hear what they think is a real voice outside them. While the other class have a hallucination of *internal* speech. They declare that there is some one inside them, speaking to them. Ségla's holds, with evident truth, that these latter hallucinations are 'psycho-motor'³ in their seat, while the 'objective' kind are auditory. (2) There are cases of motor aphasia due to impairment of hearing, the motor centers being intact, *i. e.*, cases of auditory verbal amnesic aphasia.⁴ (3) We recognize and understand words which we are unable to pronounce and which we have never written; this recognition must be by aid of visual or auditory images. The part played by the visual and motor memories respectively, in my own case, is seen in the fact that when I wish to speak in any language but English, the German words come first into my mind; but when I sit down to write in a foreign language, French words invariably present themselves. This means that my German is speech-motor and auditory, having been learned conversationally in Germany,

¹ See case of Charcot quoted by Ballet, *Le langage intérieur*, p. 64, also cases in Ségla's, *Les troubles du langage chez les aliénés*, p. 126.

² Cf. *Revue Philosophique*, Nov. 1892, p. 520, and Ségla's, *loc. cit.*, p. 117 and p. 145. A case is reported of a patient who could stop his internal voice by holding his breath (*Annales psychol.*, Jan., '93, p. 103).

³ Ségla's, *loc. cit.*, p. 147; Janet, *loc. cit.*, who advocates the expression "kin-aesthetic verbal" instead of "psycho-motor," as applying to this hallucination of internal speech.

⁴ See cases collected by Ballet, *loc. cit.*, pp. 91-92; also Bastian's case, *Brain as Organ of Mind*, p. 642; cf. also Paulhan, *Revue Philosophique*, XXI, pp. 37 ff.

while the French, which was acquired in school by reading and exercise-writing, is visual and hand-motor.¹ It is interesting also to note the joyous recognition which young children show, when they speak a new vowel or consonant sound correctly. The memory of the correct sound can not, in this case evidently, be from the motor centers.² (4) There is evidence of direct functional connection between the visual (and auditory) seat and the center of motor discharge. Here I may best give the words of Janet, who writes in view of the pathological evidence: "this hypothesis is confirmed by investigations on anaesthetic hysterics. In my opinion, it is impossible to explain the fact that these persons preserve their power of movement intact, in spite of the absolute loss of kinaesthetic sensations and images, unless we admit that movement may be directly stimulated by visual and auditory pictures. There are individuals with whom the auditory image of a word suffices for its pronunciation."³ (5) The law of 'dynamogenesis,' in accordance with which every sensory stimulation tends to bring about a motor discharge, indicates such a direct connection in cases of closely associated function. Féré demonstrates that speaking makes the hand-grasp stronger, that seeing colors and hearing sounds influence the motor centers; so it is altogether probable that stimulations of sight and hearing react directly to stimulate the motor speech centers.⁴ (6) Cases may be cited of direct antagonism between memories of words

¹ A similar case is reported by Ballet, *loc. cit.*, p. 62.

² At the risk of too much personality (of which, however, the literature of this topic is necessarily full), I may quote the following about a two-year-old child, written in a letter by her aunt, who was far from intending it as a psychological observation or for publication: "She rejoices greatly, when she succeeds in sounding a new letter. The other day she achieved *l*, and went about telling everybody, 'Baby can say sleep and slipper.' This morning I am informed that she can say 'save' and 'give' (letter *v*). She notices at once herself, when she can pronounce the word as the rest of us do — no one tells her."

³ Pierre Janet, *Automatisme Psychologique*, p. 60. The common cases of patients who can *copy*, when they can not *initiate* writing and speech, are in evidence.

⁴ Féré cites his results in support of Stricker's contention; see his *Sensation et Mouvement*. He fails, however, to distinguish between the direct motor effect of a sensation, and the roundabout motor effect — *i.e.*, through the kinaesthetic center — which latter is required by Stricker's view.

and the sensations produced by the speech-movements which they stimulate. The pathological state called paraphasia is duplicated sometimes temporarily in cases of severe sick headache; one intends to mention one object (chair) and really speaks another (spoon) without detecting the mistake. I have myself had this experience; being quite unable to name correctly an object seen until someone else has spoken the word with emphasis — yet all the while allowing the incorrect word spoken to pass, and feeling astonishment that others have not understood my meaning. Similar are those cases in which patients take their own words for those of some one else, declaring, when questioned, that they themselves did not speak them.¹ Reflection leads us to the view that in these cases there is a direct flow from the auditory or visual center to the motor speech center, the kinaesthetic speech center being perhaps temporarily inhibited. The same kind of antagonism is also seen, from the other side, when there is 'exaltation' of the kinaesthetic center, or what is called uncontrollable 'verbal impulse.' The patient speaks certain words or phrases in spite of himself — against his utmost effort to speak something else.²

This conception of the case — not to dwell upon other points of evidence³ — seems to harmonize well with the doctrine of nervous function now becoming more and more current. According to this doctrine, the brain is a series of centers of

¹ See Ségla's very interesting cases, *loc. cit.*, p. 150 f.

² See Ségla on "hysterical mutism," *loc. cit.*, p. 97 f. In dreams this is probably the case: the kinaesthetic centers are no longer inhibited, and we talk meaningless sounds, which in our dream consciousness are interpreted as rational discourse. In view of all such cases of antagonism, a distinction may be legitimate between *psychic* and *cortical dumbness*, corresponding to the current distinction on the sensory side. Just as there is a distinction between being unable to hear words (cortical deafness) and being unable to understand the *meanings* of words we hear (psychic deafness), so there is a distinction, shown pathologically, between being unable to speak words, and being unable to speak the words we *mean*. Put in different terminology, the former case would be due to a lesion of the motor elements at the 'second level,' and the latter case to a lesion of the motor connections between the second and the 'third level.'

³ For instance, cf. Stumpf, *Tonpsychologie*, I, pp. 160 ff. Further evidence accrues, also, from the consideration of tune memories below.

relatively stable dynamic tension; the various associative connections among these centers are paths of *less and more* rather than of *least and most* resistance; that the range of alternative adjustments is excessively wide; and, consequently, that any individual has his 'personal equation' in all functions as complex as that of speech. One man is a 'motor,' another a 'visual,' a third an 'auditive,' according as one or another of the extrinsic sources of stimulation suffices to release the necessary energy into his motor speech center. No one doubts Stricker, therefore, when he says that he remembers words only by means of sensations of incipient movement; but for the same reason we cannot dispute the claim of Stumpf, and Wernicke, and Kussmaul, and Lichtheim, that auditory and visual images may, in other cases, play an equally leading rôle.

Assuming, then, this answer to the question of the antecedents of speech, some additional considerations arise which have not hitherto been suggested, as far as I am aware. In the first place, I find in my own case and from experiments with others, that the presence or absence of elements of movement in the consciousness of a word depends in many individuals largely upon the direction of the attention.¹ If the attention be directed to the vocal organs — either one's own or some one's else — movements of the tongue, lips, and larynx are clearly felt in the organs, and sometimes by touch, and may be seen. If, on the other hand, the attention be directed to the ear, and the words be thought of as heard, these muscular sensations fall perceptibly away or disappear. This indicates that there are two great speech-types, a motor type and a sensory type, according as the attention is given in one direction or the other — a distinction which is now familiar in connection with reaction-time experiments. The reaction-time is shorter in so-called 'motor' reactions. I have experimented to some extent with a view to finding in what per cent. of individuals one kind of hand-reaction is normal as against the other kind. The results

¹ Paulhan notices the influence of the attention (*loc. cit.*, p. 43), but does not inquire into it; so also does de Watteville, I fancy, from references I have seen to an article of his (*Progrès Medical*, March 21, 1885) which I have been unable to procure.

show that, among uninstructed groups of students, reacting for the first time in the laboratory, about one-quarter of the entire number, when questioned immediately after giving a series of reactions, were clearly conscious of having paid attention to the hand (motor attention). The average time of their reactions is considerably lower than the general average. This result shows clearly, not only that the difference in time of the two kinds of reactions is a real difference; but also that there are individuals who normally react most readily, and most effectively, in one way or the other.¹ The bearing on speech is this: it becomes at once evident that the most rapid speakers are generally *ceteris paribus* 'motors' in their type. The direction of the attention serves to arouse the organs of speech in advance by an influence, the nature of which is discussed below.²

The further questions arise: Is a person motor, visual, or auditory, in his speech, and in his reactions generally, because he has strengthened a particular kind of memories by the prevailing concentration of his attention upon them? Or does he give motor or sensory attention and reaction, because of the predominant strength of a certain class of his memories? Probably both of these positions are true: and each of them is of great importance in the education of speech, and other motor functions. The case is simply the exhibition, on a large scale, of what we find to be true of the relation of attention to sensations generally. Increased intensity of sensation tends to draw the attention; and the attention increases the intensity of sensations. It is one of those processes of 'reasoning in a circle' which characterize the growth of body and mind together. Another instance is this: pleasure arises from healthy function, while healthy function is directly assisted by pleasure.

The case before us is capable, however, of a closer psychophysical explanation. We know that increasing intensity of sensation liberates energy increasingly toward the motor

¹ See the further position on this subject below.

² To quote my own case again—I find it impossible to reproduce a French sentence without keeping my attention on the visual picture of the printed signs; but I can follow a German sentence by memories of speech movements with no trace of visual attention.

centers. It is probable, therefore, that a given degree of intensity of each particular sense-quality involves as an element in its conscious value a motor ingredient — be it in part an element of consciousness from the potential condition of the motor centers themselves, or in whole from the kinaesthetic centers. The distinction between sensory and motor consciousness is largely logical: all consciousness is both. Every sensation reverberates outwards in the muscles and this muscular resonance reacts upon the sensory factor. It is clear that the largest amount of the motor ‘ingredient’ attaches to the most intense sensation. Now we also know that the exercise of attention involves a large amount of motor innervation; its constant and necessary accompaniments are motor. Consequently the rising tide of motor incitation due to the rising intensity of sensation is at once an increasing relative stimulus to the attention.

On the other hand, the ordinary opinion is true, that the idea of a movement is already the beginning of that movement. In the light of this principle it is easy to see that, when I turn my attention to a sensation, I in so far start into more vigorous existence the motor ingredients of that sensation. This in turn brings out more intensely the sensory ingredients — and the second aspect of this ‘reasoning in a circle’ is made clear.

To put the matter in a nutshell — just in as far as the motor ingredient is large, that is, in as far as the sensory ingredient is intense, just to this degree will the direction of the attention be secured, on the one hand, and both the ingredients intensified by this act of attention on the other hand. The two facts, therefore, that intensity draws attention and attention increases intensity may be stated in terms of a single principle which I venture to call the “law of sensori-motor association,” *i.e.*, *every sensational state is a complex of sensor and motor elements, and any influence which strengthens the one, tends to strengthen the other also.*

The reflex attention which follows upon increased intensity of sensory excitation is, therefore, the *Nachklang* of revived motor associates; and the increased intensity which follows

the direction of the attention is the *Nachklang* of revived sensory associates.

This principle also goes far to explain the relation to each other of the two so-called laws which are usually stated independently in connection with reaction-times : (1) greater intensity of stimulus diminishes the reaction-time, and (2) motor reactions are shorter than sensory reactions. Both are ready deductions from the "law of sensori-motor association." More intense stimulation gives a shorter reaction than less intense, because it arouses more and stronger motor associates ; or, put physiologically, because it has greater dynamogenic effect, and so facilitates motor discharge. This is clearest, when the signal is foreknown and the attention is consequently not drawn to it. But this means, when a particular kind of motor association is emphasized by the direct act of earlier attention. Now this is the second case—motor reaction. The motor associates are pictured, dwelt upon, emphasized beforehand, the motor centers are put into a state of high potential, the stimulus is left to discriminate itself without attention—and thus the reaction time is shortened. It is evident that in the sensory reaction, part, at least, of the dynamogenic influence of the stimulus goes into the attention (discrimination of signal) ; while, in the motor reaction, it all goes into the reaction, which is already prepared for, besides, by motor attention.¹

Applying this thought to the rise of speech and its method, we find abundant reason for the variety of types found among adults. Visual, auditory, and motor memories of words date back to early childhood, and do not arise synchronously. Visual pictures of figure arise and get comparatively fixed in childhood some months before the child begins to speak or write, as is shown by its recognition of simple figures, animals, and later letters. Its auditory images, however, date back still farther : this is seen in the very early recognition of words heard. The motor (speech and writing) memories, on the

¹ It is only what we would expect that, when the stimulus (signal) is not intense enough to carry its own discrimination, either the reaction takes place upon a false stimulus, or the attention shifts and the time is lengthened.

contrary, are the latest of all. The ability to trace 'copies'¹ recognized, arises only after considerable progress has been made in speaking, and the progress in speaking is, in turn, relatively much later in its rise than visual and auditory recognition. So the probable order in which these different elements of the speech faculty would come under the jurisdiction of the "law of sensori-motor association" is about this : auditory, visual, speech-motor, hand-motor (writing) memories.

This means that auditory and visual memories get a good 'start' on the other varieties in the genetic process. They acquire considerable influence over the attention, which is largely reflex at that early period, and they become in turn relatively easy of revival, before the specific motor memories are well begun. Here is sufficient reason for the existence of auditory and visual speech types. Habits thus arise which, on the mental side, express the readiest sensori-motor associations. They amount to what some have called 'pre-perceptions,' or better, perhaps, 'pre-apperceptions.' On the physical side these habits represent preferential dynamic tensions among those paths of discharge whose convergence is towards the brain seat of attention. The law signalized above, tends of course, as life advances, to consolidate these particular sensori-motor couples : and they become permanent traits of the mental life, unless the other speech connections, which are subsequently brought into use, be of sufficient strength to supersede them. This latter, however, may happen in any of several instances : either from inherited tendency, or from the strength of other motor habits, as walking, etc., or, in course of time, by dint of continued practice.

It would seem, accordingly, that the 'auditory speech' type should be found most frequently among unliterary people and among those who have not had extended linguistic training or large practice in writing and reading. The particular influences which are lacking in this type are present in the 'motor type.'

¹ What I have called "tracery imitation," *Science*, XIX, 1892, p. 19 f, discussed also by Goldscheider under the equivalent phrase, *malende Reproduction* in *Archiv für Psychiatrie*, XXIV, 1892, p. 503.

It would be interesting to note the effects following, in this respect, upon the different methods of instruction in the primary and secondary schools. If speech is so fundamentally interwoven with thought and mental growth, the method and means of language study which emphasize conversational and written expression must be most valuable. And it may be that, even in the college course of four years, valuable auxiliary training may be had from the 'recitation' or oral method, as opposed to the exclusively 'lecture' method with only written tests.

I may add also a word of practical application on the subject of the psychology of reaction times. We have in this fact of types the explanation of the contradictory results reached by different investigators in the matter of motor reactions. Some find motor reactions shorter, as I have said above; others do not.¹ The reason is, probably, that in some subjects the 'sensory' type is so pronounced that the attention can not be held on the muscular reaction without giving confusion and an abortive result. On the other hand, some persons are so clearly 'motor' in ordinary life that sensory reaction is, in like manner artificial, and its time correspondingly long. And

¹ As illustrating this state of things, I may refer to the brief article (just come to my hands as I send this to print) by Prof. Cattell in *Philosophische Studien*, VIII, (1892), p. 403. He reports variations in experimental results which do not confirm the general law that motor reactions are shorter. At the same time Prof. Cattell attempts to apply as universal the principle that attention to a voluntary motor combination tends to derange it—and so he "would expect" the motor reaction to be *longer*. Now, as it seems to me, this principle applies largely to such movements as have already become so 'automatic' as to be practically reflex, *i.e.*, out of conscious supervision altogether. In saying, "in speech, writing, reading aloud, etc., the attention is always directed to the end in view (*Ziel*), never to the movement," Prof. Cattell overlooks altogether the 'motor' type of reagent and goes directly in the teeth of the teaching of the pathology of speech. Stricker says the motor images are exactly and only what he pays attention to. What shall we say of Sommer's and Pick's citations of cases in *Zeitsch. für Psychologie*, vol. ii, 143 and iii, 48. As a matter of fact, I think the reactions which we perform in the laboratory (moving second rather than first finger, right rather than left hand) are so evenly voluntary throughout that the principle suggested by Prof. Cattell has little appreciable influence one way or the other; although in a person of decidedly sensory type some embarrassment might arise from it. I hope to return to this subject with some figures of my own: my note in the *Medical Record* (N.Y.), April 15, 1893, p. 455, may be referred to.

yet again others may be neutral as regards sensor or motor preferences. If this be true, another element of "abounding uncertainty" is introduced into all the results of experiments so far performed in this field, as reflection on the matter will show. It might well be a matter of very great importance in connection with astronomical observations: a source of error which could not be eliminated by any amount of instruction to the observer as to the method of his attention.

And another inference: Why may not reaction-time results be used as a means of *diagnosis* of speech-troubles? Given an aphasic patient with an unusually short reaction-time, he would be *probably* (1) motor in type, and, consequently, *probably* (2) afflicted with trouble in his motor region. On the other hand, a patient with a very long reaction would be auditory or visual in his type. This would require cases of almost artificial simplicity of symptom and lack of 'sympathetic' disturbance; but it might be tested by observing the reaction time of patients, the seat of whose brain trouble is already known.

II. INTERNAL SONG.

The question of 'internal song' is a new one. What do we mean, when we say that a 'tune is running in our head'? The factors involved are evidently less complex than those involved in speech, at the same time that the entire phenomenon is more obscure. Evidence goes to show that the internal tune is almost entirely auditory: that is, that the auditory center is intrinsic to musical reproduction — Stricker again to the contrary notwithstanding.

An adequate discussion of the nature of tune reproduction should provide a theory of tune perception which takes account of three factors — pitch, time or rhythm, timbre — and possibly of a fourth character, ordinarily designated by the phrase 'musical expression' or, more properly, emotional tone.¹

¹ There is not a great deal of literature on this topic; see the following titles: Egger, *La parole intérieure*; Stricker, *Langage et musique*; Stumpf, *Tonpsychologie*, i, pp. 135 ff.; Walleschek, *Vierteljahrschrift für Musikwissenschaft*,

There are certain interesting points of relationship between internal song and internal speech. For example, many persons find internal tunes generally fuller, more real, and sometimes only tunes at all because they remember the appropriate words, because they have sung the words to the tune, or at least, because they have hummed the refrain aloud. Here there is clearly a motor type of music performers. But this motor requirement is extremely variable. In some cases the tune must be associated with a particular instrument, and this is done only by the reproduction of the proper sensations in the finger tips, lips, etc., used in playing that instrument. On the other hand, there are facts which show that the motor type is only a type, and that even in these cases auditory tune memories are necessary. Musical recognition in childhood often precedes verbal recognition. Musical expression usually precedes verbal expression, both when there is a clearly inherited musical tendency,¹ and in ordinary imitative reactions.² In cases of 'absolute hearing'—discussed below—we have apparently recognition of pitch without any motor-speech or song-images. Further, there is the critical fact that motor aphasia, and even verbal deafness, may exist with no impairment of the musical faculty—no *amusia*, as defects of musical faculty are called by Brazier. This is true both for musical recognition (case of Wernicke), and for musical expression.³ Cases show, however, that the latter, musical expression, is never lost without involving speech; although musical recognition seems sometimes (Carpenter's case) to be lost without impairing speech. The conclusion that musical reproduction is auditory is supported also by such facts as the following: that we often recognize an air after hearing it once, even when

1891, heft 1; Lotze, *Medicinische Psychologie*, p. 480; G. E. Müller, *Grundlegung der Psychophysik*, p. 288; besides the voluminous literature of aphasia. An interesting late article, full of bibliographical references, is by Brazier, *Revue Philosophique*, Oct., 1892, p. 337.

¹ Interesting cases are cited by Ballet, *loc. cit.*, p. 24.

² My child E. imitated a run of three notes, vocally, long before she showed any verbal imitations whatever.

³ Cf. v. Franckl-Hochwart, *Ueber den Verlust des musikalischen Ausdrucksvermögens in Deutsche Zeitschrift für Nervenheilkunde*, I, p. 283.

we have never tried to sing it, and could not if we tried; that in singing or humming a tune, we know that we are wrong even when we are unable to correct it; tune hallucinations are reported without words or vocal quality, and, similarly, illusions stimulated by accidental sounds;¹ many persons are able to remember and recall musical chords and combinations which it is impossible for the human voice to reproduce, *i. e.*, we can mentally depict harmony; further, there are cases of persons who can recognize the pitch of tones from instruments, but not of the tones of their own voice.² It seems, indeed, on the surface clear, that of the elements distinguished above as essential to musical reproduction — pitch, rhythm, timbre, and emotional tone — the most essential, pitch, finds no adequate basis in motor speech or song memories. The range of intonation in speaking and singing is too narrow to supply the material for musical reproduction, although there are, no doubt, individuals whose musical capacity — especially of expression — is confined to these limits.

It is probable, accordingly, that there is a brain-center for tune memories — a center whose impairment produces so-called *notal amusia* — that this center is a part, in function, at least, if not anatomically, of the auditory center, and that cases will occur in different persons, of partial amusia, due to the degree in which this function involves others.³ This general conclusion is confirmed, I think, by what follows on pitch memory, the only one of the four elements of musical reproduction which I am able to discuss in this paper.⁴

¹ Ordinary internal tunes are usually stimulated in this way, as I have found by analysis of a great many such tunes at the time of their occurrence.

² Cases of v. Kries cited below.

³ For example, musical deafness without verbal deafness; case of Grant Allen in *Mind*, III, p. 157, and that of Brazier, *loc. cit.*, p. 359. Bastian, *loc. cit.*, p. 664, quotes a case from Lasègue of an aphasic musician, who could write nothing but passages of music which he had *just heard*. A recent case of Pick's (*Arch. für Psych.*, 1892, p. 910) seems at first sight to give trouble, *i. e.*, a case of loss of musical *recognition* with no impairment of musical *expression*. Yet Pick's location of the lesion as *subcortical* sufficiently accords with the view in my text. The seat of auditory *attention* was not injured. Cf. note on Pick's position below in this article.

⁴ I hope, however, to say something on the psychology of musical 'time' and 'expression' later.

III. PITCH RECOGNITION.

The recognition of the pitch of notes gives two cases apparently distinct from each other, *i. e.*, 'relative' and 'absolute' pitch recognition. In relative recognition the musical interval seems to supply the real *locus* of the recognition. Given the initial note (and the proper rhythm) — and the rest of the tune comes up by reason of the associated tone intervals, note by note. Comparatively few persons lack the ability to carry through a familiar tune mentally. Absolute recognition, on the other hand, is a different accomplishment; even among competent musicians it is often¹ conspicuously absent. It is the power of reproducing a note of any desired pitch absolutely from memory.

The auditory character of all relative pitch recognition is shown by the following facts—in addition to the general considerations already adduced: (1) Brazier² cites cases of aphasic patients who could speak words only by singing them: that is, they must first recognize an air, and then arouse the motor speech function from that cue. The motor center not being available in these cases, it is difficult to see on what but auditory grounds the tune recognition could proceed. It often occurs, in my own case, that I can not recall the words of a song until I get the tune started (of which a case is cited immediately below). (2) I find it possible, with Paulhan,³ to think different notes very clearly while the vocal organs are held rigid. I am able to think one note while I am uttering aloud a long-drawn-out vocal sound (say \bar{a}) in a different pitch. And lest it may be said that it is the overtones which are heard internally in this case, I may add, that I am able with the greatest ease to hold aloud an \bar{a} sound at c' (say), and at the same time to cause a whole tune — say Yankee-doodle — to run its course "in my ear." Stricker's inability to think one consonant while speaking another is due, probably, to the fact that

¹ In the case of some of those who carry tuning-forks in their pockets.

² *Loc. cit.*, p. 366.

³ *Loc. cit.*

in uttering labials, etc., pronounced and explosive muscular combinations are necessary, and that they have no clear auditory character being usually merged in accompanying vowel sounds. (3) My internal tunes have very decided pitch — determined upon an instrument in a number of cases. Yet it is not always the normal pitch of the tune as written and learned, nor is it constant for recurrences of the same tune. For example, on April 9th, I found a tune 'in my head' which was perfectly familiar, but for which I could find no words. Tested on the piano, the pitch was f-sharp and the time was my heart-beat.¹ I finally, after much effort, got the unworthy words, "Wait till the clouds roll by," by humming the tune over repeatedly. The pitch is determined, probably, by the accidental condition of the auditory center as respects pitch-readiness, or by the pitch coloring of the external sound, which serves as accidental stimulus to the tune.

In explaining pitch recognition the question of relative pitch comes first. The very fact that it is relative, means that it may be brought under the question of conscious recognition in general. If recognition be due to complexity, relationship, 'fringe,' in the representation recognized, and vary with the degree of this associative, or apperceptive element, then recognition of each note would occur, like the recognition of any other presented content, according as it have or have not a train or fringe of associated elements. A tune is then recognized, because it is such a train. The degree of precision in its recognition depends upon the fineness of discrimination at the original hearing of it. So also the fact that notes are better recognized after the musical notation has been learned, simply means that additional elements are brought into the complex by the notation — elements which support the claim of the whole. With persons of the motor type, further, the motor speech and song images are prominent in this complex, and so essential, perhaps, that recognition does not occur without them. It seems likely, therefore, that if we grant differences of pitch in tone sensations, the recognition of the

¹ Very frequently the case, especially just after eating, as in this instance.

associated trains which we call 'tunes' is but an instance of a broader mental phenomenon.

Absolute recognition, on the other hand, or 'absolute hearing,' as it is called, presents anomalies which make it difficult to explain it as an ordinary case of recognition. Either we must find elements of complexity in such tones or confess that here is an exception to all our rubrics. The question is this: can any one identify a note of any pitch simply and only from the tone-quality of the note itself? One of the latest contributions to this question is from v. Kries,¹ who is himself a musician. He possesses the so-called absolute hearing. He also publishes details supplied from other similar cases. He argues that the ability to identify a single isolated note can not be due to musical practice, *i. e.*, can not be a refinement of interval recognition,² because (1) he (and others) has had this power from early boyhood, because (2) some of the most celebrated musicians have not been able to acquire it at all, although their sense of interval became most wonderfully acute, and because, (3) the power in himself (and others) varies with the instrument which sounds the note, and is not best with the instruments used most. He recognizes notes from the piano (best), from string (especially the violin), and wind instruments, but not those from tuning-forks, or steam and other whistles, or notes sung, or whistled with the lips—a state of things shown with some variations also in several of his correspondents. Now the violin is with v. Kries a late accomplishment, while he has, of course, been hearing singing all his life, accompanying singers on the piano from his twelfth year, and whistling habitually. Indeed, these last facts—showing the influence of timbre on pitch-recognition—lead him to deny that there are any revived images of any kind belonging intrinsically to musical recognition. He finds it to be a case of *Benennungs-association* as established by Lehmann, *i. e.*, v. Kries was not able to recognize notes until after, in

¹ *Das absolute Gehör*, in *Zeitschrift für Psychologie und Physiologie der Sinnesorgane*, III, 1892, p. 257.

² So Stumpf, *loc. cit.*, I, p. 280.

boyhood, he had learned their names and written signs. The case is analagous, therefore, he holds, to the recognitions which Lehmann found to follow from the simple lettering and naming of shades of wool not before separately recognized.¹

This conclusion of v. Kries is lame, I think. It does not account for the differences due to *timbre* as explained above; for the notation is the same practically for all the instruments and for the voice. v. Kries admits this, and says it remains for the future to provide a theory of this influence due to *timbre* — leaning, however, as he does to the over-tone theory. Further, he agrees with other observers in finding that chords are better recognized than single notes; this would indicate that recognition is due in some way to the complexity and variety of the tone content, rather than to the accident of naming. It is possible, perhaps, to give due weight to the influence of the name-association in a theory which does more justice to the essential facts. This and other cases of the recognition of apparently isolated sense-qualities can be brought, I think, under the law of “sensori-motor association” which I have formulated in what precedes.

The fact of recognition, in all its obscurity, seems to involve two aspects of feeling which are, in common cases, both equally present, *i. e.*, a subjective and an objective aspect.² We have in the recognition of an image not only the identification of it as objectively the same; but also a feeling of ‘warmth,’ ownership, self-reference. We do not recognize a thing simply *for itself*; we recognize it *for ourselves*. It has become in a sense ours by having been present to us before.

Now, if we find the objective aspect of recognition in the represented complexity of content — spoken of above in connection with relative pitch recognition — the apperceptive or associative meaning of the thing; it still remains to find the more uniform element of subjective reference common to different recognitions. This I find in the *varying degrees of attention* which are necessary for the reinstatement of the

¹ Lehmann, *Philosophische Studien*, 1889.

² Together constituting the ‘coefficient’ (Höfding’s *Bekanntheitsqualität*).

image in question in each case; that is, in the motor sensations of adjustment, which are constant for each varying degree of concentration of the attention.

In the principle of "sensori-motor association" we find this motor element in recognition supplied. The motor associates of each sensory intensity are constant, and each degree of motor complexity is associated with the degree of readiness of attention which is represented by its own tendency to stimulate the motor elements of the attention. When, therefore, a presentation comes a second time into consciousness, it is adjusted to more easily because its apperception in attention proceeds upon a basis of ready formed association. This relative ease of adjustment is felt as the subjective aspect of recognition.

In the case of absolute pitch recognition, the objective aspect is wanting — pure tone has no presentative complexity, as v. Kries claims. But the subjective aspect is present in the relative ease of transition from the motor associates of the tone to the motor elements of the attention. This suffices for its recognition.¹

Several considerations may be urged in favor of this view: (1) It brings absolute and relative tone recognition under a single principle; the former arises on the motor side, the latter on the sensory side, of the original sensori-motor association; (2) it accounts for the greater relative ease of recognition of chords and compound tones; apart from their complexity of content, they carry greater and more varied dynamogenic influence; (3) it makes it possible to consider tone recognition in some cases hereditary, as the facts (*i. e.*, cases of v. Kries and others) seem to require; persons have from birth a tendency to give the attention with greater facility to one class of stimulations than to another — so the doctrine of types teaches. Why may not this difference extend also to different notes? The analysis given above of the speech function leads us to see

¹ Instead of Höfding's sentence (*Phil. Stud.*, VIII, p. 90), "*die organische Functionen gehen leichter*" in absolute recognition, I would say the psychophysical function of attention "goes easier."

what refinements are possible in the recognition of words. Even the recognition of particular classes of words, nouns, etc., may be lost while other words are correctly used. Brazier cites a case in which the visual time notation of written music was retained while the pitch notation in the same music was lost. A corresponding refinement on the motor side is all that this theory requires; (4) it enables us to explain the apparent influence of *timbre*, a fact not explained by any other theory. The fact that isolated tones from some instruments are recognized, while from others they are not, I hold to arise from differences in the type of attention exerted in the several cases respectively. A 'visual' musician is most likely to recognize tones from instruments whose manipulation or notation involves much visual attention; an 'auditory,' notes from those which exercise hearing in most varied and exclusive ways; and a 'motor,' notes from those in connection with which muscular attention is at its best. It is remarkable that in all of v. Kries's recognitions the method of learning was probably by visual note-reading — piano, violin, etc. — while his non-recognitions are apparently in cases in which the auditory indications did not include such systematic visual attention — his own voice, voice of others, steam whistles, lip-whistling, etc. Now on the supposition that v. Kries is a 'visual,' that the motor elements of the attention in his case are most readily stimulated from the center for sight, we have a clear application of our law.¹ Further, v. Kries was unable to recognize tones before he learned musical 'naming,' which, it is natural to suppose, was at first visual. The case of musical alexia already quoted from Brazier, shows the importance of a single class of notation memories, although it involved the loss, not of tone-recognition, but of musical execution;² (5) one of v. Kries's cases of 'absolute hearing' seems to be, from what he reports of it, motor in its type: a young woman who recognized sung tones,

¹ Of course, such an application is only an illustration; the details of the individual's life and education — the questions "why?" and "to what extent?" he is visual, motor, etc. — make any single case extremely complex.

² *Loc. cit.*, p. 363.

only by means of 'internal repetition' for herself of the note sung (*das Bedürfniss bestand, sie innerlich nachzusingen*).¹ This *innerliches Nachsingen*, in a case where the real note is already heard, is probably motor, a supposition supported by the fact that the woman was a "skilful singer herself." Her quicker recognition of piano tones might be because of the motor practice in hand-execution; (6) this point of view affords us an additional reason for the fact, which all admit, that the best recognitions are for notes of moderate pitch — not very high or very low — for, being of most frequent occurrence, these notes exercise the attention most, and so get most easily and readily accommodated to. And it is also easy to see that, for this reason, their discrimination becomes finer and better; (7) in the experiments already referred to, Féré found different dynamogenic effects to follow the hearing of the different notes of the musical scale, and the greatest effect to follow the notes in the middle of the gamut. Can this be no more than a coincidence?

Finally, if 'motor associates' be at the bottom of pure-tone recognition, we would expect something of the same kind in the case of color and odor qualities. This is the sphere of Lehmann's results in *Benennungsassociation* to which v. Kries appeals. Now Féré claims to have demonstrated this very point, *i.e.*, that color discrimination and recognition are improved by muscular exercise. He found it possible to bring back purple-recognition to purple-blind hysterics, simply by muscular movement. It is a ready deduction, also, from the opposite fact that the different colors, beginning with red, have diminishing dynamogenic effect as measured on the squeeze-dynamometer.

IV. SUMMARY.

I have endeavored in this paper to maintain the following positions:

I. The law of "sensori-motor association" — "every sensational state is a complex of sensor and motor elements, and any influence which strengthens the one tends to strengthen the other also."

¹ *Loc. cit.*, p. 273.

2. The subjective element of recognition in general is due to the association between the constant "motor ingredients" of mental states, and the motor elements of the attention.

3. All pitch reproduction is auditive. Pitch recognition (absolute) is due to association between the motor ingredients of pitch qualities and the motor elements of the attention.

4. Verbal reproduction is of several types—motor, visual, auditory, etc. Verbal recognition is due to association of the motor elements of that memory image which most readily stimulates the attention, with the motor elements of the attention.

5. The existence of memory types is due to the education of the attention under the operation of the "law of sensori-motor association": the motor ingredients of a particular kind of memories become in this way implicated, by association, with the motor elements of the attention.

6. The facts that "increased intensity of sensation draws the attention," and that "attention increases the intensity of sensation," are both explained as partial statements of the "law of sensori-motor association."

7. The facts, also, that "increased intensity of stimulus shortens reaction time," and that "motor reactions are shorter than sensory reactions," are explained as deductions from the law of "sensori-motor association." This law also—with the memory types which it produces—explains the discrepancies reported by different observers in the matter of sensory and motor reactions.¹

J. MARK BALDWIN.

¹ It is evident that the general position taken in this paper bears in favor of *central*, as opposed to exclusively *peripheral*, control in voluntary movement. The correlation of various images in the attention, through their respective 'motor ingredients,' is necessary for voluntary activity; and when a particular class of images is lost, the damage it works in the mental life is not alone the narrowing of the content in consciousness, but it is in many cases the withdrawing of that support without which the voluntary function can not proceed at all. It is in the coordination of the attention, therefore—what I have elsewhere called "volitional apperception"—that every one of the incoming sensory elements must have part, at least, of its regulating effect upon the efferent discharge. This is shown so clearly, as a matter of fact in the elaborate article by Pick on the loss of voluntary

movement by certain anæsthetics when the eyes (or ears) are closed (*die sogenannte 'conscience musculaire,' Zeitsc. für Psych., IV, 1892, 161 ff.*), that I need not do more than recognize the support which my article gets from his. As to the interpretation of the facts, I hope that the principle urged in this paper may be found to take us a step further. A collection of cases which show the extreme dependence of attention and voluntary movement, in persons of the visual type, upon vision, is made by Dr. Ireland in *Journal of Ment. Sci.*, Jan. '93, pp. 130 f. The extraordinary patient of Dr. Grainger Stewart of Edinburgh, whose case Dr. Ireland cites, I myself had the pleasure of examining, through the kindness of Dr. Stewart.

THE MEANING OF TRUTH AND ERROR.

IT is now above two centuries and a half ago that the thinker commonly accounted the initiator of modern philosophy seated himself, as he tells us, by the fire in a winter dressing-gown and attempted, with the vast self-trust and sense of power written in his masterful rugged features, to doubt all things and to rebuild the universe from the foundations. Since Descartes's time it has been widely assumed that no philosophy can be profound which does not begin by being profoundly sceptical. The enterprise on his part, however, which set this fashion cannot be said to have had the best success. The reasons for this are not hard to assign. Goethe, I think, has somewhere said that that doubt only is to be praised which lives to destroy itself. Descartes's doubt in that case must receive a full measure of our laudation, for its suicidal tendencies were from the first irrepressible, and it required constant watching to keep it alive for that formal public execution for which he reserved it. And although Descartes set himself in much seriousness to be sceptical concerning matters of fact, it never occurred to him to be sceptical of categories. He could doubt the existence of God, and of his own body, he could question whether two and two are really four, he could conceive that the people on the street whom he watched from the window might be cunningly devised automata, but he was in no wise suspicious of the impostor-term 'perfection,' for example, which plays a leading part in his thought.

The philosophical world in our time has tired a little of affecting in speculation a universal doubt which it does not feel at heart; and it has discovered that the analysis of terms—which Descartes completely neglected—is the most important business of philosophy. Indeed, philosophy is no longer the same science as that which occupied Descartes. He wished to discover the existence or non-existence of certain supposed

facts ; or more exactly, he wished to establish the existence of certain dubitable facts on a rational basis. The modern investigations of which I speak seek to analyse facts whose existence is not disputed. Analysis may of course lead to scepticism, but scepticism has too seldom led to analysis, and the distinction between the two interests in themselves is of the widest.

In no case is it wider than in the particular problem which I wish now to consider, the elementary question whether an idea, which is one existence, can know an object, which is another ; or, as I shall put it, what we mean by true opinion and false, by knowledge and error. The difficulty that waits to thwart us here is among the deepest difficulties in thought. I am not unaware of the literature existing on this subject, from the Greeks through Fichte, Hegel and their followers, to certain writers of the present day, though from some points of view it seems to me surprisingly slight ; I shall not, however, be obliged to discuss it here. An exception may be made for the presentation of the difficulty contained in the work of Professor Josiah Royce, *The Religious Aspect of Philosophy*. The method and matter of Professor Royce's conclusion I am unable to accept, but his statement of the problem is of much value. I must set it down here, however, in my own terms.

We believe ourselves to know existences external to our minds. We believe ourselves to know, for example, the minds of others. How do we know them ? By having correct ideas of them. But an idea is merely a particular appearance in the mind ; it presents itself to us, but it can tell us of nothing beyond itself. If there are external existences, my ideas can at best resemble them. But resemblance is not knowledge. The south tower of Cologne Cathedral resembles the north tower, but does not therefore know it. In order to have true knowledge, not only must my ideas resemble certain external things, but I must *mean* them to resemble those external things. A thought of mine cannot be accused of error about an outer fact, if I did not mean it to refer to that fact. My ideas are not responsible for their chance resemblances. But

what is it to mean an outer fact? What but to think of it? And to think of it, again, is at best to have an idea that resembles it. Turn which way we will, we are met by the same difficulty.

The gulf opens not only between my personal consciousness and the things beyond it, but between my present and my past. I know nothing but what is before me, and only the present moment is before me. My former states are as truly external to my present self as are the minds of others. I am shut in to the four walls of my momentary consciousness.

The problem here broached is not, of course, that which is at issue between Realism and Idealism. Realists affirm that the physical world is in its essential qualities external to our minds, and of a substance not mental. The various opinions of Idealists agree in the tenet that all existence is mental. The difficulty upon which we are engaged would appear to apply as much to one party as the other, since the Idealist regards his neighbor's mind and his own past as in a true sense outside of his own present mind.

There are metaphysicians who will seek to cut the ground from under this reasoning by challenging its terms. You tell us, they will say, that the only thing present to the mind in thinking of outer facts is its ideas; and by this we take you to mean that we apprehend in such thought only our ideas. This we deny. What we apprehend is the outer facts, and we apprehend them through our ideas. An idea *presents* an object. It is a fundamental property of our ideas to *report* something not themselves, to tell us of something external to our consciousness. This self-transcendent power of certain mental states is among the ultimate data with which philosophy has to start. So far, then, from apprehending only my ideas, I apprehend only a world of objects; the ideas *are* the apprehension. Do you ask, What can we be conscious of but consciousness? As well say, What can we see but our eyes? Or, What can we eat but our mouths?

Nevertheless I am persuaded, after much observation and thought, that my own ideas have no such special license to

violate the Laws of Identity, Contradiction, and Excluded Middle, and I am tolerably well satisfied that others are in the same case. To my wit the notion of an idea 'reporting' what is outside of itself is a piece of incoherency. *An idea* is the name we give to a certain mental appearance. It is, as one may say, an image or picture¹ before the mind. Its being is its being felt, and it *is* just so far as it is felt. Its whole being, nature, and function are wrapped up and circumscribed in its existence as an idea. If it alters, it is a different idea — yet people talk as though it were a personal agent, as though, preserving its identity as the same idea, it could perform a variety of functions, and engage in almost any respectable occupation. How should an idea set about this delicate task of getting out of itself, and telling us, like Mr. Stevenson's fair Cuban, 'I am not what I seem'? Is it to present a picture to the mind and say, (for surely it can talk) 'This is an object outside of consciousness.' But that would be an unholy falsehood — *That* object is inside consciousness. Is it to stretch out a long arm, grasp an external thing, and drag it within consciousness? But the external thing could only cross the portals by becoming an idea. It is clear, then, that mental states can never, as theorists have fancied, 'report' or 'tell us of' anything beyond themselves. Such attempts to escape from the grinding tyranny of the Law of Identity to the free country of self-contradiction are human, but they are not heroic. We can understand, but we cannot abet.

The problem is now sufficiently before us. We must try to compass its solution. What we need is no metaphysical hypothesis, but an analysis of the states of mind that we call knowledge, of the means by which we distinguish knowledge from error, and of the notions attached to the word knowledge, as it is commonly employed.

¹ These terms are convenient ones for the purposes of this discussion. It is hardly necessary to caution the reader that they have no exclusive reference to visual ideas. I shall use them of mental appearances in general.

I think, then, of the mind of my friend. His mental situation, whatever I may think it to be, rises up before me,—his dominant thoughts, his controlling desires, his prevailing emotional tone. I fancy him, perhaps, as he is at the moment. In that case the particular ideas with which I conceive him to be occupied come before me, or the objects which I suppose he sees, together with the background of feeling which I attribute to him. These, so far, are presentations in my mind. If my attitude is what is called belief, then these presentations form, for the time, the whole mental content of the words ‘my friend’s mind as it now is.’ My friend’s mind, so far as it figures in my knowledge, so far as it comes within my sight, so far as it means anything to me, *is* for the moment this group of presentations. It is sufficiently described as a mental picture.

To this I know many will promptly demur. The ideas, they will say, which enter into my belief about another mind purport to be representative. They purport in some sort to image or portray external things. There is the picture, and besides the picture there is the thought that it corresponds to an external object.

I suspect that this view owes its plausibility to a confusion — a confusion between a simple belief and subsequent critical reflection upon the belief. The later reflective moment and the sense in which the representative element appears in it I shall presently consider. In the first self-unconscious moment of thought about another mind I contend that my description is exhaustive. There is a picture *et præterea nihil*. It is a picture with which we are satisfied (belief) or with which we play (imagination), but in any case a picture.

Indeed, the supposition that the mental appearance purports in the first instance to be representative, is essentially unmeaning. There is, we are told, the picture, and there is also the thought that it portrays an outer reality. But what is this superadded thought, this reference to the outer object? Obviously, to refer to the outer object this additional thought must be, or contain, an idea of the outer object. That idea, again, can be nothing but a mental vision, a picture, as I have called

it. It is one more particular existence which can in no wise transcend itself. Why, then, the duplication of mental elements? The first picture is no less simply a picture because it has a duplicate in attendance.

To the minds of some, I fancy, the effective agent in the business is the belief. It is belief that lifts a mental image to the dignity of a cognition, and endows it with the privilege of breaking through the trammels of its own identity. The conception of belief in popular psychology offers one of the most curious studies in philosophical folk-lore. Belief seems to be an intellectual essence, a magic metaphysical drug, quite distinct from the matter of thought, but having the virtue when plentifully applied thereto, of communicating validity and meaning. It is perhaps worth while for the purposes of our inquiry to turn for a moment to the psychological analysis of belief.

Of the numerous theories of belief — theories that assimilate it to the feelings, to the will, to the phenomena of association, *etc.* — I select two that are for our purposes fairly typical. The first is that of J. S. Mill, who held that the characteristic which distinguishes a belief from an imagination is an ultimate and irreducible one, a specific feeling. A similar doctrine is clearly expressed in Professor William James's *Principles of Psychology*:

“In every proposition . . . , so far as it is believed, questioned, or disbelieved, four elements are to be distinguished, the subject, the predicate, and their relation (of whatever sort it be) — these form the object of belief — and finally the psychic attitude in which our mind stands towards the proposition taken as a whole — and this is the belief itself.”

The ‘psychic attitude’ in the case of affirmative belief is described as ‘a sense of reality,’ ‘an emotion of conviction’ — that is to say, applying Professor James's general principles, probably a bodily sensation of some kind. The psychic attitude is the accompaniment and mental record of an affection of the body — or, as one may say, a physical attitude.

The other theory of belief which I shall mention makes it a ‘psychic attitude’ in a more literal sense; — not a feeling over

and above the ideas which form the matter of the belief, but a mode of behaviour of those ideas themselves. Belief, by this theory, is defined as a *spontaneous association of ideas*, an image spontaneously arising and maintained. When a certain subject and predicate, or, to put it more exactly, the components of a mental image, spontaneously maintain their connection apart from any effort of our will, we have the phenomenon of belief; the intensity of the belief being proportional to the tendency of the ideas to maintain, or, when deliberately separated, to resume their connection.

Which of these two representative theories is nearer the truth, it does not concern us to inquire. Both may very well be correct. A spontaneous association may, in all cases, as a matter of fact, be accompanied by the peculiar emotion of which Professor James speaks. At all events it does not appear that contemporary psychology finds any especial mystery in the phenomenon of belief, or observes it to perform any feats of self-transcendence. When we say that a man believes, we are either stating the fact that his mind contains a certain element, or that the contents of his mind behave in a certain way, or are affirming both these propositions.

And now let us turn to our consideration of the second or reflective moment of knowledge. It occurs to me that my thought of my friend's mind was incorrect. I have ascribed to him some strong prejudice from which he is free, or I have withheld from him some excellence that he possesses. What occurrences in the mind do these words figure? It does not seem hard to say. Over against my first mental picture a second has arisen with which I compare the first. This second picture may be a more complete one; a keener attention and interest may have spurred my memory. This second picture I call 'my real friend,' 'my friend's mind as it really is'; I mean those words are the verbal sign to me of the second, and as yet of nothing else. My first image, which has by this time called up to itself associates of the kind distinguished as subjective — acquired, that is to say, a personal setting — I call 'my thought of my friend.' When I ask in such a doubtful moment, 'Did

my thought of my friend correctly represent my friend as he is,' I am comparing the first image with the second and observing whether it agrees. The second is the standard. If the first does not resemble the second, I call it 'an error.' I say, 'My thought of my friend did not represent my real friend. It was inaccurate.' If it does resemble the second image, I call it 'a true idea.' Why do I do this, is it asked? What right have I to require the first image to resemble the second? The question betrays a failure to understand the situation. It abuses the word 'require.' I do not, in any intelligible sense of the term, *require* the one image to represent the other; but when it does I call it a 'truth,' and when it does not I call it an 'error.' These are nothing else than the class-names by which I distinguish two varieties of mental phenomena. There is no profound logical obligation, or mystic metaphysical propriety binding the first idea to bear the likeness of the second. The simple fact is that, when dealing with a certain order of my ideas, I welcome them as useful (taught by forcible experience) when they are copies of something in the outer world, when they have an external equivalent; and reject them as worse than useless when they have no external equivalent. Suppose, in the present instance, that, on testing my first picture of my friend's mind by the second, I find it erroneous. This means that the first so far resembles the second as (so to speak) to locate itself, to prove that its only utility was to resemble this part of 'the outer reality' (namely my friend's mind), but it has failed to resemble it completely. What order of ideas it is—obviously it is not all—to which I look with this interest and ascribe the function of counterfeiting something in the world outside, is a question with which I shall subsequently deal.

But there may be a third, a more deeply critical moment. I may suddenly say to myself that what stood in my mind for the reality was after all but another idea, an altogether distinct thing from the genuine reality. The genuine reality is a thing apart from me and can never enter my consciousness. Now this reflection is nothing but the appearance of a third psychic picture with a concomitant change in the associations of the

second. As this third picture arises, the second takes to itself also a personal setting, and ranges itself, so to speak, with the first. The first and second I now speak of as 'my first and second thoughts,' and the third I call the true outer reality. My mental term for 'outer' is, needless to say, merely an idea, a thing in my consciousness like the rest. In this third mental picture, as in the others, I see the mind of my friend with the contents I am led to put into it, and see it as separate from my own. That is to say, I imagine a mind somewhat similar to his, but with important differences of content and with a warmth and intimacy all its own. This is what I have called the 'personal setting' of the pictures recognized as 'only my own ideas'; these pictures are placed *in* the inclusive picture that I call 'my own mind,' and the two minds, my friend's and my own, appear as outside of each other. Thus in one sense there are never more than two pictures in the mind for the purposes of such reflections; for all pictures classed as past thoughts of mine are grouped in the larger picture which stands for 'my own mind,' and put over against a later picture which figures as 'the reality.' A third, a fourth, a fifth, an indefinite number of pictures may arise, but the whole result of each fresh apparition is that the last previous picture is superseded, degraded from the rank and title of 'outer reality,' and added to the number already huddled together in the compass of what I call 'my mind.'

Of course in this account there is some convenient simplification. I ignore for the moment the extreme mobility of ideas. In point of fact it would often happen that the earlier pictures would drop out as the new ones were ushered in. It would often happen that the two pictures compared would both be so vague and shifting that no decision as to truth or error could be made. It would often happen in rapid mental processes that an erroneous picture would disappear even before the entrance of the true one, and the belief thus be rectified without any judgment of error at all. It would sometimes happen that the later picture, though true so far as it goes, would be much less complete and definite than the erroneous one, as in the

cases where we say we have a 'feeling' or 'presentiment' that we are wrong. It would nearly always happen that neither of the rival pictures would completely embody my information about the object thought of, but that they would only present, on a vague background, the points in which I was momentarily interested. But without such a confrontation of pictures, a real judgment of truth or error could not, I submit, take place.

Hasty critics will, I know, find in the foregoing account a fatal flaw. You have clean forgotten in your psychological analysis, they will urge, that the three or four distinct moments you mention are veritably distinct moments; that they are, as you have yourself said, as entirely separated from each other as another man's mind is from your own. In the second moment the thinker does not keep the first moment's picture, nor in the third moment the second's picture. The first moment is as inaccessible to the second; and the second to the third, as any external existence can be. Yet by your statement I recognize one of the pictures as my own past thought. If we can bridge the gulf in the case of memory, why can we not in the case of other beliefs?

Such an objection will doubtless be put; yet it is really answered by implication in what has been said. The past, in common with all outer existences, is to me at any moment a disposition of pigments on the mental canvas and no more.¹ Observe again what I have called the second moment of

¹ It cannot be necessary that I should enter here upon the much controverted subject of the nature of the moment. I do not, of course, refer in the text to any mathematical point of time. I refer to the experienced moment, to the assemblage of sensations and ideas which by the testimony of consciousness I have in some true sense together. The doubt about just what things a moment contains is always the doubt of later moments. And though later moments may doubt whether the earlier contained this or that element, they do not doubt that there were some things that it contained and some that it did not contain. I am not able to see that any of the perplexities that beset philosophy with regard to our consciousness of time can abolish the broad distinction between presence and absence. "No human reflection," it has been said, "has ever yet fathomed perfectly the consciousness of even a single one of our moments." The statement may be true; but how such a defect of memory or introspective power proves the existence of any metaphysical mare's nest concealed in the shadows I cannot divine.

thought. In that moment I have an idea named 'my own thought of a moment ago' confronted with another named 'the reality my former thought should represent.' These are phenomena of my momentary consciousness. They are similar, perhaps, in content ; they differ only by the associates with which they appear. But if some one speaks to me of 'the reality of which you are thinking,' his words can only refer, in my apprehension, to that one of the two mental appearances by which I test the other ; and if he speaks of 'the idea you had of it a moment ago,' the phrase can only signify the other mental appearance, with its personal setting and its associations of times. In conceiving a point in my past, I fancy the stream of my conscious experience running back through time, and I vividly and particularly image the special turn of the stream that I wish to recall. The past itself, the actual point in my experience, is irrecoverably dead and gone. What 'the past' *means* to me at the moment of remembrance is the content of a certain present thought.

If this be true, the law of conscious life is what I may term — wresting a phrase from its mathematical usage — the substitution of similars. Each several moment of experience is known, or may be known, in all succeeding moments by virtue of the likenesses of itself present to those moments. Every moment is a unit, shut up to itself, cut off from communication with the outlying stretches of existence, but possessed of a sufficient world of its own and consummately oblivious of all outside. From the first gleam of conscious life up to its last flicker and extinction there can apparently in the nature of things be no knowledge or error on other terms than these.

At this point the reader may be moved to protest. He will find a curious want of consistency in the view expressed. He will charge me with shifting the point of view. I seem to begin at the point of view of the momentary consciousness and describe the world there present ; and then I composedly overstep its limits and talk of a general world and of a real succession of conscious states. The two descriptions do not square. Either I should confess myself a solipsist, and a

solipsist reduced to the moment, or admit that in some sort we really do leap the hedges of ourselves.

I do not see that the account is inconsistent ; and I shall neither confess to solipsism nor look more credulously upon the alleged infraction of the laws of being. The second moment (to resume the terms of my analysis) believes firmly in the existence of the first ; only that belief is an affection of itself ; all that 'the first moment' *means* to the second, as I have sufficiently repeated, is a certain spectacle in its consciousness. All, then, that the world of existence meant to me at the moment of performing the analysis called inconsistent was — a presentation in my mind. That presentation contained the individual moment upon which my analytic attention was fixed, but it did not therefore exclude the vague pall-mall of real existences outside. I believed in the past moment analysed and in the correctness of the analysis ; but I also believed in endless other moments and endless other streams of consciousness. *And I believe in them now.* I am not exempt, of all the human race, from the impulsion to hold fast to these things. They are actual ; they are most positively real ; I should be a most consummate fool to doubt them ; but I may nevertheless have my theoretic notion of what constitutes belief.

I have just said, "I believe in these things now." In that belief of a second ago, all that was actually contained was a panorama in my mind. I saw in a vision the mental lives of my fellows and of the teeming animal world, and nature as it lies in our common consciousness. They were not dusky and shrinking imaginations ; they appeared to me in the high noon of reality. I accorded to them the uttermost farthing of faith ; my belief was the most whole-hearted of which I am capable. Now, in my present thought, I recognize that there was at that moment an ulterior world, similar in a fashion to my panorama, but outside of it and numerically distinct from it. In my universe now that vision and belief is but an item in a world of existence ; in my universe then it was the whole. So, again, with the thought of my last sentence ; while it lasted it was all I had of the world of being ; now it has stepped back into the

multitude that peoples my present world. Such is the law. Each moment of time to itself is the whole ; to each subsequent moment it is but a part. And it is known to each subsequent moment by a copy and not by the original.

I am not insensible of the light in which this view will appear. It will be set down as a piece of the most radical and audacious scepticism ; so much may securely be predicted. Indeed it will, I fear, be regarded as a scepticism of a peculiarly absolute and insidious kind ; as not merely inviting us to withhold our belief from certain matters of common credence, but as undermining belief itself. Many sceptical doctrines content themselves with perseveringly informing us that we have no right to believe in anything beyond the passing moment ; but this view, while it cynically encourages the most irresponsible belief, empties all belief of its rationality and meaning.

I fear, too, that the view I have advanced lacks the only virtue that scepticism can possess, the grace of confessing its character. For certainly I shall protest to the last that it is in no sense sceptical. The imputation may be not only denied but refuted. And it may not only be refuted but explained. It is due to a failure to observe the elementary distinction between analyzing a conception into simpler elements and casting doubt upon its validity. Though the distinction is elementary, it cannot be said that the philosophical world consistently respects it. There is a wide-spread tendency to think that a philosophical category hitherto deemed unanalyzable is analyzed *to its cost*. To ascertain its composition is somehow to degrade it from its high estate and make it of little consequence in the world. Now it is of capital importance to the progress of speculation that we should free our minds from the last traces of this notion. For the subject-matter of philosophy is such that its investigators have not so much to ascertain the reality or unreality of supposed existences as to determine the nature and components of existences obviously real. The objects of metaphysical inquiry are almost always, not facts, but *natures*. The characteristic spirit in which philosophy should approach her tasks is not sceptical but analytic.

The contrast between the popular talk about scepticism and the philosophic problem of analysis is nowhere broader, as I said at starting, than in the present case. What I have attempted is such an analysis. The reality of belief and knowledge, the reality of existences not my own, I have not for a moment been so extravagant as to question; I have merely offered a hypothesis as to the nature of belief and knowledge. I am incomparably more sure of the existence of the world at large than I am of the truth of this theory of the manner in which I know it. And, as I have already said, the theory, if accepted, does not alter the size or shape of the universe by one jot or tittle. It does not even say whether, touching the question of matter, I shall be a Realist or an Idealist. I may continue to believe, if so be, in angel and spirit, God and Devil, Heaven and Hell, earth, sky, and "this too, too solid flesh" as undisturbedly as ever. The most zealous of the faithful, if the theory be true, has never believed in any other fashion than that described.

What manner of argument could be used to extract a sceptical meaning from our analysis? Professor Josiah Royce, in the book I have mentioned; triumphantly refutes the theory of 'Total Relativity,' which he ascribes to a class of modern thinkers. I take the existence of these thinkers on Professor Royce's testimony, but their position, I cannot help thinking, is one of farcical absurdity. They believe in the passing moment of consciousness, but as regards all else they are a prey to uncertainty. They can *conceive* an ulterior world (since they question its existence); they take practical account of it day by day in their action; but they affect to be sceptical of its existence. Surely no encouragement can be derived for such a view from our psychological analysis. If the sceptic points out that at this moment, according to that analysis, my thought of things is nothing better than a panorama in my own particular mind, and urges that by no effort can I come to closer quarters with outlying existence, the answer is plain. His very terms betray him. No outlying existence is conceivable which I cannot supposably come to know. The outlying exist-

ence which he describes as forever beyond me, holds its place in my thought on precisely the same tenure with the rest of my beliefs. My present thought to me is the real world ; and when in a subsequent moment I wake up to the fact that there was a real world similar but external to it, the observation should not disconcert me, since I hold a theory whose sum and substance is that all knowledge is vicarious.

We have now to consider the effect of the foregoing analysis upon the formal definition of truth. The change which it necessitates in the customary formula is not, on first appearance, a large one. The truth of a thought is commonly defined as its accurate correspondence with its object. We must now say, 'its accurate correspondence with *an* object' — that is, with any object whatever. The prevailing notion is that a thought always contains, besides a picture of some kind, an intellectual comment, a sort of superscription, to the effect that the picture is 'meant' to represent this or that specific outward object. But, apart from this fiction, it is clear enough that a thought can in no sense designate an object except by resembling it ; that it cannot in the literal sense of the words have any intended object. On the other hand, to any one who will consider the facts of experience and the habits of our reflection, it is plain that the conditions are sufficiently satisfied, if any object can be found which the thought, when fully developed, resembles. Suppose I have the thought of a man upon a mountain, which, being the kind of thought known as a belief, is translated into a proposition : 'a man is on a mountain.' If, then, any man can be found upon any mountain the truth of the thought is vindicated. Suppose the thought is, '*A. B.* is on Mt. Blanc.' If, then, a mountain can be found possessed of the name and qualities of the mountain presented in my thought, and a man thereon called *A. B.*, resembling the *A. B.* of my thought, in that case, again, my thought is true.

The second instance illustrates, however, what I meant in the definition by full development. It is not inconceivable (and the improbability is irrelevant) that there should be two persons on Mt. Blanc of the name *A. B.*, and that they should both

resemble the conception, perhaps a vague one, which I had in mind. If this became known to me, I should immediately amplify my conception, adding the qualifications which previous knowledge of my friend *A. B.* supplied, until the other *A. B.* ceased to answer to them, and the identity of my object was no longer questionable. An interesting query here arises. Supposing that in the first instance only the false *A. B.* had been upon Mt. Blanc, would my original thought have been true? Apparently it fulfils the definition; an object is to be found which resembles it. The answer, however, according to the convenience of speech must be 'no'; and that because the thought at first was undeveloped. In the relaxation of everyday thinking, in which such duplications seldom present themselves, it had left part of its burden of qualifications behind, and was at ease in a light equipment of ordinary requisites. In deciding the question of truth or error we must always have regard to the further specifications which the mind stands ready to add.

It has to be noted that in some cases an incomplete thought announces, as it were, its incompleteness, in others not. For example, my belief may be '*The man is on the mountain.*' In this case it is likely that my idea both of the man and of the mountain would, as regards its concrete features, be highly indefinite, so that many men and mountains could be found which, so far as it went, agreed with it. The word '*the*,' however, betokens that in my thought a certain relation of the man and the mountain, namely their relation to me and my attention, is in some sort indicated. What the precise psychological elements are whose presence constitutes this delimitation and prevents this man and this mountain, despite their vague outlines, from being confused with others, we need not stay to describe. The fact is sufficiently clear. We have here the consciousness of one circumstance peculiar enough to distinguish the object of our thought from all others; since the word '*the*' imports not only that I have been attending to this man, but that I have been attending to him only. The very mark of the thought's incompleteness in detail makes it, for

purposes of verification, complete. But the other case is widely different. When I think, '*A. B.* is on Mt. Blanc,' my original thought bears no mark of its unfinished state. Nevertheless, when the spurious *A. B.* is shown, accurately corresponding to my original thought, I say promptly: 'That is not the man I meant.' The word 'meaning' here refers to those further descriptive resources, commonly left out of consciousness for economical reasons, but ever ready to be produced at a moment's notice; and this is the only intelligible force of the term as so used.

This account of the matter leaves certain difficulties; but they are such as can safely, I think, be called difficulties of detail. For instance, when I speak of the 'full development' of a thought, the phrase is obviously not final. For during a process of development the opinion of the thinker might change, the direction of the development abruptly alter; and in that case to accept the final form of the thought as only the interpretation of the first form would be absurd. The conditions under which developments are to be accounted legitimate must therefore in the end be more narrowly defined. And of many thoughts which never attain development, we must be content to say (since only a minute cerebral knowledge which is out of the question could tell us how they would have developed) that we do not know whether they were entirely true or not.

To such readers as count themselves nominalists, it may be well to remark in passing, this subject of the development of ideas is of especial consequence. For, according to their belief, it is not the content but the connections, the associations of a thought, which give it in a large majority of cases its mental significance. If nominalism be true, it is not so much the ingredients of an idea as the future course of thought and action to which its presence commits the mind, which constitutes its weight and moment.

So much for the principles by which we are to seek the object and judge the veracity of a thought. But what thoughts are to be so treated? What thoughts are to be charged with a cognitive duty and held responsible for their resemblances?

Manifestly not all. But in some cases the discrimination is easy to make, in some cases surpassingly hard. It is clear enough that the cognitive function will be ascribed to beliefs and not to imaginations — that is, to those mental states only which possess that psychological *differentia* which we have to some extent discussed above. But in cases not exclusively of thought, in cases where there is an admixture of emotion or sensation, the problem is more perplexing. In the matter of our moral judgments, we do not apparently seek in outward and objective actions a counterpart for the approval or disapproval with which the thought of them is suffused; yet to deny the external reality of right and wrong is to utter a revolutionary proposition. As regards another class of judgments, we do not apparently look in the object for the aesthetic relish or disrelish which is sometimes so poignant an accompaniment of our conception of it; yet not everybody is prepared to say that beauty and ugliness are in no sense independent outer facts. To the unending controversies over our sensory perception of the outer world which have so often returned to vex the philosophic mind — whether it is cognitive, how far it is cognitive, in what sense it is cognitive — it is only necessary to refer. To set down the analyses of these cases which I should offer, is forbidden by the compass of this article. I can only ask the reader to notice that they present no new difficulties — I should myself say that they lose some of the old — when they are approached with the present terms and presuppositions. And in particular I would point out once again that this argument, if well-founded, does not close the question of the independent existence of matter, or prejudice it on either side. If the mind contains a category or ultimate element of thought which enables it to think of existence not mental, then many of the realist's assertions may be correct; if not, his position as commonly stated is certainly wrong.

DICKINSON SERGEANT MILLER.

BIBLIOGRAPHY OF WRITINGS BY AND ON KANT
WHICH HAVE APPEARED IN GERMANY UP TO
THE END OF 1887. (II.)

PART II: WRITINGS ON KANT, No. 160 *et seq.*

160) *Urtheile, Freye, und Nachrichten zum Aufnehmen der Wissenschaften und Historie überhaupt.* Hamburg. 1755. Grund. 12th year, July 15., pp. 429-432: Rev.* of K.'s "Naturgeschichte" (no. 20).

161) *Weymann, Dan.: Bedenklichkeiten über den einzig möglichen Beweisgrund des Herrn M. Kant's zu einer Demonstration des Daseins Gottes.* Zweiter Theil der philosophischen Labyrinth. 8vo. Königsberg. 1763. Kanter. pp. VI, 96. (Directed against the first section of the "Beweisgrund." Several obvious and sound objections are urged against the third and fourth chapters of the same; otherwise this is a shallow, flimsy, and impudent polemic against statements which W. fails to understand.)

162) *Plonquet, Gf.: Observationes ad commentationem D. Cant de uno possibili fundamento demonstrationis existentiae Dei.* Quarto. Tübingen. 1763. In his Biography of Kant (no. 14a), p. 62, Borowski makes the statement that (Jh. Gli.) Töllner ("Theologische Aufsätze, I. Sammlung," pp. 33 *seq.*) and Clemm ("Einleitung in die Theologie," pp. 442 *seq.*) have, in their proofs for the existence of God, taken K.'s doubts into consideration. According to Kayser, however, there is no such work as the first, but only "Theologische Untersuchungen" and "Kurze vermischte Aufsätze." H. Wlh. Clemm's complete "Einleitung in die Religion und gesammte Theologie" is a work in seven volumes.

163) *Nachrichten, Lindausche.* Part VII, pp. 535 *seq.* (According to Borowski's Biography [no. 14a], p. 64, a criticism of K.'s "Beobachtungen" [no. 38] seems to occur in this place. I have not been able to discover further particulars.)

164) *Hamann, J. Geo.: Rev.†** of K.'s "Beobachtungen" (no. 38) in K. G. Z. of April 30th, 1764. Reprinted in Hamann's "Schriften." Ed. by Fr. Roth. 1822. Vol. III, pp. 369-79. — Ed. by Petri. 1872. Part II, pp. 181-186.

165) *Briefe, die neueste Litteratur betreffend.* 1764. Part XVIII, pp. 69-102: Rev.* of K.'s "Beweisgrund" (no. 33) by Tz (= Mendelssohn).

166) *Ib.,* 1765. Part XXII, pp. 147-158: Rev.* of K.'s "Spitzfindigkeit" (no. 32) and

167) pp. 159-176: Rev.* of K.'s "Versuch" (no. 34), both also by Tz (= Mendelssohn).

168) *A. D. B.* 1765. I, 1, pp. 149-154: Announcement of K.'s prize-essay on "Deutlichkeit" (no. 35).

169) *A. D. B.* 4, II. 1767. p. 281: Brief announcement of K.'s "Träume" (no. 40).

170) *A. D. B.* 5, II. 1767. p. 273: Brief announcement of K.'s "Beobachtungen" (no. 38).

171) *Herder, J. Gfr.*: Rev.* of K.'s "Träume" (no. 40), in: *K. G. Z.*, 1766, no. 18, March 3rd, reprinted in: Suphan, *Herder's Complete Works*, vol. I, pp. 125-130. Several shorter essays by H., all of which reflect the views held by K. at that time, belong to this period. The same standpoint is especially prominent in:

172) *Herder: Ueber die neuere deutsche Litteratur*. Fragments supplementary to the "Briefe, die neueste Litteratur betreffend." Third collection. Small 8vo. Riga. 1767. Hartknoch. pp. 102-122. — First collection, second completely revised edition. 1768. Hartknoch. pp. 241-260.

The following writings deal with H.'s dependence on K. and with the criticisms which he passed on K.'s philosophy at different stages of his life:

173) *Suphan, B.*: *Herder als Schüler Kant's* in "Zeitschrift für deutsche Philologie." 1873. Vol. IV, pp. 225-237; and based on more abundant materials:

174) *Haym, R.*: *Herder nach seinem Leben und seinen Werken*. Vol. I. First half. Large 8vo. Berlin. 1877. Gaertner. pp. 30-51.

175) *Lenz, Reinh.*: *Gedicht auf Kant*. (Very turgid), in commemoration of the 21st of Aug. 1770, the day on which K. held the disputation for the professorship, in: *A. M.*, 1867, IV, pp. 655 seq., also in: "Lenz und Wagner," ed. by N. Sauer. Berlin and Stuttgart. Spemann. "Deutsche National-Litteratur," ed. by Jos. Kürschner. Vol. LXXX. pp. 215-216.

176) *Schultz, Joh.*: Rev.* of K.'s *Dissertatio pro loco* (no. 42), in *K. G. Z.* 1771. Nos. 94 and 95, Nov. 22 and 25. pp. 369-371, 373-375.

177) *Herz, Marc.*: *Betrachtungen aus der spekulativen Weltweisheit*. Small 8vo. Königsberg. 1771. Kanter. pp. 158. (Commentary to K.'s *Dissertatio pro loco* [no. 42], which amplifies many points merely suggested in the same, conforming throughout to K.'s meaning.)

177a) *Bacmeister, H. L. Ch.*: *Russische Bibliothek*. 1773. Vol. I, nos. 4-6, pp. 530: Brief announcement of K.'s "Beobachtungen" (no. 38).

178) (*v. Hippel, Th. G.*) *Lebensläufe nach aufsteigender Linie*. With supplements A, B, C. 8vo. Berlin. Voss. Part I, 1778, pp. 526; Part II, 1779, pp. 660; Part III, vol. 1, 1781, pp. 452; vol. 2, 1781, pp. 652. In *Th. G. v. Hippel's Complete Works*. 8vo. Berlin. Reimer. Vol. I, 1827, pp. 368; Vol. II-IV, 1828, pp. 456, 310, 450. (As H. himself informed Borowski, it was one of the aims of this work to popularize K.'s views, with which H. had become acquainted as K.'s pupil and table companion and through lecture-note-books. It is a fact that many of the ideas of theoretical and practical philosophy, which K. afterward made public in his critical writings, are herein contained, especially in the second volume [*e. g.*, 1828,

pp. 148-166; reprinted in an abridged form in no. 15, ii, pp. 295-302]. K. was, therefore, regarded as the author or as the joint author of this book, as well as of the treatise "Ueber die Ehe" [1744 and oftener], which also appeared anonymously. This gave rise to a literary controversy, in the course of which K. made his public statement [no. 91] in A. L. Z., 1797, I. B. For further information on the controversy, see Hippel's Biography [cf. no. 91], pp. 448-463.)

178a) *Bacmeister, H. L. Chr.: Russische Bibliothek.* 1781. Vol. VII, nos. 3, 4, pp. 411. Brief announcement of R. Va.

179) *G. g. A.* 1782. Supplement. Vol. I, pp. 40-48: Rev.† of R. Va. Garve wrote a review for G. g. A., which Feder abridged and altered considerably, thereby exaggerating its blunders and falsely making an idealism identical with Berkeley's the chief characteristic of K.'s system. Regarding the influence of this review on Prl., cf. B. Erdmann, edition of Prl., 1878.

180) *A. D. B.* Appendix to the 37-52 vol. 2d Div., 1783, pp. 838-862. A reprint of Garve's unabridged review (characterized by Garve himself in the dedicatory preface to Kant which preceded the following treatise, as "a very imperfect, one-sided, and erroneous criticism").

181) *Garve, Chr.: Uebersicht der vornehmsten Principien der Sittenlehre von dem Zeitalter des Aristoteles an bis auf unsere Zeiten.* A treatise belonging to the first part of the translation of Aristotle's Ethics, from which it is reprinted. 8vo. Breslau. 1798. W. G. Korn. In the first volume of the Ethics, pp. 1-394, pp. 183-394 deal with Kant. (There appears in it a detailed exposition and critique of K.'s Ethics, with due regard to the rest of the system. The work is of importance, because in Garve, the most important representative of the so-called Moralists, the *Popularphilosophie* takes its stand against K. G. cannot fully grasp the Kantian problems, especially those of theoretical philosophy, and his judgment, therefore, lacks breadth of view. Nevertheless he has made some very pertinent objections. The same opinion is expressed by:)

182) *Stern, Alb.: Ueber die Beziehungen Chr. Garve's zu Kant.* 1884. Cf. no. 151. (An exhaustive treatment of the subject. The newly published letters are of especial importance. Bearing on G.'s attitude towards K.'s philosophy, the writer uses, in addition to nos. 180 and 181, detached passages from the rest of G.'s writings as well as some unpublished material belonging to the Breslau *Stadtbibliothek*. G.'s first review is too favorably criticised, as has been shown by:)

183) *Arnoldt, Em.: Zur Beurtheilung von Kant's Kritik der reinen Vernunft und Kant's Prolegomena.* First paper: Comparison between Garve's and Feder's Reviews. Second paper: G.'s First Letter to Kant and K.'s Answer, in: A. M., 1888. XXV, pp. 62, 193-226. (A running contrast between the two reviews. Both Garve and Feder misunderstood the *Kritik*; F., however, is to blame for the unbecoming, offensive tone of the Göttingen review. Of course, many of the criticisms on Garve are valid only from Arnoldt's standpoint.) Concerning Garve's relation to Kant, cf.

also, *Schelle, K. G.: Briefe über Garve's Schriften und Philosophie.* Leipzig. 1800; and *Vogel: Erinnerungen an Chr. Garve*, in Hasse's "Zeitgenossen." 3d series, vol. III. In the first part of no. 78, K. combats objections urged against him by G. in 1791 in his "Versuche über verschiedene Gegenstände aus der Moral und Literatur."

184) *Gth.*, August, 1782: Rev.* of R. Va. (by Ewald in Gotha, on authority of C. L. Reinhold: "Beiträge zur leichtern Uebersicht des Zustandes der Philosophie beym Anfange des 19. Jahrhunderts," no. 2, 1801, p. 2).

1784.

185) *A. D. B.*, 59, II, pp. 322-356: Rev. of Prl. by Sg. (= H. A. Pistorius). Reprinted in *Mtr.*, I, pp. 131-155.

186) *Kritiker, Der.* Part III, pp. 3 *seq.*: Rev. of the Transcendental Aesthetic.

187) *Lossius. J. Ch.: Uebersicht der neuesten Litteratur der Philosophie.* Large 8vo. Gera. Beckmann. Vol. 1, pp. 1 *seq.*: Rev. of Prl.

188-194, *Platner.*

188) *Platner, E.: Philosophische Aphorismen nebst einigen Anleitungen zur philosophischen Geschichte.* (1st edition. Leipzig. 1776 and 1782.) Part I. New, completely revised edition. 8vo. Leipzig. 1784. Schwickert. pp. 500. Entirely new revision. 8vo. *Ib.*, 1st part. 1793. XVI, pp. 656. The other part. 1800. XVI, pp. 848.

189) *Platner, E.: Lehrbuch der Logik und Metaphysik.* 8vo. Leipzig. 1795. Schwickert. pp. 200. (An epitome of the first volume of the Aphorisms, with occasional revisions. In the first edition of the Aphorisms Platner belonged to the Leibnizian school. The second edition of the first volume was almost entirely completed when R. Va. appeared; it, therefore, notices the latter only in occasional passages. No second edition of the second volume appeared, because Pl.'s system, logic [epistemology] as well as metaphysics and ethics, had in the meanwhile undergone a complete change, which was owing to K.'s influence. In the two volumes of the third edition the dogmatic Leibnizian turned critical sceptic. Here he proceeds from the principle that "certainty of human knowledge can be demonstrated only in relation to the faculty of knowledge," that we cannot, therefore, convince ourselves of the objective truth of our ideas, *i. e.*, of a relation between them and something outside of them; that it is impossible exactly to gauge our faculty of knowledge and to prescribe definite limits to it. The criticisms on K., which run through the entire third edition, are not, it is alleged, aimed at his philosophy, but only at the structure of his system, *i. e.*, at the dialectic proof of his fundamental thought. Of course, from his own point of view, K. could not but regard many of Pl.'s differences as fundamental. Pl.'s polemic, though acute throughout, is most forcible where he attacks the systematic structure of K.'s system. It is worthy of note that he was the first to raise

Trendelenburg's objection [cf. Tr., 1867] that space and time might be forms of knowledge as well as qualities of things in themselves. To his Aphorisms, which are still worth reading, attention has been repeatedly called of late.)

190) *Heinze, M.: Ernst Platner als Gegner Kant's.* Leipzig University Programme. Edelmann. 1880. pp. 19. A prize-problem of the Berlin University. "Platner's Stellung zu Kant" occasioned the publication of four dissertations which supersede no. 190. The latter did not, as it purposed, carry out the parallel between the two opponents, but merely called attention to the general importance of Platner, and to some differences in their epistemology.

191) *Röhr, P.: Platner und Kant. Ein Beitrag zur Geschichte der Philosophie.* Leipzig Inaugural Dissertation. 8vo. Gotha. 1890. pp. 70.

192) *Bergemann, Paul: Ernst Platner als Moralphilosoph und sein Verhältniss zur Kantschen Ethik.* I. D. 8vo. Halle a. S. 1891. Kaemmerer & Co. pp. 57.

193) *Seligkowitz, B.: Ernst Platner's wissenschaftliche Stellung zu Kant in Erkenntnisstheorie und Moralphilosophie* in: V. w. Ph. 1892. XVI, pp. 76-103; 172-191.

194) *Wreschner, A.: Ernst Platner's und Kant's Erkenntnisstheorie mit besonderer Berücksichtigung von Tetens und Aenesidem.* Berlin. I. D. 8vo. Halle a. S. 1891. Heynemann. pp. 25. Also in Z. f. Ph. N. F. Vol. C. 1892. pp. 1-25.—1893. Vol. CI. pp. 203-204. (Of these dissertations nos. 193 and 194, which have not yet appeared in complete form, seem to be the most thorough and exhaustive.)

195) *Schulze, Joh.: Erläuterungen über des Herrn Professor Kant's Kritik der reinen Vernunft.* Large 8vo. Königsberg. 1784. Döngel. pp. 200.—Second edition. Königsberg. 1791. Hartung. pp. 254. Besides these, a counterfeited edition. New and revised edition. 1791. Frankfurt and Leipzig. Translated into French by Tissot. Paris. 1865. The name usually written "Schultz," also by the author himself in letters and in the University album. (A very inferior kind of work; an epitome of the *Kritik*, for the most part following the very wording of the same. Kant favored and promoted the undertaking, which is not without its value; for although S. does not solve the difficulties necessarily encountered by the student of the *Kritik*, he nevertheless removes perplexities arising from its form, its many repetitions and contradictions. And in the appendix, "Versuch einiger Winke zur näheren Prüfung der Kritik," he regards the demonstration of the universality and necessity of our knowledge in opposition to Hume's scepticism, and consequently the saving of Rationalism, as the starting-point and centre of the *Kritik*. Although the work was heartily welcomed and gained great renown, a view contrary to Sch.'s standpoint obtained: Idealism and the determination of the limits of the pure use of our reason were almost universally regarded, by friend and foe alike, as the fundamental characteristics of the *Kritik*. The prevalence of this view

proved to be detrimental to a proper understanding of the *Kritik* and greatly retarded further philosophical progress.)

196-198, *Selle*.

196) *Selle, C. G.: Versuch eines Beweises, dass es keine reinen, von der Erfahrung unabhängigen Vernunftbegriffe gebe*, in B. M., II, Dec., pp. 565-575. Reprinted in Mtr., I., pp. 98-106. (Kant's synthetical judgments *a priori* are analytical, and experience assures us of their truth as well as of the truth of all the laws of our intellectual faculty. This standpoint is further developed in :)

197) *Selle: Grundsätze der reinen Philosophie*. 8vo. Berlin. 1788. Himbürg. pp. 180.

198) *Selle: De la réalité et de l'idealité des objets de nos connaissances*. 4to. Berlin. 1791. pp. 36. The greater portion translated in : Ph. A., 1793, I, 1, pp. 81-125. (In both treatises a combination is formed of *empirical* and *dogmatic* elements. All our conceptions, also the notion of space, are derived from experience ; there is no such subjective, *a priori* necessity as K. claims. -The existence of non-sensuous objects, like things-in-themselves and God, is theoretically demonstrable ; their objective reality is the source of the necessity and universality which is recognized in analytical judgments, *e. g.*, in the principle of sufficient reason, in virtue of the law of contradiction. This combination is made possible by the notion of the *mediate* verification by experience. According to this, we reach a knowledge of non-sensible objects by means of our *reason* but through the mediation of experience, because they are the grounds of what we experience ; and by means of our *understanding*, because the qualities which we ascribe to them have been made clear to us in experiential concepts.)

1785.

199) *A. L. Z.* II, pp. 21a-23b. Brief notice* of Gr. (Schütz). Exhaustive rev. 1786.

200) *A. L. Z.* 1785. III, pp. 41a-44a ; 53a-56b ; 117a-118b ; 121a-128b : Rev.* of R. Va. and Prl. (by Schütz).

201) *Antiphädon, oder Prüfung einiger Hauptbeweise für die Einfachheit und Unsterblichkeit der Seele*. In the form of letters (by K. Spazier). Small 8vo. Leipzig. Crusius. pp. 286. (There are more reasons against than for the simplicity of the soul. Moreover, this simplicity would not be sufficient to prove immortality, the acceptance or denial of which bears no essential relation to virtue and happiness. The publication of this work led to its author's removal from his ministerial charge. He died of grief.)

202) *Bering, Joh.: Dissertatio de regressu successivo* ; resp. Chr. Fr. Gl. Ernst. 4to. Marburg. pp. 73. (B. agrees with K. in regarding the *regressum ad infinitum* as possible, but only *in indefinitum* in the case of phenomena, not *in infinitum* in the case of things in themselves. He, there-

fore, considers this notion as consistent with the existence of a necessary being.)

203) *Born, F. Glo.: De notione existentiae.* Academic Programme. 4to. Leipzig. pp. 20. (No existence is conceivable without the notion of a substance with attributes in space and time. Reproduction of K.'s views on these notions.)

204–204a, *Breyer.*

204) *Breyer, J. F.: Academic Programme: Sieg der praktischen Vernunft über die spekulative (in der Lehre vom Dasein Gottes).* 4to. Erlangen. Palen. Parts 1–5. 1785–1789. Each, pp. 20. (K.'s views concerning the moral proof of God's existence as the only possible proof are briefly and intelligibly set forth, illustrated by the statements of other philosophers, and sharply distinguished from Basedow's "religious duty," the "moral certainty" of Feder and Platner as well as from Jacobi's "faith." But in order that these views may ultimately triumph, they need to be further developed. Br. seeks to unite the two extremes according to which there is or there is not *a priori* knowledge, according to which the principle of causality is an *a priori* or an empirico-analogical notion. The difference between him and K. becomes still more pronounced in :)

204a) *Breyer: Ein Wort zur Ehrenrettung des Grundsatzes der eignen Vollkommenheit, als ersten moralischen Gesetzes.* Academic Programme. 4to. Erlangen. 1791. Hilpert. pp. 20. (He refutes the objection that self-perfection may be attained also at the expense of others, *e. g.*, through pernicious projects. Polemic against K.'s formal moral principle.)

205) *Cäsar, K. Ad.: Rev.* of Gr. in Denkwürdigkeiten aus der philosophischen Welt.* 8vo. Leipzig. Müller. pp. 433–467.

206) *G. g. A., III,* pp. 1739–1744 : Rev.* of Gr.

207) *Grfw.,* p. 314 *seq.* : Rev.* of Gr.

208) *Gth., II,* p. 533 *seq.*; p. 537 *seq.*; p. 545 *seq.* : Rev.* of Gr.

209–214, *Heinicke.*

209) *Heinicke, Sam.: Metaphysik für Schulmeister und Plusmacher.* 8vo. Halle. 1785. Hendel. pp. 342. (Against the alphabet method of teaching reading; entire pages of RV. are inserted. By abolishing this method, milliards could be saved; hence the term *Plusmacher* in the title.)

210) *Heinicke: Ueber graue Vorurtheile und ihre Schädlichkeit. Erwiesen durch Sätze der Vernunftkritik.* 8vo. Copenhagen and Leipzig. 1786 (on the title-page 1787). Proft. pp. xvi, 456. (Six essays.) The third (pp. 103–186), "Ueber Fatalismus"; the fifth (pp. 263–328), "Ueber Spinozismus," both "according to the principles of the *Kritik* of Reason"; the sixth (pp. 329–456), "Ueber die Architektonik der Larvenkrittler." (By the latter term he means the anonymous reviewers, especially those of A. D. B. and A. L. Z., together with their editors; he demands of them that they cease writing over a pseudonym.)

211) *Heinicke: Nach kantischer Manier aufgelösete Axiomen von Moses Mendelssohn, nebst einem Gutachten von Hrn. Friedrich Nicolai. Suum cuique.* 8vo. Cöthen. 1787. Glaudenberg. pp. 84.

212) *Heinicke: Scheingötterey der Naturalisten, Deisten und Atheisten etc.* Small 8vo. Cöthen. 1788. pp. 280.

213) *Heinicke: Geschichte der geheimen Ursachen, welche verschiedene königl. preuss. Consistorial-Räthe bewogen haben, sich wider das Religions-edikt aufzulehnen. Ein satyrisches Originalgemälde.* 2 parts. 8vo. Frankfurt, Leipzig, and Bethlehem (Cöthen). 1789.

214) *Heinicke: Clavicula Salomonis, oder Schlüssel zur höchsten Weisheit.* 1789. First and second parts. 8vo. Presburg. 1789. Mahler. pp. 158. (These writings present a strange mixture of Kantian philosophy and belief in revealed religion; they manifest an active interest in the enlightenment of the people, and yet betray an intolerance towards antagonistic views that makes objectivity impossible and often degenerates into unmannerly abuse and reflections on character. H.'s philosophical productions are, therefore, as worthless as his standing in pedagogy may be high. They are of interest only in so far as they offer us an insight into his impetuous character, show us how energetically he lays hold of whatever interests him, how passionately he cleaves to what he has once taken up and recognized as useful, and how unrelentingly he defends his own views with an utter disregard of learned authorities. Theoretical proofs of God's existence are according to him impossible, the only possible one is that furnished by Biblical revelation. Whoever fails to acknowledge it, is a naturalist, atheist, thief, rogue; and whoever refuses to accept K.'s moral principle identifies himself with Epicurean pseudo-morality and its imperatives, *ede, bibe, lude.*)

215-216, *Hufeland.*

215) *Hufeland, Gli.: Versuch über den Grundsatz des Naturrechts, nebst einem Anhang.* 8vo. Leipzig. Göschen. (K.'s formal principle is not an adequate practical law, because no obligation can be deduced from it. In order that this should be possible, we need a content, an object, as the highest end of a rational being. The perfection of such a being H. declares to be this end. The highest practical principle commands the promotion of this end, whence follows the right, nay a certain natural obligation, on the part of the individual to compel others. On this principle is based the entire philosophy of natural rights. — Polemic against K.'s identification of morality with worthiness to be happy, and against the moral argument for God's existence which is based on it. [Rev. of K. in A. L. Z., 1786, II, pp. 113-116; cf. no. 61.] From the principle established in no. 215, H. deduced and systematically presented the particular notions, not only of the doctrine of natural rights, but also of State, International, and Civil rights in:)

216) *Hufeland: Lehrsätze des Naturrechts und der damit verbundenen Wissenschaften. Zu Vorlesungen.* 8vo. Jena. 1790. Cunos Erben. 300 pp., besides preface, etc. 2d revised edition, 1795, *ib.* 400 pp.

217) *Mendelssohn, Mos.: Morgenstunden oder Vorlesungen über das Dasein Gottes.* Part I. 8vo. Berlin. 1785. Voss & Sohn. pp. xii, 40, 330. 2d edition, 1786 (also in his collected writings and oftener). (It is true, M. knows R. Va. only from the reports of his friends; we can, however, recognize its influence from several passages, e.g., in the Introduction where he discusses Idealism.) Against it, the review of A. L. Z., 1786, I, pp. 1-6; 49-56 (cf. no. 60), and Jacob in no. 358.

217a) *Schreiben des Pfarrers zu . . . an den H. des T. M. Ueber eine Recension von Herder's Ideen zur Philosophie der Geschichte der Menschheit* (A. L. Z., 1785, I, no. 4), in: T. M., 1785, I, no. 1, pp. 148-174 (by K. L. Reinhold; K. is accused of criticising the work in a spirit of coldness and of picking flaws). K.'s reply in A. L. Z. (cf. nos. 52 and 53).

218-221, Schütz.

218) *Schütz, Ch. Gfr.: Quaestio de syntheticis mathematicorum pronuntiationibus.* Programma. Fol. Jena. One sheet.

219) *Schütz.: Kantianae de spatio doctrinae brevis explanatio.* Programma. Fol. Jena. 1788. One sheet.

220) *Schütz.: Kantianae de temporis notione sententiae brevis expositio.* Programma. Fol. Jena. 1788. One sheet.

221) *Schütz.: De vero sentiendi intelligendique facultatis discrimine, Leibnitianae philosophiae cum Kantiana comparatio.* Programma. Fol. Jena. 1789. One sheet. Reprinted in: Schützi Opuscula philologica et philosophica. Large 8vo. Halle. 1830. Buchhandlung des Waisenhauses. No. 215; pp. 280-288; no. 212; pp. 289-297; no. 213; pp. 298-305; no. 214; pp. 306-313. No. 213 also in: Mtr., II, pp. 1-10; no. 214; Mtr., II, pp. 11-18; no. 215; Mtr., I, pp. 106-114. (These four programmes give a lucid exposition of K.'s thought; not going beyond its content but choosing an independent method of presenting the same, and partially adducing [nos. 214 and 215] historical material for purposes of comparison. Schütz's greatest service to Kantian philosophy consisted in defending it, wherever he could, in the A. L. Z., edited by himself and Hufeland [founded in 1785]. In this way he contributed largely, during the earlier years of the new philosophy, to the diffusion of Kantian thought and to the formation of a K. school.)

222) *T. 1785.* II, p. 105 seq.: Rev.* † of Gr.

222a) *Tiedemann, D.: Ueber die Möglichkeit einer anfangslosen Succession,* in: "Hessische Beiträge zur Gelehrsamkeit und Kunst." Vol. I, nos. 1-3. Frankfurt a. M. pp. 17-30. (In mere abstract thinking of succession the absence of a beginning is possible; in real concrete things, however, a beginning is necessary.)

223) *Tiedemann: Ueber die Natur der Metaphysik; zur Prüfung von Herrn Prof. Kant's Grundsätzen.* Ib. pp. 113-130. (Against K.'s arguments for the ideality of space and time; the mathematical propositions are analytical.) pp. 233-48. (A wretched piece of work directed against the Analytic, which T. does not at all grasp: attempt to prove the analytical

principle of causality from notions.) pp. 464-474. (Against the first two Antinomies; also utterly worthless.) Reprinted in *Metr.*, II, pp. 53-76; 77-92; 92-103.

224) *Ulrich, J. A. H.: Institutiones logicae et metaphysicae scholae suae scripsit.* Large 8vo. Jena. Cröcker. pp. viii, 426, and an index of 34 pp. *Initia philosophiae de natura divina sive theologiae rationalis.* pp. 153 and index pp. 7. *Editio 2 a aucta et emendata*, with the addition: *Perpetua Kantianae disciplinae ratione habita.* Large 8vo. Jena. 1792. Cröcker. (It was expected that the complete text-book of metaphysics which K. had promised would be found in this work; the author corrects this impression, and simply aims to facilitate the study of the *Kritik*. He regards things in themselves as knowable (*e. g.*, time, the causal law, categories, *constitutive* principles of reason, are applicable to them), and conceives them in the sense of Leibniz's monadology. U. takes exceptions also to less fundamental assertions of K., *e. g.*, to the completeness of the table of categories and its relation to the table of judgments, to the critique of the arguments for God's existence, and to the moral proof. Strange to say, he nowhere mentions the Transcendental Deduction, but chiefly antagonizes the proof of the second Analogy. Very ingenious is the rev.* in :

225) *A. L. Z.* 1785. IV, pp. 297-9. (Polemic against K., especially against his Transcendental Deduction, which is declared to be inconsistent with his distinction between judgments of perception and judgments of experience in *Pr.* K.'s reply in the preface to *M. A.* 1786.)

1786.

226) *A. D. B.* 66. II, pp. 447-463 : Rev.* † of Gr. by Sq. (= Pistorius). Reprinted in *Mtr.*, III, pp. 222-238.

227-231, *Abel.*

227) *Abel, J. Fr.: Grundsätze der Metaphysik, nebst einem Anhang über die Kritik der reinen Vernunft.* 8vo. Tübingen. 1786. (On the authority of Kayser. It is not contained in Heinsius nor in the "Allgemeines Repertorium der Literatur" for the years 1785-1790; nor have I found mention of it anywhere else. Is it possible that the book was merely announced in the "Messkatalog," and that it appeared, not with the above title, but as no. 224 or 225?)

228) *Abel, J. Fr.: Einleitung in die Seelenlehre.* Large 8vo. Stuttgart. 1786. Metzler. pp. xxxii, 459.

229) *Abel, J. Fr.: Ueber die Quellen der menschlichen Vorstellungen.* Large 8vo. Stuttgart. 1786. Metzler. pp. 294.

230) *Abel, J. Fr.: Plan zu einer systematischen Metaphysik.* 8vo. Stuttgart. 1787. Erhard. pp. 232, and 12 pp. of additions. (A. was an eclectic of the worst type; although in the main an empiricist he, nevertheless, makes overtures to Rationalism, and places the most diverse views side by

side without the least attempt to connect them. K.'s ideas, too, are amply represented in this work, still more fully K.'s terminology. But the fundamental principles and results with which those conceptions are, in part, intimately and necessarily connected, he does not accept; nor does he divine the scope of the problems advanced by K. His feeble mania for reconciling differences leads him to attempt to unite inconsistent standpoints and to find a mean where there can be but one alternative. The untenableness of his position clearly reveals itself in his anonymous treatise:)

231) *Abel, J. Fr.: Versuch über die Natur der spekulativen Vernunft zur Prüfung des Kantischen Systems.* 8vo. Frankfurt and Leipzig. 1787. 174 pp. (Worthless attempt to discover a mean between the empirical and transcendental deduction of space, time, and categories, analogous to the genesis of general notions. This position is, however, in reality, merely empirical even though it strongly emphasizes the *a priori* work of the mind. Things in themselves are, to a certain degree, knowable.)

232) *A. L. Z.* 1786. II, pp. 261-4. Rev.* of M. A.

233) *A. L. Z.* IV, pp. 193-198; 201-207; 265-272. Rev.* of Gr.

234) *Bacmeister's russische Bibliothek.* Vol. X, nos. 1-3, pp. 163-5: Brief announcement of Prl.

235) *Ib.*, pp. 165-6: Brief announcement of Gr.

236) *Beyträge, Kritische, zur neuesten Geschichte der Gelehrsamkeit.* Vol. I. 8vo. Leipzig. Hertel. pp. 202 *seq.*: Rev. of K.'s Gr.

236a) *Breyer, J. F.* Cf. no. 204.

237) *Forster, G.: Noch etwas über die Menschenrassen.* An Herrn D. Biester, in: T. M. Oct., pp. 57-86; Nov., pp. 150-166. (Relating to nos. 57 and 59; against K.'s definition of a race; two original races must be assumed on anatomical grounds. K.'s distinction between natural history and mere natural description cannot be maintained. The natural scientist should not set up any principle *a priori*, by which to be governed in his investigations and observations. K. replies to this in no. 66.)

238) *S. g. A.* IV, pp. 1914-1918: Rev. of M. A.

238a) *Heinicke, Sm.*: Cf. no. 210.

238b) *Jacob, L. H.: Prüfung der Mrg.* Cf. no. 358.

239) *L.* III, 1713-1718; 1729-1733: Rev.* of Mrg.

240) *Meiners, C.: Grundriss der Seelenlehre.* 8vo. Lemgo. Meyer. pp. 194, besides a preface of three sheets. (In the preface an unseemly, personal, and calumnious polemic against the *Kritik*, which M. does not at all understand. He reproaches K. with undermining religion and morality. Refuted in detail in:)

240a) *Cäsar's philosophische Annalen.* 1787. pp. 247-260, and in:

240b) *Sendschreiben an Hrn. Prof. Meiners in Göttingen über dessen Angriff gegen Kant's System der Philosophie*, in J. W. v. Archenholzen's "Neue Litteratur- und Völkerkunde." First year. Vol. I. Large 8vo. Dessau and Leipzig. 1787. pp. 221-242.

240c) *Mendelssohn:* Cf. no. 217.

241-291, Reinhold.

241) *Reinhold, C. L.: Briefe über die Kantische Philosophie*, in : T. M., 1786, Aug., pp. 99-141; 1787, Jan., pp. 3-39; Feb., pp. 117-142; May, pp. 167-185; July, pp. 67-88; Aug., pp. 142-165; Sept., pp. 247 seq. (R. was unquestionably the ablest disciple of K. In his ingenious letters, which K. highly appreciated [no. 66], he declares the latter's philosophy to be the only one which is able to satisfy all the practical-philosophical needs of the age; far from undermining religion and morality, it is rather the first philosophy which places both upon a solid basis, a feat which the rational theology and psychology of the past, whose untenableness is proved by the fact that they proceed from false premises, have not, as yet, been able to accomplish. The letters were reprinted from T. M., without R.'s knowledge, under the title :)

242) *Auswahl der besten Aufsätze über die Kantische Philosophie*. 8vo. Frankfurt und Leipzig. 1790. pp. 250. (In reality : Marburg, Krieger.) The letters appeared in book-form in 1790 :

243) *Reinhold: Briefe über die Kantische Philosophie*. Vol. I. Large 8vo. Leipzig. Göschen. pp. xii, 371. (Largely augmented and revised; instead of eight letters, we have now twelve; what was formerly the third here forms the fifth and sixth, while the twelfth is an addition. An essay published 1790 in T. M. is inserted into the collection as the main part of no. 1, and as nos. 2 and 3 :)

244) *Reinhold: Ueber den Geist unsres Zeitalters in Teutschland*. March, pp. 225-255; April, pp. 337-378. The second volume of the

245) *Briefe* appeared 1792. (Large 8vo. Leipzig. Göschen. pp. xvi, 480.) (R. places the notion of freedom in the centre of these twelve letters, which give an independent exposition of K.'s practical philosophy. He conceives freedom as indeterminism, as the faculty to decide in favor of the impulses as well as of reason, in this respect differing from K. C. E. Schmid. Only in this way, R. holds, can the internal disagreement which has hitherto prevailed in philosophizing reason in regard to the source of duty and of law, and the former discrepancies between moral and political [civic] legislation, and between the sciences of natural and positive law, be reconciled. Into this volume, too, a number of essays that had appeared in T. M. were received in a more or less altered form :)

246) *Reinhold: Ehrenrettung der neuesten Philosophie*. 1791, Jan., pp. 81-112 = letter no. 1.

247) *Reinhold: Ueber die Grundwahrheit der Moralität und ihr Verhältniss zur Grundwahrheit der Religion*. T. M. 1791. March, pp. 225-262 = letter no. 10.

248) *Reinhold: Ehrenrettung des Naturrechts*. T. M. 1791. April, pp. 338-382 = letters no. 2 and 3 (the latter in part completely revised).

249) *Reinhold: Ehrenrettung des positiven Rechts*. T. M. 1791. Sept., pp. 3-40; Nov., pp. 278-311 = letters 4 and 5 (the middle portion of the latter largely revised).

250) *Reinhold: Beytrag zur genaueren Bestimmung der Grundbegriffe der Moral und des Naturrechts.* Supplementary to the "Dialog der Weltbürger." (T. M. April, pp. 340-72). T. M. 1792. June, pp. 105-139 = letter 6 (greatly altered). The following was directed against the Letters:

251) *H.: Neuer Beweis dass Herr Reinhold nicht leistet, was er leisten sollte,* in: Ph. A. 1793. II, 1, pp. 26-37. R.'s chief work, which for a time gave him an even more prominent place in the philosophical movement than K.'s, appeared in 1789. During its genesis K. was informed that it was to be an introduction to the *Kritik*; in June, 1788, it was announced in the announcement-sheet of T. M., p. lxxii, as "Allgemeine Theorie des Erkenntnissvermögens." Its final title was:

252) *Reinhold: Versuch einer neuen Theorie des menschlichen Vorstellungsvermögens.* Large 8vo. Prag and Jena. Widtmann und Manke. pp. 68 and 511. 2d edition: 1795. pp. 579. An essay which appeared in 1789 in T. M. (April, pp. 3-37; May, pp. 113-135), and also in separate form in 1789 at Jena (large 8vo, Manke, pp. 68) is reprinted as the preface:

253) *Reinhold: Ueber das bisherige Schicksal der Kantischen Philosophie.* § 1 of the "Versuch" had already appeared in T. M. under the title:

254) *Reinhold: Allgemeiner Gesichtspunkt einer bevorstehenden Reformation der Philosophie.* 1789. June, pp. 243-274; July, pp. 75-99. Besides this there appeared in T. M. a closely verbal summary of §§ VI-XVI of the second book of "Theorie des Vorstellungsvermögens überhaupt":

255) *Reinhold: Fragmente über das bisher allgemein verkannte Vorstellungsvermögen.* 1789, Oct., pp. 3-22. § II had already appeared in the B. M. (1788. Vol. 14, pp. 48-73) under the title:

256) *Reinhold: Von welchem Skepticismus lässt sich eine Reformation der Philosophie hoffen?* §§ III-V in N. D. M. 1789. I, pp. 31-47, 204-226, 284-304, under the title:

257) *Reinhold: Wie ist Reformation der Philosophie möglich?* (According to R.'s work all the misconceptions of Kantian philosophy arose from the fact that K. did not proceed from incontrovertible premises. His notion of experience is in dispute. It is held that mathematics possesses only hypothetical necessity. K.'s method was regressive; from the effects as *rationes cognoscendi* he proved the presence of causes. R. wants to provide the missing basis, to begin with an indubitable principle, that of consciousness, and to progress, *i. e.*, deduce from the causes all the effects, so that what is antecedent in K. becomes consequent in the "Elementarphilosophie." In the mere presentation, in the fact of consciousness, he seeks the common root of receptivity [sensibility] and spontaneity [reason]. He examines neither the presenting subject nor the presented object, but only the presentation itself and its inner conditions [transcendental investigation as distinguished from the psychological one, which examines the genesis of ideas, *i. e.*, the external conditions]. On a parallel with the principle of consciousness, the additional principle of knowledge is established for the

Theory of the Faculty of Knowledge, from which latter the Theory of Consciousness is lopped off in the "Beyträge" as a separate part. The different parts of the Theory of Knowledge are made up of the Theories of Sensibility, of Understanding, and of Reason, which correspond to K.'s Aesthetic, Analytic, and Dialectic, and give an independent exposition of the *Kritik* [not of the Antinomies], deducing everything from one fundamental principle. Similarly in the doctrine of categories, the twelve forms of judgment are not appropriated from logic, but deduced. Especially commendable is the clear, good style. R. avoids K.'s chief fault in that he assigns to the latter's technical terms *definite* meanings and consistently adheres to the terminology thus obtained. Wherever a word has several significations he discriminates between these by designating them as "narrow," "narrower," "narrowest," etc. The "Elementarphilosophie" was also to include the practical philosophy as the Theory of the Appetitive Faculty, but only a few notions are appended, rather in the form of definitions, which in other passages are assigned to theoretical philosophy: Apart from minor differences [*e. g.*, the sharp distinction between noumena, — = ideas of pure reason — and things in themselves] R. wholly shares K.'s views. The latter, aiming as he does to prove and deduce everything *a priori*, is right in calling R. hypercritical. R., on the other hand, is simply acting in harmony with the spirit of K. when he extends the directive factor of K.'s system, Rationalism. Both endeavor to secure to human knowledge necessity and universality, and under what circumstances could *these* be greater than when all knowledge is deduced from *one* necessary, indubitable principle? The old Rationalism declared the law of contradiction together with its consequent, the law of sufficient reason, to be such a principle; R. substitutes the principle of consciousness, from which transcendental Idealism necessarily follows. Because the propositions deduced from it are all necessary and universal, there cannot be, in R.'s opinion, many kinds of philosophy, but only *one* philosophy, the philosophy without surnames [*ohne Beinamen*]. Hence the constant tendency on R.'s part to reconcile the most contradictory views from a higher standpoint, and to represent them as disappearing in it. Hence also the attempt to show that the systems of his adversaries are simply misconceptions arising from one-sided notions, and that their essential elements are harmoniously combined in his own philosophy. R.'s "Versuch" for a long time formed the centre of the philosophical movement. Most of the critical philosophers were his disciples during the first half of the nineties, and the A. L. Z. was his organ. He was, however also violently attacked, especially in Eberhard's periodicals:)

258. Zy.: *Ueber ein neues merkwürdiges Resultat der philosophischen Geschichte, in Beziehung auf die Frage vom Dasein Gottes.* (Cf. Reinhold in A. L. Z. 1788. III, pp. 831-2, and in the "Versuch," pp. 79 seq.) Ph. M. 1790. Vol. II, pp. 436-46.

259) Eberhard, J. A.: *Ueber Herr Reinhold's Resultate der Geschichte der philosophischen Lehre von Gott.* *Ib.* pp. 447-59.

268) *Eberhard: Noch neue Vereinigungspunkte der Leibn. und Kant. Vern. Krit.* Vol. III. 1790. pp. 70-82.

261) *Eberhard: Ueber den Begriff des Vorstellungsvermögens.* *Ib.* pp. 111-24.

262) *Schwab, J. C. Ueber den Reinholdischen Versuch einer neuen Theorie des menschlichen Vorstellungsvermögens.* *Ib.* pp. 125-147 (cf. no. 285).

263) *Eberhard: Review of Reinhold's "Versuch einer neuen," etc.* pp. 358-76.

264) *Eberhard: Endliche Beilegung des Streits über den kritischen Idealismus durch den Satz des Bewusstseins.* *Ph. Mg.* Vol. IV. 1791. pp. 360-5.

265) *Schwab, J. C.: Prüfung der Reinholdischen Deduction der Kantischen Kategorien.* *Ph. A.* Vol. IV. 1792. no. 1, pp. 35-44.

266) *Schwab: Prüfung des Reinholdischen Begriffs vom Urtheil.* *Ib.* pp. 45-55.

267) *K.: Ueber die Theorie des Vorstellungsvermögens.* *Ph. A.* Vol. II. 1794. no. 3, pp. 74-8. Cf. also :

268) *Sokratische Unterhaltungen.* 3d vol. 1789. pp. 305-25. Notes to Reinhold's "Resultate der Geschichte der philosophischen Lehre von Gott."

269) *Feder* very mildly criticised the "Versuch" in his *Ph. B.* III. 1790. pp. 142-194, but only because he did not divine the scope of the work. To the review in

270) *A. L. Z.* 1789, IV, pp. 417-429, which regarded his "Versuch" as a mere commentary to the *Kritik* of Pure Reason, R. replied in :

271) *A. L. Z.* 1789, I. B., no. 137, pp. 1138-40, and pointed out the true relation between the two works. He also defended his "Theorie," established it more firmly, and improved some parts of it by the following :

272) *Reinhold: Beyträge zur Berichtigung bisheriger Missverständnisse der Philosophen.* Erster Band, das Fundament der Elementarphilosophie betreffend. Large 8vo. Jena. 1790. Manke. pp. xii, 456. Zweiter Band, die Fundamente des philosophischen Wissens, der Metaphysik, Moral, moralischen Religion und Geschmackslehre betreffend. *Ib.* 1794. pp. viii, 436. The first volume contains : I. On the Notion of Philosophy. pp. 1-90. II. On the Need, the Possibility and the Characteristics of a Universal First Principle of Philosophy. pp. 91-164. III. New Exposition of the Fundamental Points in the "Elementarphilosophie," pp: 165-254 (extends only to the end of the Theory of the Faculty of Knowledge in General). IV. On the Relation of the "Theorie des Vorstellungsvermögens" to the "Kritik der reinen Vernunft" (Motto : *Inventis facile est addere*). pp. 255-338. V. On the Possibility of Philosophy as an Exact Science, pp. 339-372 (reprinted in the Oct. no. of *T. M.* 1790. pp. 134-160, under the title :

273) *Vorschlag und Bitte an die streitenden Philosophen*. VI. Discussions in regard to the "Versuch einer neuen Theorie des Vorstellungsvermögens," pp. 373-404. (R. himself points out several real errors in his "Versuch"; the objections of the reviewers, however, he regards as arising from misconceptions. He appends a defence of his work against two reviews, pp. 405-423: Criticism of Professor Flatt in Tübingen on the "Theorie des Vorstellungsvermögens," in the 39th no. of the Tübing. Anz., and my Remarks on the same; pp. 424-9: Criticism of Professor Heydenreich of Leipzig on the "Theorie des Vorstellungsvermögens" in the Leipz. gelehr. Zeit., no. 46; pp. 430-34: Discussion of the Objections contained in the Cited Announcement [from A. L. Z., 1790, I. B., no. 80]; pp. 434-8: Prof. Heydenreich's Answer [from A. L. Z., 1790, I. B., 1788]; pp. 438-46: A Forced Reply; pp. 446-56: Notes to the First Volume.) The second volume contains: I. On the Difference between Common Sense and Philosophizing Reason in respect to the Foundations of the Knowledge Possible through Both. pp. 1-72. (Referring to this treatise, R., in the preface, pp. v-vi, tells the reviewer of "Aenesidemus," in A. L. Z., 1794 [Fichte], that they had, without any previous understanding on their part, been playing into each other's hands, and that they had both been working on one and the same foundation, each at his particular place.) II. Systematic Exposition of the Principles of the Metaphysics of the Future and of the Past. pp. 73-158. (pp. 113-151 and the preface vi-vii had already appeared in the N. T. M. 1794. Jan., pp. 2-18; March, pp. 235-256, under the title:

274) *Systematische Darstellung aller bisher möglichen Systeme der Metaphysik*.) III. A more detailed account of Negative Dogmatism or Metaphysical Scepticism. pp. 159-206. IV. On the Complete Foundation of Morals. pp. 207-294. (Explaining the second part of his Letters, especially the notion of freedom; consists of an Introduction and two treatises: "Ueber den Unterschied zwischen dem Wollen und dem Begehren, in Rücksicht auf das Sittengesetz. An Herrn Professor Schmid in Jena," pp. 230-264, and "Ueber den Zusammenhang zwischen Begehren und Wollen in Rücksicht auf das Sittengesetz." pp. 265-294. The first had already appeared in 1793 in the Ph. J., I, 3, pp. 352-387, under the title:

275) *Ueber den Unterschied zwischen dem unwillkürlichen aber durch Denkkraft modificirten Begehren und dem eigentlichen Wollen; oder zwischen dem sogenannten nicht sittlichen und dem sittlichen Wollen*. An Herrn Professor C. C. E. Schmid.) V. On the Foundation of Moral Religion. pp. 295-368. (Originally:

276) *Rev. of Rel.* in A. L. Z. 1794. I, pp. 681-95, 697-714. The review extends to p. 715). VI. On the Foundation of Aesthetics. pp. 369-408. (Also originally:

277) *A Review of U.* in A. L. Z. 1793. III, pp. 1-17; from pp. 17-32 a review of the "Kritik der teleologischen Urtheilskraft.") VII. On the Foundation of the Critique of Pure Reason. pp. 409-436. (Originally:

278) *Rev. of R. Vb. and c. in A. L. Z.* 1791. I, pp. 425-35, amongst other things also worthy of note, because it discusses the differences between R. Va. and R. Vb.) The following attacks against the "Beyträge" appeared in the *Ph. Mg.*, IV, 1791 :

279) *Beurtheilung dessen, was Herrn Prof. Reinhold im 1. Band seiner Beyträge zur Berichtigung, etc., dem Herrn Prof. Flatt in Tübingen entgegengesetzt hat*, by E. R. A. W. pp. 116-25.

280) *Schwab, J. C.: Bemerkungen über die Reinholdischen Beyträge zur Berichtigung bisheriger Missverständnisse der Philosophie.* 1. Band, das Fundament der Elementarphilosophie betreffend. *Ib.* pp. 317-53. In the interval between the publication of the first and second volumes of the "Beyträge," there appeared a work having the same object in view, but directed, in particular, against the review of the first volume of the "Beyträge," which was printed in :

281) *A. L. Z.* 1791. I, pp. 201-214 ; namely :

282) *Reinhold: Ueber das Fundament des philosophischen Wissens. Nebst einigen Erläuterungen über die Theorie des Vorstellungsvermögens.* 8vo. Jena. 1791. Manke. pp. xviii, 222. (The preface appeared also in the *T. M.*, 1791, pp. 134-47, under the title :

283) *Wie und worüber lässt sich in der Philosophie Einverständnis der Selbstdenker hoffen?* On pp. 139-182 we have a treatise by :

284) *Erhard, J. B.: Die im 26sten Stück der A. L. Z. von 1791 enthaltene Beurtheilung der Reinholdschen Elementarphilosophie.* Followed in pp. 183-222 by :

285) *Forberg, M. F. C.: Des Herrn Hofrath und Professor Schwab Gedanken über die Reinholdsche Theorie des Vorstellungsvermögens.* Im 2ten St. des 3ten Bandes des Eberhardischen Magazins. (Cf. no. 262.) The same standpoint was still held by R., in 1705, in his answer to a prize-problem offered by the Berlin Academy.

286) *Preisschriften über die Frage: Welche Fortschritte hat die Metaphysik seit Leibnitzens und Wolffs Zeiten in Deutschland gemacht?* J. Chr. Schwab, K. L. Reinhold, and J. H. Abicht. Ed. by the Royal Prussian Academy of Sciences. Large 8vo. Berlin. 1796. Maurer. pp. 469. R.'s Answer: pp. 171-254. (R. lets the different schools, preceding the Critical School, answer the question, each according to its own principles, and finally gives his own views as the impartial observer. He, therefore, places himself alongside of or above K., and regards the progress of metaphysics to lie especially in the endeavors to establish a universally acknowledged basis, and to merge the true elements of all the preceding systems into one higher standpoint. While R. was preparing a new revised edition of this prize-essay in which he advanced beyond K., a thorough study of Fichte's "Wissenschaftslehre" led him to adopt the standpoint of this latter work. This new standpoint he holds in :

287) *Reinhold: Ueber den gegenwärtigen Zustand der Metaphysik und der transcendentalen Philosophie überhaupt.* Neue um die Hälfte ver-

mehrte Ausgabe meiner Beantwortung der Berliner Preisfrage über die Fortschritte der Metaphysik seit Leibnitz und Wolff, in: "Auswahl vermischter Schriften." Part II. 8vo. Jena. 1797. Manke. pp. iii-xii, 1-363. The same volume contains. pp. 364-400 :

288) *Reinhold: Einige Bemerkungen über die in der Einleitung zu den metaphysischen Anfangsgründen der Rechtslehre von I. Kant aufgestellten Begriffe von der Freiheit des Willens.* (The definitions which K. here sets up, especially those of will and arbitrariness, contradict former ones. R.'s later writings from the standpoint of Fichte, Bardili, and the "Synonymik," often refer to K., but, for the most part, only in single passages. We need mention only the following treatises :)

289) *Reinhold: Die erste Aufgabe der Philosophie in ihren merkwürdigsten Auflösungen.* Second Part. From 1781-1800. § 1. Kant, in: "Beyträge zur leichteren Uebersicht des Zustandes der Philosophie bey dem Anfange des XIX. Jahrhunderts." Second number. Large 8vo. Hamburg. 1801. Perthes. pp. 1-27.

290) *Reinhold: Ueber die Autonomie als Princip der practischen Philosophie der Kantischen — und der gesammten Philosophie der Fichtisch-Schellingschen Schule.* pp. 104-140. (Psychological deduction of the autonomy; transcendentalism is an apparent psychological delusion.)

291) *Reinhold: Die Dogmen des Criticismus, als Entwurf einer Formula Fidei et Concordiae für die philosophischen Recensenten der Jenaischen A. L. Z. Ib., no. 5.* 1803. pp. 114-126. (Professedly a faithful exposition of K.'s philosophy, in truth, however, modified by R.'s development since 1789, and directed against the A. L. Z. which, he says, seeks "to impute to common sense the doctrines of K. and to illustrate and confirm Criticism by means of the conceptions now prevalent among the great body of the learned public," in this way, however, weakening Criticism and preparing for it a fate similar to the Leibniz-Wolfian philosophy.)

292-293, *Wizenmann.*

292) *Resultate, Die, der Jacobi'schen und Mendelssohn'schen Philosophie, kritisch untersucht von einem Freywilligen.* Th. Wizenmann. 8vo. Leipzig. 1786. Göschen. pp. 255. (Uses K.'s arguments against all transcendent Metaphysics, in order to establish, in an acute and penetrative polemic against Mendelssohn, the validity of Jacobi's view that God's existence cannot be demonstrated, but must be believed. Belief he regards as equivalent to sensuous evidence or intuitive knowledge. Reason can acquaint us only with relations. The conviction of God's existence must, like all knowledge of really existing things, proceed from experience of facts, *i. e.*, from perception, or feeling, or faith. Jacobi appealed to his feeling which gave him, as he said, immediate certainty, Wizenmann to the revelation of scripture, to the historical belief in facts. The valuable fundamental thought that there are no arguments whatever for the existence

of God, not even arguments of practical reason, and hence no rational belief, he successfully defended against K.'s attack in B. M. [Oct., 1786 : "Was heisst sich im Denken orientiren?"] in the "Deutsches Museum." 1787. I, pp. 116-156 :)

293) *Wizenmann, Th. : An den Herrn Professor Kant von dem Verfasser der Resultate Jacobi'scher und Mendelssohn'scher Philosophie.* Reprinted in Mtr., II, pp. 103-144.

294) *Schmidt, C. Chr. Erh. : Kritik der reinen Vernunft im Grundrisse zu Vorlesungen nebst einem Wörterbuche zum leichteren Gebrauch der Kantischen Schriften.* 8vo. Jena. Cröker. pp. 294. (In the subsequent editions, which — especially the dictionary — were continually enlarged and improved, the two works are divided. Second edition, 1788, pp. 202. Dictionary, pp. vi, 368 and 52 ; third edition of the "Grundriss," 1794, pp. 264 ; of the Dictionary, 1795, pp. 590 ; fourth edition of the Dictionary, 1798, pp. viii, 688. All editions, Jena. Cröker. — The following is appended to editions 2-4 of the Dictionary : "Einige Bemerkungen über den Empirismus und Purismus in der Philosophie ; durch die Grundsätze der reinen Philosophie von Herrn Selle [no. 197] veranlasst." [The two standpoints are contrasted in reference to the fundamental problems of Epistemology ; Purism = K.'s Rationalism.] The fact that edition rapidly followed edition proves the usefulness of the two works as introductions to K.'s thought. They contributed much to the diffusion of the latter. Schmidt gives not merely a summary of R. V., as Schultz [1784] does, but considers also the other writings of K., adds critical remarks, and avoids Schultz's closely verbal rendering of K. The Dictionary is, on the whole, arranged alphabetically, except that related notions [*e. g.*, effect, force, action, momentum] are classified under their fundamental notion [causality]. The work is of great value ; though it would, of course, be futile to try to study philosophy from it. But in so far as it seeks to bring consistency into K.'s shiftless terminology, in so far as it clearly explains his notions, on the one hand classifying the related ones, in order more closely to determine their meaning, and, on the other, sharply distinguishing between them and preserving their content, it greatly facilitates the study of K.'s writings.)

295-299, *Tittel.*

295) *Tittel, G. A. : Ueber Herrn Kant's Moralreform.* 8vo. Frankfurt and Leipzig. Gebrüder Pfähler. pp. 93. (Worthless summary of Gr., followed, step after step, by an equally worthless criticism from the standpoint of the happiness-principle, which is regarded as the highest in morals.)

296) *Tittel : Kantische Denkformen oder Kategorien.* Large 8vo. Frankfurt a. M. 1787. pp. 111. Gebhard. (His objections, which are grounded on the Lockian principles, do, in part, touch really weak points, *e. g.*, the presumed completeness of the table of categories and its deduc-

tion from the judgments. Nevertheless his treatise is unimportant and worthless, because he frequently fails to understand K. and his problems; thus, for example, he regards intuition as impossible without thinking, and yet combats K.'s deduction of the categories. Characteristic of Tittel is his idea of publishing a commentary on a man like Feder.)

297) *Tittel: Erläuterungen der theoretischen und practischen Philosophie nach Herrn Feder's Ordnung, in fünf Abteilungen: Logik, Metaphysik, allgemeine practische Philosophie, Moral, Natur- und Völkerrecht.* The separate parts passed through from two to three editions during 1783-94. Though not aimed directly at K., they were nevertheless in content decided in their opposition to him, as is shown by frequent attacks, especially by the polemic in an appendix of the new, revised and enlarged edition of the "Moral" (large 8vo. Frankfurt a. M. 1791. Gebhard und Körber. pp. xxvi, 581), which deals with several propositions of Kantian ethics (principle of happiness, relation between morality and religion).

298) *Tittel: Locke vom menschlichen Verstande zu leichtem und fruchtbarem Gebrauch zergliedert und geordnet.* Large 8vo. Mannheim. 1791. Schwan and Götz. pp. 557. (Some of the notes and the preface in particular criticize K.) There is a point of agreement between K. and T., in that they both object to illegitimate rationalistic presumptions, as for instance in their refutation of the ontological argument for God's existence. In this connection T. also makes use of K.'s reasons in the first chapter of the work.

299) *Tittel: Zu einigen neuen Theorien berühmter Philosophen.* 8vo. Durlach. 1787. Müller. pp. 111.

300) *Unterhaltungen, Philosophische.* Vol. I. Leipzig. 1786. J. G. Müller. pp. 122-133. Rev. of Pr. by W. (Against the conception that things in themselves are limiting concepts [*Grenzbegriffe*]. All judgments are synthetical and are formed in accordance with the principle of contradiction, not, however, deduced from it.)

301) *Unterhaltungen, Sokratische, über das Aelteste und Neueste aus der christlichen Welt* (ed. by J. K. Pfenninger). (First volume.) 8vo. Leipzig. Weidmann. pp. 83-93: Contributions to the History of Demonstrative Philosophy. (K.'s Kritik is to bring about an epoch of the reign of common sense, similar, perhaps, to that which reveals itself in the "Unterhaltungen" as a warning example.)

302-307, Weishaupt.

302) *Weishaupt, Ad.: Ueber Materialismus und Idealismus. Ein philosophisches Fragment.* Small 8vo. Nürnberg. Grattenauer. 1786. pp. 125. Second, completely revised edition. 8vo. *Ib.* 1788. pp. 216. (The foundations of his idealistic systems have not been shaken.) In no. 303 of the year 1788, W. maintains that he had already developed his

metaphysical views, set forth in no. 302, eight years before, prior therefore to the appearance of R.Va. But though W. does not refer to the latter, it is highly probable that he was influenced by the same while writing this treatise. He calls himself an Idealist, and believes with K. that philosophy is but a philosophy of phenomena, that we cannot know the essence of *things in themselves*. He differs from K., however, in assuming for the predicates which we ascribe to phenomena, hence for space, extension, etc., substrata in the real things, independent of our modes of presentation. His points of difference from K. he states in the following detailed polemical writings:)

303) *Weishaupt: Zweifel über die Kantischen Begriffe von Zeit und Raum.* Small 8vo. 1788. pp. 120.

304) *Weishaupt: Ueber die Gründe und Gewissheit der menschlichen Erkenntniss; zur Prüfung der Kantischen Kritik der reinen Vernunft.* 8vo. *Ib.*, 1788. pp. 204.

305) *Weishaupt: Ueber die Kantischen Anschauungen und Erscheinungen.* 8vo. *Ib.*, 1788. pp. 267. (Heinsius's and Kayser's book-catalogues mention also the following title, which I was not able to find anywhere else :

306) *Weishaupt: Einleitung zu den Kantischen Anschauungen und Erscheinungen.* 8vo. *Ib.*, 1787.

307) *Weishaupt: Ueber Wahrheit und sittliche Vollkommenheit.* Three volumes. First and second : On the Doctrine of the Grounds and Causes of all Things. Third : On Ends or Final Causes. Large 8vo. Regensburg. Montag and Weiss. Vol. I, 1793, pp. 276 ; vol. II, 1794, 25 sheets ; vol. III, 1797, pp. 384, with an appendix of 44 pp. : On the Origin of the Doctrine of Ideas. (Opposed to K.'s Rationalism and Idealism. W. is, perhaps, the subtlest and most thorough defender of English Empiricism of his time ; he, therefore, opposes K.'s proposition that intuitions and notions are altogether independent of experience, and precede the latter. But he agrees with his age in making the transcendental Ideality of space and time the centre of K.'s system, and hence the target for his attacks. The strict logical consequence of this conception is, according to W., a thorough-going Subjectivism and Egoism ; we must regard ourselves as the only real beings, or go still further and say that there exists neither a subject nor an object of knowledge. Since K. refuses to accept these conclusions, he must grant that space, time, and change are not merely subjective, but that they have, in the thing in itself, something objective corresponding to themselves. Unfortunately, however, W. does not always abide by the above cautious assertion regarding K.'s relation to Egoism but often imputes to K. the conclusions which he (W.) himself draws ; he complains that the R. V. reduces everything to a dream-like illusion, that it is an obstacle to the extension of our knowledge and even to morality, and raises other equally foolish objections. At the same time he seeks to emphasize his attack by means of a certain vigor and warmth of expression, and to suppress the voice of reason, but he loses himself in hollow phrases and idle declamatory rantings. He was, during his life-time, continually upbraided for this fault, which does

indeed greatly detract from the value of his writings which are in many respects excellent. A dissenting opinion by Born, 1788.)

1787.

307a) *Abel, J. Fr.*: Cf. no. 230.

308) *A. D. B.*, 74, II, pp. 333-344: Rev.* of M. A. by R. K. (= Pistorius).

309) *A. L. Z.*, I, pp. 389-392: Rev.* of Mrg.

310) *Axiome, Ueber die*, by *** zu (= G. G. Fülleborn, on the authority of his "Beyträge zur Geschichte der Philosophie." 1793, no. 3, pp. 181) in: "Denkwürdigkeiten aus der philosophischen Welt," ed. by K. Ad. Cäsar. Vol. IV. Leipzig. Joh. Gottfr. Müller. pp. 86-102. (K.'s statements concerning the distinctions between axioms of mathematics, synthetical principles *a priori* and dialectical propositions, borrowed, for the most part, word for word and without the addition of quotation-marks, from R. Va., especially from the first section of the *Disciplin*. Reprinted in Mtr., II, pp. 41-53.)

311) *Bacmeister's russische Bibliothek*. Vol. X, no. 4-5. pp. 468-469, Brief announcement of M. A.

312) *Beyträge zur Berichtigung der Wahrheiten der christlichen Religion*. Erstes Stück, Ueber Glauben und Ueberzeugung. 8vo. Berlin. Vieweg, pp. xvi, 141. (The contents do not harmonize with the title; happiness depends only on our moral conduct, without the intervention of articles of faith. Yet those relating to God, providence, immortality, though they cannot create, may nevertheless strengthen, virtuous impulses. The deity is for man a mere idea; his existence can in no way be proved. The author's appeal to K.'s principles is only partially justifiable. The *A. L. Z.* 1787. IV, pp. 113-14, severely criticises him, perhaps on account of its well-grounded fears lest the blame for such anonymous attacks on Christianity be laid on K.)

313) *Born, Fr. G.*: Cf. Born under Pezold. 1787.

314) *Breyer, C. F.*: Cf. no. 204.

315) *Briefe über die K.'sche Philosophie*. T. M. Cf. no. 241.

316) *Cäsar, K. Ad.*: Rev.* of Mrg., in "Philosophische Annalen." Part I, vol. 1. p. 190.

317) *Cäsar*. Rev.* of M. A. pp. 194-9.

318) *Döderlein, J. Gr.*: Auserlesene theologische Bibliothek. Vol. IV, no. 2. pp. 109-132. Rev.* † of Mrg.

318a) *Dorsch, Jos. Ant.: Aphorismi ex Logica*. 8vo. Mainz. Häfner's Erben, pp. 16. (The arrangement, system and application of Kantian philosophy are, according to Reuss [no. 728] unmistakable. Dorsch [Catholic priest!] ranks K. among the greatest philosophers in the second number of his :)

318b) *Dorsch: Beiträge zum Studium der Philosophie*. 8vo. Mainz. 1787. Häfner's Erben, pp. 98. ("Vom Unterschied der Geisteskräfte und dessen Ursachen.") Cf. no. 662.

319-335, *Feder.*

319) *Feder, Jh. G. Hnr. : Ueber Raum und Causalität, zur Prüfung der Kantischen Philosophie.* 8vo. Göttingen. Dieterich. pp. xxx, 268 (the paging 80-96 appears twice). (Fed. here accepts K.'s challenge in the Prl., and from his eclectic standpoint [our knowledge rests on empirical observations and on analogical inferences] raises objections against the theory of space, the first two Antinomies, the theory of causality, the critique of rational theology, and against K.'s general idealistic position, which he declares to be essentially similar to Berkeley's. These objections do not differ materially from the remonstrances of common sense. Necessity is due to the feeling that we cannot alter a thing. He was refuted by the reviewer of the :

320) *A. L. Z.* 1788. I, p. 250 *et seq.*, and by :)

321) *Schaumann, J. C. G. : Ueber die Transcendentale Aesthetik.* Ein kritischer Versuch. Nebst einem Schreiben an Herrn Hofr. Feder, über den transscendentalen Idealismus. 8vo. Leipzig. 1789. Weidemann. pp. 190. (A very temperate polemic ; space, time, and categories are, according to K., not ready-made, innate conceptions, but are abstracted from our faculty of knowledge on occasion of experience. Replied to by Feder in the :

322) *G. A.* 1790. no. 109, and in his :

323) *Ph. B.* Vol. III. 1790. pp. 121-142. The following essay also deals with this controversy :

324) *Wird der von dem Professor Feder in Göttingen gegen den Professor Kant in Königsberg eröffnete Streit über Raum und Causalität der menschlichen Gesellschaft Nutzen bringen?* in J. A. Schlettwein's "Neues Archiv für den Menschen und Bürger in allen Verhältnissen." Vol. V. 1788. pp. 340-349. F. also published several essays in the *Ph. B.*, which refer to K. in a few passages only, but are concerned throughout with K.'s system :)

325) *Feder : Ueber subjektive und objective Wahrheit, und die Uebereinstimmung aller Wahrheiten unter einander.* Vol. I. 1788. pp. 1-42, esp. pp. 18 *seq.*

326) *Feder : Ueber den Begriff der Substanz.* Vol. II. 1789. pp. 1-40.

327) *Feder : Ueber Bestimmung und Bestimmtheit der Begriffe.* Vol. IV. 1791. pp. 1-86 (agrees with K.'s views concerning synthetical, also mathematical, judgments).

328) *Feder* is also the author of a review of Pr. V. Vol. I. 1788. pp. 182-218. (An abstract with notes.)

329) *Feder : Versuch einer möglichst kurzen Darstellung des Kantischen Systems.* Vol. III. 1790. pp. 1-13. (A very happy selection of the essentials without gross errors.)

330) *Feder : Ueber die Kantische Moralthologie.* Vol. III. 1790. pp. 13-66.

331) *Feder*: Rev. of U. Vol. IV. 1791. pp. 180-194. (F. examines only a few points, like the notions of "the agreeable," "pleasure," "genius," because he had already given the contents in:)

332) *Feder*: G. g. A. 1790. pp. 1137-47. Besides these, there are also a number of reviews of books on critical philosophy in Ph. B. as well as in G. g. A., among which the review of Schulze's "Prüfung der Kantischen Kritik" (G. g. A. 1791. I, pp. 201 *et seq.*) is the most important, for in it F. candidly acknowledges a mistake that occurred in his treatise "Ueber Raum und Causalität," and of which much had been made. It consisted in deducing the principle of contradiction from experience. That K.'s doctrines considerably modified F.'s views is evident from:

333) *Feder*: *Grundsätze der Logik und Metaphysik*. Small 8vo. Göttingen. 1794. Dieterich. pp. xxiv, 375. In 1803 F. transmitted to the *Société Philotechnique de Paris*, as a corresponding member of the same, a not altogether worthless treatise containing 32 folio pages:

334) *Feder*: *Précis historique et critique de la philosophie de Kant et des effets, qu'elle a produits en Allemagne*. Published in the Society's *Mémoire de l'an XI*, in part also in

335) *J. G. H. Feder's Leben, Natur und Grundsätze*. (Ed. by his son.) Large 8vo. Leipzig. Schwickert. Hannover. Hahn. Darmstadt. Leske. 1825. pp. 352-360. (Contains occasional passages on K., esp. Ch. 9: History of the Author's Controversies regarding Kantian Philosophy, pp. 115-129.) In the Ph. B. and in his later writings, F.'s criticism of K. becomes very mild, because his eclectic nature had led him to gather together, from acknowledged authorities, the elements of his characterless philosophy. He also, most likely, dreaded a repetition of K.'s scathing attack in Prl. Besides, since he did not take a comprehensive survey of K.'s system, but, eclectic that he was, confined himself to particular statements, he believed that most of the latter had already been advanced by K.'s predecessors, many of them by himself. The great admiration and the intense antagonism which K. aroused are said to be due to the fact "that he often expresses his views too strongly," and exaggerates opinions that are in themselves correct. K.'s idealistic assertions are especially objectionable to F., who characterizes them as exaggerations that contradict common sense. His writings have no longer any philosophical significance, their value is purely historical. But this value is, as far as the history of Kantian philosophy is concerned, by no means small. Up to the close of the eighties, F. was a highly respected teacher and author of text-books (his text-books on theoretical and practical philosophy passed through eight and seven editions respectively). At the beginning of the nineties, the attendance at his lectures grew smaller and smaller, in 1791 the Ph. B. suspended for lack of support, F. himself relinquished his professorship at Göttingen and became Director of the *Georgianum* in Hannover.

[Continued.]

E. ADICKES.

DISCUSSIONS.

TWO RECENT CRITICISMS OF 'MODERN' PSYCHOLOGY.

IN the third edition of his Translation of the Platonic Dialogues,¹ Professor Jowett has inserted an Essay on the Nature and Limits of Psychology, as an appendix to the Introduction to the Theaetetus. That introduction itself, and the Introduction to the Cratylus contain psychological discussions, constructive and destructive. These I shall not refer to, in the present criticism, except incidentally; I am concerned only with this latest expression of the writer's judgment of the 'new' Psychology.

In his attitude to Psychology in general, Professor Jowett reflects the well-known verdict of Kant. "It cannot . . . proceed by the inductive method; it has not the necessity of mathematics; it does not, like Metaphysics, argue from abstract notions or from internal coherence." "Psychology is necessarily a fragment, and is not and cannot be a connected system." It is curious to find this opinion of the new Psychology in so complete accord with that of the latest apologist of "Psychology as a Natural Science." "A string of raw facts," so Professor James writes; "a little gossip and wrangle about opinions; a little classification and generalization on the mere descriptive level; a strong prejudice that we *have* states of mind, and that our brain conditions them; but not a single law, in the sense in which Physics shows us laws, not a single proposition from which any consequence can causally be deduced. . . . This is no science, it is only the hope of a science." Professor Jowett is still more severe. "The subject . . . begins to assume the language and claim the authority of a science; but it is only a hypothesis or outline, which may be filled up in many ways according to the fancy of individual thinkers. The basis of it is a precarious one. . . . It may be compared to an irregular building, run up hastily, and not likely to last, because its foundations are weak and in many places rest only on the surface of the ground. . . . The fact that such a science exists and is popular affords no evidence of its truth or value." And so on.

¹ The Dialogues of Plato, translated into English, with Analyses and Introductions: by B. Jowett, M.A., *etc.* 1892. Vol. IV, pp. 175 ff.

Against such arguments one might urge, with all the respect due to the high authority of their formulators, that the extravagant claims made for modern psychology are not made by modern psychologists. All that the experimentalist asks is the opportunity to work in his own way, — a way, be it remarked, which presupposes knowledge and appreciation of philosophy, past and present, and of past psychology, — and the suspension of his neighbor's judgment. It is the popularizer who is to blame for the extravagance. The worker knows, not only that psychology is of all sciences (I beg the question, for the moment !) the most difficult to make popularly intelligible, but he is well aware that the time is not yet ripe for such a manner of exposition. Not till last year could the protagonist of the new school be prevailed upon to publish a "Psychology made easy," for the reading of the educated world in general.

One might say, again, that the popularity of the modern direction is certainly questionable. In England it is, so far as practice is concerned, absolutely unrepresented ; and a German psychologist has recently complained that it is impossible for a discipline to attain its full development while its material equipment is so inadequate. And if this is the truer view, as indeed it seems to be, then it would be possible to reverse Professor Jowett's phrase, and to say : The fact that such a science is not popular affords no evidence against its truth or value.

But considerations of this kind, whether they make for or against a thesis, cannot carry the weight of more particular arguments and refutations. Let us turn to some of the concrete objections which the writer raises, and examine them in detail.

The first difficulty in the way of a scientific psychology is the difficulty arising from the inadequacies and false implications of language. "Psychology is inseparable from language"; so, of course, are all the sciences ; so is human knowledge in general. But psychology suffers especially from the "disguises, oppositions, contradictions," which language presents. The remedy for this, so far as any remedy can be operative, is naturalness, simplicity. "Instead of seeking to frame a technical language, we should vary our forms of speech, lest they should degenerate into formulas."

Certainly, a psychology which was popular, in this sense, could never become a science ; but the methodological difficulty, for such it really is, is not insuperable. We may frankly admit that words are "slippery"; we may say, further, that no form of words, as discrete, is adequate to the description of a conscious process,

which is continuous. Moreover, even granted that a particular process has been adequately described, we cannot assume that its description will be adequately understood. These are some of the disadvantages of speech, which constitutes (and this is what Professor Jowett seems to have overlooked) a psychological *method*. Surely the linguistic and the memorial methods must be recognized as such; though we may, if we wish, mark them off, as indirect, from the direct methods of introspection and experiment. And there are advantages beside the disadvantages. The spoken or written token is constant; and communication of ideas is furthered by the similarity of the associations which have gathered round it, themselves conditioned by an education, at least as uniform as it is diverse.

I cannot agree with the author that it should be a matter of principle to avoid a technical language. "A difficult philosophical problem is better understood when translated into the vernacular." Better understood by the many, yes! but not better understood by the philosopher; and since the many can never completely understand, *really* not better understood at all. Of premature schematization and premature rigidity of definition I have as great a dread as Professor Jowett; but, where we know, we should be precise; where we do not know, we need not be ashamed to declare it. It happens that Professor Jowett himself has discussed and sought to define or describe certain "principal terms," and his remarks illustrate, with a fatal aptness, the danger attaching to the use of ordinary words in the sense of a special discipline.

"Consciousness" is, indeed, a "treacherous word." The new psychology has sought to establish a strict usage: consciousness is the collective name of the mental processes which exist for an individual at any given moment. In other words, consciousness is *all* of conscious content at that moment. It is a convenient term, because possessed of a more exact connotation, and therefore capable of more exact employment than the layman's word, "mind." The writer speaks of it as follows: "It is a kind of attention which we pay to ourselves, and is intermittent rather than continuous. . . . Consciousness is opposed to habit, inattention, sleep, death." And again: "Consciousness carries us but a little way in the observation of the mind; it is not the faculty of internal observation, but only the dim light which makes such observation possible. . . . Would it not be better if this term . . . were . . . used only with the distinct meaning of 'attention to our own minds,' such as is called forth, not by familiar mental processes, but by the interrup-

tion of them?" (*Cratylus*, vol. I. pp. 300, 301.) Here is a plain confusion, as it seems, of two sciences: of psychology and epistemology. That the sensation and its derivatives *know* is a datum of psychology, a problem for theory of knowledge. And then, how unfortunate is the identification with some form of attention!¹ The psychologist has a definite theory of attention; and though the two hypotheses at present in the field are mutually exclusive in their extreme forms, sound work is being done, which should one day settle the quarrel between autogenesis and heterogenesis. The psychophysicist, again, if he is not ready with a complete theory, has at least made considerable advance along this line of research. Neither would regard the concepts of consciousness and attention as related, except as whole is related to part; it is only in virtue of the confusion which I have just pointed out that the superficial character of his analogy has escaped the author's remark. "Attention to our own minds" is like all other attention. In the one case, the object of attention is representative; in the other, presentative; that is all. For psychology, it makes no difference.²

Or take the paragraph on association. It is quite true that the so-called 'laws' are not laws at all, in any strict sense of the word. But do the following sentences do justice to the new psychology?—"Like may recall like, and everything its opposite. . . . The new thought may occur to us, we cannot tell how or why, by the spontaneous action of the mind itself, or by the latent influence of the body." No one would assert that the problems of recognition and association have been solved; the more modest might even think that they are not to be adequately discussed, on the basis of our present knowledge. But the nature of mental "likeness," association by opposition, the occurrence of *freisteigende Vorstellungen*: these are definite questions, which have been definitely approached, in the way of observation and experiment. No! this is not to "review the bases of psychology," or to "severely draw the line between facts and opinions."

If, then, we are in agreement with Professor Jowett as regards the danger of that "love of system [which] is always tending to prevail over the historical investigation of the mind," we cannot admit that valid objection has been raised to the employment of technical

¹ Cf. p. 186.

² Cf. what Prof. Jowett himself says, p. 176:—"The mind, when thinking, cannot survey that part of itself which is used in thought. It can only be contemplated in the past, that is to say, in the history of the individual or of the world."

(*i. e.*, of strictly definable) terms. Rather is this, for many of us, a consummation devoutly wished.

I pass on to the consideration of another question, that of the methods of psychology. Introspection is not allowed to possess any great importance.¹ "The firmer ground of psychology is . . . the observation of external actions" of ourselves, and of others. Psychophysics shows no promise of fruitful investigation. Yet, we "can observe our minds, and we can experiment upon them"; and earlier, in the course of the Introduction, an account of Memory is given which could certainly be tested by experiment.² And yet again, at the conclusion of the essay, we are told that "the elements of psychology can still only be learnt from reflexions on ourselves, which interpret and are interpreted by our experience of others." So that introspection is of importance after all. Can one help but find confusion here? At the same time, it is not all confusion. The necessity of the study of social psychology to the individual psychologist is rightly emphasized. If it is not to be ultimately true, that psychology "is concerned with qualitative rather than with quantitative differences," it is true that a vast amount of qualitative work has still to be done.

Lastly, what of the aims of psychology? It is made a reproach to modern psychology, that it is a "kind of metaphysic, narrowed to the point of view of the individual mind."³ A popular terminology will assist in freeing it from the influence of metaphysic;⁴ and yet, psychology is to be rehabilitated as an aspect of metaphysic!⁵ Verily, great is the power of Dialectic.

"The real psychology is that which shows how the increasing knowledge of nature and the increasing experience of life have always been slowly transforming the mind; how religions, too, have been modified in the course of ages, 'that God may be all in all.'" "No account of the mind can be complete which does not admit the reality or the possibility of another life." "It is important that we should conceive of the mind in the noblest and simplest manner." Psychology "should be careful to distinguish the higher and the lower elements of human nature." Such sentences as these take us to the heart of the matter. What have they in common with views like the following?—"Die Psychologie ist ebensogut eine Erfahrungswissenschaft wie die Physik oder Chemie"; "Psychology is the science of mental life, both of its phenomena and their conditions"; "Die Psychologie ist die Wissenschaft von den Erlebnis-

¹ p. 183.² pp. 164, 165.³ p. 176.⁴ p. 190.⁵ p. 185.

sen, soweit sie von dem körperlichen und geistigen Individuum abhängig sind." I need not multiply quotations. Professor Jowett includes under Psychology portions of Metaphysics and of Epistemology, of Philosophy of Religion and of Ethics. Between his limitation and that of the modern psychologist is a great gulf fixed.

I have said but little of the author's positive standpoint ; I have dealt rather with his criticism of the new direction. Some of the psychophysical opinions expressed show plainly that he is not abreast of the tide of research. The whole Essay is valuable, therefore, only as being a protest of principle. From this point of view, one can readily forgive the sarcastic reference to the microscope ; it is very possible that Professor Jowett has never seen a psychological laboratory in working. The only quite modern influence that seems definitely traceable in his writing is that of Professor James. All the more reason that a counter-protest should be raised on the experimental side ; that one should earnestly caution the reader not to be influenced by the power of a great name, nor carried away by charm of style, but to read, work, and judge for himself.

It is with much personal regret that I publish a so generally adverse criticism of Professor Jowett's Essay. I have been his pupil ; and he has represented to me, as to so many other Oxford men, the pure type of English scholarship. But the science — I beg the question at the end as at the beginning : and yet, is not Professor Jowett's admission of the possibility of experiment in itself an admission that Psychology may become a science? — must be the principal consideration. Οὐ γὰρ πρό γε τῆς ἀληθείας τιμητέος ἀνὴρ.

The 'modern' Psychology, which Dr. Ward attacks in his recent Essay in *Mind*,¹ has a much narrower range than that which is the subject of Professor Jowett's strictures. With the major part of Dr. Ward's article — with the spirit, if not with the letter of it, — I am very heartily in accord. What I have to say here relates only to his Introduction and Conclusion.

I would take exception, at the outset, to the writer's use of the phrase "modern Psychology." I do not think either that it necessarily connotes Associationism, or that it denotes Professor Münster-

¹ "Modern" Psychology : a Reflexion. By J. Ward. *Mind*, Jan. 1893, p. 54 ff.

Cf. "The 'new' Psychology and Automatism," by A. Seth. *Cont. Review*, April, 1893, pp. 555 ff. Much of what is said in the text applies also to this article, which appeared after the above Discussion had been written.

berg's writings only. Modern Psychology surely began, not "three or four years ago," with the publication of the *Willenshandlung*, — but some forty years ago, with Fechner's notion of the definite functional correlation of psychical with physical processes.¹ The modern psychologist is the experimental psychologist. And it would be more than rash to assert that Experiment leads to Associationism; it would be against the facts. I believe it to be unquestionable that the majority of Wundt's pupils who are engaged in psychological work at the present time are apperceptionists, — if one may use the word for brevity's sake. Professor Münsterberg's smoke must not be allowed to obscure the *Studien* fire. It has always seemed to me that Laboratory investigation tended rather to establish the Will in an independent position than to reduce it to Sensation. Nowhere does the "outstanding tenth" (p. 81) behave more obstinately than in the course of experiments, whose presupposition is attention.²

In his criticism of Wundtian and other terminology, Dr. Ward has put his finger on a difficulty which is perpetually meeting the teacher of Psychology. Wundt has spoken of a *sensation* of activity, of spontaneity, as the "conscious content" of Will.³ Now the sensation is the knowing, intellectual element, from which the volitional or apperceptive is distinct. We can *know* an affective or volitional process, in the technical sense, only as an idea; *i. e.*, we represent its *Begleiterscheinungen*, the circumstances and conditions of its occurrence, not itself. So that the expression "sensation of activity," in which 'activity' is equivalent to 'quality of will,' is as erroneous as the phrase "sensation of pleasure" would be. To escape the difficulty, one is greatly tempted to say 'consciousness of activity' and 'consciousness of pleasure.'⁴ The word is employed, in this sense, just to avoid the use of 'knowledge.' It is vaguer, more colorless than the latter; there is no intellectual implication. Yet the use is not a good one, if consciousness is in general to denote the sum total of conscious processes present at

¹ Cf. O. Külpe, Anfänge u. Aussichten der experimentellen Psychologie, I, *Archiv f. Geschichte d. Philosophie*, VI, p. 177.

² The passage cited from Wundt (*Phil. Stud.* VI, p. 382) occurs in his criticism of the *Willenshandlung*. The authors there connected with Prof. Münsterberg are neurologists, not psychologists. A good many of the objections raised from the psychological side to the apperception-theory seem to be due to sheer misunderstanding of it. Cf. Waller, in *Brain*, LIX and LX, pp. 390 ff.

³ Cf. *Phys. Psych.*, II, 235 ("Wir nehmen . . . eine innere Thätigkeit wahr"), and I, 233.

⁴ Cf. Prof. Jowett's definition, given above.

a given moment.¹ And it is really unnecessary. The whole problem of Knowledge belongs, as I said above, to Epistemology, not to Psychology. The psychological data are only these: I sense, *e.g.*, blue; I feel pleasantly; I will actively. Or, better: the sensation senses (knows) blue; the feeling feels pleasantly; the will wills actively.² Does not this leave the whole difficulty as formidable as ever? The epistemological and metaphysical, yes; but the phrasing shows, I think, the significance of apperception to the experimental psychologist. It is the quality of Will, as pleasantness is a quality of Feeling. The question, 'How do we "know" it?' is not a psychological question; only, one cannot will without there being there a conscious process of the quality "active."

A terminology implies a set of definitions. The defining of a psychical element is an almost hopeless task. Dr. Ward admits that Wundt's new definition of Sensation (that of the second edition of the *Vorlesungen*) is an improvement on the older ones of the *Phys. Psych.* It is to be hoped that it will be inserted in subsequent editions of the latter work. The passage quoted from the *Ethik* has been remodelled in the new edition, and the objectionable phrases removed.³ No better proof of the necessity of a scientific terminology could have been advanced than this collation of the uses of the word *empfinden*, which was made to do duty in all the three spheres, of Sensation, Feeling, and Will. The author might, perhaps, have taken some account of the view of the relation of Feeling to Sensation set forth in the *Vorlesungen* (p. 226); and he seems not to have grasped the function assigned to the hypothetical Apperception-organ. This is hardly an "organ *within* the brain," on a par, *i.e.*, with the 'sensory-motor' cortical centres. It is involved in every case of "highest-level neural synthesis";⁴ and the suggestion of its localization in the frontal lobes is introduced by no stronger an adverb than a "möglichlicherweise."⁵

¹ It being necessary to express the facts somehow, I have adopted, *faute de mieux*, the word 'experience,' in a quite general sense, as equivalent to *Erlebniss*.

² Better, because the subject-object difficulty is openly and voluntarily neglected.

³ *Vid.* p. 442.

⁴ Waller, *l.c.*, p. 393.

⁵ *Phys. Psych.*, I, p. 233; Waller, *l.c.*, p. 372. — If Dr. Ward is wrong in speaking of a 'faculty' of apperception (p. 71: or is he quoting the presentationist?), Dr. Waller goes too far in stating that Wundt's view "is in no opposition to the associationist doctrine of the English school" (p. 393). Certainly, a doctrine of association is *included* in Wundt's Psychology. The difference between him and the Mills, *etc.*, is that the latter regard as whole, what he looks on as part only. *Vid. Phys. Psych.* II, pp. 244, 245.

It is, I suppose, unquestionable that the *Physiologische Psychologie* marks an epoch in the history of Psychology, and that the moderns have advanced far beyond their predecessors, both as regards method and result. To support the latter view, I need only instance three recent discussions: those of the so-called Time-sense, of Attention, and of Recognition and Association. Experiment has yielded sound fruit, with promise of more: small wonder that those who "go down to do their work in laboratories" are in good heart. There is no lack of problems; but the principle of psychophysical parallelism, while on the one hand it renders possible a scientific psychology by admitting experiment, on the other necessarily restricts the sphere of the science. It is undoubtedly true that laboratory psychology "has to do with nothing but processes or events." The consideration of 'the conscious subject' and its implications *must* be relegated to some other discipline, since experimental psychology cannot go behind its first principle.¹ We are only dealing with an example of that division of subject-matter which characterizes the progress of scientific knowledge in general; and if there is an irony discoverable in many psychological references to metaphysics, that is due, I take it, to the psychologist's belief that the metaphysician is, after all, very largely dependent on him. There can hardly be a sound metaphysic without a sound psychology; and, until this has been furnished, the psychologist naturally distrusts metaphysical construction.

E. B. TITCHENER.

¹ The adoption of this principle, as a working hypothesis, has been amply justified by its results. Cf. James, *Textbook*, pp. 6, 7.

REVIEWS.

The Principles of Ethics. By HERBERT SPENCER. Vol. I.
New York, D. Appleton & Company, 1892. — pp. 572.

This volume was briefly noticed in *Review*, No. 7, pp. 115-116. It is made up of the "Data of Ethics," and of two new Parts, *viz.*, "The Inductions of Ethics" (pp. 305-474) and "The Ethics of Individual Life" (pp. 475-561), with ten pages of bibliographical references.

The new matter seems to me below the level of Mr. Spencer's other ethical writings. This is all the more disappointing as the volume on "Justice" (see *Review*, No. 1, pp. 79-88) gave no evidence of any abatement in the powers of the author, who has long suffered from serious illness. It is not improbable that the falling off which is observable in the present work is due partly to the nature of the subject, and partly to the method of treatment which the author adopts. Unfortunately, the calm air of scientific investigation is not infrequently disturbed by the eruption of prejudices against Christian bishops, emperors, and other potentates, whose offices are as objectionable to Mr. Spencer as their doings; but readers of the Synthetic Philosophy have grown accustomed to these catastrophic parentheses in the development of Mr. Spencer's arguments.

The most valuable feature in the new work is the conception, and the carrying out of the conception, of morality as relative to a life, on the one hand, of external enmity, and, on the other, of internal amity. Mr. Spencer long ago laid down the thesis (see "Data of Ethics," § 48) that from the sociological point of view "ethics becomes nothing else than a definite account of the forms of conduct that are fitted to the associated state." And with the elaboration of his theory it grows clearer that the sociological view of ethics is in Mr. Spencer's estimation the only fruitful one. He makes no use in later volumes of the physical view, the biological view, and the psychological view, each of which received, along with the sociological view, a chapter in the "Data of Ethics." It seems substantially correct to say that, in Mr. Spencer's present opinion, the science of ethics has simply to show that morality is the code of

conduct proper (for the sake of preservation) to human beings living together in the associated state. This state can be maintained only by effectual co-operation, both for external defence and internal sustentation. In early societies, in which war is the normal condition, the morality of external enmity prevails. As war dies out, the morality of internal amity, which is necessary for peaceful industry, comes to the front; and the continuance of these conditions favors the growth of an international morality of amity, which is at present slowly developing in civilized countries. But this goal is unattainable so long as wars survive. "Hence the fact that we have a thin layer of Christianity overlaying a thick layer of paganism" (p. 323). Our generation acts at one time on the principles of the morals of amity, at another time on those of the morals of enmity, and for the most part without recognizing the contradiction.

In the light of the foregoing analysis, the diversity of moral sentiments, ideas, and judgments is easily explained. And ethical science must take account of what peoples, in all stages of civilization, regard as right, obligation, and duty. Here murder and lying are proscribed, there veracity and respect of life. We treat smoking as a morally indifferent act; some Mahomedan tribes consider it one of the worst offences. But the science of ethics must reckon alike with our moral code, and with codes which do violence to all our moral sentiments. An act is to be described as ethical whenever, in the minds of those performing it, there is a consciousness of authority, of coercion, and of public opinion, which results in an idea and feeling of obligation. Or rather, since this consciousness is one of external constraint enforced by extrinsic results, such an act should, in strictness, be designated *pro-ethical*, though with the mass of mankind it stands in the place of what is truly ethical. The true moral consciousness refers solely to the intrinsic results of conduct. Few minds possess it. Hence in the inductive treatment of ethics it is with the pro-ethical feelings and ideas and virtues that we are almost exclusively occupied.

Mr. Spencer pursues the morality of external enmity and the morality of internal amity through chapters on aggression, robbery, revenge, justice, generosity, humanity, veracity, obedience, industry, temperance, and chastity. The chapters are rich in sociological materials, showing how differently these notions are regarded by different peoples. The results are given by Mr. Spencer himself in an admirable summary (pp. 467-468):

“Taken together, the preceding chapters show us a group of moral traits proper to a life of external enmity. Where the predominant social co-operations take the form of constant fighting with adjacent peoples, there grows up a pride in aggression and robbery, revenge becomes an imperative duty, skilful lying is creditable, and (save in small tribes which do not develop) obedience to despotic leaders and rulers is the greatest virtue; at the same time there is a contempt for industry, and only such small regard for justice within the society as is required to maintain its existence. On the other hand, where the predominant social co-operations have internal sustentation for their end, while co-operations against external enemies have either greatly diminished or disappeared, unprovoked aggression brings but partial applause or none at all; robbery, even of enemies, ceases to be creditable; revenge is no longer thought a necessity; lying is universally reprobated; justice in the transactions of citizens with one another is insisted upon; political obedience is so far qualified that submission to a despot is held contemptible; and industry, instead of being considered disgraceful, is considered as, in some form or other, imperative on every one.”

There is much in this theory that is scientifically tenable. But on two fundamental points it seems to me altogether erroneous. First, what Mr. Spencer calls “the ethics of enmity” is not, in view of the historic facts, entitled to a position alongside of the “ethics of amity.” By warlike nations themselves murder and cruelty come, in the progress of civilization, to be reprobated. And naturally so. For they are in conflict with that sentiment of humanity which, from the beginning, is the fundamental factor in morality, and which, in the course of history, reveals itself in a fashion that breaks down the tribal and other artificial barriers between man and man. The two ideas of amity and enmity have not, in the history of the race, as Mr. Spencer implies, an equally real and justifiable content.

Secondly, Mr. Spencer errs—and this is the vitiating principle of his entire philosophy—in overestimating the influence of external circumstances. War is a great evil, and it doubtless affects the sentiments and ideas of the people who practice it. But the evil in human nature lies deeper than the circumstances of human history. If all swords were beaten into ploughshares and the era of absolute peace had come, a contemporaneous observer would scarcely say of that distant humanity what Mr. Spencer already claims for the Pueblos, *viz.*, “that circumstances have long exempted them from war and that they are now organically good” (p. 472). This is the

“higher truth” which Mr. Spencer finds in the moral-sense theory of the intuitive moralists. A critic exposes himself to the danger of being ranked among those benighted people who “accept the prevailing creed”; but, at all hazards, I venture still to think that out of the heart are the issues of life, and it is perfectly demonstrated by our American experience of industrialism, peace, and non-aggression that Mr. Spencer is wrong in holding that “there needs but a continuance of absolute peace externally, and a rigorous insistence on non-aggression internally, to ensure the moulding of men into a form naturally characterized by all the virtues” (p. 471). “The Christian scheme,” with which Mr. Spencer finds his own theory irreconcilable, at least rests on the sound position that reformation originates and consists in a change of heart not in a modification of environment. That this change is to be brought about by “promises of heaven and threats of hell” is a bit of psychological theology that may be left with Mr. Spencer and its advocates; but conversion from even motives like these is at least intelligible in certain natures of the coarser type, whereas Mr. Spencer’s dogma “that humanity may be moulded into an ideal form by the continued discipline of peaceful co-operation” (p. 473) flies in the face of all experience. No doubt the institutions and practices of society react to some extent upon its individual members; yet every one knows how useless even a law is that is not supported by public sentiment. It is, therefore, with the individual soul that the great reformers have always begun.

Part III, “The inductions of Individual Life,” is made up of somewhat sketchy chapters on activity, rest, nutrition, stimulation, culture, amusements, etc., They have more practical than theoretical value. Yet it ought to be signalized that, in these chapters, Mr. Spencer joins with writers of other and very different schools in claiming a moral significance for acts which do not affect others for good or evil, but are simply self-regarding. It is true the results are vague and uncertain. In eating, drinking, amusements, etc., we are told that we are to follow the mean and to have regard for proportion among the several divisions of our activities. Beyond these prescriptions Mr. Spencer does not venture to go, and he says that the remaining problems “can be completely solved only by the organic adjustment of constitution to conditions” (p. 560). If his precepts are not new, they are important. The health and happiness of innumerable men and women are sacrificed by disregarding them.

Evolution and Man's Place in Nature. By HENRY CALDERWOOD, LL.D., F.R.S.E., Professor of Moral Philosophy, University of Edinburgh. London and New York, Macmillan & Co., 1893. — pp. xvi, 349.

As stated in the preface, the author's main objects in writing the present volume have been "to trace the evidence of man's relation to the continuity of life on the earth, and to describe the distinctive characteristics of human life itself." The volume consists of eight chapters, of which the first five, occupying the first 121 pages, may fairly be called introductory. The scope of these chapters may perhaps be sufficiently indicated by the titles: "Evidence for Evolution," "Life in its Lower and Higher Forms," "The Characteristics of Human Life," "The Relations of Environment to Life," and "Heredity and Evolution." They make little pretence of containing anything new, but consist for the most part of a résumé and popular discussion of the different phases of the theory of evolution from Darwin to Weismann. The résumé is in the main good. If one feels that it is superficial at times, one is to remember that this was almost inevitable, considering the vast amount of literature on the subject, and the fact that the author's principal object in this part of the book was to present the theory of organic evolution as now accepted. The passages which impress one least favorably are those which deal with the vexed question as to the 'inheritance of acquired characteristics.' While the author is by no means dogmatic in the statement of his views, he pronounces against the Weismannian theory without indicating as definitely as one would wish his reasons for doing so. Moreover, in certain passages he fails to consider separately the supposed 'inheritance of acquired characteristics' and the undoubted inheritance of congenital variations (p. 90 *et seq.*). In this way the former is made to appear a much more necessary assumption than it really is. It is interesting to note that, while the author assumes the 'inheritance of acquired characteristics' on the side of the organism, he is very cautious when it is a matter of mental and moral qualities. "Each individual must achieve his own victories; none can hand down such gains" (p. 120).

In the short chapter on "Sensory and Rational Discrimination," the author's point of view, already hinted at in the preceding chapters, is clearly indicated. Moreover, the method according to which he proposes to proceed is frankly stated. It is with the latter, which, indeed, presupposes the former, that we chiefly have to do. As will

be seen, it is a method which was almost certain to influence the final result. Granting that man as an organism is a product of evolution, the author begins by making "the broad distinction, universally recognized" between "sensibility" and "rational power." We must emphasize differences instead of resemblances at the beginning of our investigation for purposes of clearness. As a matter of fact, the author tacitly assumes an absolute difference here. His treatment of "sensibility" is peculiar. "Mere sensory experience, in us as it is in animals, must be assigned a separate place as physiological, to be grouped under a distinct classification" (p. 129). This is not a chance expression. No materialist could claim for the sensory side of our psychic life a more adequate explanation in the facts of nerve physiology. Indeed, this part of psychology seems to be regarded as pertaining to physiology rather than to psychology proper. The author's idea as to the province of experimental psychology is also open to criticism, as will be seen from the following quotation. "We are not to be misled by the title 'Experimental Psychology.' . . . While all the phenomena of nerve action are included under experimental psychology, all the phenomena of consciousness are excluded from this field of observation" (p. 132). Not only must "reason," as a totally distinct faculty, be brought in at every step in the development of human consciousness, but the "doctrine of the separate existence of the soul . . . seems the only adequate interpretation of the phenomena of human life" (p. 141).

While the author often makes sharp distinctions the validity of which may well be questioned, his whole treatment of the problem of mental evolution suffers from a failure to distinguish clearly between the physical and the psychic plane. In his treatment of "sensibility" in the lower animals, it is sometimes difficult to tell whether he refers to some dim form of consciousness or to a merely physiological susceptibility to external stimuli. Further, there seems to be the tacit assumption that, if mental development is to be explained by evolution, mind itself must be regarded as a result of combinations of matter. Now even on the physical plane the theory of evolution is by no means a theory of origins (in the strict sense); it is distinctly a theory of development. Life in some very simple form is once for all assumed. The theory attempts to explain how the indefinitely complex has been developed from the relatively simple. One has just as good a right to assume a rudimentary consciousness, from which the higher forms of consciousness have been developed. Whether mental evolution can be proved, as organic

evolution practically has been, is another question, of course. In the case of the organism we are dealing with something tangible, while our knowledge of the psychic life even of the highest mammals is necessarily indirect and therefore fallible. The argument for mental evolution is necessarily largely one from analogy. The postulate of continuity, which has met with such ample vindication on the physical side in the almost universal acceptance of the theory of organic evolution, inclines one strongly to believe that mental, like physical, development has been gradual and according to law.

Our author, however, distinctly pronounces against continuity in mental development. In the lower animals we have "sensibility," and this alone. This, with "instinct," is sufficient to explain the actions of all animals, with the exception of the higher mammals. Then "intelligence," as a distinct faculty, appears upon the scene. This marks the limit of psychic development possible for brutes. With man "reason" appears. "Granting a common basis of intelligence, capable of interpreting sensory experience . . . there remains a difference of power so enormous as to require that a distinction be drawn between 'intelligence' and 'reason'; between 'animal intelligence' and 'rational power'" (p. 214).

In the two remaining chapters on "Animal and Rational Intelligence" and on "Rational Life," which together constitute about two thirds of the book, this whole question is discussed with considerable wealth of illustration and with a candor which the reader must recognize, however far he may be from sympathizing with the author's point of view. Professor Calderwood is more than justified in scrutinizing with great care supposed instances of animal intelligence. Only too many of the examples which have found their way into popular works on the subject have been accepted at the hands of wholly untrained and uncritical observers. The attitude of all careful psychologists here must be one of caution, and Professor Calderwood has done good service in showing how much of our supposed knowledge of animal intelligence is mere conjecture. But while one may be prepared to admit that the author does justice to the degree of animal intelligence, one cannot but feel that the absolute distinctions in quality which he makes between "sensibility," "intelligence," and "reason" are unfortunate. These hard and fast distinctions suggest all the dangers of a 'faculty psychology.' The constant tendency of science is to emphasize the extreme complexity of phenomena and the continuity of development. And the development of the 'higher' from the 'lower' is not what it seems. Even

if, with Professor Tyndall, one should go to the length of seeing in 'matter' the "promise and potency of every form and quality of life," the implication would not be that 'life' was different from what we had supposed, but rather that 'matter' was vastly more than we had supposed. For after all, 'matter,' not 'life,' is the inference.

As will be seen, the book treats of a most difficult subject, where the latest utterances of science, philosophy, and even theology, are involved. If the treatment is somewhat popular, one has no right to assume that the author intended it to be otherwise. While we cannot but consider the author's presuppositions and method as somewhat unfortunate, and the results as correspondingly doubtful, our last word must be one of respect for the candor and generosity of a man who can discuss a question which so immediately concerns his most cherished ethical and religious views without any trace of bitterness or conscious evasion of difficulties.

ERNEST ALBEE.

The Dialogues of Plato. Translated into English with Analyses and Introductions, by B. JOWETT, M.A., Master of Balliol College, etc. In five volumes. Third edition, revised and corrected throughout, with marginal analyses and other additions, and an index of subjects and proper names. New York and London, Macmillan & Co., 1892.

A writer in the *Edinburgh Review* of April, 1848, in lamenting the lack of a good English translation of Plato's Dialogues, says: "The scholarship of our age *ought* to be able to raise up an English Schleiermacher or an English Cousin." It was just a little less than a quarter of a century after that time that Jowett, in bringing out the first edition of his translation, supplied in most brilliant fashion the lack pointed out by the Edinburgh Reviewer and in him England produced a greater interpreter and translator of the divine Idealist of Greece than was either the German or the French scholar. The same Reviewer goes on to say further: "A translator of Plato ought to be not merely competently skilled in Greek, but, still rarer qualification!—to be a great master of English"—two qualifications that are united in Jowett in a degree, as far as we know, unparalled. By his translation Jowett has raised Plato to the rank of an English classic. But these are not the only qualifications which the translator brought to his work. Equally important is his philosophical acumen,

temperate judgment, wealth of sympathy for the Platonic manner, broad learning essential to the wide range of subjects handled in the Introductions, and absolute fairness and candor in the treatment of those unsettled problems where most great scholars have dogmatized and when no dogmatism is admissible. He is reticent about the chronological order of the dialogues and shrinks from any hard and fast theory of a preconceived order in their composition, such as Schleiermacher's, and though he is ready to admit in the totality of the dialogues "both unity, and also growth and development," he says, "we must not intrude upon him [Plato] either a system or a technical language." In this respect he seems to favor the now prevailing accepted theory of Hermann, the historical or evolutionary theory, which provides the only natural and adequate solution for the many inconsistencies that are scattered up and down the pages of Plato and, without some such hypothesis, in spite of Emerson's belief that a foolish consistency is "the hobgoblin of little minds," make for the reader no end of trouble. The dialogues simply represent the development of Plato's self, and in this essentially Hermannic view Jowett seems to acquiesce when he says (V, ccxxxvi): "The progress of his writings is also the history of his life; we have no other authentic life of him."

Further, the handling of a subject in the form of dialogue, provided the dialogue observes the law of natural conversation, precludes anything like fixed plan or procedure; for much the same freedom that characterizes conversation should characterize the dialogue and this constitutes one of the elements of art in it. Jowett fully recognizes this (*cf.* *Intro.* to *Phaidros*, pp. 393, 403) and so does no violence to the composition by forcing it into a mould of system and orderliness into which it will in no manner fit. Instead of setting up any extreme hypothesis which may in a way be brilliant, but probably wide of the truth, he advocates in his introductions always the side of moderation, where truth is more apt to be found, and avoids lengthy disquisitions on those subtleties and vagaries out of which one only gets straw for the thrashing.

In reference to the Platonic canon, Jowett maintains the same position as in his first edition, only he deviates somewhat from the order of that edition, notably in placing the *Kratylos*, *Gorgias*, and *Phaidros* much earlier; further, he adds a second appendix, in which he includes *Alkibiades II* and *Eryxias*, the translation of which comes from Mr. Knight. He thus incorporates in his canon twenty-five of the dialogues and places in a sort of *Apocrypha* five others,

thus regarding as "undoubtedly genuine" nineteen-twentieths of all the writings ascribed to Plato. He excludes all the epistles. The grounds for regarding them as spurious are so strong and well known that a defense of himself for excluding them was hardly necessary. For this variance with the canon of Grote, and at the wish of Grote's editor, Professor Bain, Jowett gives a brief and in the main conclusive résumé of the arguments against the genuineness of the epistles (Preface, p. xxvi), though the argument against the seventh, which is usually regarded as Plato's *apologia pro vita sua*, will not, as it is stated, appear very convincing. Another point in which he is at variance with Grote concerns the much troubled question of the Sophists. Jowett treats the question at some length and with great fairness in his Introduction to the *Sophistes*, and takes the same view of the exponents of this Aufklärungsperiode as Ueberweg-Heinze and Zeller. The author shows that the bad sense of the term 'Sophist' was not a creation of Plato, but from the manner of its employment in the dialogues, it must have been current before him; that it is not improbable that Plato's writings served to emphasize the bad sense and add to the ill-reports of these somewhat maligned teachers, thereby doing for the Sophists "the same kind of disservice with posterity which Pascal did to the Jesuits." But for the original bad odor of the term Plato is not responsible, and the traditional opprobrium attaching to the name is not without historical foundation.

In his Introduction to the *Protagoras*, I doubt if the aim of the dialogue is fairly stated (I, 123) by calling it the unity of virtue. In the same paragraph the real aim of the dialogue is more accurately called the "identity of virtue and knowledge." The unity of virtue may be involved in the theory that all virtue is knowledge, but the aim is not so much to prove that virtue is a unity as to set forth its character as knowledge. The question whether Plato derived the legend of Atlantis from an Egyptian source (IV, pp. 429 seq.), is one which to Jowett can hardly be taken *au sérieux*; the authority of Proklos he rejects as quite inadequate, and, turning to internal evidence, he finds that it is much more probable that Plato invented the story than that he derived it from Egypt. Grote's view that "it is not improbable that Solon did leave an unfinished poem," he regards as entirely foundationless. But in saying that there is not a "tittle of evidence" for this Jowett seems rather extreme, a statement one can rarely make of anything found in the whole of these elaborate introductions. Is there not an *a priori* probability, with

Grote, that some such allusion was contained in the poems of Solon? It does not appear likely that Plato would have fabricated, after fashion of the modern novel, a historical basis for his legend in order to lend it greater credibility or interest. The fact that Plato broke off early in the narrative, furnishes, as far as I can see, no manner of proof against Grote's view. M. Martin on the other hand takes, it is true, an extremely credulous attitude toward the entire legend; but Grote, who, with Socher, regards the legend as a creation of Plato's imagination, holds with plausibility to a dependence on some Solonic allusion or cue. In this third, and probably definitive edition of the dialogues, Jowett has added several new essays, and alterations have been introduced affecting analyses, introductions, and text; the headings to the pages and marginal analysis of the text have added greatly to its convenience; in fact everything seems to have been done to make the reading of the dialogues comfortable alike for the literary dilettante and the serious student of Plato's philosophy. It would be difficult to find a parallel to this union of exquisite scholarship with the best in the book-maker's art. The new essays which have been added concern 'Language,' 'The Decline of Greek Literature,' 'The Ideas of Plato and Modern Philosophy,' 'The Myths of Plato,' 'The Relation of the Republic, Statesman, and Laws,' 'The Legend of Atlantis,' 'Psychology,' and 'Comparison of the Laws of Plato with Spartan and Athenian Laws and Institutions.' Of these the least attractive is the one on 'the Decline of Greek Literature,' which is very scant, containing a good but slight characterization of the dreary waste of Alexandrine literature, preached from the text of Plato's satire on Rhetoric in the Phaidros. But when Jowett turns from this to the views of those melancholic soothsayers who lift up their voices and prophesy that for English letters an age of "sciolism and scholasticism" is imminent, he is not so happy. He gives his reasons against such decadence, but in doing so, he hardly sustains the high philosophical or literary character of the other introductions, and true as his observations are, they are such as any normal eye might see without effort.

In the matter of the translation itself there are, of course, different opinions as to what constitutes a good rendering into English, and, unfortunately, these opinions are prevailing determined by associations of the class-room and grammatical study. The misemployed idea of 'literalism,' and the school-master's insistence on 'construing,' furnish perverted norms of an English translation. Jowett has elucidated in the preface to this edition his canons of trans-

lation, which appear to me to be the true laws for guidance in this art. Munro's Lucretius is one of the most notable examples of the successful employment of the 'literal' theory in translations. But 'literal' is used in but half its proper sense if it is applied only to words and the exact turning of particles and phrases into literal English equivalents. If 'literal' is used in the sense of 'exact,' then we must transfer meaning, spirit, art, color, and those less tangible elements of style into their English equivalents, and this constitutes a much higher standard for the translator and requires an immeasurably greater skill than the grammarian's poor law of 'word for word.' Jowett aims at clearness, grace, the transfer of Plato's artistic Greek into a corresponding artistic English, an English that is not artificial, but as natural to the genius of our language as Plato's utterances were to that of Athens, and he has succeeded beyond the success of any translator with whose work we are acquainted. He has given us neither an English exotic, as is Munro's Lucretius in style, nor has he brought into the world halting and crippled monsters, such as those with which our 'construers' perversely continue to fill and defile the market-place. What could be more delightful than the spirited translation of a passage in the Theaitetos (IV, 204): "Once more, then, Theaitetus, I repeat my old question, 'What is knowledge?'—and do not say that you cannot tell; but quit yourself like a man, and by the help of God you will be able to tell," or the skilful touch in Sokrates's encouragement to the young dialectician (IV, 205): "Capital! excellent! spoken like an oracle, my boy!" or again (IV, 221): "Like a good-for-nothing cock, without having won the victory, we walk away from the argument and crow." I cite two or three further passages illustrative of the happy manner in which the translation has been made, and if they are compared with the original it will be readily seen that the translator is equally fortunate in exactitude and stylistic finish: "Thus great are the heavenly blessings which the friendship of a lover will confer upon you, my youth. Whereas the attachment of the non-lover, which is alloyed with a worldly prudence and has worldly and niggardly ways of doling out benefits, will breed in your soul those vulgar qualities which the populace applaud, will send you bowling round the earth during the period of nine thousand years, and leave you a fool in the world below" (I, 463); "Sees them only 'through a glass darkly'" (II, 245); *ἐπομένων δὲ τῶν ἄλλων ταυτῆ*, "And the remainder to match" (I, 445); *ὁ δ' αὖ σκολιός, πολὺς, εἰκῆ συμπεφερομένος*, "The other is a crooked lumbering animal put together any-

how" (I, 460); "And the argument implies that there are combinations of pleasure and pain in lamentations, and in tragedy and comedy, not only on the stage, but on the greater stage of human life" (IV, 624). In this way numberless citations might be made exhibiting the consummate skill of a great master in translation, a skill, however, which no one will understand, who has not many times tried to convert Plato into English prose.

A few slight lapses of the printer may be noted here: Mantinea, Mantinea (I, 521, 532, 537, 572); mos [t] (III, 89); Io for Ion (I, 126, cf. 493); and δ into [ξ] (I, 286). The translation of both θεοῖς and θεῶ (I, 483) as *God* may be questionable, and in Symp., 208 B, ἀθάνατον is translated instead of the preferable ἀδύνατον; in Symp., 208 D, no distinction is made in the verbs ἀποθανεῖν, etc.

From the very fact that the work before us is in the main not constructive, but an interpretation of the construction and speculation of another, it is very apt to be underestimated, and so the immense skill and scholarship employed on the work will hardly ever be fully understood or receive their just meed of praise. The preparation of these masterpieces in analysis, introduction, and translation, will remain one of the greatest results of the cultivation of the humanities in England. Plato has probably never had an interpreter so acute and sympathetic; these five tall volumes show nowhere any lapse of love's labor; the work from Charmides to the Laws is all on the same high plane, and when the translator comes to the end of his task, his words before laying aside the final introduction to the laws are full of exquisite feeling: "We have followed him during his forty or fifty years of authorship, from the beginning when he first attempted to depict the teaching of Socrates in a dramatic form, down to the time at which the character of Socrates had disappeared, and we have the latest reflections of Plato's own mind upon Hellas and upon philosophy. . . . We have endeavored to see him as he truly was, a great original genius struggling with unequal conditions of knowledge, not prepared with a system nor evolving in a series of dialogues ideas which he had long conceived, but contradictory, enquiring as he goes along, following the argument, first from one point of view, and then from another, and therefore arriving at opposite conclusions, hovering around the light, and sometimes dazzled with excess of light, but always moving in the same element of ideal truth . . . And so, having brought into the world 'noble children' (Phaedr., 261 A), he rests from the labors of authorship. More than two thousand two hundred years have

passed away since he returned to the place of Apollo and the Muses. Yet the echo of his words continues to be heard among men, because of all philosophers he has the most melodious voice. He is the inspired prophet or teacher who can never die, the only one in whom the outward form adequately represents the fair soul within; in whom the thoughts of all who went before him are reflected, and of all who came after him are partly anticipated . . . We may see him with the eye of the mind in the groves of the academy, or on the banks of the Ilissus, or in the streets of Athens, alone or walking with Sokrates, full of those thoughts which have since become the common possession of mankind . . . So, 'partly trifling, but with a certain degree of seriousness' (Symp., 197 E), we linger around the memory of a world which has passed away (Phaedr., 250 C)." We congratulate the revered master of Balliol on the completion of his third edition of the Dialogues of Plato and its presentation to the English-speaking world, and beg to bring to him our small tribute of thanks for the monumental interpretation, hardly less immortal than the works interpreted.

WM. HAMMOND.

John Locke und die Schule von Cambridge. Von DR. GEORG V. HERTLING, München und St. Louis, Mo. Herder'sche Verlagshandlung, 1893. — pp. xi. 319.

There is a rising consciousness among continental thinkers that Locke is of central importance in the history of modern philosophy; there is a growing disposition to attach more weight to the intellectual elements of his system. As Aristotle by the Scholastics, so Locke by the Illuminati, was not fully understood. The growing significance of Epistemology has dragged the fourth book of Locke's Essay into notice, and the supposed problem, as regards Locke, is to explain his intellectualism or to harmonize the second and fourth books of his *Human Understanding*. Dr. von Hertling seems to conceive the problem as equivalent to settling accounts between extreme intellectualism and extreme sensationalism. This appears to me to state the problem, not only against Locke, but against philosophy itself, and to repeat the dogmatic blunder of Descartes as touching the metaphysical problem. It is perfectly clear that the dualistic problem, as handed on by Descartes, is from its form of statement incapable of an answer; and it is equally clear that the above *a priori* conception of the psychological problem precludes the possibility of a solution. The spirit and method by which

Locke approached the problems of philosophy are the contraries of the spirit and method generally shown by his critics. Thus, in the first chapter of the present study, which treats of the empirical and rationalistic tendencies of Locke's Essay, crucial points are too hastily passed upon. It is concluded that these tendencies in Locke are wholly antagonistic. The classic passages, II, 1, 2, and IV, 2, 1, are pitted against each other without any adequate inquiry as to what Locke means by the terms 'idea' and 'experience,' without noting that Locke himself did not regard them as contradictory, and without taking into account the fact that in the second book Locke is pioneering in Psychology, while in the fourth book he is dealing with Epistemology. Whether these are two distinct questions, as Locke declared, and whether the latter is necessarily dependent in all points upon the former, are two points for consideration before we bring in a verdict. But it is pretty clear that verbal harmonies in all cases are impossible, and that Locke is often an offender against his own views regarding the use of language. The conclusion that Locke is a thoroughgoing Nominalist is also questionable; such passages, as II, 13, 28; IV, 4, 13-17, and IV, 5-6, 2, seem to oblige us to regard Locke as a Conceptionalist. As to whether Locke regarded the intellect as a distinct source of ideas and principles, is a question of fact, wholly independent of harmonizing his language. Dr. von Hertling answers in the negative. Locke himself answers in the affirmative, as to ideas, in his first reply to Stillingfleet; as to first principles, in his first and second reply to Stillingfleet, as well as throughout his discussion of relations. That the mind has "powers intrinsic and proper to itself"; that "the mind necessarily forms the idea of substance"; that "general ideas come *not* into the mind by sensation or reflection, but are the creations and inventions of the understanding"; that the reason is regarded "no otherwise than as a faculty standing for clear and true principles," added to the following explicit declaration: "I make self-evident propositions necessary to certainty, and found all certainty only in them. Whether they come into view of the mind earlier or later, this is true of them, that they are all known by their native evidence, are wholly independent, receive no light, nor are capable of any proof, one from another," shows Locke to be, in Epistemology, an Intuitionalist. Thus, it appears to me that Dr. von Hertling's exposition is faulty by assuming that the intellectual element in Locke is a vagrant element, disturbing his otherwise English empiricism derived from Bacon and Hobbes. The Cam-

bridge School is brought in to account for this disturbing factor ; but here arises another difficulty. The supposition (s. 214) that, as the Essay was twenty years in making, and as the fourth book is strongly intellectual, therefore Cambridge rationalism crept in upon Locke after he had got well along in the composition of his work, is untenable ; for, as Fox-Bourne has pretty well shown in his *Life of Locke*, Vol. II, 101, the first book and part of the second were written after the fourth book. The thought is suggestive, although it cannot be used as a principle of explanation. In the second chapter we have an account of the Cambridge School. The chief source is Tulloch's *Rational Theology and Christian Philosophy in the XVIIth Century*. It may be remarked here that von Hertling's work on Locke really supplies the missing chapter upon the most rational of the rational theologians of the Seventeenth Century. It is pointed out how and why the School was a reaction against Bacon, Descartes, and Hobbes ; and much light is thrown upon Locke's more prominent predecessors. The third chapter indicates points of contact between Locke and the Cambridge men, with a view of explaining the rationalism of the former. The intimate personal relations of Locke with members of the Cambridge School are noted. Whichcote was Locke's favorite preacher, members of the Cudworth family among his closest friends. It is clear also that Locke was familiar with the writings of Cudworth, More, Culverwel, and Glanvill. Excellent service is rendered by indicating several points of contact between Locke and his friends as regards notions on Psychology, Ethics, and Religion. There certainly was community of sentiment concerning matters religious and ecclesiastical : the numerous agreements are set forth most interestingly. But it appears to me that Locke's favorite proof of God from the two necessary principles, self-existence and causation, as well as his psychological induction of the divine attributes, comes much nearer to that of Thomassin than to that of any member of the Cambridge School. In the last two chapters, which treat respectively of the occasion of the Essay and of Locke's attack upon innate ideas, it is pointed out at length how Locke was influenced by Boyle and Glanvill, and how he is independent of Hobbes both in Epistemology and Ethics. It is also held that one can find no sufficient reason in contemporary literature for Locke's attack upon innate ideas. This is perhaps questionable, when you take into view the political pamphleteers of the time, along with Herbert's "divinely implanted, original, indefeasible *notitiae communes*." The one bond which unites

Locke more closely to the Cambridge School is *not* that of affirming that the act of believing is a free act, or denying that what is above reason is thereby contrary to reason, or that the inconceivable is necessarily false, but his persistent opposition to the doctrine of the double truth, which came to the front in Pomponatius, Luther, and Bacon, and seemed to work havoc all round. Against the doctrine that what is true in theology may be false in philosophy; against Herbert, who found no place for anything but reason; against Hobbes, who found no place for the idea of God in philosophy, both Locke and the Cambridge men protested, with one voice, that truth is one; that reason is supreme, and must judge even revelation; yet, that revelation is possible, and Christianity reasonable. Dr. von Hertling has thrown much light upon his subject. He shows Locke as a mode in the continuity of thought; he brings Henry More in to explain certain mystical elements in Locke's metaphysics, and he shows Glanvill to be a significant member in the course of thought from Bacon to Hume.

MATTOON M. CURTIS.

Il Cervelletto. Nuovi Studi di Fisiologia normale e patologica.

Per LUIGI LUCIANI. Firenze, Successori le Monnier, 1891. Large 8vo. — pp. 320. LUIGI LUCIANI (Florenz): *Das Kleinhirn*, u. s. w. Deutsch von O. FRÄNKEL. Leipzig, Besold, 1892.

The appearance in a German translation of Professor Luciani's classical monograph on the cerebellum warrants us in giving a brief account of the original, although it is already two years old. The cerebellum, striking as are the obvious results of vivisectional lesions made upon it, has remained, it is well known, one of the enigmas of physiology. The doctrine of Flourens, that it is the general organ of *coördination* of movements, more or less blended with that of Magendie, that it is an organ of *equilibrium*, has held its own in the text-books in spite of the fact that many observations are difficult to reconcile with either view. Ferrier's elaboration of the equilibrium-theory may be considered the ablest view which had been presented until Professor Luciani's work appeared.

Professor Luciani's doctrine renews and establishes by careful experiments the notion of Rolando, Brown-Séquard, and Luys, that the cerebellum has no strictly local functions, but must probably be regarded as standing to the other nerve-centres in the light of a

sort of appendix, whose main use is to supply them with *energy* for carrying out their special tasks. The author puts forth this notion modestly, and more as a postulate of something which the future must more exactly determine than as a theory already defined. Meanwhile, finding important degenerations within the centres, and severe trophic disturbances of the body (glycosaria, emaciation, etc.) to follow upon extirpation of the cerebellum, in order to make his view of it as of an organ of mere vital reënforcement the more plausible, he points to the apparently analogous office of the ganglia on the posterior roots of the nerves. The decisive proof that it is not required either for coördination or for equilibrium, lies for him in the fact that dogs may *swim perfectly* with their cerebellum entirely removed. That when placed on the ground, with the whole weight of their body to carry, they should nevertheless show the well-known drunken gait, is explained, according to Luciani, by their excessive muscular weakness, especially in the neck and hinder limbs, coupled with their inefficient voluntary efforts to compensate its effects. Luciani gets rid of the voluntary movements of compensation by the ingenious method of destroying the motor-zone in one or both cerebral hemispheres. He succeeded in keeping alive for a year a bitch deprived of her entire cerebellum and of both motor-zones. This animal could hardly stand or move at all on the ground, though she swam correctly enough, the water relieving the limbs of the burden of the body, now too great for them. When one half of the cerebellum is extirpated, the resultant weakness is confined to the *same side* of the body; and here again Professor Luciani discriminates beautifully between the anomalies of movement due to the weakness itself, and those due to the acquired habits by which the animal counteracts its effects. These habits (in dogs) consist chiefly in the curving of the spine towards the weak side so as to throw the support on the stronger hind leg, and in the abduction of the weak fore leg. They disappear when the motor-zone is destroyed; and then the dog can only walk successfully by leaning his weak side against the wall. The phenomena of weakness, which are permanent, are preceded for some days after the operation by spasmodic phenomena of traumatic irritation which the author carefully describes. Luciani's distinction between the three sorts of symptoms, irritative, privative and compensatory, is masterly, and makes of his work a model for other investigators. The study of the dog's movements was carried on in part by an analysis of the order of his footprints on the floor.

No anaesthesia of any sort was observed after destruction of the cerebellum, and *no loss of sexual passion*—in fact, Professor Luciani says that his laboratory, whilst his cerebel-less dogs were there, came to resemble a lying-in hospital. Nor was any other *emotional* anomaly definitely observed, though on this point (so insisted on in the book by Dr. Courmont which we noticed last year [P.R. i, 319]) the author is loth to conclude dogmatically. There were irritative phenomena of *vertigo*, partly, but not wholly, optical in their nature; and there remained mixed with the phenomena of weakness a certain tendency to incoördination, to which Luciani gives the new name of *dismetria* of movement. These last two points certainly need farther definition and elucidation, since they leave a foothold for the 'equilibrium' theory, alongside of the purely dynamogenic theory which the author defends. The book is admirably composed and subdivided; it describes experiments on monkeys as well as on dogs, and contains a full discussion of human pathological cases, and a critical history of previous opinions on the subject. By its clearness and exactness, it may stand as a model of successful physiological work.

W. JAMES.

The Problem of Reality. By E. BELFORT BAX. London, Swan Sonnenschein; New York, Macmillan & Company, 1892.—pp. x, 177.

Mr. Bax has the laudable object of making "suggestions for a reconstruction and solution of the Philosophical Problem" on the classical German lines, and believes his book contains nothing "a thoughtful reader should have any difficulty in grasping." If so, he really should not open fire with a sentence like this: "The metaphysicist often accuses Philosophy of being a logomachy." A terminology like this may be on the classical German lines, but it is apt to be more than even a thoughtful reader can endure. And Mr. Bax is unrelenting in the strong meat he provides, and follows up his *debut* by a glossary replete with the severest Hegelian jargon, which, *e. g.*, defines 'being' as "the element in Reality of *in-itselfness* or *self-positing*, which in all Objects corresponds to the 'I' in the primal synthesis of Consciousness." As might be expected after this, Mr. Bax's metaphysic turns out to be of the sort we have always with us, and to consist of the hypostasization of the products of his theory of knowledge. This feat is accomplished in the first pages of Chapter I, and is the most interesting thing in the book.

Philosophy means "the reduction of the totality of things to terms of our abstract Consciousness." This is possible, because "all Reality contains a Thought-element," mediating between 'thought' and 'thing,' and present for the mind to abstract from the object. So Reality "means nothing except as part of a thinking consciousness, potential or actual." But Thought can never express the immediate *this-ness*, which is due to 'a-logical' Feeling. The common root of both is the 'Ego,' the "Subject of Consciousness-in-general," the "presupposition of all Reality whatsoever," *toto cælo* distinct from the "mere memory-synthesis or personality" with which the common term 'I' confounds it. Once he has got so high and mighty a Commander-in-chief of the universe as this Consciousness-in-general, Mr. Bax proceeds to shower the highest philosophic distinctions upon it, but it will be more instructive for us to consider the validity of the process by which it is created. Its assumptions seem to fail at two points: at the outset, in not considering the possibility that the mediation between Thought and Feeling may also be effected by making Thought an attribute of (some or all) feeling 'reals;' and secondly, in Mr. Bax's failure to prove that the logical 'Subject' is *not* identifiable with the individual 'I.' These two objections ultimately coincide, for Mr. Bax regards the Subject as the supreme 'a-logical' basis of all phenomena (pp. 14, 103). So that the question resolves into, Why must it be one and not many? *i.e.*, why should we conclude from the *logical* unity of a category to a *meta-physical* unity underlying all reality? And all the answer I can extract from Mr. Bax is, that "numerical difference cannot be ascribed to it" (*i.e.*, to the category—which no one doubted), and that "Thought revolts against such an assumption (of a plurality of subjects), and proclaims it inconsistent with the system of Reality as a whole."

But to return to the system of Mr. Bax. He is evidently familiar with classical German philosophy (so much so that he talks freely of 'old Kant' and "old Fichte," p. 12, 18), and after deducing his Consciousness-in-general in so Hegelian a fashion, his study of Schopenhauer makes him divide his allegiance, and protest vehemently against Hegel's excessive 'panlogism.' The 'a-logical' as such must be respected. It forms an element in all things, and occurs as chance, freedom, individuation, infinity, time, etc. What is alone surprising after the handsome admissions that "the logical universal cannot penetrate the particular" (p. 129), that "the starting point and goal of all action remains Feeling" (p. 92), that "the being of a

thing always eludes us" and "is just as unthinkable as the Ego itself" (p. 46), etc., is that Mr. Bax should still have sufficient confidence in the logical to base his metaphysic on an epistemological argument. With a little less dependence on classical German models, he might reach very different conclusions from those he does here, as to, *e.g.*, the absurdity of Theism (p. 50), the evanescence of the individual consciousness (p. 89), and the coming of the great social beast, of whose consciousness the individual consciousness would be an organ (p. 56). As to style, one must remark on coinages like 'unformulatable,' 'distinguishability,' 'Felt-ness,' 'I-ness' etc., and the inaccuracy of his German and Greek quotations. Misprints (?) like *φυσιος* (p. 2), *νους ποεϊκος* (p. 33), *architype* (p. 48) and *slusiency* (p. 56), look unscholarly. In conclusion, the book may be commended to 'Hegelians, as illustrating the dangers of any departure from the strait and narrow path, but it will hardly be a specific against "metaphysicophobia."

F. C. S. SCHILLER.

SUMMARIES OF ARTICLES.

[ABBREVIATIONS. — *Am. J. Ps.* = *American Journal of Psychology*; *Ar. f. G. Ph.* = *Archiv für Geschichte der Philosophie*; *Int. J. E.* = *International Journal of Ethics*; *Phil. Mon.* = *Philosophische Monatshefte*; *Phil. Stud.* = *Philosophische Studien*; *Rev. Ph.* = *Revue Philosophique*; *R. I. d. Fil.* = *Rivista Italiana di Filosofia*; *V. f. w. Ph.* = *Vierteljahrsschrift für wissenschaftliche Philosophie*; *Z. f. Ph.* = *Zeitschrift für Philosophie und philosophische Kritik*; *Z. f. Ps. u. Phys. d. Sinn.* = *Zeitschrift für Psychologie und Physiologie der Sinnesorgane*; *Phil. Jahr.* = *Philosophisches Jahrbuch*; *Rev. de Mét.* = *Revue de Métaphysique et Morale*. — Other titles are self-explanatory.]

LOGICAL.

Sur les idées générales. G. MARCHESINI. *Rev. Phil.*, XVIII, 5, pp. 489-498.

An idea is a sensation which has left a mental residue susceptible of elaboration. The logical distinction between the two falls within a process of which each stage depends on the preceding, and by which the most abstract notion is indissolubly connected with concrete existence. General ideas in the strict sense, *i. e.*, in and by themselves, do not exist. Abstract and concrete are relative terms, an idea being abstract in so far as the sensations whence it is derived are not immediately given. The ambiguity involved in the conception of general ideas is due to a false separation between subjective and objective, as if either could exist without the other. The universal is not an *a priori* form distinct from the given material; it is the logical function of sensation itself, and varies with the psychological character and mental development of the individual. The mark which always distinguishes it, is its indefinite applicability. Sensation itself is always implicitly general, since it can be separated from the 'this' and 'now' and logically combined. Ideality being thus a fundamental and essential quality of mental phenomena, it is not improper for psychological monism to take a logical direction in the analysis of psychological processes.

L. HANNUM.

PSYCHOLOGICAL.

Die Farbenempfindung im indirecten Sehen. I. A. KIRSCHMANN. Phil. Stud., VIII, 4, pp. 592-614.

The author states the results of this first part of his investigation as follows: (1) For the continuous perception of a saturated color, there is necessary, in accordance with the Law of Relativity, the simultaneous presence of other colors, or at least that of colorless light. (2) The perception of colored surfaces in a completely darkened visual field is exceptional, and can only conditionally be employed in the determination of the functions of the excentric retina. (3) There is as little coincidence of the spheres of perception of red and green, or of purple and green, in indirect vision, as there is of those of blue and yellow. This fact speaks decisively against Hering's hypothesis. The further fact, that the sensation-circle of blue is the largest, that of violet the smallest, while the limits of the perception of red or purple lie between those of blue and violet perception, accords neither with the theory of Hering nor with that of Helmholtz. (4) The peripheral retina functions quite differently in different directions from the centre. (5) All the color-spheres extend further in the nasal and upper portions of the retina than in the temporal and lower parts. The yellow-sphere alone has a greater extension in the latter regions, in the case of small stimulus-objects. (6) The yellow and orange zones are not coincident throughout. The former color claims more of the temporal, the latter more of the nasal retina. (7) Color-sensations, in indirect vision, are to some extent dependent on the magnitude of the colored surfaces. In the case of the lower and temporal retina, the different zones of sensibility are not greatly extended by increase in the size of the objects; for the upper and nasal portions of the retina, on the other hand, the possible displacement of boundary due to such increase appears to be unlimited. (8) Total and partial color-blindness are referrible, on Wundt's theory, to a deficient differentiation of the scale of chromatic sensation, corresponding physically to a divergent constitution of the visual substance. The modifications of sensation in indirect vision, which depend on extension and position in the visual field, are probably only the expression of a necessary alteration of function in the peripheral retina, the reason for which we cannot at present state in full. (9) The resemblance existing between partial color-blindness and the color-sensation of indirect vision is quite superficial.

E. B. T.

Die statischen Functionen des Ohrlabyrinthes und ihre Beziehungen zu den Raumempfindungen. I. R. WLISSAK. V. f. w. Ph., XVI, 4, pp. 385-403.

(1) *The physiological facts.* The literature begins with the experiments of Flourens (1824) on pigeons. Not till 1870 were the semi-circular canals expressly claimed for the sense of bodily equilibrium (Goltz). Verworn has shown how the otolith apparatus functions in the Ctenophores. Such an apparatus is the primitive form of the static sense-organ. In the higher animals we find more complex conditions: they are symmetrically built, and so require a two-fold organ; they possess the eye, which is practically absent in the Ctenophores; their static sense-organ has two parts,—the otolith apparatus, for progressive movement, and the canals, for rotatory movement. (Cf. Mach, Breuer.) A frog whose otolith apparatus and labyrinth have been unilaterally extirpated, assumes an associatedly asymmetrical position (Ewald, Loeb). This asymmetry is intelligible from the analogy of the Ctenophores. The activity of both organs is necessary to the equilibrium of the animal; its deprivation of one conditions a disturbance of the antagonists (flexors and extensors). If both organs are excised, there is no asymmetry, but the animal is dull, remains long on its back, if placed in that position, and in water sinks, or swims uncoördinately. A pigeon which has undergone the operation cannot fly, cannot at first feed itself, cannot surmount obstacles, etc. Dogs similarly operated upon are unable to execute complicated muscular movements. Again, the Ctenophores help us to an explanation. Innervation is not asymmetrical, as in the former case, but it is generally inexact.

The difference of function obtaining for otolith apparatus and canals is clearly proved by Ewald's experiments with his pneumatic hammer. Interesting are the phenomena of giddiness shown by the uninjured animal, when rotated round the vertical axis. If a pigeon be thus rotated, we get symptoms of head-nystagmus (Breuer). If the movement suddenly cease, after the disappearance of these symptoms, the animal exhibits an after-giddiness. So with rotation round the horizontal axis; the giddiness-response to the rotation is here vertical, as it was in the former case horizontal. Experiments *per exclusionem* point to the excitation of one pair of canals in each instance. We are thus led to the explanation of Flourens' results: the movement-components lying in the plane of the uninjured canals can be compensated, the component lying in the plane of the injured

canal cannot be so compensated, — and therefore the pendulum-like motion of the head continues. The relation of the labyrinth to the ocular movement-apparatus has been discussed by Breuer. The eye-movements are different when the head is held upright and rotated round the vertical axis, when it is vertically inclined, and when it is inclined to right or left. In rotatory giddiness occurs an ocular nystagmus, which is analogous to the head-nystagmus. Here we are dealing with compensatory movements; in the case of head-nystagmus with a permanent change of position. The former are to be referred to the otolith apparatus, the latter to the canals, as can be experimentally and pathologically demonstrated (Kreidl). These facts are to be harmonized with our initial view, that the labyrinth is the organ of conservation of symmetrical muscular innervation. We may expect similar laws to hold for the eye as for the skeletal muscles, which regulate the position of the general sensory surface of the body. Indeed, all the facts are explained, if we suppose that, with change of position of body or head, the labyrinth so functions that “the visual plane seeks to retain its perpendicularity to the axis of the body, and the line of bisection of the angle of the lines of sight its coincidence with the median plane of the head.” It is in this line that we see objects, monocularly and binocularly alike. — Thus, the movements due to the labyrinth bring about an equilibrium, as it were, within the organism. Disturbance of the labyrinth implies other kinds of muscular inability also. Ewald explains this fact by the hypothesis, that the muscle-groups connected with it through the medium of the central organ are influenced as regards their tonus. When we say, then, that the labyrinth looks to symmetrical muscular innervation, we mean the innervation of all the cross-striated muscles. We may conceive of the total mechanism as follows. In either half of the central nervous system we find a correlation of the centrifugal paths for the antagonist-pairs. This correlation renders symmetrical movements possible. The mechanism can be set in motion by labyrinth-excitations, at some point of the mid-brain or (perhaps) medulla. That the mechanism is present in sections of the brain which lie higher than this point, means, physiologically, that either other centripetal excitations or exclusively-central processes can affect it.

E. B. T.

The 'New' Psychology and Automatism. ANDREW SETH.
Contemporary Review, April, 1893, pp. 555-74.

In denying the soul and limiting itself to the concomitance of physical and psychical events, the 'new' Psychology starts with a definite theory which determines the results beforehand. Münsterberg, who gives the clearest statement of these results, emphasizes the dynamic aspect of ideas so as to eliminate altogether the notion of activity. There is first the idea of the movement as in contemplation, then the perception of the movement as executed. Ideas are thus active entities independent of the subject, the recognition of which becomes an empty acknowledgment. This view is due fundamentally to the standpoint of Phenomenalism or Intellectualism, more precisely to two Psychological presuppositions which are arbitrarily assumed: (1) that all psychical phenomena are reducible to sensations, (2) that the will is a phenomenon. Münsterberg inconsistently admits that every sensation has a 'tone' of feeling, and further that this element has no material counterpart (despite his contention that all conscious phenomena are materially conditioned). Feeling certainly cannot be phenomenalized, for it is the attitude of the subject to a given stimulus. We *experience* feeling, and *know about* it by its results — 'experience' being in this connection a wider term than 'knowledge.' Feeling furnishes the driving power of all life, and all actions are originally feeling-prompted. To deny this, even in the case of the lowest organisms, is to forget that where there is life there is unity, and that feeling is the inward expression of this unity. In ignoring these facts the 'modern' Psychologist goes further than the extreme Physiologist. If the talk about 'nervous currents' and 'paths of least resistance' is to be taken as a literal explanation, man is reduced simply to a network of pathways, through which the energy of external nature soaks in and oozes out again. That the nervous system does act as a unity is sufficiently proved by the unity of consciousness. As with feeling so *mutatis mutandis* with volition. Feeling is constituted by relation to the subject; volition is the action of the subject. Volition, like Feeling, can be *experienced*, but to seek to know it as a phenomenon is to seek to know it as it is *not*. An investigation founded on this assumption is a mere *petitio principii*.

DAVID IRONS.

ETHICAL.

Unreasonable Action. PROF. H. SIDGWICK. *Mind*, No. 6, pp. 174-187.

A psychological examination is necessary to determine by reflective observation what happens when a sane person acts consciously against his sounder judgment. The very existence of unreasonable action is not sufficiently recognized by influential ethical writers. Bentham, Mill, and Green leave little room for subjective irrationality. But it is so clearly a part of common experience that to reject it seems paradoxical. The present examination was conducted under the usual difficulties of introspection, yet the following result was reached: A *clear* consciousness that an act ought not to be done, accompanied by a voluntary determination to do it, is a comparatively rare phenomenon. The other cases are those in which the consciousness of the unreasonableness of the action is present, either (1) not at all at the moment of willing, or (2) only obscurely. The former heading includes acts which violate a generally accepted rule, but which have been willed without an application of the rule. In such cases the rule is often simply forgotten, temporarily excluded from memory by impulse. More often the rule is remembered, but the correct conclusion is not drawn on account of some seductive feeling, which causes the agent either to suspend his rule from a temporary conviction, that it was unwisely adopted, or to persuade himself that it is not applicable to the case before him. The second heading covers cases in which the agent is dimly aware of his sophistry. He gladly embraces any sort of casuistical or fallacious argument which seems to make against the course pointed out by reason. Sometimes the fallacy results from the direction of attention to certain aspects of the subject, and away from others, as in the case of the vain man who refrains from considering his shortcomings. Undisguised wilfulness is rare, occurring rather in failure to perform a duty than in positive wrong action. For positive wrong action, some process seems necessary which shall set aside the opposing judgment.

E. L. HINMAN.

La sociabilité et la morale chez les animaux. F. HOUSSAY.
Rev. Phil., XVIII, 5, pp. 471-488.

Although natural selection is rather a result than a cause of evolution, it is none the less interesting to determine *a posteriori* what qualities of a species are connected with survival. One characteristic, which appears to exist in direct ratio to superiority and prosperity among animal races, is the aptitude for social life. This is exemplified by man, ants, beavers, monkeys, cattle, and many other species, which never yield to the most terrible enemies unless these possess a superior social organization. The habit of living with others is usually beneficial even to subject races, although sometimes the balance of benefits is lost, *e. g.*, in slavery among men and ants. Sociability is connected with special qualities which may be called moral. The most rudimentary of these is the tendency to give assistance in turn, as when the sentinels of a herd watch while the rest graze. In its lower forms, service receives speedy recompense; in the more developed phases, the reward is delayed and sometimes renounced altogether, as when life is sacrificed for others. When self-sacrifice becomes not only an hereditary instinct, but a recognized condition of welfare, the individual is born into a moral world, and, profiting by all the previous work of society, is thus invested with duties from the outset. This state is most complete in the human species, where the struggle for life necessary to every animal race assumes a form which disengages the individual as much as possible.

In the perpetuation of variations and the development of species, sexual selection, though secondary, is highly important. But it is not true that the instincts serving the formation and conservation of the family constitute the basis of society. Among the lower animals, the social and family instincts exist in inverse ratio, and are gratified alternately; among men, they are either kept separate as in the East, or conciliated by a series of compromises, as in the more complex civilization of the western nations. When the sexual instinct is lost, as among the bees, communal life appears to be much more perfect than with ourselves, labor and its benefits being nearly equally apportioned. Such a life has existed among men only in communities practically monosexual, and natural history indicates that the price of socialism is likely to be the destruction of the family, which is a much more serious enemy to communism than are the interests of the individual as such.

L. HANNUM.

Freedom: its Relation to the Proof of Determinism. SIDNEY E. MEEZES. Int. J. E., III, 3, pp. 366-381.

Brushing formal logic aside as of comparatively slight assistance, two types of proof remain: (1) proof by induction, and (2) proof from presupposition. It is impossible either to prove or to disprove freedom by induction. Scientists employing this method can only discover 'laws of nature'; they know nothing about the 'efficiency' of a cause to produce its effect. Both 'compelling' and 'compulsion' are emotions, and it will not do to attribute them to nature. The ordinary indeterminist idea of the operation of motives is absurd. To establish freedom, it is necessary to show that at some point there is no definite order of sequence. But this cannot be done by induction. The proof would have to be one from ignorance, which might be overthrown by the discovery of unobserved antecedents. But it is equally impossible to disprove freedom by induction. Even if the ideal of science were realized, freedom would not be disproved. Predictability does not do away with spontaneity. The reality or illusoriness of freedom must be decided on other grounds. Whatever is necessary in order to the possibility of becoming acquainted with, or getting access to, truth, scientific or other, must *a fortiori* be itself true. If freedom be such a prerequisite, and if, further, the process of truth-getting can be shown to be an activity essentially similar to some of the practical activities, then surely the reality of freedom can be accepted as proven. But such is really the case. Deliberation and choice are the essential elements in all decisions, practical, æsthetic, or theoretic, and in all three types these elements are essentially the same. The truth-getting activity involves as a necessary part of itself teleological judgments the same in type as those involved in moral or æsthetic decision. But the worth of a teleological judgment depends upon the worth of the conscious being making it. 'Facts' cannot 'speak.' Squirm how we will, in the last resort authority, our own or that of another accepted by our own, is the basis on which all that is true for us rests. The Practical Reason has the primacy. We cannot think, any more than we can act, without the postulate of freedom.

E. A.

The Superstition of Necessity. J. DEWEY. *Monist*, III, 3, pp. 362-379.

The thesis to be made good in this article is, that the idea of necessity is a survival from an earlier and undeveloped period of knowledge, having reference solely to the development of judgment, not to things or events. Science ultimately gives just a complete statement of reality; and in doing so we do not say that a fact *must* be such and such, but simply that it *is* such and such. Of course, in describing the whole, we state the elements that enter into and make up the whole, but they do not *cause* it. The fallacy of the necessitarian theory consists in transforming the determinate in the sense of the wholly defined into the determined in the sense of something externally made to be what it is. The whole, although first in the order of reality, is last in the order of knowledge. We at first abstract from the concrete fact the part that is of most practical importance to us and set this part up as *the* fact, while the attendant circumstances are regarded as accidental or are entirely ignored. Afterwards experience forces on us the recognition of these circumstances as parts of the whole fact, and the unity of the concrete fact begins to dawn upon us. This passage-way from isolation to unity, denying the former, but not admitting the latter, is necessity or determinism. Necessity is of purely teleological character. So far as our past action is concerned, what is of practical value is abstracted and regarded as the entire fact; but when our *future* action is considered, this value is an end to be attained, and the conditions which before were regarded as accidental now become means *necessary* to bring about the end. Further, so far as the end is vaguely defined in consciousness, so far the means are contingent, but when the end is made more concrete, the means become necessary; finally, however, when the end is fully defined, the means constitute its concrete filling and all appearance of necessitation vanishes. The end, including the means, simply is. Logical necessity is just the teleological read backwards. The logical process of discovering and stating the reality of some event simply reverses the process which the mind goes through in setting up and realizing the end. In the one case we look for the cause of a given effect; in the other for the means to a represented end. In either case the separation of the two sides, of cause from effect, means from end, has its origin in the practical needs of our nature, and that separation gives way to unity when the real fact is known in its totality.

A. R. HILL.

METAPHYSICAL AND EPISTEMOLOGICAL.

Die moderne Energetik in ihrer Bedeutung für die Erkenntniskritik (II). K. LASSWITZ. Phil. Mon., XXIX, 3 u. 4, pp. 177-197.

In the work of representing the change of phenomena quantitatively, mathematical physics meets two difficulties from which the transition to the notion of energy offers relief. As mechanical physics knows only mechanical energy and mass as its unit of measure, the first difficulty consists in reducing all the specific forces of nature to the unity of mechanical form. To explain qualitative differences by motions, the complicated molecular and ether-hypotheses were devised, since these motions could be only such as take place below the limit of sense-perception. This solution accepted, the second difficulty arises, how to correlate these purely mechanical events with the qualities of sense reached only in experience. Why is this ether-motion experienced as light, that as heat, etc.? The chief point of the question is, how nature, as magnitude in space, can be objectified without losing its relation to the unity of determination in the subject; *i. e.*, how mechanism is possible without losing completely its connection with the subjective factor. The theory of energy makes easy the conception that it is the unity of law which conditions as well the material phenomenon, the unity of the object, as the unity of the subject. There is no place here for the epistemological error that the ultimate elements in the explanation of nature are sensations as they are given in the senses; but it is clear that the data of sense are qualities which are determined by laws of the understanding. As there is only one energy, which, according to its distribution in space and time, is designated as energy of various forms; so, too, there is only one sensation, whose various qualities are joined to the time-space distribution of energy in our bodies, *i. e.*, to the complex of the organism. Energy is the objectified content of consciousness, *i. e.*, a synthesis, in which the subjective unity of the ego is replaced by the objective unity of the complex. Sensation, subjectively considered, is that change of state of our ego which is localized, and so belongs to the space-time content — an adjustment of energy in relation to the subjective unity of an ego. There is energy only so far as relations of unity take place in time and space through the categories, *i. e.*, as far as the realm of nature extends. In speaking of energy outside the

realm of nature, *i. e.*, outside the realm of the categories of quantity, quality, and relation, in their relation to space, we can use only metaphors, to which the concept of energy in physics does not correspond. Energy is only the content objectified by the law of the understanding; but content, *i. e.*, determination by synthesis, is also produced by laws of reason, by teleology, and freedom. Accordingly, we find in energy, not an absolute, but only one of the law-determined formations of consciousness, namely, the condition of all sense-experience. It is the work of epistemology, and not of the science of energy, to reduce the empirical phenomena of energy to merely spatial configurations of energy; but just in so far as the development of natural science approaches this end, the more distinctly emerges the thought that the ultimate individual, the concrete content of nature, is not the sense-given, but that it has objective validity, in so far as it is determined by general laws. In the definite working out and clearing up of such general principles, we see the epistemological significance of the modern science of energy.

F. C. FRENCH.

The Epistemology of Ed. V. Hartmann. W. CALDWELL. *Mind*, No. 6, pp. 188-207.

Hartmann begins from Subjective Idealism. His final theory is Transcendental Realism which teaches that the things that are real are objects outside, or transcending, consciousness. I. He finds the Common Sense view of perception refuted by the facts of science. But we should study the facts of perception in their entirety, *i. e.*, as aspects of an organic function of percipient beings. It will then be seen that not the Common Sense, but the introspective immanent view needs justification. In movement in response to physical stimuli, the percipient has an actual living relation to the larger whole of which its body forms a part. This diffuse organic sense of reality, which gives us a 'that,' but not a 'what,' is the type of perception. From this the specialized perceptions are built up. II. The propositions in which Hartmann states the scientific reputation of naïve Realism are summarized and criticized. It is noted that 'things' do not enter as units into our simplest consciousness, they arise as distinctions in the psychical content parallel to other distinctions drawn in the content of the physical world. The physiological refutation of naïve Realism is discussed. This argues that the world of consciousness and the world of being are different *in toto*.

But this affects not the fact perceived, but only the percipient's interpretation of it. The world we know is one in which psychic or nervous process is attendant on physical process. We can abolish neither. It is valid to predicate my perceptual knowledge of reality, because knowledge itself is a phase of reality. The relation of knowledge to reality is the relation of one kind of reality to another. Hartmann's own doctrine about Perception is summed up in five propositions: (1) What is perceived is one's own conscious content. *Ans.* The psychical is only possible through organic movement, which is the physical basis of perception. (2) Experience cannot decide whether there are 'things-in-themselves.' *Ans.* 'Things' may mean (a) things in the ordinary sense; (b) the ultimate structural elements of the world. Meaning (b) does not exist for sense-perception. (3) Experience cannot decide whether our intention and thought forms are applicable or not to 'things-in-themselves.' *Ans.* If I know only what is within my consciousness, I can never raise this question. (4) The world is my subjective appearance-world built up out of sensations, etc. *Ans.* The first clause confuses the world with my interpretation of it, the second erroneously takes sensations to be the elements out of which experience is built up. (5) Experience cannot say whether there are other worlds outside my subjective appearance world. *Ans.* This only means that the world has many aspects, only a few of which I know. III. Transcendental Idealism having failed to bridge the gulf between the immanent and the transcendent, Hartmann tries to accomplish this it by a transcendent application of the principle of causality. In this way he gets to 'things in themselves.' He shows how the other categories apply to 'things-in-themselves,' viz., unity, plurality, substance, existence, necessity, space, time. He makes the 'thing-in-itself' an "efficacious, unconscious, deaf happening." The two forms of transcendentalism are unreal alternatives. The opposition between immanent and transcendent is a false one. Scientific Realism is the completest theory. There is not for us one, but many related planes of reality. For metaphysic there always remains a dualism in *at least two* planes of reality. Results: (1) Dogmatic Idealism is an *idolon specus*. (2) Common Sensism is only an imperfect, and not a contradictory, account of reality. (3) Realism in the broad sense includes Idealism. "We cannot know things because between us and things there comes the mind" means that we can never know things because, in order to know them, we have got first to know them, *i.e.*, to falsify them.

J. A. LEIGHTON.

The Nature and Aims of Philosophy. H. JONES. Mind, No. 6, pp. 160-173.

Philosophy is the reflective reconstruction of the life of man. It starts with a working hypothesis, not from anything unconditionally valid. A valuable conception as a starting-point is that of human experience as a process of growth. Only potencies, however, are transmitted from age to age, and human experience is born anew and developed in each individual and generation. Every system of philosophy, therefore, which is faithful to its datum, must perish with the life it explains. The continual failure of systematic thought is due to the fact that we can connect parts together, but not wholes. Hence Art and Philosophy must always start afresh, while Science, dealing with incomplete contents, can proceed steadily by aggregation. The synthetic impulse of philosophy is only satisfied when we view the world in the light of self-consciousness, that category which allows the deepest differences within the most intense unity. Philosophy thus seeks, to interpret the world by knowing man, and in the nature of self-consciousness we find the explanation at once of the growth of philosophy and the failure of philosophic systems. We see that there can be no final philosophy, yet that the worth of philosophy remains, just as Morality retains its value, though the absolute Good is never realized.

DAVID IRONS.

HISTORICAL.

Le concept du nombre chez les Pythagoriciens et les Éléates.
G. MILHAUD. Rev. de Mét., I, 2, pp. 140-156.

The satisfactory explanation of the Pythagorean doctrine, that 'things are numbers,' is found in the ancient commentators. How did the Pythagoreans probably arrive at such a doctrine? Pythagoras was the first mathematician to speculate on the general properties of geometrical figures, and he found that these could be expressed by numerical relations, *e. g.*, the two sides and hypotenuse of a right-angled triangle are numerically expressed: $a^2 + b^2 = c^2$. For him the thought lay near: things which have form or figure, are numbers. The Pythagoreans did not study the properties of number, like ourselves, as abstract symbols, but in the light of

figures generated from points. The point was, for them, a unit having position; a line was a series of such points. The need of separating geometrical figures from natural bodies was not felt; the distinction between the domain of pure abstraction and the domain of concrete things was not known. So Pythagoras would have said 'geometrical figures are numbers,' or 'the bodies which fill the universe are numbers.' Further, Pythagoras was the first to institute investigations on the subject of sound. And here, too, he found that number was the determining element; though the ratio of weights suspended from the same length of cord to produce the octave, fifth, and fourth, is not, as stated in the tradition, 2 , $\frac{3}{2}$, and $\frac{4}{3}$, but the squares of these, 4 , $\frac{9}{4}$, $\frac{16}{9}$. Thus Pythagoras finds number everywhere; in geometrical surfaces and solids, in the movements of the celestial bodies, in the entire mechanism of the universe, and even in the hidden recesses of the soul, in the sensations of harmony, and believing he has found the essence of things, he propounds the doctrine that 'things are numbers.' It is not surprising that the first thinker in discovering a concept of such service for general science, did not himself understand the purely formal and subjective character of it. With him the concept was at once identified with the real. So Descartes says, extension is the essence of material things, things are extension, as Pythagoras had said: things are number. The same idea is expressed in the two formulas. Similarly Newton says that things are 'forces.' In Renouvier's law of determinate number, we find a return to the Pythagorean concept, and to the objectifying of the concept. In Parmenides and Zeno the unity of being is opposed to the Pythagorean plurality. Being is merely extended substance, the object of sense. Its unity implies that the matter of which the universe is composed is continuous; there is no empty space. This unity or continuous Being of Parmenides and Zeno is the extension of Descartes, and it is this Eleatic conception of continuity that is fundamental, though Zeno could not have foreseen this, to the generation of lines and surfaces in geometry, and to differential and integral calculus.

W. H.

Le mouvement et les arguments de Zénon d'Elée. G. NOEL.
Rev. de Mét., I, 2. — pp. 107-125.

The first two arguments of Zeno postulate the infinite divisibility of space, and imply the same of time. The last two postulate indivisibility directly of time, and indirectly of space. The first argument

merely shows the impossibility of a passage from repose to movement. The second is supplementary and declares relative and absolute movement to be equally absurd. If the common postulate of both be denied, the second pair of arguments still remains. Hence in either hypothesis as to the nature of space and time, motion is maintained to be impossible. The last two arguments cannot be refuted, but the first pair are founded on an unexpressed postulate which contains the negation of motion — that quantity must be given either as a whole or by successive additions. This forbids the application of the notion of Becoming to magnitudes, and ignores the possibility of a quantity in potentiality, which is gradually and continuously produced. Movement cannot be said to be an illusion of sense. It is a rational construction which cannot be explained by experience, since it explains experience. If it is denied, universal scepticism results. Movement is a Becoming; in itself, it is the continued passage to a new position, the successive changes of position being merely its effects. The number of successive movements, into which Zeno dissolves the total movement, only exists for the mind of an on-looker. The movement in reality is a continuity of such a nature as to exclude division in any form. These arguments are sophisms, but are inevitable unless we undertake a rigid criticism of the principles of our knowledge.

DAVID IRONS.

Metaphysik und Asketik. WILHELM BENDER. Ar. f. G. Ph., VI, 3, pp. 307-331.

Leibniz gives two independent explanations of morality. First, he accounts for it upon psychological and anthropological principles. Secondly, he gives also a metaphysic of ethics, which only refers to the universal forms of morality in abstraction from the actual process in which it is realized. Thus, morality appears as a purely internal matter, which has only to do with the good in itself. With its double relation to man and to God, it necessarily leads to the ascetic striving for personal salvation, and can no longer be distinguished from religion in its mystical, supernatural form.

Kant is a classical example for the correctness of our observation, that the metaphysical explanation of morality leads to asceticism, and that the ascetic practice, which renounces the world and seeks for personal salvation, is based on a metaphysical, transcendental view of morality. In the same way, Fichte's metaphysical explanation of morality combined naturally and necessarily with an asceticism and

mysticism which resembled that of the theosophists and neo-Platonists. Hegel escaped the consequences of his professed metaphysic of morals, but his absolute idea contributed nothing towards the explanation of the moral activities, institutions, and goods, which he included in the idea of the State. The same is also true of Schleiermacher; for, apart from some personal considerations, he had no place in his system for a religion which demanded a God without the world, and outside of the world.

J. E. C.

Le problème moral dans la philosophie de Spinoza. V. DELBOS.
Rev. de Mét., I, 2, pp. 126-139.

The moral problem, as S. conceived it, consists in eliminating those extrinsic conceptions which lead human activity towards transcendent and imaginary objects, in order to discover the intrinsic ideas and absolute truths which give expression to our inmost being and its relations to God. The system by which he sought to solve these problems took the ontological reason as the measure of everything. That which is not founded upon reason, is nothing but an illusion and a negation. The good is not outside of ourselves, but is directly of interest to us. That is true and useful which sustains and completes life; that is false and injurious which cripples and lessens it. Spinoza's system is idealistic, as is seen from his definition of *causa sui*; but it differs from former systems of idealism by the different mode in which he understands the divine thought. It is an Infinite which, instead of thinking itself eternally, produces other beings as their efficient and immanent cause. It is not a universal notion, but an individual; and that which is from the beginning present to it are individuals and their relations. S. seeks to free moral philosophy from abstract notions and conceptions, and to substitute for them the concrete individual, whose essence consists in the effort to persevere in his own being. That which the individual follows is good; that from which he turns away is evil. Suffering and unrest arise when one tries to realize what he is not, that which is the negation of his true being. The desire which is his essence is then determined, not by itself, but by the influence of external causes; and thus arises a life of contradiction, of falsehood, and of uncertainty. Then one expects to find the Infinite in the finite, *i.e.*, to discover in the latter satisfying pleasure and happiness. Thus, we imagine the existence of a Providence which is continually employed in providing for our wants; and the disappointments

which we experience drive us either to despair or impotent revolt. Not knowing himself, man is not able to know others, and finds himself in conflict with them. Most theologians and philosophers err in seeking to overcome this opposition by subjecting the individual to the constraint of a law ; but a law founded upon the false conception of a will which can incline indifferently towards good or evil, opposes itself to our natural feelings as a tyrannical power. It is something external to the individual, and cannot furnish the unity we are seeking. Virtue is not an external end, but rather the effort of the man who arrives through consciousness of himself to full autonomy. It is not, then, by abnegation, but by the complete affirmation of himself, that a man is able to arrive at his true being. We reach the true life by the complete development of all our desires. The tendency to persevere in our own being, must, however, transform itself into the new order of reason. It is through reason that the elements which compose it can be grouped in a stable unity. Reason transforms the inadequate ideas, which arise from external things, into adequate ideas. It substitutes for the relations of sense those of reason, and exhibits in each being the necessity which makes it what it is. Thus, by uniting that which is for sensibility diverse and opposed, reason restores to us, under an intelligible form, those moral beliefs which for most men are necessities of thought.

J. E. C.

Ueber den Begriff der Wissenschaft bei Galilei. A. RIEHL.
V. f. w. Ph., XVII, 1, pp. 1-14.

G. not only discovered the correct methods and employed them in his investigations, but he had also the clearest conception of the grounds of this procedure. His method displayed deep and penetrating speculation, but was based upon, and controlled by, experience. Sense experiences are indeed to be taken as the starting point of every scientific investigation, but for further progress the knowledge which the spirit has from itself is not less essential. The most important species of knowledge which the mind derives from itself, is the mathematical, which enables it to advance from the phenomena of sense to a knowledge of their laws. G.'s own discovery, which transformed the methods of acquiring knowledge, consisted in the application of arithmetic to the phenomena of outer nature ; and to this even experiment is subordinated. No really valuable knowledge is gained by mere induction. We do not gain a knowledge of laws

by comparing the largest possible number of cases, but by a complete analysis of a single case. The task which G. set for science was to explain phenomena not from their causes, but from the law of their causes, or, otherwise expressed, to substitute for the strictly causal explanation, the logical mathematical ground. The object of his investigation was not to discover *what* causes bodies to fall, but *how* they fall. This change in the statement of the problem marks a transition between two ages of science. The means to gain this knowledge of laws (which G. pronounces necessary and universal) is experimental and mathematical analysis, and its criterion is its simplicity. We are also directly conscious of the motives of our own will, and there is a connection here that is as perfectly intelligible as that between reason and consequent. There is thus a group of mental sciences along-side the natural sciences. But it is the height of presumption to suppose that the human mind is capable of understanding fully the workings of nature. There is no single effect of nature which would not transcend the power of the most enlightened mind to comprehend completely.—Science, as G. conceives it, has thus points of relation to the Platonic conception of knowledge. It deals with what is timeless in time, with the unchanging laws of the changeable.

J. E. C.

Essai sur quelques problèmes de philosophie première. F. RAUH.
Rev. de Mét., I, 1, pp. 35-62.

An examination of the conditions of knowledge leads to the conclusion that I do not know the primary truth either as a being analogous to me, or as an objective law or notion, but as my intellectual consciousness or pure Ego. There are two degrees of intellectual consciousness, the moral and the logical. In a sense, moral certitude ought to be placed first, but in another sense the two are coördinate. Moral certitude being justified by an analysis of the conditions of knowledge, it is reasonably justified, and not accepted by an act of blind faith. Since the primary truth revealed by an analysis of the conditions of knowledge is my pure Ego, the old metaphysical questions regarding the fundamental truth may be ignored. It is contradictory to ask whether we are the modes of an Eternal Thought or distinct existences. The question before us is simply, When I think, how do things appear to me? Suppress the noumenon, and Kant's system is true. All questions relating to the efficient power of the first truth simply betray ignorance. External nature is not the

emanation of something superior, particular existences are not derived from an eternal consciousness. The independence of truth with respect to empirical cognition and its fluctuations, has been substantiated and personified by the old metaphysicians. The fact that others know the intellectual consciousness as well as myself, has also been held to imply that our individual consciousness is the manifestation of a more primary reality. It is true that intellectual consciousness presupposes an existence, but that existence is just the consciousness itself with that 'coefficient of eternity' which all truth bears with it. It is admitted that other beings, and the forms of space and time in which they appear, cannot be derived from my thought ; or rather the question is inadmissible, since the whole concept of efficient power (*efficacité*) is contradictory. German philosophy, in its attempt to unite the concepts of nature and moral liberty in the notion of the absolute, substantiated the absolute, instead of simply affirming as true the system of our knowledge. The idea of God is not a positive idea. It is useful in excluding all interpretations of nature which do not consist with the idea of liberty. It is not the idea of another *Being*; another being could not be absolute, as it would require to enter into the series of facts composing the universe. The representation of the intellectual consciousness under the form of a distinct being is less false than insufficient. It is even necessary in a sense to express the independence of truth with respect of my empirical consciousness. So long as it is regarded as a symbolical representation of the truth, it is legitimate. It is also possible to represent the hierarchy of existences, as subordinated one to another and also to an infinite consciousness, which attracts them and to which they tend. Thus, admitting in a particular sense conceptions at first wholly rejected, we get a doctrine that stands midway between Kantianism and the old theology. It excludes 'the thing-in-itself' on the one hand, and on the other all those special questions relating to the nature of God regarded as a separate existence.

DAVID IRONS.

NOTICES OF NEW BOOKS.

The Aesthetic Element in Morality, and its place in a Utilitarian Theory of Morals. By FRANK CHAPMAN SHARP, Ph.D. New York, Macmillan & Co., 1893.—pp. 131.

This is an interesting attempt to determine the grounds of our aesthetic judgments in regard to human conduct from the point of view of Utilitarianism. The author writes with considerable vigor, though he occasionally degenerates into a somewhat overflown rhetoric. The great defect of his essay is the almost total absence of that sympathetic or historical point of view from which alone we can hope for any real advance in philosophical insight. At the very outset this abstract way of dealing with his problem forces itself upon our notice. Ethical theories he classifies as either "teleological" or "deontological," meaning, by this latter terrible word (which is his own unaided invention), what is ordinarily called 'intuitional.' The result of this artificial classification is that Paulsen and Green are divorced from Kant, their philosophical father, while Butler and Kant stand side by side as "deontologists." No doubt Dr. Sharp may appeal to the example of Professor Sidgwick for the ranking of Kant as an intuitionalist, but that only shows a want of independence on his part. Perhaps it may seem that this is a harsh judgment, when we find our author attacking Mr. Sidgwick's view that "we desire a thousand things besides pleasure, . . . and that directly and independently of the pleasure they may happen to bring with them" (p. 13). But it immediately appears that he abandons Mr. Sidgwick only to fall back upon the 'psychological idealism' of Bain and Mill, maintaining that "the object of desire is always pleasure (or freedom from pain)," and that the 'highest good' is "greatest attainable amount of pleasure in general" (p. 17). I have no intention of entering into this well-worn controversy, of which we are all by this time tired; I refer to it merely as another instance of the author's inadequate method. Mr. Sidgwick is no doubt illogical in affirming that there are *two* ultimate ends, but in holding that we do desire objects, and not simply the pleasure which accompanies them, he has made a distinct step in advance of the older theory. He is certainly not to be proved wrong by Dr. Sharp's confusion (pp. 13-15) between the pain of want, which is not a desire at all, and the desire for freedom from pain, *i. e.*, for a certain form of self-satisfaction. To say that there are cases in which "desire undoubtedly differs from a mere state of pain, but only in so far as it includes a mental representation of the means of relief" (p. 14), is to explain desire by leaving it out. The feeling of pain which accompanies the sensation of tooth-ache, and the idea

of tooth-ache drops, do not constitute the desire, which is a mental effort to escape from a present suffering self and become a satisfied self. Having thus failed to see the significance of Mr. Sidgwick's contention that desire is not always for pleasure, it is not surprising that the author has not got beyond the untenable distinction between egoistic and altruistic desires, a distinction which assumes that there is a public good which is not identical with the true good of the individual.

In his "Analysis of Moral Beauty" (Chap. III), Dr. Sharp shows the same tendency to accept distinctions which have been outgrown. Thus he assumes that the beautiful and the sublime are coördinate. Now this opposition rested mainly upon a want of appreciation of the wild and grand aspects of nature. So long as the beautiful was identified with symmetry and proportion, it was natural to oppose it to the sublime; but when beauty was seen to consist in the characteristic, it became apparent that the grandeur of, say, the sea in a tempest is not exclusive of beauty, but exhibits it in the splendid masses which express its resistless power. Failing to grasp this idea of beauty as the presentation to sense, or imagination of the significance of nature or human life, it is not surprising that Dr. Sharp should say that "it would be the merest child's play to show that all the formal definitions of beauty ever proposed, fail to hold for important groups which the usage of language . . . persists in including under the beautiful" (p. 52).

In dealing with his more special problem, the author begins by saying that "the aesthetic quality of a single action, or of an entire life, is primarily independent of its relation to the moral ideal" (p. 50). The career of Caesar Borgia was, in Renan's words, "beau comme une tempête, comme un abîme," *i. e.*, we may regard it as sublime because of its display of "transcendent power" (pp. 50, 54). But, though the exhibition of power gives rise to the feeling of the sublime, no matter what the ends for which it is exerted may be, "we must restrict this, at bottom correct, and yet, as thus formulated, somewhat too broad statement" (p. 59). For, in the first place, "the unselfish life gives far better opportunities for a finer display than the service of self." "The end which the egoist proposes to himself is, after all, too narrow to be a proper object of aesthetic emotion" (p. 60). Secondly, "the proper aesthetic emotion is united with and then modified in various ways by our interest in the ends at stake in each instance" (p. 63). We are unnerved by the struggles of the Greek states among themselves, while the spectacle of Marathon or Salamis inspires us with enthusiasm. Thirdly, "it is limited by love or hatred for the agent." The aesthetic feelings arising from the display of skill and unity of purpose are similarly modified. The result of the whole inquiry is, that "not all the conduct useful to society is beautiful," and that "much that is beautiful is harmful in the highest degree" (p. 89). Dr. Martineau is, therefore, wrong in holding that "the beauty of conduct is conditioned on its rightness." This is true only of the 'idyllic' type of character. "All

the other kinds may be displayed alike in the most shocking crimes, and in the highest example of devotion to others" (p. 87). This being so, all theories which base morality upon beauty of character fail to account for the facts.

There is a certain want of consistency in the author's view of the relation of beauty to goodness. According to his first view, the aesthetic feeling is entirely independent of morality. As he goes on, however, we find that its intensity depends upon morality. The reason is, he says, that the egoist exhibits the power of self-command only over those impulses which conflict with self-love, whereas the altruist overcomes these and also the impulses of self-love. But if the distinction is merely one of *quantity*, there is no essential difference between non-moral and moral beauty. Would our author say that Caesar Borgia exhibited less self-command than a sister of mercy? Surely, that must depend upon the intensity of the impulses he overcame, not simply upon their number. The truth is, I think, that Dr. Sharp has not brought out the real difference in the two cases. In the wide sense in which beauty is conceived simply as harmony with an ideal, whatever it may be, both lives may be pronounced beautiful; but only the latter is morally beautiful. The differentia of human or moral beauty is conformity with the moral ideal. Hence every moral life is necessarily beautiful in so far as it is moral. This is virtually admitted in the second limitation, *viz.*, that the feeling of beauty is modified by our sympathy with the ends at stake, for such sympathy arises from comparing the action with the moral ideal. The third limitation depends upon the same principle, for love or hatred for the agent, as we are told, is determined by his attitude towards the welfare of his fellow-man (p. 86). What I should maintain, then, is that Dr. Martineau is right in holding that all moral conduct is necessarily morally beautiful, in exact proportion to its morality. Thus the opposition between the doctrine that morality consists in beauty of character, and the doctrine that it consists in the universal good, falls away. There can be no morally beautiful character except one in which the good is willed, and on the other hand the good consists in the realization of the ideal nature of all the individuals forming the organic unity of humanity. It is only by taking a narrow view of morality or of beauty that the two can seem to conflict: This is why the 'idyllic' type of character may seem more beautiful than those types in which a higher form of morality is realized. Such a life as that of Goethe is at once more noble and more beautiful than the life of the 'schöne Seele.' It must be observed, however, that in claiming the identity of noble with beautiful character, it is not meant that beauty of character is the end of life. The end is noble character, and beauty is the characteristic which such character presents when it is contemplated as realized. Thus beauty and goodness are not related as end and means; they are different aspects of the same thing, but aspects which necessarily harmonize with each other.

JOHN WATSON.

Socialism and the American Spirit. By NICHOLAS PAINE GILMAN. Boston and New York, Houghton, Mifflin, & Company, 1893.—pp. x, 376.

This work, which is appropriately dedicated to the author of *The American Commonwealth*, is not a history or exposition of socialism, but simply an estimate of the standing and the probable future of that doctrine in the United States. The author's principal object is to show how, in relation to the opposing doctrines of socialism and individualism, the American Spirit has exhibited itself in our history, institutions, life, and literature. This limitation of the theme must be borne in mind, for it is the justification of what some readers might regard as unpardonable omissions and also of the introduction of subjects not ordinarily associated with the name of socialism.

After a couple of chapters on "Individualism and Socialism" and "The Present Tendency to Socialism," the author analyzes, in three chapters, the American Spirit and its relations, on the one hand to individualism, and on the other to socialism. The notes of the American Spirit are found to be love of personal liberty, practical conservatism, enterprise, competition, public spirit, and optimism. This Spirit is animated by the conviction that in all economic activity the presumption is in favor of individual liberty and free competition. But the American practice has never been in accordance with the ultra-individualism of closet philosophers like Mr. Herbert Spencer, who lives in constant dread of a terrible enemy called 'the State.' The patent system is selected (p. 91 ff) to show how Americans reconcile the interests of the individual and the interests of the community by a method that is, theoretically, neither individualistic nor socialistic. No theory will deter the Americans from expanding the functions of government—local, state, and national—provided only experience shows such expansion to be in the interest of the people. While no American legislature has shown a bias towards theoretical socialism, none has been trammelled by an ultra-individualistic theory of the functions of government. This is illustrated in our free public school system, and free public library.

The sixth chapter disposes very effectively of Mr. Bellamy's "Nationalism"; and the seventh, after describing very briefly "Christian Socialism" in England and in the United States, shows the moral relationship between Christianity and socialism.

The rest of the volume (pp. 252–366) is taken up with more general considerations, and is indeed, as the author claims (Pref. vii), of a more 'constructive' character. Chapter VIII, on "The Industrial Future," shows in a very impressive way how by the continuous application of remedies already in successful use, as, for example, state boards of arbitration, shortening of hours without diminution of production, voluntary insurance, etc., the condition of the wage-earners may be gradually relieved and even elevated. But the most urgent need is that of closer union of

employer and employee. "Industrial Partnership," which the author believes to be the best means of accomplishing this end, is discussed and defended in Chapter IX with that fulness of knowledge and strength of reasoning which have made the author of "Profit Sharing in the United States" the recognized authority amongst us on this subject.

The four remaining chapters deal with "The Functions of the State," "The Higher Individualism," "Social Spirit," and "The Way to Utopia." They are characterized by great wisdom and sobriety of reflection and by a boldness in the assertion of old doctrines, which is all the more effective that it is not unreasonably conservative. There is a fine contrast between the lower individualism and the higher; and in this connection it is justly observed that "the follies of socialism excuse no one for lack of the higher individualism" (p. 336). Attention may also be called to the criticism of socialism (Chap. XII) as unfavorable to the production of moral and intellectual leaders, as regardless of history and experience, and as tainted by the belief that the want of money is the root of all evil.

The sound moral discernment of the author, coupled with the recognition that socialism is, at bottom, an ethical question, deserves the highest praise. But this alone, though indispensable, could not have enabled Mr. Gilman to write what I regard as one of the best books ever written on the subject of socialism. The author's philosophic breadth of view, scientific temper, and ample knowledge of the facts are attested by every chapter. And as the book is written in a clear and even fascinating style, it cannot fail of a large circulation, which it certainly deserves.

J. G. S.

A Manual of Ethics. Designed for the use of students. [University Correspondence College Tutorial Series.] By JOHN S. MACKENZIE, M.A., Fellow of Trinity College, Cambridge; Assistant Lecturer on Logic and Philosophy, and Cobden Lecturer on Political Economy in the Owens College, Manchester. London: W. B. Clive & Co.—pp. xxvi, 339.

This book "is intended primarily for the use of private students." Its standpoint is Kantio-Hegelian. Green's influence is marked; yet the author takes account of many other writers—too many, indeed. Part I (pp. 1-170) is devoted to the Theory of Morals; Part II (pp. 173-339) to Moral Life. The first two chapters define the scope of Ethics, and show its relations to other sciences. Chapters III-V give an analysis of the Moral Judgment, Duty, Will, and Desire. It is shown that Moral Judgments are concerned with character and motives; and motives are elaborately distinguished from intentions. The treatment of Will and Desire is along the lines of Green's. Chap. VI is devoted to Happiness, and in its divisions and treatment follows closely Sidgwick's *Methods of Ethics*, though Sidgwick's acceptance of pleasure as the only rational end is criticised. Chap. VII, on Perfection, presents Green's theory of the end and

rejects that of Spencer. Chap. VIII, on the Freedom of the Will, has, at least, the merit of brevity. Chap. IX, in which the author leans upon his "Social Philosophy," gives a discriminating account of the Relation of the Individual to Society.

Coming to Part II, we have in Chap. X an account of the Rights of Man and of Social Institutions, with a brief notice of Justice. Chaps. XI and XII treat of Commandments and Virtues. Chap. XIII is devoted to the Inner Life; Chap. XIV to Moral Pathology; and Chap. XV to Moral Progress. Of the two remaining chapters, one discusses the Relation of Art to Ethics, and the other the Relation of Ethics to Religion. A modification of the author's own preliminary account of Ethics is mentioned on p. 209, note.

As a book for the 'general reader,' who wishes to know what moralists are busied with, Mr. Mackenzie's work may be commended. It is, however, and perhaps of necessity (for it is written for a series), a somewhat scrappy and even superficial book. Like Mr. Mackenzie's earlier and more ambitious volume, it is overloaded with an ostentatious weight of scholarship. Does the author know anything, one is tempted to ask, not recorded or alluded to in this volume? The literary allusions may, however, beguile the general reader into the belief that Philosophy is not dull and crabbed! Some of the translations of foreign quotations (for example, 121, note) might have been improved.

J. G. S.

Les transformations du droit. Étude sociologique par G. TARDE.
Paris, Alcan, 1893. — 12mo., pp. 210.

M. Tarde is opposed to the use which recent jurists have made of the theory of evolution. The evolutionist insists too exclusively upon the similarities of the law in different countries and at different times. M. Tarde's mission is to emphasize the dissimilarities. He claims that the word evolution is deceptive. It suggests a uniform progress and development of the law by means of changes produced internally by the felt needs of society. The present work endeavors to show that this continuous uniform development is a myth, and that many of the greatest changes have been imposed from without by imitation, by proselytizing religions, or by conquering powers.

As regards archaic law, M. Tarde combats most of the accepted positions. He rejects the development of the family from promiscuity through matriarchy and patriarchy, denies the communistic character of primitive property, and asserts the antiquity of contracts. His treatment of criminal law is especially noteworthy. He regards the derivation of this from the instinct of revenge, through the *lex talionis* and compensation, as erroneous. The mistake arises from regarding primitive man in his external relations only. There, it is true that the law of retaliation held, and that the idea of culpability was unknown. But more important, though

less obvious, were the relations within the family group; relations regulated by domestic tribunals in accordance with moral conceptions. The instinct of revenge was a source of criminal law, but it was only a secondary one. The essential source was domestic punishment expressing moral blame and productive of remorse. The entire work aims at establishing the existence of moral sentiments in primitive society. T. W. TAYLOR, JR.

The Philosophy of the Beautiful. A Contribution to its Theory and to a Discussion of the Arts. Part II. By WILLIAM KNIGHT, Professor of Philosophy in the University of St. Andrews. [University Extension Manuals.] London, 1893, John Murray. — pp. xii, 281.

The first volume of this work appeared two years ago, and was devoted to an account of aesthetic writers and their theories. It contained a brief statement of theories of the Beautiful which had been advanced in Greece, Italy, Germany, France, England, and America. This part attempts an independent discussion of the problems of aesthetics, and also supplements the first volume by appending thirty pages dealing with Russian and Danish aesthetics. It also contains discussions in separate chapters of Poetry, Music, Architecture, Sculpture, Painting, and Dancing. Professor Knight states very clearly the problems which reflection upon Beauty suggest to us. He also distinguishes sharply between the Science and the Philosophy of the Beautiful. "Science contents itself with registering the particular forms which Beauty assumes, classifying the objects in which it occurs, and thus distinguishing its types. It is concerned only with phenomena and the laws of phenomena. But if we ask for an archetype under which these types can be combined, we have left the sphere of phenomena and Science and have entered the inner court of Philosophy" (p. 3 ff.). Chapter IV is a brief criticism of theories which the author considers inadequate. The author's own theory is suggested in the following chapter, but is not worked out in any detail. "It comes to this," he says, "that Nature has evolved certain definite types, which are, on the last analysis, thoughts or ideas — mind-forms, disclosing mind's essence. These are not merely phenomenal facts, now existing in the world, they are things that have been slowly developed out of antecedent forms through a thousand ages and have now a certain fitness of relation each to each. They possess harmony among themselves, and definite proportions in detail. They thus form a homogeneous whole or scientific unity. A unity, however, might be lifeless; and it is only when life animates the harmonious forms of the phenomenal world that they become expressive and that their beauty is disclosed" (p. 52 f.).

Chapter VI is a brief but very interesting discussion of Art, its nature and functions. The following chapter, however, which deals with the correlation of the Arts, is vague and unsatisfactory. Among the discussions of the separate Arts, by far the most valuable chapter is that which deals

with Poetry. The author's own treatment, which is of necessity brief, is supplemented by a discriminating list of works dealing with the same subject, at the end of each chapter. One might complain of the inadequate discussions of many of the important problems, but when the purpose for which the book was written is taken into account, this is seen to be unavoidable. The book will doubtless serve its purpose well. Professor Knight's style is delightfully clear and vigorous, and the typographical work is excellent.

J. E. C.

Elements of Psychology. By JAMES MARK BALDWIN, Professor-elect in Princeton College, Professor in the University of Toronto. New York, Henry Holt & Co., 1893.—pp. xvi, 372.

This little volume is an abridgment of the author's *Handbook of Psychology* ("Senses and Intellect" and "Feeling and Will"). It stands to the *Handbook* in much the same relation as does Professor James's briefer *Psychology* to the original work in two volumes. In bulk it seems to be about seventy-five per cent of Professor James's abridgment, while the style in which it is written is somewhat more technical. Both of these small volumes are intended for use as college text-books; both consist largely of extracts from the larger works. On the whole, Professor Baldwin follows the original rather more closely than does Professor James. As he says in the preface, the book differs from the larger work "mainly in its omissions." However, there are certain differences which will be noted. The treatment of the nervous system has been put at the beginning of the book instead of before "Feeling," as in the *Handbook*,—a concession to his critics for which the author asks "attention as unanimous as their criticism." As might be expected, foot-notes have practically been done away with, while a short glossary of psychological terms has been added, which probably will be found helpful.

The part corresponding to the first volume of the *Handbook* ("Senses and Intellect") is, with the exception of the changes just noted, practically a mere condensation of the original. However, the arrangement of the chapter on "Sensation" is different and better, while the chapter on "Reason" is left out altogether. It will be remembered that in the original work the volume on "Feeling and Will" is somewhat longer than that on "Senses and Intellect"; here about a third more space is given to the latter division. It is to be remembered, however, that the chapter on the "Nervous System" has been transferred to the first part of the book. The treatment of "Feeling and Will" is the same as in the *Handbook*, except for slight differences in the order of exposition. Where such changes have been made, they seem to be for the better, as, *e.g.*, where the author treats "Sensuous Pleasure and Pain" and "Ideal Pleasure and Pain" in one chapter, instead of in chapters widely separated.

On the whole, this abridgment may be called a success. It is clear, systematic, and does not impress one as being scrappy. At the same time, the language is somewhat technical for an elementary text-book, and there is a lack of illustrative material. In this respect it is much less satisfactory than Professor James's briefer *Psychology*. As an outline, however, in the hands of a competent teacher, the present volume could hardly fail to prove useful.

E. A.

Les altérations de la personnalité. Par ALFRED BINET. Paris, Bibliothèque Scientifique Internationale, 1892. — pp. viii, 323.

The author's object, as stated in the preface, was to collect and summarize the best established results of pathological psychology which bear upon the question of 'double consciousness.' The facts studied fall into three divisions: First, cases in which two personalities make their appearance alternately in the same subject, the second consciousness being either spontaneous or induced; second, cases where the two personalities are co-existent, as shown in observations on hysterical anaesthesia, automatic writing, and distraction; third, cases where the two consciousnesses enter into relation, as in the phenomena of suggestion and 'systematic anaesthesia.' The hypothesis of a divided consciousness is made to explain all these facts, not without being slightly strained, inasmuch as remarkable mental powers are occasionally ascribed to the rudimentary 'sub-conscious personage.'

In his conclusion Binet quotes Ribot, to the effect that consciousness is not an irreducible unity, but a coördination of elements. These elements may exist uncoördinated, and, under certain conditions, groups of them may organize into secondary personalities. Considering the question as to what constitutes a personality, the author decides that association is not the only influence operative in coördinating the elements, because the laws of association fail to explain the lack of memorial connection between the parts of a 'double consciousness.' Nor is memory the test of personality, since in some of the cases cited the subject has entire memory of certain of his acts, while ascribing them to another person. Just what the unifying influence is remains a mystery. Last and most important corollary of the hypothesis set forth is, according to Binet, the possible existence of a secondary consciousness accompanying the functions of organic life; a suggestion which he offers as a substitute for old theories of 'unconscious cerebration.'

MARGARET WASHBURN.

History of Modern Philosophy, from Nicolas of Cusa to the Present Time. By RICHARD FALCKENBERG, Professor of Philosophy in the University of Erlangen. Translated, with the coöperation of the Author, by A. C. ARMSTRONG, JR., Professor of Philosophy in Wesleyan University. New York, Henry Holt & Co. — About 550 pp.

Falckenberg's *Geschichte der neueren Philosophie* (Leipsic, 1886; 2d ed., 1892) is a comprehensive survey in one volume of the entire history of modern philosophy, designed to meet the demand for a handbook at once scientific and readable. It, therefore, stands midway between the exhaustive treatises of Ueberweg and Erdmann, and such sketches as those of Schwegler and Bowen. In its original form, it is the outcome of the author's experience as a professor of historical philosophy in Jena and Erlangen; while the translation has been undertaken in view of the needs of students in our American colleges and universities. The historical standpoint of the work is entirely objective; the method of exposition, a free reproduction of the leading principles of the philosophers discussed, in preference to direct citation on the one hand, and unchecked subjective interpretation on the other. The treatment of British philosophy is full and adequate, the author's acquaintance with the foreign thought of the eighteenth century being no less marked than his study of the philosophy of his native land, while the account of recent movements in England and America has been revised and enlarged by the translator. The translation is from the second German edition, with the author's latest notes and revisions communicated in manuscript.

The work is divided into two parts, from Descartes to Kant, and from Kant to the Present Time, preceded by a thorough discussion of the Period of Transition, from Nicolas of Cusa to Descartes. Part I includes chapters on Descartes, The Development and Transformation of the Cartesian Philosophy, The English Philosophy of the Eighteenth Century, The French Illumination, Leibniz, and the German Illumination. Part II is divided into eight chapters: Kant, Fichte, Schelling, Schelling's Co-workers, Hegel, The Opposition to Constructive Idealism, Philosophy Outside Germany, German Philosophy since the death of Hegel.

TRANSLATOR.

Le pessimisme moderne. Son Histoire et ses Causes. Par ÉTIENNE METMAN. Dijon. Imprimerie Darautiere. 1892. — pp. 399.

Another long monograph on Pessimism naturally invites comparison with Mr. Sully's work on the same subject. The present writer, like his predecessor, begins with a chapter on unreasoned Pessimism, and then proceeds to the history and criticism of modern pessimistic systems. But although this part of the exposition follows the same lines and has the same

outcome in both books, the obvious similarities of treatment only emphasize the difference of standpoint between the two authors. M. Metman lingers over biographical and literary details, and grows eloquent over the desolation and misery of the Pessimist's inner life. Despite the fulness and excellence of his account of the philosophical side of Pessimism, the reader feels that he is interested in Leopardi and Schopenhauer less as philosophers than as men who have suffered and sought in vain the compensating secret of life. This attitude is still more unmistakable in the later chapters of the book, where the author discusses the various forms which Pessimism assumes in Germany, Russia, and France, and attempts to trace all its causes to one common root, the decay of religious faith. Among students, loss of reverence for the higher truth appears in the overestimate of science and contempt for metaphysic; among the untaught, in impatience of dogmas and rejection of the authority of the church. Unlike Mr. Sully, the author makes no attempt to examine critically the pessimistic verdict as to the worth of life. Schopenhauer himself could hardly desire a less judicial opponent than the writer who grants in a breath that the world as it is merits the deepest anathemas that have been pronounced against it. Apparently it is chiefly because the Pessimist persists in seeing the world as it is that M. Metman finds fault with him. At any rate, Mr. Sully's succinct remarks on the old difficulty of contradicting the evils of existence by an hypothesis for which those evils furnish a part (and, according to M. Metman, a very large part) of the data meet with no comment from the present writer, although the French translation of *Pessimism* is several times referred to. M. Metman contents himself with affirming that, since the mind cannot be confined within the circle of experience, it is incumbent upon the thinkers of the race to adopt the metaphysic which best fulfils human needs. The choice, he seems to assume, lies between the metaphysical basis of Pessimism and that implied in Catholic Christianity. The former is irrational, as M. Metman carefully points out; the latter presumably shelters itself under practical advantages. At least, the only argument offered by the author consists in a reiteration of his conviction that the freedom of the will and the fall of man alone explain the existence of evil, and that without a personal God and an immortal life the world is utterly inexplicable and irremediably miserable. To those who wish an ample and entertaining account of theoretical Pessimism together with an ancient and facile solution of its difficulties offered by one who finds all less uncritical remedies hopeless and inglorious, the work 'couronné par l'Académie des sciences morales et politiques' is cordially recommended. Others will find few compensations for the absence of the moderate and discriminating spirit which makes Mr. Sully's inquiries so useful to students of pessimistic philosophy.

L. HANNUM.

The Evolution of Religion. The Gifford Lectures delivered before the University of St. Andrews in Sessions 1890-91 and 1891-92. By EDWARD CAIRD, LL.D., D.C.L., Professor of Moral Philosophy in the University of Glasgow, late Fellow and Tutor of Merton College, Oxford. 2 vols. New York, Macmillan & Co., 1893, — pp. xv, 400, 334.

The lectures are published in the form in which they were delivered, except that the first course contains two additional lectures. The plan is thus described in the preface: "After the general statement, in the First Lecture, of the problem which I propose to discuss, I have given in the next six Lectures an explanation, as clear as I could make it, of the principles upon which my view of Religion and of its History is based. . . . In the rest of the course I have described what I conceive to be the main stages in the development of pre-Christian religions. . . . In my Second Course of Lectures I have confined myself almost entirely to the development of the Jewish and the Christian religion. . . . What I have aimed at throughout has been rather to illustrate a certain method of dealing with the facts of religious history in the light of the idea of development, than to exhaust any one application of that method." The 'three stages' in the Evolution of Religion are the objective, the subjective, and the unity of these. Only in the last is God known 'in the true form of His idea.' Review will follow.

J. SETH.

Philosophy and Political Economy in some of their Historical Relations.

By JAMES BONAR, M.A., LL.D., author of "Malthus and his Work"; editor of "Ricardo's Letters to Malthus." London Swan, Sonnenschein & Co.; New York, Macmillan & Co., 1893.

This book discusses the question, "How far men's thoughts about the world, and human life in general, have affected their thoughts about the economical element of human life in particular, and how far this influence of thoughts upon thoughts may have been mutual." There is an introductory book with chapters on Plato and Aristotle, and briefer chapters on the Stoics and Epicureans and on Christianity. The relations of philosophy and political economy in modern times are treated under the heads of "Natural Law" extending through the writings of Adam Smith, "Utilitarian Economics" including Malthus, Bentham, and the Mills, "Idealistic Economics" from Kant through Hegel, "Materialistic Economics and Evolution" treating of Marx, Engels, and Lassalle, with a chapter on the relation of economics to evolution. The work is an important contribution to the history of thought in a much neglected field. Review will follow.

W. F. WILLCOX.

The following books have also been received :—

The Philosophy of Individuality. By ANTOINETTE BLACKWELL BROWN. New York and London, 1893, G. P. Putnam's Sons. — pp. x, 519.

A Manual of Logic (Volume I). By J. WELTON. London, 1891, W. B. Clive & Co. — pp. xxii, 536.

Questions on Logic (Part I). By H. HOLMAN. London, 1891, W. B. Clive & Co. — pp. 93.

Die grossen Welträthsel. Philosophie der Natur. Zweite Auflage. Von TILLMANN PESCH, S. J. Freiburg im Breisgau, 1892, Herder'sche Verlagshandlung. Erster Band. — pp. xxv, 799. Zweiter Band. — pp. xii, 616.

Mittheilungen aus Leibnizens ungedruckten Schriften. Von GEORG MOLLAT. Neue Bearbeitung. Leipzig, 1893, H. Haessel. — pp. 140.

A. Bronson Alcott: His Life and Philosophy. By F. B. SANBORN and WILLIAM T. HARRIS. In two volumes. Boston, 1893, Roberts Bros. — pp. 678.

Der Monismus und seine Consequenzen. Erster Theil. Von R. ED. LIESEGANG. Düsseldorf, 1892, Ed. Liesegang's Verlag. — pp. 75.

État mental des hystériques. Les stigmates mentaux. Par PIERRE JANET. Préface de M. le PROFESSEUR CHARCOT. Paris, 1892, Rueff et Cie. — pp. 233.

Das Gefühl. Eine psychologische Untersuchung. Von DR. THEOBALD ZIEGLER. Stuttgart, 1893, Goschen'sche Verlagshandlung. — pp. 328.

Seele und Geist. In strengwissenschaftlicher Auffassung. Von DR. EMANUEL JAESCHE. Leipzig, 1893, Otto Wigand. — pp. 118.

Ethik und Religion. Grundlegung der religiösen und Kritik der unabhängigen Sittlichkeit. Von DR. CONSTANTIN GUTBERLET. Münster i. W. 1892, Aschendorff'sche Buchhandlung. — pp. viii, 376.

La morale de Spinoza. Examen de ses principes et de l'influence qu'elle a exercée dans les temps modernes. Par RENÉ WORMS. Paris, 1892, Hachette et Cie. — pp. 331.

The Social Philosophy and Religion of Comte. By EDWARD CAIRD. Second edition. New York, 1893, Macmillan & Co.

The Pursuit of Happiness. By DANIEL G. BRINTON, A.M., M.D., LL.D. Philadelphia, 1893, David MacKay. — pp. xiv, 282.

Drei religiöse Reden. Von CHRISTOPH SCHREMPF. Stuttgart, 1893, Fr. Fromann's Verlag. — pp. 75.

Commentar zu Kant's Kritik der reinen Vernunft. Von DR. H. VAHINGER. Zweiter Band. Stuttgart, Berlin, Leipzig, 1892, Union Deutsche Verlagsgesellschaft. — pp. viii, 562.

NOTES.

ANTHROPOMETRY AND EXPERIMENTAL PSYCHOLOGY.¹

Mr. Francis Galton has kindly allowed me to publish the following letter. I do so with the more pleasure, as I am in it acquitted, at least by implication, of the wish to disparage Anthropometry, with which certain correspondents have credited me.

“April, 24, 1893.

“The coarse, off-hand methods of such an anthropometric laboratory as mine, could never be worked in immediate conjunction with those required for experimental psychology, without interfering seriously with them. The one are speedy and suited to test many persons in succession, in a rough and preliminary way; the others take . . . great patience, practice and dexterity, and must be conducted in quietude. I hope that the skill and beauty of the latter methods will not be ruined by combining them too closely with the former. If I had to plan an exhibition to include the two, I should conduct the psychological part in a well-lighted, glazed enclosure; the on-lookers being in somewhat less well-lighted or in screened parts, and separated from the glass by interposed trellis-work. Then, the people at work in the laboratory would be in no way distracted by the outside gazers, and would indeed hardly perceive them. The persons operated on inside ought, I should think, to be *practised* experimentees, and the purport of the exhibition would be to show (1) the action of apparatus, (2) the uniformity of the results with the same person under similar conditions. It would not seem advisable to test anybody who applied, because the second of the above conditions would fail with novices, who are sure to blunder as well as to waste precious time.

“There are some half-way experiments that might require half-way treatment, such as the \pm number of vibrations that give a sensibly higher or lower note to the standard key, and the limits of audibility to high and to low notes. In respect to sight, there could be managed . . . *matches*, either of illumination or of color. I fear that audibility tests would be really hopeless in such a noisy medium as a great Exhibition. Gustatory tests could be tried, perhaps: by using, say, different strengths of brine, dropping slowly from fine tubes. A man would put his hand out, and receive a drop, and lick it; then he would try another tap, and so on; his business being to put pegs 1, 2, 3, 4, representing successive increments of salinity, in the appropriate holes, opposite to the various taps. This would serve to show the *measurability* of taste, if it did nothing else. The sense of smell could, I fear, hardly be dealt with in a very simple way.

“I sincerely hope that some effort will be made to show *how to deal with the results*, and how to get good out of them.”

E. B. TITCHENER.

¹ Phil. Review, II. pp. 187 ff.

THE
PHILOSOPHICAL REVIEW.

METAPHYSIC AND PSYCHOLOGY.

IN a former number of this *Review*¹ Professor Andrew Seth makes a praiseworthy effort to mark out the province of Psychology in bold and clear outlines, distinguishing it on the one hand from Epistemology, and on the other from Metaphysic. Whatever view may be taken of the correctness or incorrectness of the distinctions there drawn, it must be admitted that they have all the appearance of that simplicity which is usually regarded as a mark of truth. Superficially, at least, they are clear and distinct, and no one who is untroubled by a desire to comprehend the deeper relations of things will hesitate to pronounce them satisfactory and illuminating; for what they amount to in substance is, that Psychology deals with the Self, Epistemology with the World, and Metaphysic with God. "How simple! how admirably simple!" one naturally exclaims. "We have been looking for truth afar off, when, in Plato's phrase, it was 'tumbling out at our feet.'"

The problem of Psychology, if I understand Mr. Seth aright, may be stated somewhat in this way. It is a fact that I am conscious, and that my consciousness takes the form of a series of states. The reality of these states as facts of my consciousness is beyond doubt, and I am therefore building upon solid rock, when I affirm their reality as such facts. Doubt can only arise, when, going beyond these states themselves, I ask whether they are signs or symbols of a reality other than themselves. But the psychologist, if he values his own peace of mind, will resolutely refuse to be moved from his impreg-

¹ March, 1892, pp. 129 ff.

nable position. He "cares not what the sects may brawl." He "holds no form of creed." There may be a reality lying beyond his consciousness or there may not: that is no concern of his: he is as determined to hold by the indubitable fact that there is in his own consciousness a series of states, as Shylock to have 'law' and nothing but 'law.' His one task is to examine this series as well as he can, and to find out by analysis what are the elementary or primitive 'states,' out of which the whole complex structure of his own consciousness has been evolved. No doubt the psychologist finds, in the course of his analysis, that he has the consciousness of an external world, and the belief in its 'trans-subjective' reality; but that consciousness and that belief are for him only a 'complex presentation,' existing nowhere but in his own mind. It is, of course, part of his duty to explain how within his own consciousness the idea of a 'trans-subjective world,' and the conviction of its existence, have grown up; but, if he is wise, he will refuse to budge one step further.

So far all seems clear. The psychologist is sure of his own mental states, but he is not responsible for what they 'mean,' or, indeed, whether they 'mean' anything. But Mr. Seth drops a remark, almost parenthetically, which brings back the old obscurity and confusion, and blurs, if it does not efface, the clear-cut lineaments of Psychology. Psychology, he says, has an experimental or physiological side, and here it is "as purely objective as it was before purely subjective." This is perplexing, and not only perplexing, but disappointing. The pure individual subject, alone in a 'God-like isolation' with his own states, seems to have been invaded by that 'trans-subjective world' of which he knows nothing. Thus Psychology, false to itself, has become Epistemology, if not even Metaphysic. Why should it thus gratuitously forsake its impregnable fortress? By what right can a science, which "*ex vi termini* can have no concern" with "the extra-conscious or trans-subjective," speak of "objective facts of nerve and brain"? Are these facts 'states of consciousness,' and, if not, how can the psychologist know anything about them? The psychologist may very

properly explain, if he can, how the 'complex presentation' called nerve and brain has arisen in his own consciousness; but how can he deal with nerve and brain as 'objective facts'? Do not nerve and brain, as 'objective facts,' belong to that 'trans-subjective' world, which, for aught the psychologist as psychologist knows, may be a pure fiction? I submit that for Mr. Seth's psychologist, who has shut himself up in his own individual consciousness, there is no nerve and brain, any more than there is a solar system or other individual conscious subjects. He is alone in the universe, and must remain alone until the epistemologist lets him out, if indeed that happy deliverance should ever take place. I fear that Mr. Seth must have had the fear of the physiological psychologist before his eyes when he destroyed the symmetry of his theory by admitting prematurely the existence of "objective facts of nerve and brain." I am aware that the physiological psychologist, like Michel Angelo, has about him a certain *terribilità* hard to withstand: still, one must pluck up courage, and resist the adversary. A clear-cut theory must not be sacrificed from mere lack of courage.

Let us suppose, then, that nothing has been said about the "objective facts of nerve and brain." Psychology, as we can now affirm clearly and boldly, deals only with the successive states of the individual subject, and neither affirms nor denies the reality of anything beyond those states. But, though the psychologist may preserve, and should preserve, absolute neutrality in regard to the existence of a 'trans-subjective world,' the problem must be faced by somebody, and the epistemologist is the man to do it. Are these mental states of mine, asks Mr. Seth's epistemologist, the signs or symbols of a reality lying beyond my consciousness? Are there "realities which have a different fashion of existence from the fleeting and evanescent mode of psychical states—beings or things which are in some sense permanent and independent?" With what right do we pass beyond our subjective states? What is the ground of our belief in an independent world? In a word, what is the relation of knowledge to reality?

> The transition from Psychology to Epistemology, Mr. Seth contends, is natural and inevitable. I have the belief in an objective world, and I must justify my belief. This latter problem, indeed, cannot be shirked, were it only that there always are unpleasant people who persist in raising difficulties, and asking how the individual subject, shut up within the circle of his own ideas, manages to get out of himself. "The office of the theory of knowledge must, in the main, be negative or indirect, ruling out certain solutions as inadmissible rather than itself supplying us with a ready-made solution."¹ Epistemology, however, it is held, only prepares the way for a new branch of philosophy. Granting that we have somehow passed beyond our subjective states to the objective world, we have still to ask: "What is the ultimate nature of the reality which reveals itself alike in the consciousness which knows and the world which is known?" From psychology the
> subject has learned the reality of his own mental states; epistemology has shown him that his natural belief in other men and things cannot be overthrown by scepticism; and now metaphysic seeks to determine the ultimate ground or essence of these two forms of reality. Thus our progress from psychology to epistemology, and from epistemology to metaphysic, is so simple and natural that it almost looks like the logical transition from premises to conclusion.

One has almost a guilty feeling in even venturing to suggest a doubt of the value of so neat and symmetrical a scheme;
> but, for my part, I do not see my way to accept it, until I have been convinced that the basis of the whole structure is sound. That basis, obviously, is the assumption that by no
> possibility can the conscious subject have a knowledge of anything but his own mental states. Not only does that assumption seem to me incapable of proof, but, so far as I can see, it makes all real progress in the solution of philosophical problems an impossibility. In my opinion, a subject confined to his own mental states is a subject that never existed and never could exist; yet, upon this product of a false abstraction, Mr.

¹ *Hegelianism and Personality*, p. 32; 2d edition, p. 34.

Seth's whole theory of the demarcation of psychology, epistemology, and metaphysic rests. It is the supposed limitation of knowledge to the states of the individual subject which leads to the restriction of psychology to an analysis of consciousness, to the exclusion of all investigation into the living process by which the subject becomes aware of reality; it is the same assumption which sets to epistemology the vain task of showing how "the individual knower" can "transcend his own individual existence and become aware of other men and things"; and, finally, it is the same hypothesis which burdens metaphysic with the insoluble problem of showing how an unknowable God can become known. Psychology, as I believe, does *not* deal with the 'conscious states' of the individual subject, for there are no such 'states'; there is *no* sphere for an epistemology which deals with these 'states' as 'signs' or 'symbols' of 'trans-subjective' realities; and metaphysic does *not* deal with an 'ultimate reality' distinct from both, but it has to do from first to last with real existence, apart from which it has no serious problem whatever. I venture to deny that there is any branch of philosophy such as that to which Mr. Seth gives the name of epistemology, but which, as he is himself fain to confess, has no positive content, or almost none.¹ Epistemology, as I believe, is a part of Metaphysic or Ontology, that part which deals with the explicit knowledge of reality. I do not, however, propose at present to examine our author's view of epistemology; I shall merely try to show by a short consideration of his metaphysic, especially as it is indicated in his *Hegelianism and Personality*, where the results of his initial assumption are most clearly seen, that his view of the nature and mutual relations of psychology and metaphysic cannot be accepted.

Metaphysic, as Mr. Seth conceives it, is the science of ultimate Reality, or God. When we ask what is meant by the term 'God,' we get some such answer as this: God as to his

¹ *Hegelianism and Personality*, 32 (34), quoted above: "The office of the theory of knowledge must, in the main, be negative or indirect." It is characteristic of Mr. Seth that he qualifies his assertion; strictly speaking, epistemology must in his view be absolutely negative.

existence is unique or individual, and is therefore, as to *existence*, absolutely separated from all other existences. But, containing within himself all perfection, he infinitely transcends all other forms of existence. Agreeing with these in his self-centred individuality, he is the only being of whom we can predicate necessity, all other forms of existence being contingent. God is not involved in the process of the world or of human history. We cannot comprehend the inner nature of God, but we are entitled to affirm that he is self-conscious, and contemplates reality as it truly is.¹

Whether Mr. Seth is entitled to make these assertions as to the existence and nature of God, consistently with the theory of knowledge which he adopts, I shall immediately inquire : at present I assume that he has a right to make them, and I merely ask how far they enable us to unify existence, or reach the 'ultimate ground or essence' of things. Let us, then, see as clearly as possible the logical consequences of the doctrine.

1. It is held that, as to his existence, God is distinct from every other form of existence. Nor is the plain consequence

¹ For the sake of clearness I have stated Mr. Seth's view of God as simply and shortly as I could. The following among other passages may be quoted from *Hegelianism and Personality* in support of the correctness of my summary. The "divine, creative Self" must "exist as something more than the individuals whom [according to Mr. Seth's view of Green's doctrine] it constitutes"; p. 61 (2nd ed., p. 66). "The real Self [of man] is one and indivisible, and is unique in each individual." Different selves are "absolutely and forever exclusive"; 1st ed., p. 64. "The individual alone is the real"; 1st ed., p. 128. "When existence is in question, it is the individual, not the universal, that is real; 220 (231)." "If we are to keep the name of God at all, or any equivalent term, subjectivity—an existence of God for Himself, analogous to our personal existence, though doubtless transcending it infinitely in innumerable ways—is an essential element in the conception"; 222 (234). Ferrier is commended, because, unlike Green (Mr. Seth's Green), he does not identify the "necessary existence" of God with the "contingent existence" of other beings; 31 (34). "The development we can trace is not the development of God, but of man's thoughts about God—a development, therefore, which does not affect the existence of their object"; 194 (203). "The absolute Ego must really be an Ego . . . with a self-consciousness of its own"; 61 (66). The "Hegelians of the Left" wrongly "renounce the idea of anything like a separate personality or self-consciousness in the Divine Being; 188 (197). "The truth, . . . we may well believe, is reserved for God alone"; 212 (223).

of this view, namely, that other forms of existence are distinct from God, in any way slurred over; on the contrary, it is affirmed in various ways that each thing is in existence as truly individual as God himself. "The meanest thing that exists has a life of its own, absolutely unique and individual." It would therefore seem that, so far as existence is concerned, God is not the only being, but only one of a number of beings, each of which as truly exists as God. Then, God does not contain all existence within himself, but lacks that part of existence which belongs to other beings. He is, therefore, limited as to existence by the beings outside of him. This may not imply any limitation of his wisdom or love or goodness, but it certainly implies the limitation of his existence. But how can a Being of this sort be the principle of *unity*? The problem of metaphysic, on Mr. Seth's own showing, is to find a real existence, which shall serve to bind together the reality of the individual subject revealed in psychology, and the reality of the objective world guaranteed by epistemology; but the Reality actually certified by metaphysic is merely *another* Reality as exclusive as the two forms of reality which it is to bring into unity. It is a curious way of reducing mutually exclusive realities to unity of existence simply to add another Reality equally exclusive. Mr. Seth's metaphysic thus leaves us with an aggregate of individual existences, of which God is merely one among the rest. Even if we suppose God to be capable of contemplating all other existences besides his own, we shall have no real unity of *existences*; all beings will remain as absolutely separate and distinct as before. It would therefore seem that, if the problem of metaphysic is to be solved at all, we must affirm that there is no absolutely individual existence, as our author defines individuality. Mr. Seth shows a tendency to appeal to the popular conception of God as a transcendent Being: let me remind him that the popular consciousness has equal faith in the doctrine of the Holy Spirit, as present in the soul of all believers. In any case, I feel certain that, on Mr. Seth's theory, the problem of metaphysic must be abandoned as hopeless.

2. God is held to be, not only individual in his existence, but conscious of himself. Now, it must here be assumed that when self-consciousness is predicated of God, it means what is meant when it is predicated of other forms of being. I am of course aware that Mr. Seth regards the category of self-consciousness as inadequate to express the ultimate nature of God; but, however inadequate it may be, we are surely entitled to assume that it cannot *contradict* the perception or consciousness of God as he is for himself. This point will be immediately considered: at present I assume that, in affirming God to be self-conscious, Mr. Seth means what he says. What, then, is self-consciousness? As our author defines it, self-consciousness is the consciousness of a self-centred individuality. No being in his consciousness of himself is conscious of any other being. If God in his existence comprehended all other forms of existence, in being conscious of himself he would also be conscious of all existence. But, as we have seen, God in his existence is absolutely exclusive of all other forms of existence, as they are exclusive of him; and, hence, to be conscious of himself is to be conscious *only* of himself. All other forms of being thus lie beyond the range of his self-consciousness. But a Being who is thus ignorant of what has a real existence, is as limited in knowledge as we have seen him to be limited in existence. To say, therefore, that 'the truth' exists for him alone is absurd. These considerations seem to show that, if we are to affirm self-consciousness of God in any sense which shall preserve the absoluteness of his knowledge, we must show that self-consciousness as the consciousness of an exclusive individuality is a fiction. If the consciousness of self is not the consciousness of an absolute reality, comprehending self and not self in a single unity, the predication of self-consciousness in relation to God is the denial of his omniscience.

3. Holding that God is individual in his existence and consciousness, Mr. Seth naturally denies that He enters into or constitutes the process of the world or of human history. Strictly speaking, indeed, there is no 'world' or history of 'man,' but only changes going on independently in a number of

separate individuals. But, if we are to preserve the exclusive individuality of things, we must attribute the changes they undergo to themselves. How, then, can we ascribe infinite power to a Being who in his self-centred individuality is as entirely impotent with regard to the changes of other self-centred individuals as they are with regard to one another and to Him? Either God does 'enter into process,' or there is a process which goes on in entire independence of him. Moreover, if God is thus beyond the process of the world, how can he be the only 'necessary' being? If all beings are in their existence absolutely individual, no other being can possibly affect their existence. The distinction, in short, between 'necessary' and 'contingent' existence is simply the illogical assumption of a relation between God and the world which yet is denied to exist.

These considerations seem to show that if God is conceived as an exclusive self-centred individual, there is no real unity of existence, but merely an aggregate of independent beings, of whom God is one; that such a Being can be conscious only of himself, and must therefore be limited in knowledge; and that, having no relation to other beings, he cannot be the source of their reality, and must therefore be limited in power. An escape from these difficulties may be sought in either of two different ways: we may abandon the conception of exclusive individuality as inadequate, or, clinging to that conception, we may fall back upon the incomprehensibility of God. It is the latter method that Mr. Seth virtually adopts. The inner nature of God being unknown to us, why should he not be an exclusive individual, and yet include all existence within himself? though he is conscious only of himself, why should he not be conscious of other existences as well? though he is unrelated to other beings, why should he not be related to them in some unknown way? And no doubt these and any number of contradictions may be got rid of, if in reality, though not for our knowledge, contradictions meet together in peaceful unity. But the price we have to pay for this metaphysic of the contradictory is that we can have neither

a metaphysic, nor an epistemology, nor a psychology, but merely a blind faith, which is a faith in the unfathomable mystery of what for us is pure Nothing.

It is held, then, that we can have no knowledge of God as he really is: we know only ourselves, or beings of like nature with ourselves, and God is infinitely more than we know ourselves to be. We do, indeed, know God in his 'manifestations,' and these enable us in a sense to apprehend his 'essence.' It is thus that we come to believe that the world is constructed on a rational plan; but this belief is not properly speaking knowledge, but merely faith, assurance or conviction. For, as the time-process of the finite world is the only reality we can be said to know, we can never escape from the limitations of our knowledge. "The truth" is "for God alone." Shut out from a knowledge of God, we are compelled to figure Him to ourselves by the highest symbol we have, the symbol of self-consciousness. Similarly, when we predicate 'eternity' of Him, we must recognize how inadequate such a symbol is to express his real nature.¹

1. There can be no doubt, I think, that Mr. Seth denies that we can, properly speaking, have a knowledge of God as he really is. Did this merely mean that our knowledge of God is *incomplete*, the assertion is one which probably no one would dispute; but neither would there in that case be any reason to limit the assertion to our knowledge of God, for *all* our knowledge must be incomplete. The whole tenor of

¹ "God may, nay must, be infinitely more . . . than we know ourselves to be": 224 (235). "God's being may infinitely transcend His manifestations as known to us": 223 (235). "We may be said to know God as manifested in nature and history. Knowledge of the manifestation is . . . knowledge of the essence: it does not cut us off from knowledge of the essence, as the Relativists would have us believe": 223 (234). "The world gives evidence of being constructed on a rational plan": 124 (131). "The truth . . . is reserved for God alone": 213 (223). "A real self-consciousness in God seems demanded of us if we are not to be unfaithful to the fundamental principle of the theory of knowledge — interpretation by the highest category within our reach": 223 (235). "Only an abstraction can properly be spoken of as out of time; so far as the Ego is real, it is not out of time, but abides or persists through time. Even in speaking of the Divine Being, that is the only sense which the 'eternal' can bear to us": 225 (236).

Mr. Seth's remarks shows that he means to affirm that God is in his real nature different in *kind* from us, and hence that he cannot be known by us *at all*. This impotency, in fact, is regarded as so inseparably bound up with the form of our consciousness, that it prevents us from having anything more than a *symbolical* apprehension of any being but ourselves. Nor can any other view be consistently maintained by one who starts from the presupposition that each human subject is limited to his own mental states; for, on such a presupposition, we must fall back upon the hypothesis of a correspondence between our own mental states and a reality lying beyond them — a correspondence which, from the nature of the case, can never be more than an unwarranted assumption. This separation of knowledge and existence, therefore, leads to much more than the denial of any knowledge of God as he really is: its only legitimate result is the denial of any knowledge of the existence of God. It is, therefore, not in the least surprising that Mr. Seth should speak of Kant's "conclusive" reasoning against "the ontological argument for the existence of God": 141 (149). If we cannot "lift ourselves out of the stream of ever-flowing time": 213 (224), most assuredly we can have no knowledge of God's existence. By what right, then, do we assert his existence?

2. Assume, however, that God does exist, and is so different in nature from ourselves that we cannot comprehend him, and we are forced to deny, not only a knowledge of God, but of anything whatever, including ourselves. For, if the 'specular consciousness' of God is such that it transcends the opposition of self and not-self, we can frame no conception whatever of its nature, and therefore the whole aspect of existence must be absolutely different from existence as it appears to us. This is virtually admitted by Mr. Seth, when he tells us that "the truth" is "for God alone" (unless, indeed, he falls back upon the absurd hypothesis of two kinds of 'truth'). Now, it is not possible to introduce a radical incapacity for truth into the very centre of consciousness without infecting every object of consciousness. Does Mr. Seth suppose that he can maintain

“the truth” to be “for God alone,” without at the same time holding that the subject’s consciousness of *himself* is under the same spell of illusion as other objects? If not, the very fact that the conscious subject appears to himself as ‘unique’ is the strongest reason for affirming that in reality, or as he is known by God, he is not ‘unique.’ We ought, therefore, to discard the term ‘knowledge’ with its misleading associations. Man literally ‘walks in a vain show,’ having no real apprehension of God, the world or himself.

3. That Mr. Seth has not realised the profoundly sceptical character of the opposition of knowledge and existence seems to be shown by his assertion that to God we must apply “the highest category within our reach.” Here at least two assumptions are made, neither of which can be justified from our author’s point of view. The first is, that we are entitled to speak of higher and lower categories at all. For such a distinction implies that one category is more adequate to the expression of real existence than another. How can this be maintained by one who holds that “the truth is for God alone”? Were it possible for us to contemplate existence from the divine point of view, we should find that self-consciousness as we experience it is not applicable to God. How, then, can we, who are incapable of so contemplating existence, tell whether the category of self-consciousness is higher or lower, or identical with other categories? Nay, as existence, whatever it may be, must be essentially different from what we conceive it to be, higher and lower can from the ultimate point of view have no meaning whatever. Has not Mr. Seth himself told us that every category is an abstraction, which is inadequate to express the nature of existence? So that even the category of ‘being’ has no application to God, and might mean ‘not-being,’ were it not that even ‘not-being’ is meaningless. It will of course be answered that, though no category is adequate, the categories which we apply to other forms of existence have a certain analogical truth or *symbolical* sense. Thus, we may affirm that God is ‘eternal’ or persists through time, if only we are careful to note that the real manner of his existence cannot

be expressed in terms of time. But this last refuge of nescience can only convince those who refuse to follow a principle to its logical consequences. For, if the real manner of God's existence is absolutely unknown to us, how can we tell that persistence through time is a more adequate conception than momentary duration? If we have no way of comparing our symbol with that which it is supposed to symbolize, by what mysterious process do we come to know that the one corresponds to the other?

The second assumption to which I referred above is, that, having a knowledge of God "as manifested in nature and history," we have somehow a knowledge of the 'essence' or nature of God. But surely the 'essence' of God must be for us the predicates or categories which we employ in thinking of God. Now, as none of these express the nature of God, how can it be said that he is 'manifested' at all? The 'manifestations' of other human beings, to take our author's own illustration, have a meaning for us, because we can reproduce in ourselves the form of their consciousness. This is not the case with the so-called 'manifestations' of God, who differs from us *toto coelo*. So that the 'manifestations' manifest nothing. They are in fact illusions which conceal God from us. Nor is the difficulty lessened when we consider that, on Mr. Seth's own showing, God is not presented in nature and history at all: nature being a mere 'collocation,' and 'history,' not "the development of God, but of man's knowledge of God." How Mr. Seth can continue to speak of God as 'manifested' at all, or to affirm that the world is 'constructed on a rational plan,' I fail to see. A God who is entirely beyond nature and history cannot be 'manifested' in either, and even if he were, a being like man, for whom the apprehension of reality is impossible, would not comprehend the 'manifestation' when it was given.

These are some of the difficulties that beset every theory which affirms that Reality is unknowable. If they have any force, they show that the primary assumption from which they proceed — the assumption that the subject is limited to his

> own mental states — is absolutely untenable. The distinctions which Mr. Seth has drawn between psychology, epistemology, and metaphysic thus vanish away. As there is no consciousness of self apart from the consciousness of other selves and things, and no consciousness of the world apart from the consciousness of the single reality presupposed in both, the march of our author's 'victorious analysis' is impeded at the very start.

Since the above remarks were written, my attention has been drawn to the new edition of *Hegelianism and Personality*, in which one or two notes are added, intended to explain and defend the doctrine set forth in the text. It thus seems incumbent upon me to inquire whether any new light is cast upon that doctrine, which may require a modification or withdrawal of the objections set forth at length above. Of course I am not directly concerned with the epistemology of Mr. Seth, but only with his conception of God and the individual conscious subject.

One of the passages upon which I relied in my statement of our author's position was that in which he said, that "when > existence is in question, it is the individual, not the universal, that is real." In the note we are told (2d ed., p. 231) that "there is no attempt here . . . to fall back upon isolated, self-existent reals. Each finite individual has its place within the one real universe, or the one real Being, with all the parts of which it is inseparably connected. But the universal is itself an individual or real whole, containing all its parts within itself, and not a universal of the logical order containing its exemplifications under it."

Mr. Seth's readers will probably be somewhat perplexed to reconcile this conception of a single universe, in which so-called individuals are merely parts of a whole, with his former assertions that different selves are "absolutely and forever exclusive," and that "the meanest thing that exists has a life of its own absolutely unique and individual." Whether Mr. Seth

has changed his view of the world or not is of interest mainly to himself. So far as I am concerned, at any rate, the matter is of small importance. To my mind the only point of any consequence is, not whether Mr. Seth affirms that the world is actually made up of a number of separate individuals or consists of a single individual having a number of parts, but whether he is entitled to affirm either the one or the other. Now, as I understand him, our author still maintains that we have no knowledge of real existence and no knowledge of God as he really is. Under these circumstances we can assert of both anything we please, but what we cannot do is to produce any warrant for our assertion. An unknown world and an unknown God are for us nothing.

That this objection is valid will perhaps be more evident by looking at another of our author's explanations. Replying to Mr. Ritchie's strictures upon the assertion that "the individual alone is the real," he tells us that "after we have banished the 'metaphysical phantom of the thing in itself,' . . . a distinction remains to be made between knowledge and existence." For, "as all knowledge consists of universals, it is obvious, that, however far we may penetrate into the essence of any individual thing, our account of it will be a set of universal attributes." Hence "there is a complete solution of continuity between the abstractions of knowledge and the concrete texture of existence."

But *has* Mr. Seth banished the 'metaphysical phantom of the thing in itself?' It has always seemed to me that that phantom is as inseparable from a theory which denies knowledge of reality as shadow from substance. Mr. Seth seems to maintain that, as no judgment can be made about a thing which does not involve a 'universal' or 'abstraction,' our knowledge can never be of reality as it actually is. Granting that this contention is sound, it would seem to follow that we can be conscious of reality only if we rigidly exclude all judgment or predication. Now, such an elimination of predicates must leave us with pure being, or rather with pure nothing; and this pure nothing, it must be observed, is not even the

positive consciousness of the absence of all attributes — which would still be predication, and very decided predication too — but it is the absence of consciousness itself. Thus Mr. Seth can from his point of view banish the ‘metaphysical phantom of the thing in itself’ only if he banishes all consciousness; for, whether we speak of ‘knowledge,’ or of ‘faith,’ there must be *some* distinction, and therefore judgment with its ‘universal.’ The ‘thing in itself,’ in short, is just the counterpart of the least determinate judgment we can form — the judgment that something ‘is.’ To say that the ‘universal’ is in this case ‘such a little one’ does not alter its character, and therefore consistency demands that we should eliminate reality altogether. It would be hard to find a stronger confirmation of what I have maintained above, that Mr. Seth’s doctrine is fundamentally sceptical. It is also obvious, I think, that to be conscious of self implies some distinction within consciousness, and therefore some degree of predication or judgment. Mr. Seth’s view of predication thus leads to the conclusion, — already shown in another way to follow from his whole mode of thought, — that the subject can no more have a knowledge of himself than of objects, and hence that there can be no real psychology on his theory. To this it may be added, that our author’s defence of his now famous saying, “the individual alone is the real,” does not weaken the objections raised above to his conceptions of God and the Self, but confirms their force. For him God is still in existence and nature beyond knowledge, and conscious subjects are still, if not “absolutely and for ever exclusive,” at least “mutually exclusive centres of existence” (2d ed. p. 135). I do not myself understand how such a God can be legitimately affirmed to exist at all, or how there can be a ‘centre’ where there is no circumference, or how the subject can be conscious of himself without thinking; but it is manifest that no other view is open to one who maintains that the original sin of the intellect is judgment, and its inevitable penalty expulsion from the paradise of faith.

JOHN WATSON.

UNIVERSITY OF QUEEN’S COLLEGE.

THE ETHICAL IMPLICATIONS OF DETERMINISM.

A SERIOUS defect in much of our modern ethical writing is the failure to recognize the necessity of working on strictly scientific lines when endeavoring to develop a sound theory of moral philosophy. At present we mix up ethics as a science with ethics as an art ; we try to combine in our text-books on morals the methods of the pulpit with those of the class-room, and we cannot discuss the theory of ethics with absolute freedom, because we are constantly hampered by the fear lest our conclusions should prove hurtful, in their application, to human interests ; hence we work at a disadvantage, and ethics at the present day lags far behind, not only the physical sciences, but the sister science of psychology. In no respect is this weakness more noticeable than in the vague and unsatisfactory treatment of determinism by many even of our most brilliant writers, who, while they would never think of denying the necessity of reasoning from effects to causes in any other sphere of knowledge, yet hesitate to admit that natural antecedent conditions alone are to be sought for in explanation of moral actions.

Yet, if ethics is in the future to be studied by scientific methods, we shall be forced to admit the validity of the law of causation in the domain of moral phenomena as unreservedly as we now accept it in that of physical phenomena. Or, rather, we shall have to break down that wall of separation which still in our thought is allowed to isolate the activities of man from those of the rest of nature ; recognizing frankly that to understand such human activities means that we know from what they spring, and in what they result, and that we can *begin* to study any fact of moral significance only on the supposition that it has had a cause, the discovery of which will form its explanation. It is just this view which, when held without any reservation, constitutes determinism as opposed to what is called libertarianism, which asserts that man's actions

are not in this respect like other events, — that they are not the inevitable outcome of precedent conditions, but are, in some quite unique sense, 'free.' The purpose of this article is, however, not to fight over again the old battle of the freedom of the will, but to indicate some of the changes in our ethical notions which must result from the attempt to carry out to their logical conclusions the implications of the determinists' doctrine.

It may, nevertheless, be desirable for the sake of clearness to state this doctrine very briefly and in its simplest terms. A human character is the result of inheritance and of those external circumstances which in their totality, as they affect any man, we call his environment. Were there given, then, an absolutely complete knowledge of a man's character at some particular moment when he has to choose between two courses of action, with an equally full and accurate acquaintance with his circumstances, the course which he will adopt could be predicted with perfect certainty. This is equally true whether the choice be important or trivial, whether it involve moral issues or not ; it is true when a man chooses his dinner at a restaurant, when he chooses his profession in life, when he chooses to be a martyr for conscience's sake, or to be a traitor to a sacred cause intrusted to his keeping. Always the result could be foretold, were the whole nature of the man, and the facts as present to his consciousness, precisely known. His actions must be thus and so, for just *this* man, at *this* time and under *these* conditions. It has been claimed that since there is no external force compelling the individual to a particular deed, the word 'must' is out of place in this connection, and on this account Mill and others have objected to the use of the words 'necessity' and 'necessitarian.' But the objection has really little weight ; the determinist view is necessitarian, for the determination is equally a necessary one, whether it arises from the character of the individual — itself, of course, an effect of previous causes — or from the direct action of external forces. Thus we may as well face our problem squarely, and grant that the determinists' position is,

that in all choice, the thing chosen is what, given the man and the circumstances in which he is placed, *must* be chosen, that it is no more possible he should act otherwise than that the lily should produce rose-buds.

All this would probably long ago have been assented to as an unavoidable corollary of the universality of the reign of law in nature which science has disclosed, had it not been felt that a belief in man's responsibility is necessary to morality, and that such responsibility presupposes a freedom which is incompatible with determinism. It has constantly been asserted that right and wrong, good and evil, are notions which lose all ethical significance if human actions and thoughts are regarded as simply the natural and necessary effects of antecedent conditions, and that, therefore, the whole fabric of our current system of morals must totter, and may eventually fall in ruins, if we take away the belief in human freedom, with its logical consequent, the responsibility of each individual for his own character and conduct.

There is a certain amount of truth in such statements. A thorough and careful application of scientific principles and methods to the mass of vague, ill-defined, and sometimes mutually incompatible notions which go to make up the popular theory of morals, would certainly introduce into it fresh difficulties, and would bring into prominence many inconsistencies that are now only latent. It does not, however, follow, because our present uncritical ethics would have to be overhauled and perhaps to a large extent reconstructed, that morality itself would be endangered by the process. Our practical ethics at present has advanced beyond our ethical theory, we are building better than we know. The work of a moral philosophy is to establish such general principles as may afford a rational support for our present efforts in practical ethics, and a guide for the formation of moral standards and judgments. And for this purpose we must accept the validity of the scientific category of causation.

In truth, the defense of a moral theory which demands the shutting out of science from the ethical sphere, — which says,

in effect, we will maintain the dogma of human indeterminism, even though reason is forced to admit the cogency of the argument against it, because we need that dogma as a bulwark against indifference and fatalism, — this defense is itself morally indefensible. To dread the legitimate outcome of our own thinking, is to be guilty of treason to that authority on which moral judgments, like all others, depend. An absolute confidence in the rightful supremacy of truth not only is the scientific temper, it is the only justifiable attitude of mind for the practical moralist.

Let us see what will be the result of accepting the conclusions of the determinist, or necessitarian, view of human conduct — as regards the ethical notions, first, of freedom, and secondly, of merit and demerit.

1. Freedom. It is a false antithesis which opposes liberty and determinism, as though a free action must be identical with an uncaused event. It is irrational to speak of any occurrence as though it sprang into existence of itself, unrelated to, and in independence of, all other physical and psychical phenomena. But if to deny that an action has a cause is absurd, it does not follow that reason forbids us to recognize certain classes of action as free. What we want, is a clear understanding of the meaning of the concept freedom, what acts are free, and what it is that differentiates such acts from all others. And no change in the denotation of the word is needed. The acts which the libertarian calls free, the determinist calls free too, — those, namely, to which the agent is not directly constrained by any force external to himself, and which are consciously performed with the idea of attaining an end which is more or less clearly present to the agent's mind. On the negative side, then, my freedom implies that the act, for instance, a movement of my hand, is not the work of some person or thing outside of me, as it would be if the hand were forcibly moved without regard to my wishes, but that it is exclusively *my* act. On the positive side, it implies some degree of consciousness of the act, and of the consequences that are to follow from it. In a word, *all truly voluntary acts are free.*

The expression 'freedom of the will,' as has often been pointed out, is not so much incorrect as tautological. That all volitions are determined by motives, that is, ideal presentations which are pleasurable, and that such motives owe their existence to the character and past experience of the individual, does not militate against their freedom in the least. Let us take an example in the ethical sphere. Suppose a man has alternative courses of action, with the probable results of each, presented to his mind. A merchant, for instance, is conscious that he must either commit an act of dishonesty or suffer a serious loss to his business. What he will do depends on his character, and that is constituted by his inherited disposition as modified and developed by the complex influences of family life, education, and social and business environment. Could we know all these antecedent circumstances in their entirety, we would have all needful materials for judging what the man's conduct would be under the given circumstances. But none the less the individual is a free agent. His freedom means just this, that he is not a mere machine, without consciousness and therefore without volition, but that he has a purpose in view, an idea of which he desires the realization. The product of the man, his conduct, is as certainly predetermined as is the manufactured article that the machine turns out when a particular material has been supplied to it; but the man is a *conscious* mechanism, he knows what will be the result of such and such movements, and why they will subserve an end that he desires better than certain other movements would do; or it may be, that, having two or more desirable ends before his mental vision, he recognizes the superior attractiveness of one of them. Only so far as the act is thus consciously performed, only in so far as it is a product of a reasoning process, can we call it voluntary or free. A man is not a free agent when he does something to all intents unconsciously, as in the case of somnambulism, or in making reflex motions; he is only very imperfectly free when his act is done with a low degree of consciousness, as when he performs some habitual action, as we sometimes say, 'without thinking'; he is only perfectly free when, — having before him an ideal

presentation of all that the act implies, of its results and of the consequences that will ensue if it is not done, — he does or forbears to do it. Since human knowledge is extremely limited, and men's actions are usually the result in part, at least, of impulse and habit as well as of reason, it follows that absolute freedom is an ideal rather than a reality. But if the view just suggested be the correct one, it is evident that the more rational a man's actions are — the more they correspond to an intelligent survey of all the facts — the more 'free' is the agent. Not only, then, does the determinist retain the notion of freedom in his ethical system, but he emphasizes to the full its significance and value.

One effect, then, of the thoroughgoing application of the category of causation to ethical notions, will be to lay stress on clearness of consciousness as an essential differentia of free activity. A knowledge of an end in view is what distinguishes reason from instinct, and a knowledge of what we are doing distinguishes the conscious and deliberate act from the sub-conscious working of habit. If we do not know what we are doing, nor why we are doing it, we are in so far merely an unconscious part of the vast machinery of nature. And such involuntary performances have, taken in themselves, no moral worth. Their interest, from the moralist's point of view, consists in the evidence they give as to what have been the true voluntary acts — those done with an approximately perfect consciousness — in the past, and as to what future voluntary acts will occur in the case of the man whose instinctive or otherwise involuntary actions are of such and such a kind. The thousand and one little mannerisms, the accent, the walk, the tricks of gesture, are the outward crystallizations of the individual's past life-history, — a history many passages of which consist of deliberate resolutions and choosings. On the other hand such unconscious, or only sub-conscious, actions form a not unimportant factor in determining the nature of those future deeds, which, being voluntary, are capable of bearing a directly moral stamp. If the flower of the moral character is found in the intelligent act, deliberately

chosen, its roots lie to a great extent in the unseen region of instinctive and unreasoned impulses.

And this brings us to another aspect of the concept of freedom, which the determinist cannot afford to ignore. Man's liberty implies that, while his acts are, like all other natural events, determined by antecedent conditions, the *immediate* medium of determination is the self. What I shall be or do tomorrow, however imperfectly known to myself or others, is absolutely, certainly, and irrevocably fixed in the nature of things. But to a very large extent indeed, this 'I' of tomorrow is simply the outcome of the 'I' of today, as the latter is similarly the product of the 'I' of yesterday. The Ego is not a mere loose agglomeration of separate psychical particles, it has an organic unity of its own, however difficult it may be to describe this unity in terms of any other. In the adult human being the mental life has, as it were, solidified; the richer, the more complex the experience has been, the further has this process of individualization gone on. At the earliest and most plastic stage of existence the acts are but slightly colored by the peculiarities of the personal character. The stimulus gives rise to the motion spontaneously and almost immediately. But the act which is deliberately carried out after full reflection is the exponent of a formed and relatively stable character. It is when the principal cause of an action is to be found in its relation to the permanent core of thoughts and feelings, which form the substantial center round which the more transient experiences group themselves, that the action is truly the man's action, — that it is free. What we do is never undetermined, but in so far as we are free agents it is determined by ourselves. It is true of a human being, what Spinoza long ago said of God, that his freedom consists in this, that he acts always from the necessity of his own nature. Consequently, the individual whose nature is still so unformed and inchoate that the acts he calls his are only due to the direct influence of outside forces, and are not expressions of his own personal character, has not attained to freedom. Like a wave of the sea, driven by the wind

and tossed, he knows nothing as yet of the perfect law of liberty.

Thus we may sum up our account of freedom by the statement, that the act is a free one in so far as it is consciously and deliberately performed, and that the agent is free in so far as the act we call his is really his own—the expression of an intelligent purpose, which purpose is an outcome of his own essential personality. It is the recognition that his deeds are the expression of his own character which constitutes his sense of responsibility; and it is the consciousness that such deeds will, and must, have certain effects, by him more or less clearly foreseen, upon himself and others, that constitutes them intelligent or voluntary actions. So far, then, from determinism being opposed to a belief in freedom, it is the knowledge of the relation of cause to effect, or the clear recognition of the necessary connection which subsists between phenomena, which is the essential condition of free action. In a well-known passage in Schopenhauer's *Die Welt als Wille und Vorstellung*, that writer quotes Spinoza's saying, that a stone set flying through the air would, if it had consciousness, attribute its flight to its own volition. "To which," says Schopenhauer, "I only add that the stone would be right. The impulse given the stone is for it what the motive is for me, and what in its case appears as cohesion, gravitation, and rigidity, is the same in its inner nature as that which I recognize in myself as will, and which the stone too, had it the same knowledge, would recognize as will." Schopenhauer's purpose, of course, is to establish the identity between what we call force in the external world and what we know as will in the human mind. But the great pessimist's restatement of the Spinozistic doctrine needs a further correction. For that freedom which he relegates to the sphere of an unintelligent and capricious will has its true existence in reason. Freedom is not an escape from the law of causation, but an intelligent submission to that law; it is not a concept that must be banished into the outer darkness of the Kantian noumenal world,—it exists in and through knowledge, and it is in proportion to the increase in the

clearness and extent of the mental vision that action becomes truly voluntary, and that man becomes free.

2. Merit and Demerit. No clearer and more satisfactory account has ever been given of what we may call the popular conception of what these terms imply, than that of Bishop Butler in his '*Dissertation of the Nature of Virtue.*' He says: "Our sense or discernment of actions, as morally good or evil, implies in it a sense or discernment of them as of good or ill desert. It may be difficult to explain this perception so as to answer all the questions which may be asked concerning it; but everyone speaks of such and such actions as deserving punishment; and it is not, I suppose, pretended that they have absolutely no meaning at all to the expression. Now, the meaning plainly is not that we conceive it for the good of society, that the doers of such actions should be made to suffer. For if unhappily it were resolved that a man who, by some innocent action, was infected with the plague, should be left to perish, lest, by other people coming near him, the infection should spread, no one would say he deserved this treatment. Innocence and ill desert are inconsistent ideas. Ill desert always supposes guilt; and if one be not part of the other, yet they are evidently and naturally connected in our mind. The sight of a man in misery raises our compassion towards him; and if this misery be inflicted on him by another, our indignation against the author of it. But when we are informed that the sufferer is a villain, and is punished only for his treachery or cruelty, our compassion exceedingly lessens, and, in many instances, our indignation wholly subsides. Now, what produces this effect, is the conception of that in the sufferer which we call ill desert. Upon considering, then, or viewing together, our notion of vice and that of misery, there results a third, that of ill desert. And thus there is in human creatures an association of the two ideas, natural and moral evil, wickedness and punishment. If this association were merely artificial or accidental, it were nothing, but being most unquestionably natural, it greatly concerns us to attend to it, instead of endeavoring to explain it away."

Butler's account amounts in brief to this, that moral evil and suffering are associated in our minds in such a manner, that when the one is observed we look for and desire the other. When there is conduct that we judge to be wrong, we look for pain to accrue to the agent, which pain, viewed in connection with the wrong act, is punishment. Similarly, we are pleased when the good deed is followed by pleasure to the doer. Again, when we see a case of misery we are sympathetically unhappy, unless it is shown that this suffering is a consequent of moral evil, in which case our sympathy ceases, or at all events is lessened. In all these respects Butler's description is perfectly correct. Granting, however, that this is so, we have here, it must be noticed, simply a psychological fact, a case of association which when it occurs gives pleasure, and the absence of which produces pain. We have no right, *prima facie*, to assume that we *ought* to rejoice when the sinner suffers or the good man is made happy. The moral justification for our satisfaction in the meting out of 'poetic justice' must rest on experience. It must be based on the fact that the association of moral and physical evil, and of moral and physical good respectively, has been found to conduce to the increase of human welfare. It is one thing to say that we *do* like to see a criminal punished, and quite another to say that we *ought* to like to see him punished; the latter can only be proved by showing that the pain inflicted usually results in a larger good. If good and ill desert, then, are legitimate and permanently useful ethical concepts, it will not be enough to point out, with Butler, that they are due to an association of ideas which is natural; it must also be shown that they do not lose their significance when the nature of this association is critically investigated.

Merit and demerit, or good and ill desert, are terms which we apply to certain classes of action to express the sense we have that it is fitting and proper such actions should meet with praise and reward on the one hand, or blame and punishment on the other. The question, then, arises, whether, supposing human character and conduct are determined, and must

be, under the particular antecedent and co-existent circumstances, just what they are and no other, it can be fitting and desirable to bestow such approval or disapproval, reward or punishment. For, if rewards ought to be given, then we may well call those actions to which they are appropriate meritorious; and similarly, if penalties are rightly inflicted, the conduct which leads to them is of 'ill desert.'

The determinists' justification for praising good actions rests on two grounds, on the fact that such praise is the suitable expression of the pleasure which these actions give him, and on the expectation that it will tend to produce other good actions. In the first place, then, our commendation of good conduct is the natural outflow of the satisfaction we take in the sight of moral beauty. How this 'moral sense' has arisen is a question we are not here concerned with. The average man is conscious of pleasure when witnessing, or hearing of, deeds of heroism or self-denial, just as he is to some extent susceptible to beauties of color, form, and harmony. And as our admiration of the scent of the rose and the hues of the sunset is not lessened by our being aware that such odor and colors are the effects of certain natural causes, so neither need the more profound admiration that we feel in the presence of moral perfection be diminished, because we know that the conduct we rejoice in is the inevitable expression of a human character, which is itself the summing up of numerous preceding facts. The aesthetic pleasure which the sight of a lovely flower gives us is not affected by our knowing that a particular seed, sown on just this soil, and growing up under just such conditions of air, sunshine, and moisture, must produce this very blossom and no other; and our recognition that an act of courage or unselfishness is a product of preceding mental conditions need not interfere with the satisfaction which it gives our moral sense.

The close analogy which subsists between the aesthetic and the ethical feelings has been often overlooked in modern moral philosophy, where the dread of disturbing the foundations of practical ethics has prevented a thorough analysis being made of the origin and nature of the moral consciousness. The pre-

dominance, also, of theological over philosophical modes of thought in the system of Christian ethics which forms the basis of our every-day moral standards, has tended to make us assume that moral notions are altogether peculiar and unique in their constitution, and that it is only by the use of metaphor that we can compare moral and sense pleasures. Modern science, however, in proportion as it teaches us to explain every event by referring it back to the preceding phenomena on which it depends, is, indirectly but surely, forcing us to recognize what a large measure of truth lay in the old Greek conception of the relation between the good and the beautiful.

That the praise we bestow upon the man whose actions are noble and good is justified by its effects upon the recipient and others, needs no proof. There are, perhaps, men whose moral stature is so lofty that the applause of their fellows is not needed, as their blame is not regarded, by them; but for the vast majority the moral judgment of their equals is a wholesome influence, constantly checking the lower impulses, and restraining from at least open indulgence in wrong doing, while stimulating and encouraging the striving after that which is lovely and of good report. It is, therefore, perfectly reasonable for the determinist to praise the conduct that he believes to be beneficial to society, since his praise is to some extent helpful in the production of such conduct. Not only is praise, then, the expression of the recognition of what is morally beautiful and admirable, but it is a power which, well directed, makes for righteousness. And what is true of praise is still more evidently true of more substantial forms of reward. The determinists' position, that the man under given conditions must necessarily be just what he is, does not render it illogical to praise his character and reward his conduct.

Now let us look at the case of demerit. Here the same line of argument holds good. The vicious man and the vicious act are repugnant to our moral feelings. Just in so far as we are moralized, in so far as we have advanced to a relatively high stage of ethical development, are cowardice, deception, cruelty, and lust abhorrent to our souls. They are to the moral sense

what the hideous and discordant are to the aesthetic feelings. It is perfectly reasonable for us to feel pain and displeasure when a crime is committed. And this distaste need not vanish because we realize that the crime is simply the objective manifestation of the criminal's character, which itself is the outcome of inheritance and environment. Nor does this knowledge forbid us to punish the evil doer; on the contrary, the more we emphasize the fact that the crime is the effect of the action of a man's environment upon his innate character, the more evident is it that what should be done is to introduce him into such new conditions as shall be suited to modify his character in such a way as may be desirable. Hence, punishment as reformatory is in perfect harmony with the determinists' contention. The notion that one of the most important functions of punishment is the moral restoration of the criminal, which is being gradually accepted by students of social science, must make headway just in proportion as the connection between crime and social conditions is clearly recognized. Of this regenerative work of punishment the Elmira Reformatory in the State of New York is a grand object-lesson. In a recent article in the *Fortnightly Review*, its superintendent, General Brockway, to whom the singular success of the institution is mainly owing, has the following suggestive words: "During the sixteen years of the existence of this Reformatory the writer has personally examined every prisoner admitted, amounting to considerably more than five thousand, with increasing charitableness for their crimes. The impression deepens that a man's character is not altogether a matter of his own free choice, it is formed by myriad influences, pre-natal and otherwise, largely beyond his own control; and besides, the responsibility of society for crimes is by no means inconsiderable. *Crimes indicate character, and character is but the preponderance of habitude, a resultant of the impressional life and of heredity.*"

But while this recognition of crime as the outgrowth of given conditions leads to that large charity of which General Brockway is, in deeds as well as words, the eloquent expositor, yet it is entirely consistent with the retention of punishment,

not only as a means for reforming the criminal, but also as a restraining force, preventing the commission of crimes and protecting the interests of society. Even capital punishment is on this ground justifiable, if the fear of it deters from murder. Only, could we steadily hold in view the determinist doctrine, that what the man *does*, is what he *is*, and that, under given conditions, he must be just what he is, then the feeling of revenge which still lingers, disguised under the name of justice, in our conception of punishment, would give place to a profound pity, that might well lead to a firm determination to do all in our power to alter those social conditions which have consequences so terrible and tragic. *Tout comprendre c'est tout pardonner*, though human mercy, if it would be rational and wise, must often follow the Divine decree that as a man sows so shall he reap.

The objection of the moralist to determinism is that it makes us deny the fact of man's responsibility as a moral agent. But even the most consistent of determinists, who clearly realizes that the so-called 'freedom' which is opposed to causation is a figment of the imagination and is inconsistent with rational thought, must know from his daily experience that man is responsible, — that he has to answer to himself and to others for that conduct which is the outward expression of his nature. Responsibility is there, we cannot deny or ignore it, but we must not give it an interpretation that is inconsistent with clear and logical thinking.

Our first feeling, indeed, when the conviction of the inevitableness, alike of man's nature and of his fate, comes home to us with the force of a necessary truth, is a sort of indignation against the moral order of the world. What right is there in the universe or its maker to inflict pain as a penalty for the sin which is itself an infliction? Has not, in truth, the clay a rightful complaint to bring against the potter, that it has been made thus? Such questions lead us beyond the limits of the present discussion. Two considerations, however, may in conclusion be pointed out. In the first place, the libertarian theory does not help us to a solution of this mystery of evil.

Granted, that the man is 'free,' that his sin is his own fault, yet why does he have faults? Let it be assumed that at each time of making a choice, what was chosen depended on the man himself, and even that, with just his character, it might have been other than it was, yet if he has chosen wrong, and his Creator foreknew this would be so, why was the opportunity for the fall given him? Still, with Omar Khayyám, we may protest :

“ O Thou, who Man of baser Earth didst make,
And ev'n with Paradise devise the Snake :
For all the Sin wherewith the Face of Man
Is blacken'd — Man's forgiveness give — and take ! ”

Secondly, a universe in which all events should *not* be causally related to antecedent facts is to us absolutely unthinkable. A world of unrelated phenomena is a self-contradictory conception, which melts away as the mind tries to realize it. The world of experience is a coördinated system, a cosmos, all the parts of which stand in necessary connection with all the rest. In the ethical sphere, as in all other departments of knowledge, we find this inter-relation of parts, each dependent on others, each known only by the discovery of its numerous relations to others; to ignore or deny the fact of these relations is to obstruct the path of moral progress and to reduce ethics to the position of a pseudo-science.

E. RITCHIE.

THE TRUTH OF EMPIRICISM.

IN his famous demonstration that 'Kant has *not* answered Hume,'¹ Dr. Hutchison Stirling describes in his own graphic way the 'cold sweats' which the suspicion of the failure of his transcendental machinery must have caused 'the good Kant' when, in the Second Analogy of Experience, he came to hand-grips with Hume's veritable problem of the necessity of the causal nexus. Dr. Stirling's convincing proof of Kant's radical failure must have caused hardly less consternation in the minds of many who had been putting their trust in the Kantian 'refutation' of Hume. The discovery is calculated to cause 'cold sweats' to any one who is not content to rest in Hume's own 'sceptical solution of his sceptical doubts.' It is, indeed, a call to re-consider the entire question, with a view to the discovery of the truth of that tendency of thought which has found in the scepticism of Hume its most striking development.

In the eagerness to construct the 'answer' to Empiricism — to devise the refutation of this cardinal heresy in philosophical doctrine — the *truth* of it has been generally ignored. Not only is Transcendentalism, as recent writers, like Professors James and Höffding, have pointed out, as extreme and inadequate as the Empiricism which it seeks to refute; but, failing to show the error of the version of Empiricism offered by Locke and his successors, it has appropriated that error and worked it into the very texture of its answer. The writers mentioned above would, therefore, in the name of Psychology, call upon Epistemologists to accept a more thoroughly empirical view of knowledge than even the Lockian and Humian. Can we not, by doing fuller justice to the truth of Empiricism, discover the fuller truth which Empiricism has never grasped? The best 'refutation' of an inadequate statement is always founded upon a candid

¹ *Mind*, IX, 531-547, X, 45-72.

recognition of its partial truth. Such a careful reconsideration of the entire question, in the expectation of finding a certain amount of important philosophical truth in the empirical theory of knowledge, seems at any rate to be 'the only path now remaining.' Unless we follow it, we seem to be doomed to swing forever between the two extremes of an *a priori* and an *a posteriori* view of human knowledge.

The position, then, is this. It cannot be denied that Hume had Kant's problem before him, in essence if only in part—the problem, namely, of the possibility of rational or *a priori* synthesis.¹ Further, Hume's solution of that problem was an 'empirical' solution, as opposed to the 'transcendental' or 'rational' solution of Kant. The synthesis of cause and effect, which Kant attributed to reason and its category, Hume had attributed to experience and customary association. Lastly, Kant's own solution, spite of his zeal for 'pure reason' and the skill with which he anatomises its complex structure, spite of all his transcendental machinery, is *not* a transcendental solution, but empirical even as Hume's own. For, in the crucial instance of connection or synthesis, that of Causality, the connection is found, in the last analysis, to be 'given' to the subject, not originated *by* him. All that the subject contributes is the category of Cause and Effect; and the category is empty, abstract, and meaningless, until it gets the clue from experience. The subject, with his category, waits for the 'empirical instruction,' the 'prompter's whistle' of Experience. It is the empirical, actual order, the irreversible sequence of the phenomena, not an *a priori* order of Reason's own, that is primary and decisive. The order of the category is just the order of the phenomena *named* or *labelled*, and "a rose, by any other name, would smell as sweet." What is Kant's 'principle of succession' but Hume's 'constant conjunction' over again?

¹ Even if, as Professor Caird maintains (*Philosophy of Kant*, I, 203 ff.) Kant read his own problem of the possibility of *a priori* synthesis into the Hume he knew, *viz.*, the Hume of the *Enquiry*, yet the more characteristic *Treatise* states the Kantian problem with perfect explicitness—the 'discovery of the ultimate connection of causes and effects,' the 'connexion, tie, or energy,' 'the ultimate principle which binds [phenomena] together.'

The causal order is 'given,' not 'explained'; named, not created. All this has been so clearly put by Dr. Stirling that I need not dwell upon it here.¹

It is more necessary to point out how deep this Empiricism goes into the heart of the Kantian epistemology, how it is only the logical outcome of Kant's central view of knowledge, and how the shadow of his final failure lay upon his undertaking from the first. The function of the human understanding is, he teaches, merely analytic; or, if it is synthetic, it is so only in the secondary sense of connecting a given manifold, not in the primary sense of creating its own object. Kant expresses this otherwise, by saying that our understanding is discursive, not perceptive or creative; in other words its function is formal, not real. 'Reality,' then, the 'matter' of knowledge, is *given*, or must be waited for. And though at first the importance of this given Reality is minimized, and it is described as a 'mere manifold,' as simply the 'raw material' of knowledge, as a 'chaos' into which the order of the understanding must be read, yet in the end it is seen to have an order of its own, an order of which the order of the understanding and its categories is only the pale reflection. The laws of understanding are only the laws of 'nature' (= phenomena) re-enacted. The subjective order is the transcript of the objective order, not *vice versa*. The source of legislation is without, not within; nature dictates to the understanding, not the understanding to nature. The subject conforms to the object, not the object to the subject; and the boasted 'Copernican change of standpoint' is an illusion after all.

Now the thesis of Empiricism is either that the 'real' and the 'rational' do not coincide, or that the 'rational' is but the reflection of the 'real.' The former is the moderate or Lock-

¹ Kant's attempted re-instatement of rational necessity by the distinction (in the *Prolegomena*) between the 'Judgment of Perception' and the 'Judgment of Experience' is unavailing. For the necessity of the 'Judgment of Experience' is simply an 'abstract' necessity, which must be resolved into its concrete equivalents, the particular necessities of the several Judgments of Perception; and since the necessity of the latter is merely empirical, that of the former cannot be different in kind.

ian version of Empiricism; the latter is the extreme or Humian version, and for Hume it is synonymous with Scepticism. To 'dispute' this thesis, it would be necessary to prove that 'the real is the rational.' Such a demonstration is the very essence of Hegelianism. Accordingly the new Transcendentalism, the Transcendentalism of the Neo-Hegelian school, interprets Kant's failure to answer Hume as the result of the limitations of the Kantian standpoint and method. Kant, it is argued, was to the end the slave of a dualistic philosophy; he never escaped from the subjectivity and individualism of the Lockian school. No wonder, then, that he failed to construct the sufficient answer to Empiricism. To the individual mind the real and the rational can never quite coincide; to it there is always, besides the necessity of thought, the contingency of existence. The individual cannot, of course, take the 'high priori' transcendental road; *he* must be content with the lower road of empirical knowledge, *he* must wait, and observe, and experiment. Yet, from the standpoint of the Universal Reason, 'the real *is* the rational.'

Such a sublimation of the whole difficulty raised by Empiricism is as easy as it is enticing. But is it not the statement of a 'dogmatic' metaphysic? Is it not an assertion, rather than a demonstration? "What boots it to explain that though reality is not thought for us, it is for God? This free and easy appeal to the Deity, in the midst of a discussion of *human* knowledge, in order to silence an opponent and to fill up any gap in the argument, ought surely to be as severely reprobated as the mediæval practice of ascribing any ill-understood fact or bit of knowledge to the agency of the Devil."¹ We have seen that the 'critical' attitude of Kant was also, in the end, an 'empirical' attitude. The question, therefore, is: Can we cease to be 'empirics,' without ceasing to be 'critics'?

Some light on this question may be expected from a consideration of the attitude of Science to Reality. For philosophy now recognizes her community of interest with the sciences.

¹ Mr. F. C. S. Schiller, in *Philosophical Review*, I, 5, p. 542.

The older meaning of the word Science, as equivalent to Knowledge generally, as distinguished from mere Opinion, is being revived, and we are coming to speak of the 'special' or 'particular' sciences, as distinguished from the 'philosophical' or universal Sciences, including both under the general name of 'Science.' One cause of this is the increasing tendency of physical science towards generalization (as well as towards specialization), which has brought home to the scientific mind certain aspects of the universal problem of philosophy. It is also one of the best results of the Kantian Criticism of knowledge to have produced a better understanding between philosophy and science, by showing that metaphysic has no exclusive field of its own, but must share with science the common field of a single reality. Science and philosophy are one effort of the human mind, the effort to know, in part or in whole, the real universe. The several sciences are the content of philosophy, so that, as they without it are blind, so it without them is empty.¹ But if the problem of Philosophy is essentially the same as the problem of Science, must not the method of the two inquiries be fundamentally the same? Now the method of Science, in the narrower sense of the word, is always empirical, or *a posteriori*—the method of observation and experiment, the method of induction; it is only secondarily and indirectly deductive and mathematical. A striking proof of this is furnished by the case of Psychology, an inquiry which, just as it has *become* scientific, has passed from the 'rational' to the 'empirical,' from the deductive to the inductive type. Would it not seem, then, that knowledge, as such, is empirical rather than rational? The lesson taught us not merely by Kant, but by the entire progress of human knowledge, seems to be that the constant attitude of the mind that would know is—amid all its active speculation and experimentation, with all its guesses and hypotheses—the docile attitude of observation and receptivity. The history of Science suggests that the true vindication of knowledge is to be found in a more faithful and thorough-going Empiricism—that is, in a

¹ Cf. Dr. Ward, in *Mind*, XV, 229.

more unprejudiced and entire surrender to the facts—than even the Empiricism of Hume.

For Hume's version of Empiricism is not the only possible version of it. The empiricism of Hume has one obvious and thorough-going defect which a more adequate psychology enables us to correct. Hume is only a partial empiricist; beneath his empiricism one finds immediately the *a priori*ism or prejudice of the disciple of Locke. Locke's doctrine of the 'simple idea' reappears in the 'loose' impressions and ideas of Hume; the later thinker adopts the psychological 'atomism' of the earlier. According to both Locke and Hume, the several units or elements of the mental life fall apart from one another, and exist as independent entities. The problem of both, therefore, is to account for the 'connection' which is the chief characteristic of actual knowledge. The resulting Empiricism is, accordingly, a 'Sensationalism,' or, at best, an 'Associationism.'

Now, Kant accepted this Lockian view of the ultimate constitution of knowledge. To him, as well as to the Sensationalist school, the 'raw material' of knowledge consists of single, isolated, chaotic sensations; and his problem is the question of the 'synthetic unity' of this 'mere manifold.' And Kant, like Hume, found the problem insoluble; how to introduce unity into the mere manifold, how to connect the absolutely unconnected, this he, too, finds an impossible task. The cause of his failure to answer the Scepticism of Hume was that Kant occupied the same ground as Hume, and the ground sank beneath his feet, too, in the end. Accepting as he did the root-error of Sensationalism, instead of up-rooting the Scepticism which grew from it, he only tore away its flower and fruit, and the old stock budded again, in his hands, like a very Aaron's rod. As long as knowledge is regarded as 'atomic,' it is in constant danger of sceptical dissolution; to make such 'atoms' cohere was beyond the achievement of even Kant's intellectual dynamics. We have seen how, recognizing his inability to bring together, by force of reason, the in-themselves-unconnected elements of knowledge, Kant was com-

pelled ultimately to admit that, from the first, they must have been connected. But Kant never reconstructed his theory of knowledge in the light of such a significant admission.

This discovery which came to Kant too late is fast becoming a commonplace of the new psychology. Its representatives are never tired of insisting that the mental life is characterized, from first to last, by unity and connection, that it is never quite 'chaotic' or entirely 'raw,' never a 'mere manifold' of 'simple ideas,' but always a continuous 'stream of thought.'¹ The distinction between the earlier and the later stages of knowledge is not, it is insisted, a distinction between absence and presence of connection, but between actual connection and insight into the connection. At first we have mere 'awareness' of the items in relation, later we have 'cognition' of the relation itself. What lesson has this psychological discovery for epistemology? If I understand it aright, the lesson is that the function of the human mind is not to legislate for nature, or to dictate to the facts the order of their procession; that the 'work of the mind' is rather to *recognize* the structure of Reality, the order and relation which characterize it, than for the first time to *relate* its parts, or to *create* order among them. The real relations reproduce themselves in my mind. I *know* the facts as so related, and then I know my knowledge of them, or gain an insight into their relations.

We have only to press the empirical view in this way, and it will yield us the *truth* of the facts, the *reality* of which knowledge is the constant quest. If only his Empiricism had been thorough, purged of the *a priori* prejudice of Sensationalism, it would have led Hume to the recognition of order and not chaos in the universe, of knowledge and not illusion in the mind. For the connection which he finds established between our ideas and impressions, though it is a subjective connection of 'feeling,' is yet, in its basis, factual or objective. The subjective connection is really founded in an objective connection. Impressions are *given* or 'presented' (to use the

¹ Cf. Professor James, *Principles of Psychology*, I, 9, *et passim*; also Höffding, *Psychology*, p. 117 (Eng. transl.).

technical term of contemporary psychology) in such and such an order; and the repetition of this order, their 'constant conjunction' in experience, is for Hume the cause of their 'necessary connection' in the mind.

Thus experience, viewed empirically, not transcendently, brings the subject into contact with the object, and guarantees the reality of knowledge; the very essence of Empiricism, when pressed to its extreme consequence, is the discovery of the object in the subject. That which Kant failed to do, Empiricism achieves, and by a precise reversal of the Kantian method. The truth of Empiricism is that the subject has to *learn everything* from the object, to conform to *it*, to learn *its* ways, to reproduce *it*. The connections which the subject seemed to have made in its own strength, to have read into the object, — thus weaving a veil that will forever hide the object from its sight, — are by Empiricism traced in the very core of the object itself. The work of the subject is first to reproduce these real relations, and then to recognize and understand them. So far, therefore, is Empiricism from being synonymous with Scepticism that, if pressed to its logical issue, it not only yields the clue to the deliverance from Scepticism proper, but, delivering us also from that modified Scepticism in which Kant rested and which we have come to name Agnosticism, it provides the needed 'answer' to Kant, as well as to Hume. Science, as such, has always been empirical in method; and yet science is always positive, never sceptical, in its attitude to the real world. It is philosophy, and philosophy as *a priori* speculation, that has always been the parent of Scepticism. Let philosophy adopt the empirical attitude of science, and see in human knowledge the reproduction of the object in and by the subject; and philosophy, too, shall be delivered from Scepticism.

This is, as I conceive it, the truth of Empiricism; and its lesson for epistemology is, it seems to me, the lesson of Realism. If there is an objective or 'trans-subjective' Reality, then our attitude to it must be the empirical attitude of docility, not the would-be Kantian attitude of *a priori* dicta-

tion. The 'Copernican change of standpoint' would shut us up in subjectivity; Agnosticism, or the discovery of the impossibility of knowledge in any real sense, is the only logical outcome of such a view of knowledge. We have seen that in order to vindicate the reality of knowledge, even in his own phenomenal sense, Kant was compelled in the end to take the empirical attitude to the object. In his Agnosticism we see the logical result of his *a priori* Idealism: a pure Idealism cannot establish the reality of knowledge, but must confine us within the sphere of our own thought, a 'charmed circle' which we can never 'break through to Reality.' The unreality and abstractness of the Lockian and Kantian Idealism is obvious enough. And Hegelianism itself gives us only 'a ghostly ballet of bloodless categories,' a system of relations without anything related, a series of predicates without a subject, of adjectives without a substantive. But Empiricism teaches us that we are unceasingly and intimately in contact with a full, living, breathing Reality, that experience is a constant communion with the real, nay, that we ourselves are part of that Reality. We can turn round upon this experience, and reflectively analyze or explain it, but we must not explain it away. There is no such breach as Hume and Kant conceived between the 'practical' Reality of Belief and the 'theoretical' Reality of Knowledge. Our practical acquaintance with Reality is the basis of our theoretical, the former is already the latter in germ. The practical belief is the datum of epistemology or theory of knowledge. Such immediate and instinctive knowledge brings us into closest contact with Reality; and since all our knowledge flows from this source, as Empiricism has always maintained, it can never rise above its level. So to etherealize or idealize our knowledge is as impossible as to make water flow up hill; the result is the entire evisceration of knowledge, — mere formalism and abstraction. Short of an absolute identification of subject and object, we must take our stand in the object rather than in the subject. This is the lesson of Empiricism, and if it is the lesson of our finitude, it is a lesson we cannot get beyond without ceasing to be finite.

Rationalism and Idealism are inseparable, Empiricism and Realism. To identify the real with the rational or conceptual, is to identify the actual with the ideal. If thought and being are the same, we must see in the world the 'work of the mind,' and our logic is at the same time a metaphysic; the particular is reduced to the universal, existence to essence, the many to the one, the concrete to the abstract. Such a view of Reality is as old as the 'Realism' of the Scholastic philosophers, which last is in its turn a revival of the Platonic view that only the universal or conceptual essence exists. In opposition to such an abstract Idealism, Realism is 'the doctrine which denies most emphatically that existence is ever reducible to essence, and holds that the individual is the real.'¹ This doctrine is as old as mediæval Nominalism, and the connection between it and Empiricism is illustrated by the fact that the great representatives of British Empiricism, Berkeley and Hume, were also Nominalists. Let me indicate this connection between Realism (in the modern sense) and Empiricism under its two chief aspects.

First, while Rationalism, with its resulting Idealism, tends to stereotype Reality, Empiricism, with its resulting Realism, reveals to us the constant variety and change of the unceasing process of the actual. If there are 'natural kinds' or universal essences in nature, they are not fixed and rigid, like the 'ideas' of Plato, or the concepts of modern Idealism. The doctrine of Evolution has brought home to us the 'continuity' of nature, the genesis of species from species, the ultimate relativity of all distinctions. In the words of Mr. Alfred Sidgwick: "In this way, therefore, the picture we get of distinctions in general is they are really fluid, but artificially hard; that the apparent absence of a borderland between (actual) A and non-A is a result of our incomplete powers of vision wherever it is not a result of deliberately shutting our eyes to some of the facts. Either the transition is too quick for our clumsy observation, or in some way the process is hidden from us at present, and is therefore liable to become manifest whenever our observing

¹ Mr. F. C. S. Schiller, in *Philosophical Review*, I, 5, p. 543.

power, or our insight into past history or remote places, shall become sufficiently improved. . . . Every addition to our knowledge of Nature is an addition to our knowledge of some *process* — an intermediate step where formerly a gap existed ; and every now and then some long-received distinction is thus found to need revision. The history of the growth of knowledge is a history of the dissolving of older and harder distinctions ; a history of the discovery (or enforced clearer recognition) of borderland cases.”¹ Thus the distinction between the ideal, or conceptual, and the real must always remain for human knowledge. The real must always be for the human thinker not the universal, the mirror of his concept, but the particular, which his concept has not yet been able to grasp. Reality is always escaping from the mould of the universal, from the dominion of the concept, ceasing to be universal and becoming again particular. The rich life of the concrete world is always convicting the concept or category of ‘abstractness,’ and condemning it as inadequate. It is true that this is only a moment in the process of the real, and that the next moment is a new universal, reached through the particular, and in turn demanding a new and more adequate concept for its interpretation. Or we might say that Reality is progressively and continuously determining and defining itself, that its process is one of increasing differentiation and integration. The attempt has been made to construct a logic of this process. Hegel has offered an elaborate dialectic, in which the categories are no longer fixed and rigid, as in the older systems, but fluid and ever passing over into one another. Spencer, too, has brought his magical formula of Evolution to bear upon the process, and attempted to interpret its every stage in terms of a ‘passage from indefinite, incoherent homogeneity to definite, coherent heterogeneity.’ But is not the result of both attempts essentially the same, *viz.*, a failure to deduce, evolve, or explain the real ? Do not both offer us a stone when we ask for bread, an abstract logical scheme in place of the concrete living fact ? Our logic ever lags behind the swift and subtle process of the

¹ *Distinction and the Criticism of Beliefs*, pp. 73-4.

actual; and a theory which would be the transcript of Reality must be 'empirical' enough to follow close in the wake of 'the facts.' To make an 'idol' of the universal is to miss it; for the universal is in the keeping of the particular, and the particular must be patiently wooed before she will divulge her secret.

But, secondly, the fact that the real is always the individual seems to render it impossible that Reality should ever be entirely conceptualized or categorized. The particularity which individualizes the universal is not to be deduced *a priori*; it can only be induced, learned by experience or empirically. Reduce the real to conceptions, idealize it, make it a 'system of relations'; and you thereby formalize it, and substitute for the concreteness of Reality a world of shadowy abstractions. 'The individual case is always richer in detail than any or all of its class-names strictly indicate.'¹ Even if we suppose, with Mill, that the ultimate constituents of Reality are 'natural kinds,' or, with Anaxagoras, that they are *ὁμοιομερῆ* or 'similar,' yet these fundamental 'universals' are, in a very real sense, 'particulars,' or rather *individuals*, at once particular and universal; and this particular element must be induced, or learned empirically, from a study of the real. We can never say why there should have been these concrete details which are the starting-point of all our conceptions of Reality. These 'matters of fact' are the basis of all our 'relations of ideas'; the ideal order is the mirror of the factual. And since the entire process of Reality is the development or actualization of the potentiality locked up in these original qualitative differences, the Empiricism which characterizes its beginnings must cling to the latest stages of our Knowledge.

This lesson of empirical Realism is especially opportune at present, now that we have so well learned the other lesson of transcendental Idealism. Many of the philosophical and general intellectual tendencies of our time indicate, indeed, that the former lesson is being learned, often to the neglect of the latter. English thought has always been empirical and scien-

¹ Mr. A. Sidgwick, *op. cit.*, p. 95.

tific, rather than speculative or philosophical, and now that the first fervor of the Neo-Hegelian movement is passing away, we find in England a reaction to the empirical extreme. There, as elsewhere, an empirical Evolutionism seems for the moment the open sesame of all mysteries. In Germany, in France, and in America, this tendency of thought is no less evident than in the home of philosophical Empiricism. The attention given to 'empirical' and experimental psychology, the prevalence of the historical and evolutionary interest in ethics, the enthusiastic study of the history of philosophy as containing an evolution of thought, above all the constant insistence upon the inseparable union of philosophy with the special sciences, all these tendencies clearly prove that philosophy is learning, however late, from the spirit of Empiricism which has so long characterized science, and that the lesson she is learning is the lesson of Realism.

JAMES SETH.

BROWN UNIVERSITY.

BIBLIOGRAPHY OF WRITINGS BY AND ON KANT
WHICH HAVE APPEARED IN GERMANY UP TO
THE END OF 1887. (III.)

336) *Glaubensbekenntniss eines deutschen Dorfschulmeisters, die Gewissheit von dem Daseyn Gottes betreffend, gegen die Kantische Philosophie.* (By Rector Vogel of Nürnberg.) In *I. C. König's Freund der aufgeklärten Vernunft und wahren Tugend*. Part I. 8vo. Nürnberg. pp. 30-65. (Theoretical proof of the existence of God, based on the argument that everything, which the nature of our thinking constrains us to regard as certain, is for us necessary, and must be thought of as *Being*. Under this rubric belong the existence of the objects of our sensible knowledge, as not being contained in our idea, and also the concept of God.) Reprinted in *Mtr.*, II. pp. 156-174.

336a, b) *Heinicke, Sm.* Cf. nos. 210, 211.

337) *Herder, I. G.: Gott. — Einige Gespräche.* Small 8vo. Gotha. Ettinger. pp. viii, 252. (A defence of Spinozism, containing many attacks upon Kant, indirect and overt. Against his affirmation of the impossibility of all demonstration of the existence of God, Herder himself adduces a variant of the ontological proof.) Second edition, with the title: *Gott. Einige Gespräche über Spinoza's System, nebst Shaftesbury's Naturalismus. Zweite verkürzte und vermehrte Auflage.* Same place. 1800. pp. xxiv, 336. (The passages directed against Kant are, in this edition, made more explicit.) Also reprinted in the collected editions of Herder's works.

338-342a, *Jacobi.*

338) *Jacobi, Fr. Hnr.: David Hume über den Glauben, oder Idealismus und Realismus. Ein Gespräch.* 8vo. Breslau. Loewe. pp. ix, 230. In the collection of his "Werke", vol. ii. Large 8vo. Leipzig. 1815. Fleischer the younger. pp. 127-310. In the *Beilage* (pp. 209-230: *Ueber den transcendentalen Idealismus*, at the beginning of which reference is made to the difference between R. Va. and R. Vb, and R. Vb is said to have suffered important losses) Jacobi accuses Kant of inconsistency, because he admits that objects make impressions on our senses. This cannot be said of *phenomena*, since they are supposed to be simple ideas; nor of *things-in-themselves*, since we know nothing at all of them, dependent as they are only on "the purely subjective form of our thought, the form which appertains exclusively to our peculiar sensibility." Transcendental Idealism leads, according to Jacobi, to the complete surrender of things-in-themselves, that is, to Fichte's *Wissenschaftslehre*; and transforms all objective

reality into subjective semblance. Jacobi is a realist, believing that we possess an immediate knowledge, not based on inference, of our own bodies; of external objects, which exist independently of our idea; and of freedom in us, and a God over us. This knowledge, since it does not take its origin in rational considerations, he designates 'belief' or 'sense'; later 'reason' or 'feeling'. In spite of this terminological variation, his philosophy remained the same throughout his whole life. Of his later writings, we have *especially* to note the following:

339) *Jacobi: Jacobi an Fichte*. 8vo. Hamburg. 1799. Perthes. pp. x, 106. *Werke*, vol. iii, 1816. pp. 1-57 (esp. pp. 36-42).

340) *Jacobi: Ueber das Unternehmen des Kriticismus, die Vernunft zu Verstande zu bringen und der Philosophie überhaupt eine neue Absicht zu geben*. In *Beyträge zur leichtern Uebersicht des Zustandes der Philosophie bey dem Anfange des 19ten Jahrhunderts*. Published by C. L. Reinhold. Third Part. Large 8vo. Hamburg. 1802. Perthes. pp. 1-110. *Werke*, vol. iii, 1816. pp. 59-195. (Containing the weakest and most difficult of Jacobi's writings. From p. 82 [resp. 158] it was revised by his friend Köppen, Jacobi being prevented from completing it by ill-health and other misfortunes. It is markedly influenced by Fichte's continuation of the Kantian philosophy; and consists mainly of a series of conclusions gained by aid of the Transcendental Deduction, special emphasis being laid on the psychological elements in this.)

341) *Jacobi: Von den göttlichen Dingen und ihrer Offenbarung*. 8vo. Leipzig. 1811. Fleischer. Second, cheap edition, 1822. *Werke*, vol. iii, 1816. pp. 245-460 (esp. pp. 344-378).

342) *Jacobi: Vorrede zu David Hume, etc.; zugleich Einleitung in des Verfassers sämtliche philosophische Schriften*. *Werke*, vol. ii, 1815. pp. 3-123. (New in these writings is Jacobi's polemic against Kant's moral proof of the existence of God. This is impossible, because the existence of God is not in any way capable of proof, but must be matter of belief. Kant's moral principle Jacobi declares to be an empty form. Morality is independent both of the concept of duty, and of that of happiness; and is not determined by an abstract universal law, but is an instinct with which every man is endowed, a basal impulse, the realization of which must be individual. The law is made for man, and can therefore in certain cases be repealed for man.)

342a) *Lachmann, II.: F. H. Jacobi's Kant-Kritik*. I. D. Large 8vo. Halle an der Saale. 1881. pp. 60. (A brief exposition of Jacobi's objections, unfortunately almost entirely without references; and a full refutation of them, which does not do justice to Jacobi, although the condemnation of no. 340 is well deserved. It is argued that Jacobi has been unsuccessful in all the essential points of his polemic, and that he has misunderstood Kant's true meaning both in general and even in essential particulars. The paper shows an exact and thorough knowledge of Kant: it regards Rationalism as the starting-point and centre of the R. Va.; attempts

a psychological explanation of the conflicting utterances regarding things-in-themselves; and rightly distinguishes, in each of the two transcendental deductions of the R. Va. and R. Vb., different and not wholly congruent methods of proof.

343-373, Jakob, L. H.

343) *Jakob, Ludw. Hnr.: Prolegomena zur praktischen Philosophie.* 8vo. Halle. 1787. Schwetschke and Son. pp. 28. (This is the first of a series of writings in which Jakob attempted, without himself originating or developing important theses, to extend and popularize Kant's practical philosophy, to give it a less forbidding exterior, and to bring it nearer to common notions. His method involved a certain smoothing and softening of the rigorousness of the Kantian principles; but this fact was itself of assistance to his books.)—A further continuation of no. 343 is:

344) *Jakob: Philosophische Sittenlehre.* 8vo. Halle. 1794. Hemmerde and Schwetschke. pp. 536. — Varying somewhat from Kant is:

345) *Jakob: Ueber das moralische Gefühl, an Kanzler von Hoffmann.* 8vo. Halle. 1788. Franke and Bispink. pp. 32. Reprint, with improvements, in no. 356, pp. 229-256. (The feeling of reverence rests upon Reason in general, not, as in Kant, on the pure practical Reason alone. One form of it, the feeling of reverence for the moral law, is the moral feeling; the correctness of which is tested by reference to the general feeling of reverence, and which is developed along with Reason.)

346) *Jakob: Ueber die Freiheit.* Prefixed to Kiesewetter's work: *Ueber den ersten Grundsatz der Moralphilosophie.* (Cf. no. 462.) 1788. Reprinted in no. 356, pp. 159-172. (Empty and pretentious verbiage. Freedom is attested by Selfconsciousness. Reason can neither explain nor deny it; and only attempts this, so long as it is not restricted by criticism to its true task.)

347) *Jakob: Dissertatio philosophica, in qua quaeritur, an sint officia, ad quae hominem natura obligatum esse, demonstrari nequeat, nisi posita animorum immortalitate; quae anno 1789 praemium legati Stolpiani reportavit. Accedunt de eodem argumento dissertationes tres; prima latina, Dan. Fr. Hauff; secunda belgica, Al. B. Fardon; tertia latina, L. G. Bekenn.* Lugd. Bat. 1790. Luchtmans. — Jakob's paper was published in his own translation:

348) *Jakob: Beweis für die Unsterblichkeit der Seele aus dem Begriffe der Pflicht. Eine Preisschrift, mit einiger Veränderung, von dem Verfasser selbst aus dem Lateinischen übersetzt.* Small 8vo. Züllichau. 1790. Frommann's heirs. pp. lxxxii, 100. 2nd edition. Completely revised. Same place, 1794. pp. 240. (Diffuse in style, and aiming to be popular, the work brings to their complete development the germs of Eudaemonism in Kant's proof, and thus allows the harshness of this to appear in full light. Jakob asserts, for instance, that, in the absence of a belief in immortality, the chief end must be self-preservation, and death for one's country there-

fore sheer folly. So that here Kant's rigorousness is transformed into its direct opposite.)

349) The above work was revised in *J. A.*, 1795. pp. 169–176. Answered in the supplement to *J. A.*, 1795: "Philosoph. Anzeiger." pp. 57–60:

350) *Jakob: Noch ein Wort über den praktischen Glauben an die Unsterblichkeit in Beziehung auf die Recension meiner Preisschrift.* — There appeared a further reply:

351) *Versuch einer Prüfung des von Herrn Jakob aufgestellten Beweises für die Unsterblichkeit der Seele.* (By K. H. Gl. Schneider.) Large 8vo. Leipzig. 1793. Crusius. pp. 122.

352) *Jakob: Ueber den moralischen Beweis für das Dasein Gottes.* Small 8vo. Liebau. 1791. Friedrich. pp. iv, 196. 2nd edition. Same place, 1798. (This proof is the only one possible: it is, indeed, itself less a *proof* of the existence of God, than an *explanation* of our *belief* in God, — which is furthered by the propagation and exposition of moral ideas, and by purification of the concept of God.)

353) *Jakob: Ueber die Nothlüge und was derselben ähnlich ist.* In *Ph. I.*, 1794, iv, 2; pp. 238–251. (An attempt to justify certain lies, as against Kant's formal moral principle.)

354) *Jakob: Ueber die Religion.* A philosophical paper in *I. A.*, 1796. pp. 209–240. Reprinted, with some alterations, in no. 356, pp. 116–158. (Revelations and Miracles are not knowledge, but concepts of reflexion, which only assert that one perceives in the contents of the Bible a constant tendency to a divine, that is, a moral End. — All compromise, and vain effort to steer a safe course between Scylla and Charybdis.)

355) *Jakob: Die allgemeine Religion. Ein Buch für gebildete Leser.* Large 8vo. Halle. 1797. Hemmerde and Schwetschke. pp. xxxii, 576. (There is a very sensible review in *I. A.*, 1797, pp. 667–688, in which it is stated that the book is not intended for a contribution to science, but is a philosophico-religious work. Contents: Basis and content of moral-theology, Religious consideration of nature — the omnipotence, wisdom and goodness of God; a very diffuse prosecution of the old physico-theology, Refutation of objections to moral religion, Advantages of this latter.) Cf. with no. 355: *Religion, Ueber "die allgemeine —."* 1801.

356) *Jakob: Vermischte philosophische Abhandlungen aus der Teleologie, Politik, Religionslehre und Moral.* 8vo. Halle. 1797. Waisenhaus-Buchhandlung. pp. xxiv, 463. (Nos. 345, 346, 354 are reprints. Further to be mentioned is vi. *Aristäus, oder über die Vorsehung. Ein philosophisches Gespräch.* pp. 260–463.) (Turns upon the moral proof of the existence of God and of a Providence, which has set up the moral culture of the human race, and moral happiness as the final cause of creation. Connected with it, and with the second part of no. 355, is no. i; *Ueber die Lehre von den Zwecken. Ein philosophischer Versuch.* pp. 1–14.)

357) *Jakob: Grundsätze der Weisheit des menschlichen Lebens. Ein Buch für gebildete Leser.* 8vo. Halle. 1800. pp. 616. Hemmerde and

Schwetschke. (A second part of the *Allgemeine Religion*.)—Jakob varied his theoretical standpoint. The first work to be noticed in this connexion is :

358) *Jakob: Prüfung der Mendelssohnschen Morgenstunden, oder aller spekulativen Beweise für das Dasein Gottes, in Vorlesungen. Nebst einer Abhandlung von Herrn Prof. Kant.* 8vo. Leipzig. 1786. Heinsius. i–xlvi, Preface; xlix–lx, the very remarkable essay by Kant. pp. 394. (pp. 1–158. Exposition of the Aesthetic and Analytic, giving a free reproduction or a verbal repetition of Kant's thoughts. This is followed by a refutation of Mendelssohn's proofs — which had been partly given in strictly syllogistic form — in connexion with Kant's Criticism of rational theology. Jakob regards the limitation to experience, resulting from Idealism, as the main point in the Criticism, and is the first to father upon Kant the view that things-in-themselves are only an Idea of the Understanding, necessary for the coherent representation of phenomena, and therefore belonging simply to the form of our thought. On this account, he asserts, there can be equally little urged for and against their existence, but they must be assumed for practical-moral reasons; while as a matter of fact a plurality of things-in-themselves was always a tacit presupposition of Kant's. That Space and Time are at once subjective and objective is not an impossibility, according to Jakob; but this view is excluded from metaphysic as a mere hypothesis.) We find the same opinion, that the unknowability of things-in-themselves is the central point of the Criticism, 1787, in :

359) *Jakob: Brief an den Herausgeber, des Herrn Jacobi Idealismus und Realismus betreffend.* In *Cäsar's Denkwürdigkeiten*, vol. v. 1788. pp. 206–243. (Finds fault with Jacobi's identification [no. 338] of Transcendental and Berkeleyan Idealism, and discusses certain technical Kantian expressions, not altogether in the Kantian sense. It is said, for instance, that by the objects which affect us [Introduction to R. Va] Kant intended phenomena.)

360) *Jakob: Grundriss der allgemeinen Logik und kritische Anfangsgründe der allgemeinen Metaphysik.* 8vo. Halle. 1788. Franke and Bispink, in commission. *Logik*, pp. 246; *Metaphysik*, pp. 350. With Preface and two Indices.

361) A lengthy notice of the work in *Feder's Ph. B.*, vol. ii. 1789. pp. 172–217.

362) Also in *A. D. B.*, 1789, vol. 89, I. pp. 1–20. This last, together with the review of the second edition, same place, 1792,

363) Vol. 106, I, pp. 177–183, is reprinted in *Mtr.*, I, pp. 218–233. No. 360 takes up the same standpoint with regard to Idealism as did nos. 358, 359. The *Logik* is of importance, because in it there is carried through for the first time Kant's idea of a purely formal logic, independent of empirical Psychology at least in its first main division. Its contents are in touch with Kant's Logic, published later by Jäsche, at so many points above and beyond those indicated in the R. V., that one might suppose Jakob to have made use of some of Kant's lecture-notes. In its contents,

the *Metaphysik* does not vary from the *Kritik*; but the work does not attempt (like those of Schultz and others) to follow the latter with the greatest possible literalness. Jakob carries out the system of Predicables; at times he even goes so far as to make changes in arrangement,—especially, *e. g.*, in including the systematic exposition of the ideas of reason in the *Analytik*, and in placing the treatment of the concepts of reflexion, as ontology, at the beginning of the *Dialektik*, and coördinating it with the three other main portions of the subject (a procedure which shows a right appreciation of the true relations of the subject-matter, but which is certainly not in agreement with the Kantian scheme, adopted elsewhere). The *Metaphysik* is therefore, even at the present day, not wholly without value as a commentary for the exposition of the *Kritik*, though it is in no sense a great work. At the beginning of the nineties, Jakob's opinions underwent a change. He now believed that, just as certainly as there are phenomena, are there actually things-in-themselves, to the notion of which we are led by the notion of phenomena, and which we can and must bring under the category of Existence, although, through the imperfection of intuition (sensation), the 'how' of their existence remains wholly undetermined. More than that: he seems to hold the view, that things-in-themselves must be connected together in accordance with the laws of the understanding, if they are to be known by it; and that therefore the categories are at once subjective and objective. This change of attitude is everywhere apparent in the publications of the nineties. And first in:

364) *Jakob: David Hume über die menschliche Natur, aus dem Englischen, nebst kritischen Versuchen zur Beurtheilung dieses Werkes.* Vol. i: *Ueber den menschlichen Verstand.* Large 8vo. Halle. 1790. Hemmerde and Schwetschke. pp. vi, 843. (Jakob's remarks, pp. 529–843.) vol. ii: *Ueber die Leidenschaften.* Large 8vo. Same place, 1791. pp. 314. vol. iii: *Ueber die Moral.* Large 8vo. Same place, 1792. pp. xiv, 302. (The rule followed in this criticism, of attacking Hume's first principle that all knowledge is derived from experience, is expounded by Jakob in more detail in *K. A. M.*, 1791, I, 1. pp. 44–74.)

365) *Jakob: Ueber David Hume's Skepticismus. Ein kritischer Versuch.*—Same place. pp. 1–17:

366) *Jakob: Ueber Erkennen; ein Vorschlag zur Beilegung einiger philosophischen Streitigkeiten.* (Every idea which is referred to a definite object, *i. e.*, is thought of as contained in it, may be named knowledge: so that Jakob can speak, with the Dogmatists, of a knowledge of things-in-themselves, although not of a knowledge of their material predicates. At the same time, our understanding can know the objective form of their connexion in a certain way, since, so far as they are related to an understanding, they must be amenable to the categories.)

367) *Jakob: Second and completely revised edition of no. 360.* 8vo. Halle. 1791. Hemmerde and Schwetschke. pp. 535. Third edition, revised. Same place, 1794. pp. xxvi, 504, and index. Fourth edition,

revised and enlarged. Same place, 1800. 28 sheets, with preface and index. — Jakob also wrote upon Aesthetics and Natural Law, adopting Kant's principles in his treatment. In his psychology, he at least made use of the Kantian terminology :

368) *Jakob: Grundriss der Erfahrungs-Seelenlehre.* 8vo. Halle. 1791. Hemmerde and Schwetschke. pp. 318. Second and completely revised edition. Same place, 1795. pp. xxiv, 438. Third and improved edition, 1800. pp. xxii, 462. Fourth edition, 1810.

369) *Jakob: Kurzer Abriss der Kritik des Geschmacks.* 8vo. Halle. 1793. Hemmerde and Schwetschke.

370) *Jakob: Philosophische Rechtslehre oder Naturrecht.* 8vo. Halle. 1795. Renger. pp. xxii, 524. Second and improved edition. 1802. pp. 446. Index of printer's errors in *I. ph. A.* 1795. pp. 151, 152. (General political and international law, with partial treatment of individual law.) — One section of his work on Law had been previously examined anonymously by Jakob, in :

370a) *Antimachiavel oder über die Grenzen des bürgerlichen Gehorsams. Auf Veranlassung zweyer Aufsätze in der Berl. Monatschrift* (Sept. and Dec., 1793) *von den Herren Kant und Genz.* (By L. H. Jakob.) 8vo. Halle. 1794. Renger. pp. xxviii, 164. Second edition, with author's name, 1796. Twelve sheets. (Against Kant, no. 78. The moral nature of man requires in certain cases [defined, and illustrated by examples] a refusal of civic obedience, and an actual resistance to the sovereign.)

371) *Jakob: Auszug aus dem Naturrechte des Prof. Jakob, von ihm selbst verfertigt; zum Gebrauche für Vorlesungen.* 8vo. Halle. 1796. Renger. pp. 181.

372) *Jakob: Tabellarischer Abriss einer Encyclopädie aller Wissenschaften und Künste, als Manuscript für seine Zuhörer.* 8vo. Halle. 1800. Ruff. pp. 30.

373) *Die Annalen der Philosophie* (*I. A.* 1795–1797), of which Jakob was the editor, are characterized by the number of detailed reviews which they contain. Everything, it is true, is regarded onesidedly, from the Kantian standpoint; but as a rule a good idea of the works is obtained from accurate summaries. The *Annalen* represent in many cases Beck's [a co-worker with Jakob] appreciation and continuation of the Kantian doctrine, without recognizing this latter as such; their principal aim is to oppose Reinhold.)

373a) *Kausch.* Cf. no. 400.

374) *L.* 1787, I. pp. 249–252. Review of M. A., no. 64.

375) *L.* iii. pp. 1489–92. Review *† of R. Vb.

375a) *Manier: Nach Kantischer* — *aufgelöste Axiomen.* Cf. no. 211.

376–389, Obercit.

376) *Obereit, Ik. Hrm.: Die verzweifelte Metaphysik zwischen Kant und Wizenmann.* Large 8vo. No place given. 1787. Two sheets.

377) *Obereit: Der wiederkommende Lebensgeist der verzweifelten Metaphysik. Ein kritisches Drama zur neuen Grund-Critik vom Geist des Cebes.* 8vo. Berlin. Decker and Son. 1787. pp. 140.

378) *Obereit: Aufklärungsversuch der Optik des ewigen Natur-Lichts, bis auf den ersten Grund aller Gründe, zur tiefsten Grund-Critik des reinen Verstandes.* Small 8vo. Berlin. 1788. Decker and Son. pp. 117.

379) (*Obereit* :) *Maasstab und Kompass aller Vernunft, in der allgemein Ziel und Maas gebenden Gleichgewichtswissenschaft, aus dem Vollkommenheitsgrunde.* 8vo. Meiningen. 1789. Hanisch. pp. 20.

380) (*Obereit* :) *Erz-Räthsel der Vernunftkritik und der verzweifelten Metaphysik; in der Unmöglichkeit eines Beweises und Nichtbeweises vom Daseyn Gottes aus Wesensbegriffen.* 8vo. Meiningen. 1789. Hanisch. pp. 48.

381) (*Obereit* :) *Critische Spatziergänge zum Ziele der Vernunft in Elysäischen Feldern. Vom Geist der verzweifelten Metaphysik.* 8vo. Meiningen. 1789. Hanisch. pp. 90.

382) (*Obereit* :) *Das offene Geheimniss aller Geheimnisse, die Naturquelle moralischer und physischer Wunder, zur Entwicklung der höchsten Magie des Orients.* (Refers to the essays on miracles in the *Teutscher Merkur*; *graus Ungeheuer, etc.*) 8vo. Meiningen. 1789. Hanisch. pp. 40. (Defence of miracles.)

383) (*Obereit* :) *Die spielende Universalkritik der ganzen Weltvernunft in einem Gleichgewichtsspiel über alles zum höchsten Zweckrecht; ein Göttergespräch, gesellig eröffnet durch alte Musensöhne, Gotthard Nulle und ungenannte Brüder des alten architektonischen Orients.* 8vo. Friedberg and Leipzig. 1790. pp. 265.

384) (*Obereit* :) *Beobachtungen über die Quelle der Metaphysik, von alten Zuschauern, veranlasst durch Kant's Kritik der reinen Vernunft.* 8vo. Meiningen. 1791. Hanisch. 12½ sheets. (*Obereit*, a Swiss by birth, was of an honest, open, ideal character, but a strange enthusiast and obscure mystic. From 1786 to 1791 he was "Hof- und Cabinetsphilosoph" to the Duke of Meiningen. In these writings, he attacks the views of Kant, which are, for the most part, entirely misunderstood, and propounds a mysticism, which he delights to connect with Malebranche. Man is said to possess an "Ewigkeitsgemeinsinn" by the aid of which he "einsieht" God and divine things, — a function of the soul, which appears as Experience by the side of Thought and Intuition, and which reaches, *e. g.*, even to the History of Creation. All *Obereit's* writings are confused and obscure to unintelligibility, and repellent through their superfluity of superlatives and of word-formations with the prefix "all"; but they are not without many traces of deep thought, and were written from pure love of humanity, and for the furtherance of its happiness. His reading of U., and especially of Reinhold's works, brought about a revolution in his mode of thought, so great that he himself admitted that he had, till then, completely misunderstood Kant's writings, and declared himself a disciple of his philosophy on

Reinhold's basis. He still retained, it is true, his mystic doctrine of the knowledge of God ; and, in essential, his philosophy remained unchanged. He felt the need [a sign of his honesty and love of truth] of publicly retracting his former utterances. He did this in :)

385) *Obereit's Widerruf für Kant. Ein psychologischer Kreislauf.* (With annotations by Maimon ; in Moritz and Maimon's *Magazin zur Erfahrungsseelenkunde*, vol. ix, 1792, second part, pp. 106-143. In reply to the remarks of Maimon, who found the enthusiast and cabalist Obereit, to some extent at least, bone of his bone and flesh of his flesh, there appeared in the third part of the *Magazin*, pp. 86-99 :)

386) *Obereit: Schreiben des Herrn Obereit an Herrn S. Maimon.* (Answered in the same, pp. 100-105 :)

387) *Maimon, Sal.: Antwort auf das Schreiben des Herrn Obereit an Herrn S. Maimon.* (Both letters deal most particularly with the question—defended by Obereit—of the treatment of the speculative in general, including mathematics, according to practical principles.—Obereit further expounded his position, on what professed to be Reinhold's principles, in :)

388) *Obereit: Socratischer Original-Gemeinsinn.* 1793. (But with this, again, his philosophical development was not come to an end. In 1794 he went over to Fichte, so far as it was possible for him to get out of his own skin. Fichte's system he characteristically designates as Real-Criticism. To this period belongs his last work :)

389) *Obereit: Finale Vernunft-Kritik für das grade Herz, zum Commentar Hr. M. Zwanzigers, über Kant's Kritik der praktischen Vernunft; mit neupragmatischer Syntheokritik, Ontostatik und Utistatik.* Large 8vo. Nürnberg. 1796. Schneider and Weigel. pp. 144.

390-391, *Pezold.*

390) *Pezold, Chr. Fr.: De argumentis nonnullis, quibus, Deum esse, philosophi probant, observationes quaedam adversus Imm. Kantium.* *Programma.* 4to. Leipzig. pp. 15. Reprinted in *Mtr.* II, pp. 175-192. (Pezold attacks Kant's moral proof of the existence of God, defending the cosmological and physicotheological. So far the paper is worthless, and misunderstanding crops up again. But some passages are to the point : as, *e. g.*, when it is said that if virtue is to be practised only for its own sake, it needs no reward ; or that the cosmological proof does not presuppose the ontological.—Against Pezold appeared :)

391) *Born, Fr. Glo.: De scientia et conjectura specimen metaphysicum ad diluenda Pezoldi dubia adversus Kantium nuper proposita.* (Motto : *Amicus Plato est, amicus Aristoteles; magis amica veritas.*) 8vo. Leipzig. 1787. Breitkopf. pp. 92. New edition, large 8vo, Leipzig, 1805. Hinrichs. (The first 67 pages are occupied with a comprehensible exposition of the R. V. The second part [de conjectura = certainty based on sub-

jective, not objective reasons] contains an exposition of the moral proof of the existence of God, and a refutation of the separate points made by Pezold.)

392-394, Rehberg.

392) *Rehberg, Aug. Wilh.: Ueber das Verhältniss der Metaphysik zu der Religion. Drink deep or taste not.* Small 8vo. Berlin. Mylius. pp. 175. (An excellent book, which does credit to its motto. All dogmatic metaphysic leads to Spinozism, which, however, can do as little harm to religion as Kant's system. Religion is altogether independent of metaphysic, and must obtain its proofs elsewhere. Rehberg venerates Spinoza, though he is himself an adherent of Kant, — and an independent one. He differs from Kant particularly in ethics. According to him, the ultimate moral principle rests upon the Law of Contradiction, and is therefore analytic : an action is moral, if it coincides with the view of the disinterested understanding, whose activity is uninfluenced by knowledge of its own advantage. The moral motive is the pleasure felt in the performance of moral actions.)

393) Against the author of the review in the *A. L. Z.*, 1788, II, no. 153 b, pp. 689-696, Rehberg defends himself in *T. M.*, 1788, Sept. pp. 215-233. Here he again sets forth the chief points of his doctrine :—

394) *Rehberg: Erläuterung einiger Schwierigkeiten der natürlichen Theologie.*

395) *Reimarus, J. Albr.: Ueber die Gründe der menschlichen Erkenntniss und der natürlichen Religion.* Small 8vo. Hamburg. 1787. Bohn. pp. 172. (Reimarus represents a Dogmatism, which has been greatly tempered by Kant's influence ; and defends it on the one hand against Kant, on the other against Spinoza, Jakobi, and Wizenmann. Neither Belief [Jakobi, Wizenmann] nor the healthy Understanding of mankind [Mendelssohn] is the source of our knowledge ; but Reason alone, whose truths possess not only a subjective but an objective validity for us. Reason leads us to a certain degree of knowledge of the supersensuous, the intelligible, by the aid of the transcendental law of causation, which itself takes us finally to the existence of God, by way of cosmology.)

395 a) *Schmid, Ih. Wlh.* Cf. no. 618.

396) *Sendschreiben gegen Meiners' Angriff auf Kant.* Cf. no. 240.

397, 398, Sprengel.

397) *Sprengel, Kurt: Specimen inaugurale philosophico-medicum sistens rudimentorum Nosologiae dynamicorum prolegomena.* 8vo. Halle. Hendel. pp. 108. (Connects with M. A. Sprengel establishes the principles of the science of pathology, which has to begin with a consideration of mechanical forces and of those of the living animal body, — vital force, irritability, sensibility, and contractility. The work was criticised in a bitter tone by :)

398) *Weber, Ag. Gli.: Endurteil jeder künftigen Metaphysik der Arzneiwissenschaft.* Addressed to the editor, in *Briefe an Aerzte und Weltweise über Bedürfnisse der Zeitgenossen.* Part I. 8vo. Halle. 1788. Hendel. Fourth letter. pp. 283-308.

399) *Studentenbalgerey über die Kantische Philosophie.* Written from the seat of a University, in *Analekten für Politik, Philosophie und Literatur, in Erörterungen und Nachrichten, welche in Deutschlands sämtlichen Journalen vermisst werden.* 8vo. Leipzig. (Mannheim. Löffler.) 1787. Num. VII. (Two students fight about the Kantian philosophy. One is punished by imprisonment; but protests on the ground that the academical senate, which is opposed to Kant's doctrines, is not impartial.)

400) *Suitnak's Brief über Kant. I. I. Kausch's Antwort im Namen der apologetischen Gesellschaft.* In *Apologien.* 8vo. Leipzig. 1787. Beer. Collection I, Part I, pp. 42 ff., 48 ff. Continuation of the essay on Kant's works by Kausch (not completed in the first part), Part III, pp. 329 ff. ('Suitnak'—'Kantius' read backwards—calls on the *apolog. Gesellschaft*, with ribald abuse, to oppose the charlatan Kant, who has with malice held the public down to folly by his high-sounding nonsense. Kausch repudiates the demand, but expresses doubt about Kant [from Feder's standpoint], and especially about his doctrine of Space.)

401) *T.*, p. 364. Review* of Mrg.

401 a, b) *Tittel, G. A.* Cf. nos. 296, 299.

402) *Unterhaltungen, Philosophische.* Second vol. Leipzig. I. G. Müller. pp. 117-163: *Der Idealist, widerlegt durch sich selbst*, by *W.*; pp. 164-170: *Ueber den ontologischen Beweis des Daseyns Gottes*, by *W.* (Both papers consist in foolish polemic against the assertions of Kant and Weishaupt, in no. 302, which are misunderstood throughout. The antinomies are said to constitute the central point of the *Kritik*.)

402 a) *Versuch über die Natur der speculativen Vernunft.* (*Abel*.) Cf. no. 231.

403) *Versuche über die Grundsätze der Metaphysik der Sitten des Herrn Prof. Kant.* In *Deutsches Museum.* 1787. II, pp. 104-118. Second essay, with the title, *Ueber die Grundlegung zu einer Metaphysik der Sitten, des Herrn Prof. Kant.* 1788. I, pp. 543-570. Third essay, 1788, II, pp. 153-184. Fourth essay, pp. 264-292. The first three essays reprinted in *Mtr.*, III, pp. 58-136. (In the first essay, the system of morals based on happiness is opposed to Kant's *System der Würde der Menschheit*. The former, with the exposition of which its adherents will not declare themselves content, gets the worst in the argument. The other three essays contain a good discussion of Kant's Principles, always in agreement with him. They lay especial value on clear exposition of the course of the thought.)

403 a) *Weishaupt, Ad.* Cf. no. 306.

403 b) *Wizenmann, Th.* Cf. no. 293.

1788.

404-432, *Abicht*.

404) *Abicht, I. Hnr.: De philosophiae Kantianae habitu ad theologiam.* Sectio I. et II. 4to. Erlangen. Ellordt. pp. 28. (A valueless affirmative in answer to the at that time much ventilated question, whether Kant's philosophy was advantageous to religion.)

405) *Abicht: Versuch einer kritischen Untersuchung über das Willensgeschäfte und einer darauf gegründeten Beantwortung der Frage: Warum gehn die moralischen Lehren bey den Menschen so wenig in gute Gesinnungen und Handlungen über?* 8vo. Frankfurt a. M. Jäger. pp. 307. (Kant's attempt to establish aprioristic and universally valid principles for our mental faculty is brought out by Abicht, nos. 405 and 406, in an acute, independent and clever way. But the author's close adhesion to Kant's systematization leads him in many cases to absurdity and bad taste, so that valuable thoughts are often completely obscured. In no. 405 his aim is the deduction from *a priori* principles of a safe method for the education of the human will to morality. To this end he divides up the volitional function into its component parts, investigates these in their mutual relations, and discovers that 'interest' is that one among them which furnishes the best key to the whole secret of practical philosophy. The possibility of it depends upon a special faculty of the mind, the faculty of enjoyment. The possibility of its specific forms depends on the original sources and forms of the faculty; which are enumerated in:)

406) *Abicht: Versuch einer Metaphysik des Vergnügens nach Kantischen Grundsätzen, zur Grundlegung einer systematischen Thelematologie und Moral.* Small 8vo. Leipzig. 1789. Haug's widow. pp. xxiv, 302. (Abicht aims to establish aprioristic principles for Feeling. For this purpose he transfers the systematic framework of the critique of Reason to his subject-matter. All pleasures arise from the contemplation of the ego and its properties, or of self-perfection. These attributes of the ego, the pathic categories, are superinduced by us, as form, upon the matter of all our ideas; and are contemplated, if we become conscious of the objectified ideas, in the objects, — which are thus made sources of pleasure. The properties of the ego, our internal possessions, express themselves in, and are extended by virtue; which thus leads, independently of the presence or absence of external possessions, to perfect self-contemplation, and so to pure happiness. — Additions to nos. 405, 406, giving fuller details and more exact arguments, with frequent commendatory references to the two works, are to be found in *N. Ph. Mg.*, Vol. I, 1. 1789:)

407) *Abicht: Ueber die falschen Moralprincipien.* pp. 16-63. (Aprioristic construction of history. Enumeration of the historical systems of morality as the only possible ones. Rules for their estimation are established, based on Kant, but carried out independently. Criticism of Hutcheson's system.)

408) *Abicht: Ueber die Freiheit des Willens.* Vol. I, 1. 1789. pp. 64-85. (Freedom is regarded as the faculty of man to be the sole and self-determinant of his volition, in accordance with internal necessity, that is to say with his own, in itself determined nature.)

409) *Abicht: Ueber den Stolz, von der thelematologischen und moralischen Seite betrachtet.* Vol. I, 1.^e 1789. pp. 97-136. (Exaggeration of Kant's view that dignity is inherent in every man as the *Selbstzweck*. The feeling of dignity, of noble pride, is made the true and all-powerful motive to virtue, the one great support of all morality, and at the same time its true reward.)

410) *Abicht: Neuer Beweis des aufgestellten Princips zu einer vollständigen Kritik des Gefühlsvermögens als eine Einleitung zur praktischen Philosophie.* Vol. I, 3, 1790, pp. 372-413; Vol. I, 4, 1790, pp. 545-608; Vol. II, 1-2, 1790, pp. 87-165. The last two essays are entitled: *Fortsetzung der Theorie des Gefühlsvermögens.* (New exposition of the principal contents of nos. 405 and 406. — A system of morality, in which the main emphasis is laid on harmonization with the Christian doctrine, as rightly understood, is set forth by Abicht in:)

411) *Abicht: Neues System einer philosophischen Tugendlehre aus der Natur der Menschheit entwickelt, insbesondere zu Vorlesungen bestimmt.* 8vo. Leipzig. 1790. Barth. pp. 374. Second edition, with the title: *Philosophie der Sitten.* Part I: *Allgemeine praktische Philosophie.* Second edition, thoroughly revised. Large 8vo. Leipzig. 1798. Barth. pp. xiv, 388. (Related to this work is:)

412) *Abicht: Ueber den Egoismus, über die Wahrheitsliebe und verschiedene andere moralische Gegenstände.* In a series of letters, addressed to *Herrn G. . . of F. . .*; in *N. Ph. Mg.*, Vol. I, 4, 1790, pp. 464-495. (In no. 413, Abicht seeks to prove that Kant's moral proof of the existence of God is inadequate. He attempts a proof on the basis of a connexion of the practical and theoretical Reason. This is, however, opposed to Kant's doctrine of the unknowability of things-in-themselves, and of the limitation of the law of causality to experience.)

413) *Abicht: Dissertatio philosophica de rationis practicae in theologia vi, cum tantummodo visa, tum vere cogente.* Large 8vo. Erlangen. 1790. pp. 88. (This appeared, together with the two dissertations of no. 404, under the title:)

414) *Abicht: De rationis in theologia vi atque virtute specimen philosophicum.* Large 8vo. Leipzig. 1790. Barth. (Here belongs also, as it appears:)

415) *Abicht: Programma de ratione practica.* 8vo. Erlangen. 1793. (In the first half of the nineties Abicht's philosophy underwent a change. *Fürst*, he adopted the view of Reinhold, that an elementary philosophy was needed for the foundation of the Kantian system. This elementary philosophy should set out from a fundamental principle, from which it should derive, as necessary consequences, all other philosophemes. The principle

adopted (first set forth in no. 419) was the at once material and formal *Satz der Beseelung*; which its author supposed to be secure from the objections urged against Reinhold's *Satz des Bewusstseins* by Schulze-Aenesidem. Secondly, in no. 417, and still more from no. 419 onward, Abicht emphasized, in opposition to Aenesidem, the dogmatic elements in his metaphysic, — elements already apparent in no. 413. On the basis of the objective transcendent validity of the law of causality, he assumed a relative knowability of things-in-themselves; whereby he came to be in almost complete opposition to Kant, quite apart from differences on many, but less important points of detail. To defend his philosophy against Aenesidem's accusation of Relativity and Subjectivity, Abicht posited the existence, alongside of the perceptive knowledge of the senses, of a non-perceptive knowledge of the understanding and reason, not inferior to the former in certainty and validity. The passage from thought to existence, from the idea to the object of the idea, is justified by the assertion that everything, which can be *thought* of by us only as *knowledge* (real), is, just by reason of its necessary thinkableness, *necessarily* something *known* by us. Here we have before us, in somewhat altered form, the fundamental thought of the older rationalism, with its ontological proof of the existence of God. It is true that this knowledge is said to conceive of objects only in relation to our faculty of knowledge, that is, as phenomena: and it might seem that Abicht had simply so far widened the sphere of our pure knowledge, that he included things-in-themselves in the circle of phenomena; and not that he extended pure knowledge to things-in-themselves as well: — in which case he would simply have progressed further along the path trodden by Kant. But this is not so. For Abicht's pure rational knowledge stands in no relation whatever to our *faculty of knowledge*; since its objects neither are nor can ever be presented to the knowledge of our sense-perceptions, whether in their entirety or in their constituents. On what could depend the reference of the idea to an object of the idea, which object can never be given us in experience? If one thus extends the concept of phenomena to things, which can, as a matter of fact, never be phenomenally presented, either philosophy will become entirely subjective: — if, *i. e.*, in regard to rational knowledge, things-in-themselves do not correspond to phenomena; since in that case one is left with knowledge without any object, to which it has reference: — or, in the contrary case, one falls back upon the old, worn-out Rationalism. This is plainly what Abicht does, however he attempts to veil the facts. His philosophy in the nineties, therefore, is to this extent retrograde from Kant's clear formulation of the problem, and his proof that our ideas possess objective validity, are referrible to objects situated outside them, only so far as these objects accommodate themselves to them. But in spite of this backward step, Abicht's writings are not without interest and importance. In any case, he is far more valuable than Jakob, Kiesewetter, and others who echo the Kantian teachings. His style is often obscure and difficult; and most of his works came prematurely to the birth, following

one another in too quick succession, and bearing the marks of immaturity. His thoughts are at once intricate and undeveloped. In the Histories of Philosophy he is unduly neglected; and it would, perhaps, be worth while to devote a monograph to him. — As early as 1790 the influence of Reinhold is apparent, in the article:)

416) *Abicht: Kurze Darstellung des Kantischen Systems.* In *N. Ph. Mg.*, I, 3, pp. 261–359. (Never completed. Abicht strikes out a quite independent course in his exposition, emphasizes apriorism, and is very far from exactly reproducing Kant's thoughts. Thus, he derives the categories from the concepts of reflexion, and his whole treatment of dialectic is antinomial. In the latter instance, he follows Kant as regards neither the number of the paralogisms nor that of the antinomies.)

417) *Abicht: Philosophie der Erkenntnisse.* Part I, 1: *Theorie des Erkenntnisvermögens*; 2: *Reine und allgemeine angewandte Logik.* Part II, 1: *Kritik des Erkenntnisvermögens*; 2: *Metaphysik der Erkenntnisse.* Large 8vo. Baireuth. 1791. Lübeck's heirs. pp. 673.

418) *Kritische Briefe über die Möglichkeit einer wahren wissenschaftlichen Moral, Theologie, Rechtslehre, empirischen Psychologie und Geschmackslehre, mit prüfender Hinsicht auf die Kantische Begründung dieser Lehre.* 8vo. Nürnberg. 1793. Felsecker. pp. xvi, 637. (All these sciences must be based upon a theory of the faculty of feeling.)

419) *Abicht: Hermias — oder Auflösung der die gültige Elementarphilosophie betreffenden Aenesidemischen Zweifel.* Large 8vo. Erlangen. 1794. Walther. pp. 145.

420) *Abicht: Ueber die Wahrheit.* 1794. In Part I of Vol. I of no. 431.

421) *Abicht: System der Elementarphilosophie, oder vollständige Naturlehre der Erkenntnis-, Gefühl- und Willenskraft.* Large 8vo. Erlangen. 1795. Palm. pp. 325.

422) *Abicht: Das Tugend-Gebot.* In *B. M.*, 1796, 28, pp. 546–559.

423) *Abicht: Revidirende Kritik der spekulativen Vernunft, in Verbindung mit den metaphysischen Wissenschaften der reinen Ontologie und Kosmologie, der empirischen psychologischen Wesenlehre und Theologie.* 8vo. Altenburg. Richter. Part I, vol. i: *Von der Bedeutung der Kenntnisse, oder der Skepticismus, Idealismus und Realismus.* pp. 316. Vol. ii: *Von der Objektivität, Wahrheit und Begründung der Kenntnisse.* 1799. pp. 575. Part II, vol. iii: 1801.

424) *Abicht: Psychologische Anthropologie.* Section I: *Aetiologie der Seelenzustände.* Part I. 8vo. Erlangen. 1801. Palm. pp. 349.

425) *Abicht: Verbesserte Logik, oder Wahrheitswissenschaft, auf dem einzig gültigen Begriff der Wahrheit erbaut.* Large 8vo. Fürth. 1802. Bureau of Literature. pp. 475.

426) *Abicht: Encyclopädie der Philosophie, mit litterarischen Notizen.* Two parts. Large 8vo. Frankfurt am Main. 1804. Wilmanns. 1 alphabet, 5 sheets.

427) *Abicht: Versuch einer Beantwortung der Aufgabe: Welche Fortschritte hat die Metaphysik in Deutschland seit Leibnitz und Wolff gemacht?* In *Preisschriften, etc.* Published by the royal Prussian academy of sciences. Large 8vo. Berlin. 1796. Maurer. (Cf. no. 286.) pp. 255-469. (Abicht is principally concerned here with the progress which he thinks made by his own philosophy. He gives an outline of his system. — Works on the philosophy of Law are :)

428) *Abicht: Neues System eines aus der Menschheit entwickelten Naturrechts.* Large 8vo. Baireuth. 1792. Lübeck's heirs. pp. 558.

429) *Abicht: Kurze Darstellung des Natur- und Völkerrechts, zum Gebrauch der Vorlesungen.* Large 8vo. Baireuth. 1795. Lübeck's heirs. pp. 151. (Abstract of no. 428, with unimportant changes.)

430) *Abicht: Die Lehre von Belohnung und Strafe, in ihrer Anwendung auf die bürgerliche Vergeltungsgerechtigkeit überhaupt, und auf die Criminalgesetzgebung insbesondere, wie auch auf Moral, Theologie und Erziehungswissenschaft. Nach Kantischen Principien neu bearbeitet.* Two vols. Large 8vo. Erlangen. Palm. Vol. I, 1796, pp. 454. Vol. II, 1797, pp. 664. (Noteworthy for detailed and reliable reviews, or, better, summaries, is :)

431) *Abicht: Philosophisches Journal, in Gesellschaft mit mehreren Gelehrten herausgegeben.* 8vo. Erlangen. Walther. Three vols., each in 4 parts. Vol. I, 1794. Vol. II, 1794, pp. ii, 343, and *Intelligenzblatt* of 26 pages. Vol. III, 1795, pp. 284, and *I. b.* of 16 pages. (The same, with the changed title :)

432) *Abicht: Repertorium der philosophischen Litteratur von 1794 und 1795.* Three vols., with a portrait of Hume. Cf. also no. 480.

433) *A. D. B.* 1788. 81, II. pp. 343-354. Rev.*† of R. Vb. by Rk. (= Pistorius).

434) *A. D. B.* 82, II. pp. 427-470. Rev.*† of the Mrg. by Sg. (= Pistorius). Reprinted in *Mtr.*, II, pp. 195-238. (Most important in this is the attempt to prove that Space and Time are at once subjective and objective, without reference to the problem of the antinomies, which in Kant's opinion stands in the way of such a view.)

434a) *A. L. Z.* Review, against Rehberg. Cf. no. 393.

435) *A. L. Z.* III. pp. 345-360. Very noteworthy review*† of Pr. V. (By Rehberg; cf. *T. M.*, 1788, Sept., p. 221. Reprinted in *A. W. Rehberg's* collected writings, vol. i, large 8vo, Hannover, 1828, *Hahn'sche Hofbuchhandlung*. pp. 62-84. On pp. 84-122 are further interesting observations by Rehberg on the whole structure of the Kantian practical philosophy: on the highest principle of the practical reason, on morals, natural law, natural political law, and the principles of international law.)

436-438, *Beiträge Kritische.*

436) *Beiträge, Kritische, — zur neuesten Geschichte der Gelehrsamkeit.* Third vol. 8vo. Leipzig. Hertel. pp. 1-62, 289-335. Review of

the R. Vb. by I. P. A. M. (Despite its length, poor and clumsy; giving no idea of Kant's work. The character of the review can be gathered from the fact that, in accordance with the hyperorthodox direction of the *Beyträge*, it dubs Kant atheist, expresses suspicion as to his personal character, and accuses him of rhodomontade, of hoaxing the world of letters, etc. — Separately, with the title :)

437) *Nähere Notiz, und Kritik der Kantischen Kritik der reinen Vernunft.* (By I. Pt. And. Müller.) From the *Kritische Beyträge*, etc. 8vo. Leipzig. 1788. Hertel. pp. 106. (Of the same kind is a letter in vol. iv, 1789, pp. 237–267 :)

438) *Ueber die Kantische Philosophie.* (Print of a private letter, in which a clergyman demands of a professor of Theology the prohibition of the lectures on Kant's philosophy which are being delivered at his university. The good advice is to be given to the professor in question "eine gute andere Bedienung, oder höchsten gnädigen Orts für blosses Stillschweigen eine erkleckliche Pension zu suchen," — which would also be the best thing for poor Kant. In particular, he is to cure the nephew of his [the clergyman's] patron of the poison which he may already have taken in the Kantian lectures. The contributor had obtained a view of the letter in an illegitimate way, when it was broken open, with all the other correspondence of the town, by the expediting officials, on suspicion of "verbotene und treulose Correspondenz".)

439) *Beweiss, Ueberzeugender, — dass die Kantische Philosophie der Orthodoxie nicht nachtheilig, sondern ihr vielmehr nützlich sei.* By Z * *. 8vo. Halle. Dreyssig. pp. 24. (Contains almost incredible mistakes. On what are supposed to be Kantian principles, — especially the discrimination of phenomena and noumena, — are proved or explained the necessity of belief, of revelation, of inspiration; the trinity in unity; generation by the Holy Ghost, etc.)

440) *Born, Fr. Glo.: Versuch über die ersten Gründe der Sinnenlehre zur Prüfung verschiedener, vornehmlich der Weishaupt'schen Zweifel über die Kantischen Begriffe von Raum und Zeit.* 8vo. Leipzig. Klaubarth. pp. 154. (Obscure remarks on the way in which we are affected. Affection is said to proceed from things-in-themselves, though it often seems as though phenomena affected us. Variation in the meaning of the word 'object' (now = phenomenon, now = thing-in-itself) just as in Kant; distinction between "ausser einander befindlich sein" = "sich nicht inhären," and "ausser einander existiren" = "in verschiedenen Orten des Raumes sein." Born attacks not only Weishaupt (no. 303), but Abel (nos. 228 ff.), Selle (no. 197), Feder (no. 319), and Bornträger (no. 441) also.

441) *Bornträger, I. C. F.: Ueber das Dasein Gottes, in Beziehung auf Kantische und Mendelssohn'sche Philosophie.* Large 8vo. Hannover. In commission, in the Schmidtsche Buchhandlung. pp. 156. (An unimportant piece of youthful writing. Kant's definition of the concept 'Being,' and his estimation of the law of contradiction, are rejected; together with

the ontological proof [against Mendelssohn], and all other previous proof, in place of which a new one is set up, — a combination of the cosmological and physicotheological. The former leads us to a prime mover of everything inanimate; since the concept of causality, deduced from experience by the understanding, possesses transcendent validity, — change among phenomena indicating change among things-in-themselves. It follows, secondly, from the physicotheological proof, that the prime mover can only be God.)

441a) Breyer, I. F.: Cf. no. 204.

442) v. Düfresne, Jos. Maria: *Epistel an Hrn. Schubauer, über den Wert der Kantischen Philosophie*. 4to. Durlach. pp. 48.

442a-g) Eberhard, I. A.: Cf. nos. 491-494, and 496-498.

442h, i) Feder, I. G. H.: Cf. nos. 325, 328.

443-454, Flatt.

443) Flatt, I. F.: *Fragmentarische Beyträge zur Bestimmung und Deduktion des Begriffes und Grundsatzes der Causalität, und zur Grundlegung der natürlichen Theologie, in Beziehung auf die Kantische Philosophie*. 8vo. Leipzig. Crusius. pp. 190. (Allowed even by antagonists to be acute and thorough. An exposition of the different meanings of the concept 'cause,' and of its possible deductions [= proof of its objective validity outside of all ideas, *i. e.*, its validity for things-in-themselves]. Flatt derives the principles of causality from a necessary law of thought, which must, like all such laws, be accredited with objective truth: namely, from the law that we can form no judgment without a reason. The reality of the concept of change for things-in-themselves is proven; and it is attempted to rehabilitate the proofs of the existence of God, especially that from the contingency of matter. A long abstract from the work, with very complimentary criticisms by

444) Maass, appeared in the *Ph. Mg.*, 1788, I, pp. 193-234.)

445) Against the objections raised by Reinhold, in the *A. L. Z.*, 1789, I, no. 3, pp. 18-22, Flatt defends himself in an

446) *Antikritik*, in the *Ph. Mg.*, 1789, II, pp. 384-390; and refutes Reinhold's assertion that every idea of a thing-in-itself is an absurdity and an absolute impossibility, from the writings of Kant and his commentators. Maass, too, defends him in the *Ph. Mg.*, 1789, I, pp. 406-412:

447) Maass: *Berichtigung eines Urteils in der allgemeinen Litt. Zeitung und gegen die nochmaligen Angriffe* [Reinhold's in] *der A. L. Z.* 1789, II, no. 176, pp. 594-596 (cf. no. 508 of this Bibliography), in the Essay

448) Maass: *Ueber die Möglichkeit der Vorstellungen von Dingen an sich, in Beziehung auf die Allg. Litt. Z.* (No. 176 of the year.) In the *Ph. Mg.*, 1789, II, pp. 232-243. — Same place, pp. 93-106:

449) Flatt, I. F.: *Etwas über die Kantische Kritik des cosmologischen Beweises für das Daseyn Gottes*. (Denies, with right, that the basis of this

proof is the ontological; and proves that the theoretical and practical reason, with their reciprocal proof of the existence of God, resemble twin sisters whose bodies have grown together, so that the life or death of the one involves that of the other.)

450) Quite superfluous is the *Zusatz des Herausgebers* (Eberhard), pp. 106–110. It falls far behind Flatt's essay. There appeared, still in 1789, a second important and acute work by Flatt:

451) *Flatt: Briefe über den moralischen Erkenntnisgrund der Religion überhaupt, und besonders in Beziehung auf die Kantische Philosophie*. 8vo. Tübingen. 1789. Cotta. pp. 110. (Flatt disputes Kant's moral proof of the existence of God, which assumes the transcendent validity of the law of causality, and could only maintain itself by virtue of this un-Kantian condition, — even so, not as the only proof, but as one out of many.) Against no. 451, see Chr. Wlh. Snell, 1790.

452) Against the view in *L.*, no. 47, Flatt defends himself in the:

453) *A. L. Z.*, 1789. I. B. pp. 827, 828. Against this again, in the *N. Ph. Mgr.*, 1790, I, 3, pp. 426–436, appeared:

454) *Erinnerungen des Leipziger Recensenten des Flattischen Buchs über den moralischen Erkenntnisgrund der Religion gegen die Aeusserungen des Hrn. Prof. Flatt in dem Intelligenzblatt der A. L. Z.* (No. 98, p. 827.)

454a) *Fürstenau, K. Gf.: Disquisitio, qua sententia Kantiana de differentia, quae philosophiam et mathesin intercedit, modestae censurae subiicitur*. 4to. Rinteln. Three sheets. Reprinted in *Mtr.*, I, pp. 114–128. Then follows, till p. 130, a defence of Fürstenau against the doubts expressed as regards him by Born, 1791; from *Th. A.*, 1792, pp. 660 ff. (The construction of concepts, which Kant only allows to mathematics, occurs also in philosophy, and especially in logic [syllogistic]. Fürstenau has entirely misunderstood the notion of 'construction'.)

455) *G. g. A.*, 1788, I, pp. 609–611. Review* † of the *Pr. V.*

456) *Geist, Ueber den — unserer Theodiceen. Ein Beytrag zur kritischen Philosophie*. 8vo. Leipzig. Beer. pp. 60. (Valueless. Four hypotheses as to the origin of evil are set up and disputed, no one of them being finally adopted. Nevertheless there did not appear any continuation of the work.)

457) *Grundlegung einer subjektivistischen Tugendlehre. Ein Versuch von I. E. K.* 8vo. Frankfurt. Esslinger. pp. 320. (At the outset the author investigates Kant's principle of all duties, and finds it too general. Morality has been hitherto treated in an altogether too abstract way. Doctrines of virtue must accommodate themselves to the main differences existing among mankind; *i. e.*, duties will be different for different individuals.) Cf. *Kellner*, 1795.

458) *Gth.*, I, pp. 139 ff. Review of *Mrg.*

459) *Gth.*, I, pp. 204 ff. Review* of *R. V. b.*

460) *Gth.*, I, pp. 353 ff., 361 ff. Review* of the *Pr. V.*

460a) *Heinicke, Sm.* Cf. no. 212.

460b) *Heydenreich, K. H.* Cf. no. 677.

461) *Ideen, Fragmentarische—über Raum und Zeit in Beziehung auf Kant's Kritik der reinen Vernunft, von *nr**. In Cäsar's *Denkwürdigkeiten aus der philosophischen Welt*. 1788. Vol. 6, pp. 191–223. Reprinted in *Mtr.*, II, pp. 18–41. (Worthless polemic.)

461a-d) *Jakob, L. Hr.* Cf. nos. 345, 346, 359, 360.

462–474, *Kiesewetter.*

462) *Kiesewetter, Ih. Gf. K. Chr.: Ueber den ersten Grundsatz der Moralphilosophie, nebst einer Abhandlung über die Freiheit von Prof. Jakob* (cf. no. 346). 8vo. Leipzig, Eisleben and Halle. 1788. Dreyssig. pp. 112. Second and completely revised edition, 8vo, Berlin, 1790, Matzdorf, pp. 179. Second part, containing the exposition and examination of the moral principle. Same place. 1791. pp. 238. (Kiesewetter is the prototype of those unconditional disciples, who swear by the words of their master. Every school-philosophy, at the time of its *floret*, produces them in scores. They possess no thoughts of their own; but are forced to a productive activity by a certain ease of style, or perhaps by external circumstances. Their whole work consists, accordingly, in the rumination of the master's thoughts,—of his words, even; and in the slavish detailment and systematic development of what is in him only indication. In the present case, Kant had already superabundantly executed this latter task: so that the profit from the performances of Kantians of this kidney,—Kiesewetter or Jakob, Snell or anyone else,—becomes all the smaller. No. 462, *e. g.*, simply reproduces thoughts, which Kant had himself previously expounded in a far better manner: it disputes the material moral principles, and so attempts to set up the formal principle as the only true one. Kiesewetter devoted himself with great assiduity to logic. There appeared first:)

463) *Kiesewetter: Grundriss einer reinen allgemeinen Logik nach Kantischen Grundsätzen zum Gebrauch für Vorlesungen, begleitet mit einer weiteren Auseinandersetzung für diejenigen, die keine Vorlesungen darüber anhören können*. Large 8vo. Berlin. 1791. Lagarde. pp. c, 280. Second edition, extended and completely revised; same place. 1795. pp. 579. Third edition, 1802. Same place. Fourth authorized edition, revised and greatly extended; large 8vo. Leipzig. 1824. Köchly. Second part, containing the *angewandte allgemeine Logik*; large 8vo. Berlin. 1796. Lagarde. pp. 90 and 368. Second edition. 1806. Same place. Third and improved edition. Leipzig. 1826. Köchly. (It is characteristic of Kiesewetter, that he comments on himself,—and at great length. In both parts he is strongly influenced by Jakob [no. 360]; although in the second part this does not appear so much on the surface, since the arrangement chosen is different from that of Jakob. The limitation of human

thought, and the means of overcoming its disadvantages, are discussed on the lines of Kant's four species of categories, which play, of course, a great part here, as they do in Jakob. [Cf. Flatt also, 1802.] The text of the Logic, without commentary, was printed as :

464) *Kiesewetter: Compendium einer allgemeinen Logik, sowohl der reinen als der angewandten, nach Kantischen Grundsätzen, zum Gebrauch für Vorlesungen.* Large 8vo. Berlin. 1796. Lagarde. Fifteen sheets. (The same contents, but set forth in a more popular or easy way, are found in :)

465) *Kiesewetter: Logik zum Gebrauch für Schulen.* Large 8vo. Berlin. 1797. pp. 156. Lagarde. Second, third, and fourth editions, extended and completely revised, Leipzig, 1814 (pp. 183), 1823, 1832. Köchly. (And in :)

466) *Kiesewetter: Die wichtigsten Sätze der allgemeinen Vernunftlehre, für Nichtstudirende.* Large 8vo. Hamburg. 1806. Campe. pp. iv, 114. (Second part of vol. iv of Funke's *Bildungsbibliothek für Nichtstudirende*.) (Kiesewetter gained most fame by :)

467) *Kiesewetter: Versuch einer fasslichen Darstellung der wichtigsten Wahrheiten der neueren Philosophie für Uneingeweihte, nebst einem Anhang, der einen gedrängten Auszug aus Kant's Kritik der reinen Vernunft, und die Erklärung der wichtigsten darin vorkommenden Ausdrücke der Schule enthält.* Large 8vo. Berlin. 1795. Oehmigke jun. pp. xxxii, 254. Second edition, greatly extended and completely revised. Same place. 1798. pp. viii, 308. (Exposition of the theoretical and practical philosophy of Kant, on the basis of the three questions : What can I know? What ought I to do? What may I hope?) In the third edition, revised and greatly extended (same place, 1803 ; pp. viii, 383), which has on the title-page *der kritischen Philosophie*, instead of *der neuern Philosophie*, a second part was introduced : *Darstellung der wichtigsten Wahrheiten der kritischen Philosophie für Uneingeweihte. Zweiter Theil, welcher die Critik der Urteilkraft zum Gegenstande hat, mit einem ausführlichen Register über beide Theile.* Same place. 1803. pp. iv, 540. (In the second part, Kiesewetter keeps Kant's own words, — which he had not done in the first part, — “wo es nur anging, ohne dunkel oder zu weitläufig zu werden.” His work, therefore, sinks here to the level of an abstract, decorated with page-long instances from poetical compositions. — After the author's death, Chr. G. Flittner reissued the whole work in one volume, of much smaller print ; with the title : *Darstellung der wichtigsten Wahrheiten der kritischen Philosophie. Vierte verbesserte Auflage, und vermehrt durch einen gedrängten Auszug aus Kant's Kritik der reinen Vernunft und einer Uebersicht der vollständigen Litteratur der Kantischen Philosophie. Nebst einer Lebensbeschreibung des Verfassers.* Large 8vo. Berlin. 1824. Flittner. pp. xxiv, 264 and 348. (The bibliographies, both of Kiesewetter's writings and of works by and on Kant, are quite worthless. The latter occupies only pp. 325–330, and is fragmentary

to a degree, though it is honored on the title-page with the epithet 'complete.' — Kiesewetter's work is one of those which, although useful for the propagation of philosophic thought, — it was even translated into Danish, — are of more disadvantage than advantage to science itself, in that they win a mass of incompetent adherents for a school of philosophy, and this too at the cost of a superficializing of its problems and their solutions, *i.e.*, at the cost of philosophical import. The idea of really introducing to the Kantian philosophy persons who possessed no philosophical training, — it was those occupied in business to whom Kiesewetter especially addressed himself, — was, of course, hopeless from the first. All that these "Uneingeweihte" could hope to attain to, was the recognition of the Kantian philosophy among the other constituents of a 'general education'; — subjects on which they had read something, and which they could therefore converse about. — The abstract of the *R. V.* had appeared earlier, as a separate volume, with the title :

468) *Kiesewetter: Gedrängter Auszug aus Kant's Kritik der reinen Vernunft.* 8vo. Berlin. 1796. Oehmigke jun. — There appeared from the same firm, in 1796 :

469) *Kiesewetter: Gedrängter Auszug aus Kant's Prolegomena zu einer jeden künftigen Metaphysik, die als Wissenschaft wird auftreten können.* pp. 38. (Among hypotheses of more or less probability, Kiesewetter counts the contents of the Essay.)

470) *Kiesewetter: Ueber das Erkenntnißvermögen der Thiere und der Gottheit.* In: *K. A. M.*, 1792, I, 2, pp. 36–61. (Animals are endowed only with sensibility, God only with an intuitive, not discursive, understanding.) Also in *K. A. M.*, 1794, II, 1, pp. 1–15, appeared:

471) *Kiesewetter: Einige Gedanken über Schwärmerci.* (Further to notice are the two compendia of psychology, also based on Kantian principles.)

472) *Kiesewetter: Kurzer Abriss der Erfahrungsseelenlehre. Zum Gebrauch für den Unterricht.* Large 8vo. Berlin. 1806. Quen. pp. iv, 257. Second edition, revised and greatly enlarged, large 8vo, Berlin, 1814, Saalfeld. pp. vi, 314. (And:)

473) *Kiesewetter: Fassliche Darstellung der Erfahrungsseelenlehre zur Selbstbelehrung für Nichtstudirende.* Large 8vo. Hamburg. 1806. Campe. pp. vi, 350. (Part I, of Vol. IV, of Funke's *Bildungsbibliothek für Nichtstudirende.*)

474) Edited by *Kiesewetter* and *Fischer* is the *Neue Philosophische Bibliothek.* Large 8vo. Berlin. 1794. Flittner. pp. 238. (The intention was to furnish brief abstracts, with explanatory notes, of modern philosophical works. The library did not get beyond its first number, in which were noticed K. H. Heydenreich's *Betrachtungen über die Philosophie der natürlichen Religion* [1794], Platner's *Aphorismen*, and Maass' *Versuch über die Einbildungskraft.* For Kiesewetter's work on Herder's *Metakritik*, cf. Herder, 1799.)

475-484, Maass.

475) *Maass, I. Gbh. Ehrr.: Briefe über die Antinomie der Vernunft.* 8vo. Halle. 1788. Franke. pp. 92. (Maass disputes the necessity of the antinomies, from the standpoint of Leibnitz; and indicates the sophisms in Kant's proofs, of which one, at most, is conclusive in each case. Thus, the world is limited; there is something simple, even though it cannot occur in our experience; etc.)

476) A judgment, not in accordance with its merits, was passed on the work in the *A. L. Z.*, 1789, I, pp. 159, 160. (It was passed over with the charge of ignorance and misunderstanding, — a charge which frequently occurs in the *A. L. Z.*, and is frequently merited, but which did not apply in the present case. Only in one secondary particular was it at all closely examined. — Maass protests against this in the *Ph. Mg.*, 1789, I, pp. 340-343:)

477) *Maass: Vorläufige Erklärung des Verfassers der Briefe über die Antinomie der Vernunft, in Rücksicht auf die Recension dieser Briefe in der Allgem. Litt. Zeitung.* (In the same volume, pp. 469-495, he reproduced in summary the considerations adduced in the *Briefe*, the letter-form being, in his own view, but little adapted for them:)

478) *Maass: Ueber die Antinomie der reinen Vernunft.* (As regards the review by Reinhold in the *A. L. Z.*, cf. no. 447.) (Previously, in 1788, Maass had published in the *Ph. Mg.*, I, pp. 117-149, an Essay:)

479) *Maass: Ueber die transscendentale Aesthetik.* (Space and Time are something objective; a possibility which Kant cannot dispute. Polemic, showing sound knowledge, against the weaknesses of the separate Kantian proofs; not always well founded, however, and not entirely free from misunderstanding and misrepresentation. This latter aspect is rightly animadverted on by:)

480) *Abicht, I. H.: Prüfung der Abhandlung: "Ueber die transscendentale Aesthetik," von I. G. E. Maass.* In the *N. Ph. Mg.*, 1789, pp. 219-260. (Space and Time cannot possibly be objective, because of the antinomies.) And by:

481) (*Rehberg*;) in the *A. L. Z.*, 1789, I, pp. 713-715. (Both are answered by Maass in:)

482) *Maass: Bemerkungen über eine Recension des zweyten Stückes dieses Phil. Mag. in der Allg. Litt. Zeit. no. 90 dieses Jahrs. 1. Beantwortung der Einwürfe gegen die Abhandlung über die transscendentale Aesthetik.* In the *Ph. Mg.*, 1789, II, pp. 30-39.

483) Replied to by *Rehberg* in the *A. L. Z.*, I. B., of the 16th December, 1789, pp. 1207-1209.

484) Final rejoinder by Maass, in the *Ph. Mg.*, 1790, II, pp. 507-510. Cf. also Maass, in no. 444.

485-489, *Mutschelle.*

485) *Mutschelle, Seb.: Ueber das Sittlichgute.* 8vo. München. 1788. Lindauer. pp. 240. Second and improved edition. 8vo. Pest. 1794. Lindauer. 14 sheets. Third edition, 1801. (The author, a Catholic, is a follower of Kant's ethical teachings, and never tires of propagating them in popular articles. These show an idealistic disposition; they are often prolix, but always intelligibly and easily written. For us they have but little importance. They are not the production of a deep and philosophic mind; and not infrequently it is the form of the exposition, rather than the content of the thoughts, which is original with the author. But at the time at which they were written they were certainly not without value, particularly to Catholic Germany. In the above-mentioned work Mutschelle begins by disproving the current systems of morals, and proceeds then to deal with Kant's formal moral principle, which, he asserts, can be fulfilled only in love of God and of our fellow-men. — Generally connected in some way with Kant's ethics are also:)

486) *Mutschelle: Vermischte Schriften.* Vol. I. Small 8vo. München. 1793. Lindauer. pp. iv, 249. (To be specially mentioned: IX. *Ueber Kantische Philosophie, und die Frage: Ist daraus für Religion und Moral Nachtheil zu fürchten, oder vielmehr wichtiger Vorthcil zu hoffen?* pp. 195-222.)

487) Vol. II. Small 8vo. Pest. 1794. Lindauer. pp. 248. (To be specially mentioned: III. *Wie kann, und soll man den Ungelahrten Gottes Daseyn beweisen?* pp. 36-62. V. *Briefe über die Begriffe von Gesetz, Pflicht, Gut und Böse.* pp. 84-118. X. *Gespräche.* pp. 190-207.)

488) Vol. III., with the principal title, *Philosophische Gedanken meist moralischen Inhalts, auch mit Rücksicht auf die kritische Philosophie. Von einem Verehrer der Weisheit.* Small 8vo. Pest. 1797. Lindauer. pp. vii, 232. (To be specially mentioned: I. *Ueber Liebe zu sich und Andern. Ein Nachtrag zu der Schrift: Ueber das sittliche Gute.* pp. 1-20. III. *Ueber die Folgen unserer Handlungen.* pp. 83-100. IV. *Von einigen Irrlichtern, welche noch immer einige Philosophen aufstecken. Warnung und Anweisung dagegen.* 1. *Realität.* 2. *Negation.* pp. 101-159. Directed against Stattler's *Antikant*, no. 625.)

489) Vol. IV. (Only the principal title of vol. III.) Small 8vo. Leipzig. 1798. In commission, with G. E. Beer. pp. x, 234. (To be specially mentioned: II: *Ueber Unsterblichkeit. In freundschaftlichen Briefen.* pp. 37-117. III: *Ueber die vielfältigen Anweisungen in Sittenbüchern, wie man glücklich werden könne.* pp. 118-126. V: *Von der Tugend, nach Weissens Grundsätzen, mit Bemerkungen darüber.* pp. 146-193.) Second edition of all four volumes. Small 8vo. München. 1800. Lindauer.

490) *Obd.* 1788. iii, pp. 1785. Review* of the *Pr. V.*

490a) *Obereit, Ik. Hrm.* Cf. no. 378.

490b) *Ph. B.* I: Review of the *Pr. V.* Cf. no. 328.

491-602) *Ph. Mg.* and *Ph. A.* Both edited by I. A. Eberhard. The *Ph. Mg.* in 4 vols., each of 4 parts. 8vo. Halle. Gebauer. 1788: vol. i, Parts I, II. 1789: vol. i, Parts III, IV; vol. ii, Parts I, II, III. 1790: vol. ii, Part IV; vol. iii, Parts I, II, III. 1791: vol. iii, Part IV; vol. iv, Parts I, II, III. 1792: vol. iv, Part IV. The *Ph. A.* in 2 vols., each of 4 parts. 8vo. Berlin. Matzdorf. 1792: vol. i, Parts I, II, III. 1793: vol. i, Part IV; vol. ii, Part I. 1794: vol. ii, Parts II, III. 1795: vol. ii, Part IV. (Both magazines are devoted principally to combating the Kantian system. They attempt to show that everything true in it had already been taught by Leibnitz. A large proportion of the articles [especially in the *Ph. Mg.*] is from the hand of Eberhard himself. They are masterpieces of philosophic insipidity, superficiality, discursiveness and loquacity. Eberhard is totally unable to comprehend the problems which Kant had before him. He consequently persistently distorts his doctrines; and though, naturally, in the course of his polemic, he comes upon many weak points, his attack is made for the most part with the wrong weapons. What he has himself to offer in the way of positive construction, is inadequate and valueless. He jogs peacefully on, in the well-worn ruts of the old bygone dogmatism; deduces existence from concepts; thinks that he is defending and rejuvenating the grand speculations of Leibnitz, when in reality he is forcing their life from them, by squeezing them into the straight waistcoat of school-metaphysic.—I give a list of the essays which call for consideration, and of the controversies which they aroused.)

491) Eberhard: *Nachricht von dem Zweck und der Einrichtung dieses philosophischen Magazins, nebst einigen Betrachtungen über den gegenwärtigen Zustand der Philosophie in Deutschland.*—*Ph. Mg.*, 1788, i, pp. 1-8. (On the vogue of the Kantian philosophy.)

492) Eberhard: *Ueber die Schranken der menschlichen Erkenntniss.*—*Ph. Mg.*, 1788, i, pp. 9-29.

493) Eberhard: *Ueber die logische Wahrheit oder die transscendentale Gültigkeit der menschlichen Erkenntniss.*—*Ph. Mg.*, 1788, i, pp. 150-174.

494) Eberhard: *Weitere Anwendung der Theorie von der logischen Wahrheit oder der transscendentalen Gültigkeit der menschlichen Erkenntniss.*—*Ph. Mg.*, 1789, i, pp. 243-262.

495) Cf. with nos. 493 and 494, Eberhard: *Die ersten Erkenntnissgründe sind allgemein objektiv gültig.* In *Ph. Mg.*, 1790, iii, pp. 56-62.

496) Eberhard: *Ueber das Gebiet des reinen Verstandes.*—*Ph. Mg.*, 1789, i, pp. 263-289. (Contents of nos. 492-496: The law of cause can be referred to the law of contradiction, and therefore possesses objective validity, *i. e.*, validity for things-in-themselves. Space and Time have not only subjective, but objective foundations in knowable things-in-themselves [simple substances and ideas].)

497) Eberhard: *Ueber den wesentlichen Unterschied der Erkenntniss durch die Sinne und durch den Verstand.*—*Ph. Mg.*, 1789, i, pp. 290-306.

(In Leibnitz the difference between sensibility and understanding is found to be *not* merely logical, as Kant stated that it was.)

498) *Eberhard: Ueber die Unterscheidung der Urtheile in analytische und synthetische.* — *Ph. Mg.*, 1789, i, pp. 307–332. (Kant's distinction is made equivalent to the old and familiar one between identical and non-identical judgments.)

499) *Eberhard: Ueber den Ursprung der menschlichen Erkenntniss.* — *Ph. Mg.*, 1789, i, pp. 369–405. (Leibnitz is able to explain the origin of empirical knowledge, of the pure intuitions, space and time, and of the categories; Kant not.)

500) No. 493 was sharply criticised by *Rehberg*, in the *A. L. Z.*, 1789, i, pp. 713–716.

501) *Eberhard* replies, in the *Ph. Mg.*, 1789, ii, pp. 40–52: *Bemerkungen über eine Recension des zweyten Stücks dieses phil. Mag. in der Allg. Litt. Zeit. No. 90 dieses Jahrs.*

502) The controversy was continued by (*Rehberg*): *Beantwortung der in Eberhard's Philosophischem Magazin, 2ten Bandes 1stem Stücke, enthaltenen Bemerkungen über die Recension des 2ten Stückes 1sten Bandes, No. 90 der A. L. Z. des laufenden Jahrs.* In the *A. L. Z.*, 1789, I. B., 16. December, pp. 1207–1212.

503) Rejoinder by *Eberhard*; in the *A. L. Z.*, 1790, I. B., 6. January, p. 30; and in the:

504) *Ph. Mg.*, 1790, ii, pp. 497–507: *Kurze Duplik auf die Beantwortung der in diesem phil. Mag., 2ten Bandes 1stem Stücke, enthaltenen Bemerkungen über die Recension des 2ten Stückes 1sten Bandes, No. 90 der A. L. Z., 1789.* Replied to by:

505) *Rehberg: Beantwortung von Herrn Eberhard's Duplik, meine Recension des philosophischen Magazins in der A. L. Z. 1789, No. 10 und 90 betreffend, im 2ten Bande, 4tes Stück, No. X, seines philosophischen Magazins.* In the *Neues deutsches Museum*, 1791, iv, pp. 299–305. — Final rejoinder by:

506) *Eberhard: Kurze Anmerkungen über Herrn Rehberg's Beantwortung meiner Duplik.* (In dem neuen deutschen Museum, 1791, St. 3, No. 5.) In the: *Ph. Mg.*, 1791, iv, pp. 302–316.

507) Directed against no. 498 is an essay by *Fr. Gl. Borns*, in the *N. ph. Mg.*, 1789, i, pp. 141–168: *Ueber die Unterscheidung der Urtheile in analytische und synthetische, zur Prüfung eines Aufsatzes im dritten Stücke des ersten Bandes des Eberhardischen philosophischen Magazins.* pp. 307 ff. — To which must be added:

508) (*Reinhold's*) Review, in the *A. L. Z.*, 1789, ii, pp. 577–597; for which Kant had supplied data, in two letters to Reinhold, of the 12th and 19th of May, 1789. (Cf. no. 118.) — Replied to by:

509) *Eberhard: Vorläufige Erklärung über die in der Allg. Litt. Zeit., No. 174, 175, 176, enthaltene Recension des dritten und vierten Stückes meines philos. Magazins.* In the *A. L. Z.*, 1789, I. B., 15th July, pp. 730, 731.

510) On pp. 731, 732, the : *Gegenerklärung der Recensenten*. Answered by :

511) *Eberhard*, in the *Ph. Mg.*, 1789, ii, pp. 244-250 : *Nachschrift betreffend die Gegenerklärung der Recensenten in dem Intelligenzblatte der Allg. Litt. Zeit.* (A material substantiation of the views attacked is contained in two essays in the *Ph. Mg.*, 1789, II, pp. 257-284 and 285-315 :)

512) *Eberhard* : *Beantwortung der Recension des dritten und vierten Stücks dieses Magazins in der Allg. Litt. Zeit. No. 174, 175, 176.* (And :)

513) *Eberhard* : *Weitere Ausführung der Untersuchung über die Unterscheidung der Urteile in analytische und synthetische. Insonderheit in Beziehung auf die Recension des 3ten und 4ten Stücks dieses Magazins in der Allg. Litt. Zeit. 1789, No. 174, 175, 176.* (The polemic against the review was also taken up by *Maass*, in no. 447 and no. :)

514) *Maass, S. G. E.* : *Ueber den höchsten Grundsatz der synthetischen Urteile; in Beziehung auf die Theorie der mathematischen Gewissheit.* In the *Ph. Mg.*, 1789, II, pp. 186-231. (The first section, to p. 216, deals with the method of classification of judgments. *Maass*' objections are far more to the point than are *Eberhard*'s; especially the argument, that the difference between analytic and synthetic judgments is only relative, inasmuch as a particular judgment may be analytic for one person, synthetic for another, according to the thought-content of a given concept in the different cases.) Against the attacks of *Th. Schultz*, in the

515) *A. L. Z.*, 1790, III, no. 283, pp. 801-808 (cf. nos. 157 and 158 of this bibliography), *Maass* defends himself in the *Ph. Mg.*, 1791, IV, pp. 235-253 :

516) *Maass* : *Zusätze zu der Abhandlung über den höchsten Grundsatz der synthetischen Urteile* (Vol. II, Part II, no. 2).

(Continued.)

E. ADICKES.

REVIEWS OF BOOKS.

Darwin and Hegel. With other philosophical studies. By D. G. RITCHIE, London, Swan Sonnenschein, 1893.—pp. xv, 285.

This volume consists of nine essays which have appeared during the past few years in various technical journals, and, though they do not, strictly speaking, form a book, Mr. Ritchie's readers will be readily led to accept his apology for not "inflicting a big treatise" on them by the charm and interest of his present contribution to their entertainment and instruction. But, though these essays were well worth collecting, we would warn Mr. Ritchie that they will not do duty for a systematic and constructive exposition of his views, and that his readers will be disappointed if he does not give them something more complete—which need not necessarily take the form of a "big treatise" in the case of an author who understands so well how to cut short disputation with epigram. It is in the interest of such a forthcoming work, and not in any sense by way of detracting from the value of the present volume, that we would offer any criticisms we may have occasion to make.

The ground covered by these essays is that occupied by the studies in speculative and political philosophy pursued in the Oxford school of *Literae Humaniores*, and, alike in form and matter, they give an excellent idea of the educational value and character of that school. In number the political essays on Economic Law, Locke's Theory of Property, the History of the Social Contract, the Conception of Sovereignty and the Rights of Minorities, just exceed the philosophical, but the superior importance of the latter is indicated by the title of the volume, which strikes the key-note of Mr. Ritchie's position. Mr. Ritchie is the spokesman of that not inconsiderable band of English Hegelians (mostly Oxonians), who, seeking to bring metaphysics into relation with modern scientific ideas, have, somewhat paradoxically at first sight, chosen the two extremes of Hegelianism and the narrowest, most self-righteous and unphilosophical of biological sects, that of the ultra-Darwinians or Weismannites. Needless to say that the humor of so ill-assorted a combination asserts itself when the philosopher encouragingly defends the infantile metaphysics of the biologist, or gravely asks

whether Heredity and Variation are not particular forms of the categories of Identity and Difference, and the destruction of the unfit the negation that leads to the higher synthesis! And the reason of it all seems to have been partly a sort of intellectual delight in proving the surprising adaptability of Hegelianism to the most rigorously specialistic 'science,' which leads Mr. Ritchie, *e. g.*, to boast that his idealism is quite compatible with "that materialistic monism" which he believes "to be nowadays the working hypothesis of every scientific explorer in every department," and partly the possession of common enemies. The Darwin-Hegelian alliance is directed, on the one side, against realist and monadist tendencies in metaphysics, which, just because they stand closer to modern science, are indisposed so lightly to sacrifice to scientific specialism the moral and religious ideals of mankind, and, on the other, against the Evolutionism of Herbert Spencer and his friends, who, whatever their philosophic shortcomings, are at least prepared to take a comprehensive view of the scientific data. The present reviewer well remembers with what glee Weismann's theories were hailed, on their first appearance, in certain academic circles in Oxford, as affording a prospect of "dishing Spencer." For it must be remembered that Mr. Spencer has never been regarded with favor in the English universities, both as being the philosopher of the vulgar and as being too closely affiliated to the 'English school,' upon whom so merciless a war was waged by the earlier English students of German philosophy.

For these reasons a biological controversy concerning obscure questions of race-propagation, on which there was very little evidence on either side, has been prematurely dragged into the philosophical arena, with its importance greatly exaggerated,¹ in order to serve as

¹ The practical difference between 'Lamarckism' and 'Weismannism' in their ethical, psychological, and social applications, is very small, and with a very little re-wording, views substantially equivalent to Mr. Spencer's or still worse, may be quite well maintained on the latter hypothesis. Thus in psychology we shall say that instead of being reflexions generated (or elicited) by the external environment in (or from) the human intellect, the *a priori* characteristics of the mind were originally an 'accidental variation,' which happened to prevail, not because it was necessarily truer and corresponded more closely to the real nature of the environment (of which Lamarckism would give us some assurance), but because the organisms displaying it *happened* to survive, *for this or other reasons*, to the exclusion of any others whose mental development would have proceeded in totally different directions. So that, instead of the modicum of harmony and connection with the cosmic process which the old theory conceded to the psychological constitution of man, the new, in its exclusive adherence to heredity, compels us

a weapon in certain sociological and psychological disputes. But for this, one can imagine the severity of Mr. Ritchie's comments on the philosophic absurdity of Weismann's *metaphysical* assumptions, which divide an *organism, e. g.*, into two parts (the somatic and germ cells) and suppose that no interaction takes place between them.

As it is, we have Mr. Ritchie's essay on Darwin and Hegel, and it is more ingenious than convincing. After conceding that Hegel was more in sympathy with the idea of Emanation (from higher to lower) than of Evolution (from lower to higher), that his Dialectic "must be read backwards," *i. e.*, is a thought-process and not a time-process, and represents the criticism of categories which have previously been abstracted from phenomena, after quoting his remark that "the Time-difference has no interest whatever for thought," Mr. Ritchie asserts he has an inherent affinity for Natural Selection. Natural Selection is the really new and epoch-making element in modern evolutionism; and its factors, Heredity, Variation, and the Struggle for Existence, are the Hegelian Identity, Difference, and the Self-Negation of the categories. Hegel's conception of the contingency and weakness of nature corresponds to the biological postulate of an indefinite variability. Natural selection supplies what Hegel desiderated and what a chronicle of the development of the simple into the complex does not give, *viz.*, an answer to the question—Why? Things have become what they have become, because such and such modes of conduct have been of utility to the species. Hence "Darwin restores final causes to their proper place in science, in the Aristotelian, not in the Bridgewater Treatise sense" Moreover, in their ethical inferences Hegelianism and Natural Selection agree, as against utilitarianism, in emphasizing the priority of the social good to the individual happiness, as in their tendency to obliterate the distinction between 'ought' and 'is,' although Hegel was rash in assuming the finality of the Prussian State of 1820. Lastly, Hegelianism offers a reconciliation of the most materialistic science with the most mystical theology. All it insists on in addition to science, is that "after we have had as complete a history as can be of how things have come to be, we are

to regard it as far less reliable and more intractable, and puts our loftiest 'intuitions' upon a level with museum 'freaks.' Similarly in ethics we shall have to give up the idea that virtue is teachable, and in sociology that the offspring of the unfit can ever be worth preserving, and only arrive at rather gloomier and harsher views of Evolution by emphasizing the paramount importance of Heredity and Natural Selection. But why should this be a matter of rejoicing to a philosophy which boasts its faith in the rationality of the world-process?

justified in seeing in the past evolution the gradual unrolling of the meaning that we only fully understand at the end of the process."

It will be seen from this sketch of Mr. Ritchie's argument that it is lacking neither in subtlety nor in attractiveness; yet we believe that its whole scheme is based on a series of delusions. It is not true either that Natural Selection is the most distinctive part of Evolution, or that it answers the Why? of things, or that it restores the use of final causes, or that, merely as a scientific fact without metaphysical inferences, it leads to any sort of ethics. And, on the other hand, it is not true that Hegelianism has any particular affinities with Darwinism, while it is true, as Mr. Ritchie feels, that it conflicts utterly with that wider and more comprehensive Evolutionism, which has used Darwinism as its modern starting point and battering-ram, but which historically has been, and logically would be, just as tenable if Natural Selection had never been discovered to be a chief factor in the development of species.

Let us consider these points in detail. Was it, as a matter of fact, by the discovery of natural selection that Darwin revolutionized biology? No, it was by his proof that natural selection resulted in the mutability of species. That there was a struggle for existence, which presided over the generation of all things was not Darwin's discovery. It was an idea grasped with unsurpassed vividness by Heraclitus 2,400 years ago, and applied to sociology by Malthus long before Darwin used it in biology. What Darwin did show was that the 'War which is the father of all things' led to the modification of species. But even that would not have been so fruitful a discovery, but for the direction which *experience* showed this modification of species had taken. *As a matter of fact*, the modification was not indeterminate, along varying and incommensurable lines, but determinable and in definite and approximately unswerving directions, so that there resulted, not a chaos of unrelated organisms, resembling one another only in their capacity to survive, but a hierarchy of beings capable of being grouped historically and morphologically in regular gradations under common principles. But did natural selection tell us that would be the case? Assuredly not, and, as no one knows better than Mr. Ritchie, natural selection by itself leads to nothing and explains nothing. For has he not told us, and confirmed it with the high authority of Professor Huxley (*Darwinism and Politics*, p. 15) that the survival of the fittest by itself is the merest tautology, merely equivalent to saying that nothing succeeds like success, and that the survivors are *ex post*

facto deemed the fittest, while it contains no hint as to what qualities constitute fitness? Did he not say that "we cannot be sure that Evolution will always lead to what we should regard as the greatest perfection of any species?" Why, then, does he now talk in Aristotelian language of the Good which each species pursues? To Aristotle surely, as to every real teleology, the Good of a species is not something different from its perfection, nor something to be attained by the shameful degeneracy of a sheep-tick. It is not, then, the mere existence of natural selection that justifies Mr. Ritchie's language. Natural selection is a mere command to fight, and contains no prophecy as to the issue of the combat. It might equally prevail in a world in which there were only protozoa, and in which there was no progress. It might equally prevail in a world in which all victory was an illusion, and today's victors the victims of tomorrow's banquet, in which justice and kindness were favorable to survival at one period and unfavorable at another, which in a word constantly underwent catastrophic overturns of the maxims of physical and moral well-being.¹ If, then, we were living in a world so constituted, to what speculative opinion could natural selection give support except to the blankest pessimism? And, indeed, is there not more than enough to support a pessimistic interpretation of the facts, as it is, in the rigidly 'scientific' view of natural selection? As much at least would seem to be admitted by Professor Huxley in his recent Romanes lecture, and by Mr. Ritchie himself on other occasions (*e.g.*, p. 23).

If, then, we are to get any comfort out of Evolution, it must be because there is more in it than natural selection, and it is that overplus which is of real philosophic importance. The important thing is not that natural selection is the (or a) means of Evolution, but that *there is an evolution*, a real progress, a real process in time, about the direction and meaning of which we can discover much by the historical method, and which so turns out to be something more than a struggle leading anywhere or nowhere. It is this something more which has made evolution so fruitful a principle even in biology, which has enabled it to be successfully extended to sciences like physics and chemistry, and which will ultimately justify the teleology, which is only incipient in natural selection pure and simple, when our research detects not only the *origin* of things in history, nor the *means* by which they have risen, but also the *end*

¹ Mr. Alexander, indeed, in *Moral Order and Progress*, seems, quite consistently, to draw some such inferences from the struggle for existence among moral ideals.

to which the whole proceeds. But no philosophy that works with natural selection alone, and abstracts from its actual historical working, can rise to the conception of a definite tendency in things, still less to that of a real end established by that tendency.

Nor, again, is Hegelianism a philosophy that can utilize Evolutionism in any shape or form. For if there is any universally admitted presupposition of modern Evolutionism, it is the *reality of the time-process*, which is assumed in every use of an historical method. But Hegel, as Mr. Ritchie confesses, holds that the time-difference has no interest for thought. *I.e.*, Evolutionism, if it means anything, asserts the reality of time, which is just what Hegelianism cannot and will not concede. Not only is Hegel's Evolution not a time-process, but it leaves no room for such a process, except as a psychological illusion in 'finite' minds. When, therefore, Mr. Ritchie implies a temporal interpretation by speaking of a 'meaning which we can understand only at the end of the process,' it is imperative that he should explain how his language is consistent with the Hegelian belief in the eternal completion of the Divine Thought. Upon Hegelian principles it would seem that the time-process must represent either the Becoming of God, so that God is as yet imperfect, or, if the Deity exists eternally, be illusory altogether.

It would be interesting to consider another of Mr. Ritchie's assertions, namely, that Hegelianism can safely disclaim finality without ruin to the Dialectical Method, but it will suffice to have drawn attention to the crucial question which modern Hegelians have to answer, and to proceed to the subjects of the other essays in so far as they have not already been discussed. That on Origin and Validity protests with much vigor and reason against the modern tendency to neglect the actual worth of a thing for the study of its past, and has many remarks both witty and wise concerning the persons who think they can dispense with metaphysics. It also contains an excellent statement of what is meant by the *a priori* element in knowledge, which, however, admits (p. 36) that Kant's choice of the word was most unfortunate, and that he often lapsed into psychology (p. 21, 9) admissions that should go far to excuse the misunderstandings of the English school. The defect of this essay seems to lie in its failure to give an estimate of the real value of the popular prejudice in favor of the historical method, and of the connection as well as of the antithesis between the ideas of origin and validity. For we incontestably do learn from history — though it may be owing to what we add to history — and the past tendencies

of things often guide us to predict their future. No doubt our historical researches often fling their crude and incomplete results at us as if they were the beginning and end of the matter, but would not a more sympathetic and fruitful criticism proceed to reveal the metaphysical thread that holds together even the most disjointed of historical facts, and show that the mere chronicle Mr. Ritchie so rightly disparages is, strictly speaking, impossible, *i.e.*, that all history implies at the least a causal relation in the temporal succession of events?

Mr. Ritchie's third essay on the nature of Reality will not be unfamiliar to readers of the PHILOSOPHICAL REVIEW (I, 3; II, 2), and this, together with the fact that I have already criticized it at length (*Ibid.* I, 5) will perhaps justify my present brevity. It is directed against philosophic adversaries, such as *Hegelianism and Personality* and *Riddles of the Sphinx*, both of which represent revolts against the tendency to reduce reality to thought, the individual to thought-determinations. There follows an extremely interesting essay on the *Phaedo* and the Platonic doctrine of immortality, which defends against Teichmüller the genuineness of Plato's belief, but at the same time concludes that Plato did not hold the soul immortal *per se*, but only as a member of the Ideal World, and as partaking in the divine nature.

The political philosophy essays, which are models of careful investigation and lucid exposition, are permeated by the same apology for non-historical treatment. Thus Mr. Ritchie admits the unhistorical nature of the Social Contract, but thinks that the 17th century thinkers, with the example of the Pilgrim Fathers before them, might well have believed it historical. And he quotes with approval M. Fouillée's doctrine that, though the social contract be no fact, society should yet be *contractual*. The paper on the Rights of Minorities will perhaps provoke most dissent, since, according to Mr. Ritchie, their only right seems to be that of turning themselves into a majority if they can. But as lack of space prevents my saying more, I must take leave of Mr. Ritchie's book with the remark that its shape and type, as well as its contents, render it a delightful one to read.

F. C. S. SCHILLER.

Psychologie du Peintre. Par LUCIEN ARRÉAT. Paris, Alcan, 1892.—pp. 267.

Decidedly our generation is growing pedantic. Here is a book which thirty or forty years ago would have been entitled "Anecdotes

of Painters," but which now must needs *affabler* itself with a name suggesting mental science. The author is a man of wide reading (as those familiar with the philosophical periodicals have had occasion to remark), and he writes easily and well. But he began his work, as he says, without any preconceived idea, and he certainly ends it without any result worth recording. Part I finds that no special bodily constitution or temperament seems to characterize the painter; and from the fact that, of "a list" of 300 names of painters, almost 200 were sons of painters or artificers, it concludes that the inheritance of acquired characteristics is proved.

Part II, entitled "the vocation," shows, with a great array of erudition, that painters are commonly fond of art when young, and are admirers of visual beauty; that their professional memory is partly visual and partly manual, and that it may be surprisingly strong in special individuals; that the lives of painters, as well as the histories of schools, prove that the outline comes first, then modelling, and last color, in the order of cultivation. The only remark here that is not altogether trivial relates to the fact already established by Mr. Galton many years ago, that some painters have poor visual imagination. This point, which should have merited attentive consideration, is despatched by M. Arréat in half a page. The third Part treats of the painters' intellectual characters. His interest and attention being so largely directed to optical effects, he is often found ignorant of science and literature, though he may be a picturesque writer or a striking talker. Few painters care for games of calculation or reflection, such as whist. A musician is more likely to be a chess player. Even the most intellectual painters, as Leonardo, Rubens, Reynolds, have not had truly philosophic minds. With painters, religion is apt to be a matter of emotion rather than of reason. They often have a good musical ear, and a facility of musical execution which, M. Arréat suggests, may be the result of good muscular memory. They are sometimes poets, hardly ever mathematicians. They have strong emotional memories. The character of their pictures obeys the influence of their age and place. All this with copious anecdotes and extracts *à l'appui*. Part IV deals with their personal character. Painters seem to have no special class-character, for our author's anecdotes show meanness, pride, jealousy, irascibility, sympathy, generosity, devotion, irresolution, tenacity, sensuality, austerity, orderliness, negligence, etc., equally dispersed. Usually they are humane and sociable, though these virtues in them flow more from temperament than from moral principle.

Many of them have married their mistresses and been affectionate and constant. They care little, as a rule, for politics, and are often poor patriots. In the last subdivision, M. Arréat treats of their Pathology, and gives examples of their infirmities. They may be deaf, or even have anomalies of vision. They are subject to nervous disorders, like other men, but they seem to enjoy longevity, 580 of them giving a mean of $62\frac{1}{2}$ years, which our author, by an obviously unsound calculation, takes to be six months more than that of the average of mankind. On the whole, they fail to substantiate the doctrine that genius is a form of madness.

Such is the almost puerile outcome of an entertaining book which has evidently cost its author much research, but whose place is rather alongside of such works of literary gossip as those of the older Disraeli than amongst contributions to science. The reason of such a waste of industry seems to lie in that "absence of preconceived ideas" on which the author plumes himself. But is it not high time, on behalf of the overburdening of studious youth, to begin an organized protest against the flood of so-called contributions to psychology which are published by men without ideas, and which really have nothing of science about them except their pedantic method and their pretension to exactitude? The statistical method which our author employs, is wholly inexact in such a question as he treats. Where we are ignorant of the conditions of a phenomenon, we are indeed forced to employ it. We then accumulate a mass of diverse cases, in the hope that some uniform concomitant may come to view, which will prove to be one of the causes which we seek. But a "professional type" like that of "the Painter," is not a product of whose generative factors we are ignorant; and the attempt to get at its exact conditions by "averaging" large numbers of painters, now in this and now in that respect, is really absurd. Instead of leading to Science, it leads to Nothing, as M. Arréat's book so well shows. Where we possess as many of the generative factors as we possess in this case (and in most other social cases), we ought to *deduce*, and use our collection of instances for verification merely. Thus one of the causes of a man's becoming a painter is capacity to draw, and interest in the plastic aspect of things. Capacity to draw is excessively common in the community, and so is interest in the picturesque. Both aptitudes are doubtless liable to be inherited; and in boys whose fathers are already painters, both are particularly likely to be cultivated effectively. Add to this the fact that it is so often materially easier for a father to put a boy into his own trade, and

you would expect a large proportion of painters to be sons of painters. M. Arréat's "list" (he does not say how it was obtained) verifies this deduction. Similarly, from the extreme commonness of artistic capacity, and the indefinite variability of human nature, one can safely deduce the consequence that "the painter" need have no one specific sort of *character* save such as his professional habits may engender. These, it is obvious, warp his attention away from abstractions, ratiocinations, and disputations, so that his philosophic aptitudes get no discipline, whilst the sort of relief he most naturally turns to, after his hours of application to lonely work, is likely to be social rather than studious or scientific. At the same time the satisfaction of the lust of the eyes tends to beget a contentment with the concrete face of the world, and the peaceful occupation tends to produce a serenity of disposition, so that we should rather expect a painter, *ceteris paribus*, to be sociable and genial, as so many of M. Arréat's painters prove to have been. In fact a competent introspective critic could write a book on the deductive method, which might be really *explanatory* of such professional peculiarities as painters tend to show, and have ten times the charm and value of M. Arréat's work.

The only *conditio sine qua non* of a painter is capacity to draw. This is a factor, the elucidation of which would be a real problem in psychology solved. M. Arréat characteristically ignores it; but it would seem on reflection as if, after all, the *elementary* difference between a good and a bad draughtsman, between a man who can and who cannot learn to render with brush or pencil what he sees (for one's inventive originality is another question altogether), might be purely and simply a difference between the *paths of conduction* in the brain between the centre for vision and the centre for the movements of the hand. It evidently does not depend on the visual apparatus alone, for we find good visualizers who are poor draughtsmen, and fair painters who are bad visualizers. We find acute interest in pictures and good critical powers in persons of almost no manual capability; and on the other hand we find great manual skill displayed in such trades as dentistry by persons who don't draw. *All* our movements are prompted by currents from some sensory centre or other. The peculiarity of the artist's professional movements is that they are such as to *reproduce* on the canvas the lines, tints, etc., which the eye sees or the mind visually imagines. Skill in such imitative movements comes by practice, but much more easily in some persons than in others. Some of us are always as awkward

with the pencil as an artist would be if, for the first time in his life, he sought to draw with his left hand. His eye would be all right, and his hand all right, but the hand would not obey the eye with any precision. Now just as there is a native tendency in the voice to reproduce what the ear hears, so it seems likely that there is a preformed tendency in the hand of certain people to trace accurately such forms as may possess the visual attention. Everyone must know persons who accompany their descriptions by modelling in the air, as it were, the objects of which they speak. The present writer knew an artist who could hardly allude to a material thing without tracing its airy outline with his thumb. This motor reaction is so irresistible in those in whom the impulse is well developed, and the feeling which it brings of more deeply "realizing" the apprehended form, is so similar to the feeling we get when we strike in with our voice in unison with some loud note which we hear prolonged, that (whatever part acquired habit may play in its cultivation) it is difficult not to believe it to have an instinctive root. This instinctive root is the basis of artistic faculty in the human race, a simple sensory-motor connexion, behind the anatomical fact of whose existence we cannot penetrate. Hardly any one is so natively *agraphic* that he cannot be schooled to imitate on paper by line and shadow a form which he sees, and to derive pleasure from the congruence. But it is only when to a powerful and copious flow of visual ideas, or liability to 'obsession' by picturesque forms, is 'accidentally' joined an irresistible tendency on the hand's part to make immediate and delicately graduated response, that we have the psychological basis out of which education and memory, visual and motor, may evolve such effective plastic geniuses as Raphael or Rubens, Gustave Doré or Wilhelm Busch.

W. JAMES.

Die Hauptgesetze des menschlichen Gefühlslebens. Von A.

LEHMANN. Uebersetzt von F. BENDIXEN. Leipzig, O. R. Reissland, 1892. — pp. x., 356.¹

The second section of Dr. Lehmann's book is entitled: The Special Laws of the Feelings. I have already remarked on the author's exclusive correlation of affective tone with presentation-content, and on the omission of its reference to the ultimate stimulus-process.² I cannot but think that he is in these chapters substituting a classificatory for an explanatory principle. The final

¹ Cf. above. pp. 336 ff.

² See, however, p. 175.

formulation of his affective theory is couched in terms of stimulus.¹ He sets out now from two other premises : the probable, but indefinite result, that "pleasure represents coincidence, pain discordance, between temporary organic activity and the conditions of life of the psycho-physical organism";² and the correct thesis, that the differences between feelings are due to their presentative substates:³ and deduces from these the conclusion that it is ideational influence which determines feeling-tone. Now, psychologically, affection is as much a function of apperception as it is of presentation : psychophysically, it can be correlated with stimulus-attributes. It would seem, therefore, that a remodelling of the present section is necessary, from whichever of the two possible standpoints we view their subject-matter.

Criticism may, perhaps, be compressed into the briefest space by just such a remodelling. Taking Dr. Lehmann's text as our basis, and cataloguing the special laws of feeling with reference to it, we should obtain the following list:—(1) The laws of dependency of feeling upon intensity (p. 180), quality,⁴ time-relations (p. 191) and space-relations of stimulus. (2) The Fechnerian laws of contrast (p. 196), sequence (p. 207) and reconciliation (p. 210). Add to these the law of habituation, with its converse of the indispensable-ness of the habitual (p. 194). (3) The laws of affective fusion. These are numerous : one of them is the law of summation of affective tones (p. 255). [Their formulation should proceed on the same lines as that of the laws of sensational (esp. tonal) fusion. The point cannot be elaborated here.] (4) The laws of reproduction (p. 262). (5) The law of singleness of quality (pp. 177, 201, 214, 216, 258, 267).—Neither this statement, nor the somewhat different one of Dr. Lehmann, has any pretension to be considered as exhaustive. Nor are the laws by any means psychological coördinates. But with the expression of them, it seems to me, a beginning is made, which is real, and so far valuable.

The author takes up a very sound position, as against Horwicz and others, on the question of 'mixed feelings.' But here again an exposition in terms of stimulus would have been more satisfactory.⁵ And, if the single-quality law holds, it is surely impossible to speak of simultaneous affective contrast in any but a misleading sense.

¹ p. 160.

² pp. 150, 151.

³ p. 56.

⁴ Cf. p. 337 above; and pp. 169, 174 (§ 233) of the *Hauptgesetze*.

⁵ Cf. Külpe, *Zur Theorie der sinnlichen Gefühle*, p. 60.

Otherwise, the account of contrast is satisfactory, if we grant the intellectualistic premises on which it rests. That contrasting processes must not be too intensive, when the maximum of contrast is to be obtained (p. 203), is a fact which to many psychologists has appeared to need special explanation. But it is in reality the most 'natural' of the possible alternatives. Two weak impressions do not contrast: there is not enough of each quality present. Two very strong impressions do not contrast: there is too much of each quality there, — each impression is, for consciousness, too certainly itself, so to say, to be influenced by its neighbor. Contrast is to be expected, therefore, just where it is found. — The remainder of the above-mentioned laws I must leave without further discussion.

But the writer has set down yet another, — the law of coincidence (p. 238). Here, and on the subject of feelings of relation (*Beziehungsgefühle*; p. 227), he has, I think, fallen into error. We can mean at least three things by the term 'relation.' We speak (1) of the time-relations, intensity-relations, *etc.*, of stimulus or presentation. In this case the word might be replaced by 'attributes.' The feelings which such 'relations' condition are, obviously, content-feelings: — surprise, fright, and so on. (2) No mental process is absolute, or occurs in isolation; each induces others, and is induced by them: this is the fact expressed in the general law of relativity. So we have contrast, in all its various forms. But the contrast-feelings are not feelings attaching to a relation between contents, but to the contents themselves. These contents are mutually modified, in an as yet unexplained way: but it is still they to which the affection attaches. (3) Using the word 'relation' more strictly, we say that processes stand to one another 'in the relation of' agreement or contradiction. Do the 'formal' feelings belong to these relations, in this third instance? Surely not. The abstract 'relation' forms no part of psychological subject-matter. The furthest limits to which the psychologist can go is the statement that conscious processes are given 'in relation': and even here nothing more definite is meant than has been said above, under (2). — How, then, are the 'formal' feelings to be explained? Wundt's analysis seems to me to be adequate.¹ They differ from the feeling or emotion proper, in that they are fused (not with the passive,² but) with the active apperception. So that we obtain the equation: — emotion: 'formal' feeling = ideational association: apperceptive ideational combination.

¹ *Phys. Psych.*, 3d. ed., II. 424.

² *Cf.* p. 341, above.

In this way we overcome a difficulty which the majority of empirical psychologists seem strangely to have passed by without notice.¹ These 'formal' feelings are the religious, aesthetic, ethical and logical. By grouping them together as 'sentiments' we can give precision to this term, and be finally quit of the expression 'feelings' or 'emotions of relation.'

The section ends with two paragraphs: *On the origin of the bodily expression of the emotions*, and *On the development of the emotions in the course of the individual life*. The latter consists almost exclusively of citations from Preyer. In the former, it is curious to find no mention of Wundt's criticism of Darwin and formulation of laws.² Dr. Lehmann's conclusions are: that heredity plays but a very small part in emotional development, and that this development is to be regarded as an associational process.³ The discussion is suggestive; it does not lay claim to finality. And indeed, the 'activity of association' cannot be said to be *wohlbekannt* in any other sense than that of frequent occurrence.⁴

The fourth and last part of the work consists in a *Contribution to the systematization of the feelings*. The author's principle (p. 329) is undoubtedly right; there must be no 'philosophical' starting-point, but the conscious processes themselves are to be examined and classified. None the less does the nature of the case preclude the obtaining of a satisfactory classification.

Dr. Lehmann's result is, in brief, this. (1) $F = \phi(c, f, s)$; where F = any state of feeling, c = the ideational content, f = the relation of this to simultaneously present or immediately preceding ideas, and s = these ideas themselves (p. 333). But (2) we are not in a position to solve the problem in this, its ideal form. Of the passage of primary feeling into emotion and mood we know too little (p. 337). For the rest, the matter is simplified by the adoption of the categories 'content-feelings' and 'relation-feelings' (p. 338). — The

¹ Wundt himself phrases his remarks somewhat loosely; *l. c.*, p. 425.

² *Phys. Psych.*, 3d. ed., II., ch. xxii.

³ p. 320.

⁴ Some minor points call for notice. (1) §§ 231 and 232, p. 174, seem to be in disagreement. As a matter of fact, is not attention presupposed? Else the limen must at least be placed very high. (2) § 236, p. 176, is needlessly pessimistic. With it *cf.* Wundt, *P. P.*, 4th ed., I, 561; with it and with § 275, p. 207, *cf.* Külpe's note, *Zur Theorie der sinnlichen Gefühle*, 1887, p. 61. With § 240, p. 180, *cf.* also Külpe, *l. c.*, pp. 60, 61. (3) On the doctrine of originally unpleasantly-toned feelings and its consequences, see Wundt, *l. c.*, pp. 562, 577. (4) § 309, p. 232, contains the *reductio ad absurdum* of the feeling-of-relation theory.

concluding chapter seeks to elaborate a system of the feelings on this basis.¹

The writer's 'thought-experiment' (p. 335) is, certainly, more interesting than many others of the classical attempts at systematization. But, apart from the criticism of it which is implicit in the foregoing parts of this review, and apart from general objections, the judgment of failure must, I fear, be passed upon it, from the special point of view of experimental psychology.²

There can be no doubt that Dr. Lehmann's book as a whole, deserves Wundt's epithet 'vorzüglich.'³ It has greatly increased our knowledge, and it is methodologically important. The author is especially happy in the analysis of complex processes.⁴ But the work presents obvious difficulties to the critic,—for an adequate consideration would imply its rewriting, from a standpoint less exclusively intellectualistic than that of the author.⁵ Regarded from the literary side, its chief defect is a certain clumsiness or heaviness, conditioned perhaps by the fact that it combines the characters of research-essay and text-book. The translation is moderately good.

E. B. TITCHENER.

A History of Modern Philosophy. By B. C. BURT, A.M. In two volumes. Chicago, A. C. McClurg & Co., 1892.—Vol. i, pp. xii. 368. Vol. ii, viii. 321.

In the author's notice of this work, published in No. 7 of this Review, Dr Burt informed us that his aim has been "to present with considerable fullness the principal content of the leading systems of modern philosophy." He claims in his preface that the book is something more than an account of systems, authors, and their works; that in a general way at least it traces the historical continuity of modern philosophical thought.

What impresses one most on first turning over the pages of these volumes, is the vast array of names and systems with which they deal. The author has included in his treatment many writers who are not found in the ordinary histories of philosophy. Indeed, the whole work fairly bristles with the names and works of philosophers who are comparatively little known. Extensively, too, the book

¹ § 433 contains a slip of the pen; cf. § 431.

² Cf., esp., p. 343.

³ *P.P.*, 4th ed., I. p. 561.

⁴ Cf., e.g., pp. 43, 173, 177 ff., 191, 197.

⁵ Cf. Ribot, in *Revue philosophique*, Fév., 1893, pp. 217, 218.

is very complete. It begins with the Platonists and neo-Platonists at the first dawn of the Renaissance, and extends quite to our own time. Some of the modern writers, indeed, are given more space than would naturally belong to them, the author's justification being that their systems have not yet become commonly known through other histories of philosophy.

It can not, however, be said, that the inclusion of so many names and systems adds much to the value of the work. The first volume treats of about 130 different philosophical writers. To many of these, of course, very little space is devoted; but the account with which we are favored generally consists of a biographical sketch, a list of works, and a few sentences regarding their philosophical doctrines. This kind of information could be obtained equally well from any encyclopedia or biographical dictionary. If these names are included in a history of philosophy, some attempt should be made to show their place and significance in the development of thought. If they are of no importance they could well be spared—at least from the point of view of the student for whom such an array of systems is apt to prove confusing.

Mr. Burt's book is not only comprehensive and complete,—leaving out of account no important writer,—but it contains so far as I have been able to find no important mistakes or inaccuracies regarding matters of fact. The author must be commended for the careful and painstaking work of which these volumes give evidence. The proportions of the work, when we take into account the author's reasons for treating modern systems more fully, seem fairly good. It is, however, surprising that Berkeley gets no more attention than Hutcheson (5 pages), and still more so that Schopenhauer,—one of the most important philosophers of the century—is disposed of in 6 pages, while Krause, who has exercised almost no influence upon subsequent thought, gets 7, Rosmini 18, and von Hartmann 19 pages.

With all due regard to the excellencies of the work, the author's claim that it is "something more than an account of systems, authors, and their works" is not, I think, borne out by the facts. Readers will find it a careful and accurate compilation of facts regarding philosophers, their writings, and their doctrines, rather than a history of philosophy. If any one expects to find in it an account of the development of society from mediaevalism to modernism, of the advancement of science and the progress of civilization, and of the influences which have led to a complete revolution in man's conception of his place in the universe, and of his relations to God and

his fellow men, he will be doomed to disappointment. The author's main interest is in the facts, the details, of the different systems; while the bearing and significance of the ideas, and the relations and connections of the various systems, receive very little consideration. It is true that in the paragraphs marked *Results*, an attempt is made to sum up in a general way the outcome of many of the doctrines presented. But these paragraphs are far too summary and vague to have much value; and, besides, the language employed is often so abstract and technical, and the sentences so overloaded with clauses of exception and reservation, that a general reader or student must find them more bewildering than suggestive. The author has also a fondness for labeling the system of each philosopher as, 'Empiricism,' 'Intuitionism,' 'Rationalistico-Idealism' etc., and he often shows considerable ingenuity in compounding adjectives to describe the different systems. These classifications of systems are never very helpful, for each system is something more than an example of a general type; each occupies its own particular place in the development of thought. Sometimes indeed, Mr. Burt's classifications are quite misleading, as *e.g.*, when he classifies Kant as a "Subjective Idealist" (Vol. I, p. 312).

The criticisms which I have made of the work as a whole, can be applied with equal justice to the manner in which the different systems are presented. After a brief biographical sketch of an author, and a list of his works, Mr. Burt gives a brief summary of philosophic doctrine under the different headings (it may be) of 'Ontology,' 'Ethics,' 'Theory of the State,' using to a large extent the author's own words. Although clearness and accuracy may be gained by this method, the result is woefully lifeless and uninteresting. We seem to get the shadow without the substance,—the facts incidental to the philosophy and not the philosophy itself. The failure of this external mode of treatment is perhaps seen most plainly in the treatment of Spinoza. Mr. Burt does indeed give us a paragraph of introduction before plunging into Spinoza definitions, but this does not render much assistance in putting the reader *en rapport* with Spinoza's thought. "Genetically viewed," he tells us, "the doctrine of Spinoza is, on the whole, a resultant of a combination of the Neo-Platonic-Cabalistic doctrine and Cartesianism." (Vol. I, p. 106.) Following this rather remarkable statement, we have in as many sentences, a description of the three stages which Professor Avenarius and others claim that Spinoza's thought passed through. Then with a passing reference to the mathematical method, we are presented with Spinoza's own definitions of 'substance,' 'attribute'

and 'causa sui' without any further attempt to explain what is meant by these conceptions, or how Spinoza came to use them. Throughout the whole exposition Spinoza's own language is largely employed, and the result must appear to the uninitiated reader a harsh and crabbed jangle of words. The contrast between a merely pragmatic account, and a philosophic presentation of a metaphysical system, will be very evident to any one who will read our author's account of Spinoza in connection with the appreciative and suggestive *Darstellung* given by Windelband in his *Geschichte der neueren Philosophie*. The somewhat full treatment of Spencer, Green, Lotze, and von Hartmann in the second volume furnish excellent summaries of the systems of these writers, and may be of much service to persons who have already made their acquaintance at first hand. It would, however, be difficult for one not already in the secret to gain much help from Mr. Burt's elucidation. Here as elsewhere, one cannot see the town for houses; the philosophy is hidden by the multiplicity of details.

It is plain from what has been already said, that this work has defects which prevent it from becoming useful as a text-book for students. It may, however, be recommended as a convenient and accurate book of reference.

J. E. CREIGHTON.

La Recherche de l'Unité. Par E. DEROBERTY. Paris, Félix Alcan, 1893. — pp. 230.

In the introductory chapter of this book, philosophy is defined as the search for a homogeneous conception of the universe as a whole, while each science seeks only the homogeneous conception and explanation of some particular order of facts. The "three grand syntheses" of philosophy in the past—materialism, idealism, and sensualism—have been superseded in the present century by positivism, criticism and evolutionism. All three fail to take sufficient account of sociological phenomena. Each denies its connection with the other, and yet they all approach closely to the most elevated position in the theological series—the pantheistic identity of thought and of the world. Pantheism, which is the most perfect synthesis in the theologico-metaphysical series, and relativism, which from a purely metaphysical point of view shows itself superior to the absolute philosophy, whether materialistic or idealistic, are only approximations to the truth. Both are vitiated by the indelible imprint of a supposition which passes experience. The hypothesis that cannot be verified never escapes general doubt and we have no criterion that can guarantee to us the "consubstantiality" of the

supreme Being and of the universe (pantheism), or that can prove that all is relative and that there is no absolute (relativism).

The second chapter is entitled "The Rôle of the Negative Concepts in the Monistic Theories." The validity of a negative idea depends upon certain conditions regularly present during the process which leads from the concrete to the abstract, from the many to the one, but necessarily absent every time that thought reaches its final limit. To the failure to observe these limits of the application of negative concepts is to be ascribed the origin of the various forms of dualism — God and the world, phenomena and noumena, the knowable and the unknowable, *etc.* In the next chapter materialism, idealism, and sensualism are further criticised and their errors shown to proceed from a misapprehension of the nature of negative concepts — such ideas as 'essence,' 'transcendental unity,' *etc.*, being "pseudo-negations subject to the law of the identity of contraries." After two chapters devoted to the unity of science and to the interscientific irreducibility respectively, the author comes in the sixth to a discussion of the law of the identity of opposites which he endeavors to show is only a further and more profound development of the axiom which proclaims the inconceivability of the simultaneous contrary, and this principle in turn reduces itself to a cerebral fact of the simplest sort — the indissolubility of certain psychic states. Modern experimental psychology based on biology and sociology is trusted to establish this. Logical necessity is simply another aspect of physical or mechanical necessity (p. 88).

With his principle of the identity of absolute oppositions now firmly in hand, the author proceeds in the next five chapters to discuss the concepts of quantity, limit, motion, transcendence, and universal science. The twelfth and last chapter is on the *Summa delusio*. "Governed by the psychologic or bio-social law of the identity of absolute contraries, the supreme illusion leads us to take two subjective aspects of the same reality for two different objective realities" (p. 200). There is no transcendence. To pass beyond experience signifies strictly to deny existence. Philosophy should be a deductive integration rather than an inductive differentiation. A logical monism developed and applied by science should take the place of the extra-rational, transcendent monism of the metaphysicians. Perhaps the most notable feature of the work is the sustained and forcible polemic against agnosticism. M. Roberty vies at once with the positivists in his opposition to the transcendent, and with the Hegelians in his denunciation of the unknowable.

F. C. FRENCH.

SUMMARIES OF ARTICLES.

[ABBREVIATIONS.—*Am. J. Ps.* = *American Journal of Psychology*; *Ar. f. G. Ph.* = *Archiv für Geschichte der Philosophie*; *Int. J. E.* = *International Journal of Ethics*; *Phil. Mon.* = *Philosophische Monatshefte*; *Phil. Stud.* = *Philosophische Studien*; *Rev. Ph.* = *Revue Philosophique*; *R. I. d. Fil.* = *Rivista Italiana di Filosofia*; *V. f. w. Ph.* = *Vierteljahrsschrift für wissenschaftliche Philosophie*; *Z. f. Ph.* = *Zeitschrift für Philosophie und philosophische Kritik*; *Z. f. Ps. u. Phys. d. Sinn.* = *Zeitschrift für Psychologie und Physiologie der Sinnesorgane*; *Phil. Jahr.* = *Philosophisches Jahrbuch*; *Rev. de Mét.* = *Revue de Métaphysique et Morale.*—Other titles are self-explanatory.]

LOGICAL.

Methods of Inductive Inquiry. H. LAURIE. *Mind*, No. 7, pp. 319-338.

Criticising Mill's 'Method of Agreement,' as starting with a complex generalization, and as stating the matter too strongly, L. proposes to substitute for the canon of the former: When within our experience a given antecedent has always been followed by a given consequent, or when phenomena have always been found accompanying each other, there is a probability that the given antecedent and consequent, or the concomitant phenomena, are connected by a law of causation; and this probability increases with the number and variety of the instances. Mill's 'Method of Difference' also starts from too advanced a point. It does not assure us that the result can be produced in one way only, and the canon needs to be altered and completed thus: If, into circumstances found to be incapable of producing a certain event, a new phenomenon or set of phenomena be introduced, and the event in question occurs, the new phenomenon or set of phenomena is the cause or part of the cause of the event. If the removal of any given antecedent makes no difference in the occurrence of the event, that antecedent is irrelevant, while antecedents which cannot be eliminated without eliminating the event are causal. And the Universal Law of Causation compels the inference that, if these conditions be repeated, the effect will also occur. The 'Double Method of Agreement,' as originally stated, requires an impossibility, *viz.*: that the instances negative of *a*, agree in naught but the absence of *A*.

We may state it: When an antecedent and a consequent have always been conjoined within our experience, or when phenomena have always been found to accompany each other, while we have failed to find any instance in which one has occurred save in conjunction with the other, there is a probability that they are connected by a law of causation; and this probability increases with the number and variety of positive and negative instances. The 'Method of Difference' shows one way of producing a phenomenon, but does not limit possibility to that one way. To cover this point, there is proposed the following 'Double Method of Difference': When, by the 'Method of Difference,' we have established a causal law connecting certain conditions with the production of a phenomenon, and when, further, we have failed to discover any case in which the phenomenon occurs without these conditions, there is a probability, increasing with the extent and variety of our negative instances, that the phenomenon can be produced in no other way. The 'Method of Residues' is deductive properly, and simply provides a direction for further inquiry. It has been adequately stated by Herschel. To make the Canon of the 'Method of Concomitant Variations' more exact, we may substitute 'condition' for 'cause' and read: Whatever phenomenon varies in any manner whenever another phenomenon varies in some particular manner, is either a condition of that phenomenon, or is conditioned by it, or is connected with it through some fact of causation.

H. C. HOWE.

On the Distinction between Real and Verbal Propositions.

E. T. DIXON. *Mind*, No. 7, pp. 339-346.

Some propositions assert matters of fact; some are purely verbal, matters of definition. The question is, What truths are real and how marked? We may argue concerning connotations ignoring denotations, that is, verbally. A definition may state the connotation, when the denotation belongs again to real knowledge, or the reverse. Anything deducible from definition is as arbitrary as the definition. To show that a given proposition is real, the definitions of its terms must be proven independent. A question of fact lies outside formal logic. By differing definition of terms the same proposition may be made real or verbal. Pure mathematics and symbolic logic are verbal. If an assertion is disputed, the first step should be definition. This will do all that formal logic can do. On this view propositions and sciences must be classified according as their conclusions

are real or verbal. A truism is not a judgment at all. Formal reasoning makes clear what is implied, but adds nothing. Not alone *a posteriori* but *a priori* reasoning is real, if no objective reference be given to the subjective judgments.

H. C. HOWE.

PSYCHOLOGICAL.

Beiträge zur Psychologie des Zeitsinns. I. E. MEUMANN. Phil. Stud., viii., 3, pp. 431-509.

Introduction.—*Part i.* The present position of the time-sense question. (1) Thorkelson's investigation. His psychical factors: readiness, practice, interval, contrast, exhaustion, attention, secondary disturbances. His analysis of practice, and maintenance of the validity of Weber's law. Criticism: the latter point is still left doubtful. (2) Münsterberg's time-psychology. Criticism of experiments and theory. (3) Schumann's comparison of his own position with those of Mach and Münsterberg. Criticism of his method and experimental results. Consideration of his remarks on the applicability of the psychophysical measurement-methods to the time-sense problem. His theory of the comparison of small time-magnitudes: the 'contents' of surprise and expectation-strain, — adaptation of the sensory attention; their coördination with finger-movements, etc. Criticism of this. The error made both by Schumann and Münsterberg is that of "thinking it possible to refer the time-judgment to general psychical phenomena, such as strain-sensations, etc." They have overlooked the real problem, which is to discover "those temporal relations of our conscious processes which find expression in our time-judgment; the conditions under which temporal relations come before our consciousness in isolation; the amount of relative independence of the perception and reproduction of temporal relations; the relations of this 'partial' content, which we call 'time,' to the alteration or persistence of our qualitative-intensive mental processes; the reflections and experiences which lead us to recognize the relative independence of the peculiar time-impressions." (4) Nichols. Experiments and theory. *Conclusion.* Subject-matter of the time-sense psychology. Three kinds of time-judgment: (*a*) the memory-idea of temporal relations in the past; (*b*) the immediate perception of temporal relations, as such, — the 'immediate' time-judgment; (*c*) the 'mediate' judgment (object of attention = other

aspects of mental processes; their time-relations judged secondarily, from association, etc.). Relation of the time-judgment to special and to the more general mental phenomena. Four questions to be propounded in the investigation of our comparison of intervals. (*a*) Are the modifications of time-relations which are the subject of judgment in our comparison of intervals the same for all intervals or not? It is *a priori* probable that in the case of least times we judge of sensational succession, in that of mean times of the duration of 'intervals' proper between the sensations, and in that of longer times (where we have recourse for assistance to a central renewal of the sound-impression limiting the first interval) of succession again, but in a somewhat modified way. Are the judgments of intervals of different length comparable with one another? (*b*) In comparing intervals, have we always a verdict from the immediate time-consciousness? or are judgments, in certain circumstances, immediately formed? What is the significance of this question for the turning of the judgments to account? (*c*) The general psychological processes which, in the case of interval-comparison, (1) represent the spaces of time, (2) render the formation of judgment possible, are certainly not the same for intervals of every magnitude. Is it not true that judgments of small, mean, and large intervals are not comparable with one another, just by reason of their being arrived at by such different ways? (*d*) Does, then, the comparison of intervals in general furnish the right means of the investigation of the validity of Weber's law in the domain of the time-sense? If not, what means must we employ, in order to measure the alteration in our time-consciousness in a constantly similar manner by the alteration in objective length of time? When these questions are answered, it will perhaps be found, that the conclusion of previous investigators — Weber's law does not hold for interval-comparisons; therefore it does not hold for the time-sense — is incorrect.

E. B. T.

Assimilation and Association. I. J. WARD. *Mind*, No. 7, pp. 347-362.

'Assimilation' and 'Association' are terms not uniformly employed. The differences are due to differences (1) of analysis and interpretation; (2) of terminology. 'Association' and 'fusion' are plainly distinguishable, but their application to presentations is difficult. — What constitutes the identity of a presentation? There are two views. "Both distinguish between presentations and the

momentary psychological occurrences or excitations on which their presence in consciousness in the primary or perceptual state depends." But (1) the *atomistic* view (fresh seal-prints on a revolving tablet) allows of an indefinite number of presentations, qualitatively alike, but numerically distinct. Recognition (assimilation) cannot be explained by it as association by contiguity (*cf.* Bain). (2) The functional view, on the other hand (not birth of new, but 'growth' of old presentations), excludes the possibility of a plurality of identical presentations.—How far is the *atomistic* assumption justifiable? It says, wrongly, the presentation of x is an x presentation; the presentation of difference is a difference of presentation. This presupposes what has to be explained. The presentation of qualitative identity with numerical distinctness requires a one in the many. And this means that the *primum cognitum* is not a plurality converging towards explicit unity, but implicit unity diverging into definite plurality.—So we come to the consideration of the *functional* view. Here are not two presentations given. We have (1) a new or strange experience. After repetition, we say (2) that it is familiar or facile. What is the nature of this attribute or characteristic of a given presentation?—Familiarity and facility are closely related to feeling; and the mark of them seems the same for all presentations. Let us see, therefore, whether the consideration of subjective activity may not throw light on the matter. And let us take (1) the broad facts of habit and practice. Here, surely, the new function is as little an association of the old as the new structure (the blacksmith's arm) is a combination of the old. Then let us look (2) at cases of instinctive or innate skill. We come to the same conclusion. And, if in the case of instinctive ability the facility-characteristic is not an association series, may we not assume that, even when such a series is a possible accompaniment of facility (*i. e.*, when the facility is acquired by a subject sufficiently advanced), the series is still no part of that characteristic?—But cognition-familiarity may differ from movement-facility. No: the individual's percept is, too, an acquisition, entailing activity and progress. (*Cf.* Spalding and Romanes.)—Does not Brown's "mental chemistry" secure to the atomistic view of presentation the continuity which characterizes the functional conception? No, again: the analogy is faulty in every essential point. And in any form, the continuity-argument (subconsciousness-hypothesis) is out of place. Eventual fusion, serial subconscious recognition, is not identical with assimilation or simple cognition. Likeness between them

there is : but in the one case A (the original presentation) becomes A^γ (when γ is the familiarity-mark); in the other, $a^\gamma + b^\gamma + c^\gamma$ originate some new form, a^ϵ . Assimilation precedes and prepares for the existence of memory-images ; mediate recognition cannot begin till memory-images are possible. This position may be questioned ; it is futile to attempt to outflank it by stretching the notion of association to self-contradiction, and postulating subconscious memory-images that have never been remembered.—How is association thought to be related to retentiveness? Bain identifies retentiveness with association by contiguity. This leads to ultra-atomism. How is association related to assimilation (the formation of the idea)? Höfding's term, *Bekanntheitsqualität*, has done good service. His theory of 'free' and 'tied' ideas, though an advance on the traditional view, is, however, still atomistic ; and his general discussion is not clear. But there is much to say for the view that the familiarity (facility) of a perception is a psychological fact distinct from the gradual elaboration of the memory-images, and that repetition furthers both.—Cognition is not a passive process ; the individual is not equally ready to receive all impressions. So there is room for progress in the facility of apprehending particulars. Here is to be referred the feeling-element of cognition.—The transition from impression to idea is to be investigated, with Höfding's theory in mind. No part of psychology more needs exploration ; our ignorance is partly due to terminological meagreness. Probably 'ideas' must pass through a stage in which they can only modify fresh impressions, before they attain to the independence implied in reproduction by association (*i. e.*, become ideas proper).—This inquiry has been arrested by the psychophysical hypothesis of the identity of the seat of impressions and ideas. Discussion of this must precede the inquiry itself.

E. B. T.

Die statischen Functionen des Ohrlabyrinthes und ihre Beziehungen zu den Raummempfindungen. (Zweiter Artikel. Schluss.)

R. WLAŠAK. V. f. w. Ph., XVII, 1, pp. 15–29.

2. *The psychological facts.*¹ Labyrinth-sensations are those of rotatory (semi-circular canals) and progressive movements, and of position (otoliths). Mach's rotation experiment. (1) The sense-organ reacts to acceleration, not to velocity. (2) It is situated in the head.—Mach's progression experiment. Sensations are of accelera-

¹ Cf. p. 482, above.

tion, and have no after-effect. *Cf.* Breuer. — Position-experiments of Mach, Kreidl, James. The labyrinth is the sense-organ for position. — Giddiness. "Labyrinth-excitations have the power of independently influencing the space-sensations proceeding from the eye." *Cf.* Mach. — How are we to connect these sensations with the physiological facts? The great problem of physiological space-construction (Hering) does not confront us. The structure of the organ necessitates the analysis of every change of position into three components. There is no need of auxiliary peripheral movement-sensation. — But what of sensations of innervation? (Mach: the innervation is the space-sensation.) It is to be noted that the 'reflex-centre' for the transference of labyrinth-excitations to movement-apparatus lies in the medulla, or not much higher: but that there is a higher 'voluntary centre' for just this coördination of these muscles. The problem lies at this 'voluntary centre.' But analysis shows that the process in which it is implicated is always of the reflex type. Moreover, we have seen that there is physiological ground for supposing that the labyrinth constantly influences the movement-apparatus (previous *Heft*, p. 401). So that it is unnecessary to ascribe to motor innervations any special part in the formation of space-sensations. — Not that sensible excitations alone suffice for the production of the space-sensation. (1) The labyrinth constantly influences the muscles. (2) When there seem to be labyrinth-sensations without movement, the latter has been inhibited by contrary innervations (Mach). — Necessary conditions of the space-sensation, therefore, are (1) excitation of the terminal sense-organ, and (2) the motor innervation appropriate to it. This view is in harmony with our general physiological ideas of the connexion of terminal sense-organs and the muscular system (Gaule). — What is the psychological significance of the movements which we are considering? Physiological analysis (rotation, skating) shows that the movement serves to cancel a sensation which has arisen. So psychological. We normally stand upright (subjective vertical = no sensation). If this position is changed, we move in the endeavor to reproduce the original (vertical) condition (= no sensation). [That labyrinth-vertical and eye-vertical differ does not concern us in this connexion.] We apply analogous reasoning to the phenomena of giddiness and after-giddiness. (The *positive* jerks of the head during rotation have nothing to do with the labyrinth: Ewald.) After-giddiness effects occur when the rotation has been so long continued that nystagmus, and with it the sensation of rotation, have ceased. — In the case of eye-

movements, the labyrinth-mechanism is not concerned to cancel, but to avoid a change of sensation. The tactual answer to localized stimulation (withdrawal of part = original no-sensation) may be compared with the above explanations. The case of the eye is more difficult (*Cf.* Hering). — *Summary.* No theory of space-sensations can explain these, derive them from the non-spatial. A comparative study of their conditions is all that is possible. Space-sensations are characterized by this, that they are connected with the cancelling of changes in the sensations proceeding from the surface of the body (retina, skin, labyrinth nerve-terminations), so far as this is possible by appropriate muscular movements. The space-sensation itself says nothing of this cancelling. Neither does every case of cancelling of a sensation lead to a space-sensation. Nor do we say anything as to whether the cancelling actually takes place or not. Further to investigate is the relation of the persistent sensations proceeding from the surface of the body, to the changes in sensation. The cancelling is the preservation of a definite attitude as regards the environment. *Cf.* the symmetrical innervation of the labyrinth. — On our theory, space-sensations are (1) an arrangement of the sensations which they cancel. So space may be regarded by us as something superimposed upon things. They are (2) a cancelling-out of changes in these sensations. So space can appear, in another light, as the alone real.

E. B. T.

Un calculateur du type visuel. J. M. CHARCOT et A. BINET.
 Rev. Phil., XVIII, 6, pp. 590-594.

M. Diamandi, a Greek with a remarkable mathematical memory, has been the subject of experiments by MM. Charcot and Binet, wherein his performances were compared with those of M. Jacques Inaudi. From the fact that he can commit to memory a series of figures much more readily by looking at them than by hearing them repeated, M. Diamandi is classed as belonging to the 'visual type.' M. Inaudi, on the other hand, depends almost entirely upon the sense of hearing. To bring out more clearly the distinction between the types, both subjects were required to learn a table of twenty-five figures arranged in five rows. The rapidity with which they could repeat the figures in any order demanded was then tested. It was found that M. Diamandi took much less time than M. Inaudi to recall the figures in irregular order, as, for instance, in ascending or oblique columns. This result agrees with what would be expected

a priori, since a person belonging to the auditory type remembers figures as a series of sounds in temporal order, while a good visualizer has their spatial arrangement mentally before him and can repeat them with almost equal facility in any order. The experiment is held to afford a new proof of the importance for psychology of the different types of memory.

MARGARET WASHBURN.

Aufmerksamkeit und Reaction. J. MCK. CATTELL. Phil. Stud., VIII, 3, pp. 403-406.

L. Lange's distinction of 'muscular' and 'sensorial' times is called in question. "In the case of persons who react quickly and regularly, the direction of the attention appears to be indifferent. In the case of those whose reaction is slower and less regular, its duration may be increased by complete concentration either upon the movement or upon the sense-impression."

E. B. T.

ETHICAL.

Einziges zur Grundlegung der Sittenlehre. (I.) J. PETZOLDT. V. f. w. Ph. XVII, 2, pp. 145-177.

Staudinger's "Sittengesetz"¹ is grounded on the idea that a single and inviolable law lies at the basis of all moral judgments. Such judgments are passed upon actions which involve an unforced relation between *will* and *ought*. This relation must be sought, not in feeling, but in thought; that is, in a will which is conscious of an end. Its conditions are: confidence in the causal law, conception of a succession of related acts serving as means, and a certain contradiction within the unity of consciousness. The blind tension which accompanies this contradiction becomes 'my will' in the moment when memory or expectation presents a state of consciousness more agreeable than the present. The end having been willed, the means become obligatory, and the relation between will and ought is established. The means are good in proportion to their capacity for being harmonized in the attainment of the end, the worth of this end being in turn relative to a higher end, and so on. The supreme end, which must have universal validity and must rest on the facts of conscious-

¹ Franz Staudinger, *Die Gesetze der Freiheit. Untersuchungen über die wissenschaftlichen Grundlagen der Sittlichkeit, der Erkenntnis und der Gesellschaftsordnung.* Erster Band: Das Sittengesetz. Darmstadt, 1887.

ness independently of their connection with external commands, divine or human, can be no other than just the harmony of all the ends of life. This harmony is itself good in relation to all other ends, being in turn the necessary means of their attainment, and thus becomes the highest moral law and the criterion of all other ends. Such a law is formal and necessary in the Kantian sense, and needs to be supplemented by an ideal scheme of the state to be attained, and a plan by which hindrances may be avoided and means and ends set in their proper relation. The most necessary condition for the fulfilment of the law is not, however, a scientific world-conception with its appropriate feelings, though this is important, but rather the moral solidarity of the race, giving a thorough and systematic community of ends. Such an ethical unity is at once the highest object of moral activity, the supreme condition of true emotional development, and the only adequate means of subjecting feeling to the reign of reason. The moral ideal, *i. e.*, the perfect harmony of all ends, is grounded upon experience only and owes nothing to metaphysics. It cannot be attained, still less superseded, but in the measure in which it is reached will all other ethical ends find fulfilment. Staudinger defines duty, sin, and other moral concepts in accordance with his system, and identifies freedom, morality, and religion. The point most open to criticism is his use of the term 'contradiction' (*Widerspruch*), to describe the state antecedent to will. This state has nothing in common with logical contradiction, and would be better described as the first stage of a psychical series tending toward relative stability.

L. HANNUM.

Character and Conduct. S. ALEXANDER. *Int. J. E.*, III, 4.
— pp. 466–89.

Conduct is defined as the mode in which character reacts upon suggestions arising from the circumstances in which a person finds himself placed. There is no difference in principle between a simple reaction of structure upon stimulus, and the ordinary case where reaction is preceded by sensation. In the latter case, the stimulus affects a more complicated structure, and the movement begins at the brain instead of at the spinal cord. It is only one step further to the truth that character is that structure — of course, a mental structure — which, when set going by certain stimuli, reacts in the form of conduct. Of course, character is a different structure from that which is sufficient to produce action of a lower order than.

moral or immoral conduct. Common language, in spite of some looseness, indicates this truth. We mean by character, not impulses, or sentiment, or temperament, and the like, but a state of mind which produces voluntary action. Character is exhibited in acts of the will. This point is of great ethical importance, because it enables us to see that we do not judge a man merely by his motive, but by his character, or, what is equivalent, by his conduct. Whether a man does an act of kindness out of pure inclination toward another, or from a sense of duty, is of no importance for judging his character. No matter from what impulse he acts, if he does the action voluntarily and can be reckoned upon to repeat such actions, his moral character remains the same. It is his disposition, which is different in the different cases. Nor is the distinction a merely verbal one. Conduct involves an idea; it is deliberate. The mental structure called character depends, therefore, for its distinctive features upon the existence of ideas of things which are to be done. The educational significance of this is of supreme importance. To build character, we must determine these ideas. To understand character, we must remember that beneath all lie the natural sentiments. These must act in some direction. The problem of the foundation of character is, therefore, to be answered in the light of this definition of it:—it is a systematic process of setting up associations between our natural objects of desire and other objects, and so establishing a system of controls. Now this process of control consists in nothing more nor less than establishing associations between these passions and their movements, and certain ideas of actions to be done, and again between these ideas themselves. These associated ideas may tend to further as well as to oppose the natural sentiment. Most of the controlling ideas are implanted in us by education, but very largely we learn them by experience. When a large body of influential controls is secured, whether in consciousness or beneath it, a character exists. In differences of structure, bodily and mental, and in circumstances, are found the data for solving the problems of differences of character in general, and of moral and immoral character in particular. We are but bodies and animal impulses controlled by certain ideas which are determined in varying proportion by nature and circumstances, or by education. Even strange mutations of character must ultimately be ascribed either to latent elements of temperament, or to a fresh arrangement of the ideas which make up our personalities. Such an analysis strips character of its special mystery.

CHAS. C. COOK.

On Certain Psychological Aspects of Moral Training. JOSIAH ROYCE. Int. J. E., III, 4, pp. 413-436.

No matter what the apparent office of the conscience, it is always engaged upon some aspect of one twofold business. It gives us two sorts of advice at the same time. It always says to us: Be humane, be self-sacrificing, be devoted to a will existent beyond your own. It also always says to us: Be lawful, have a rule in life, have a plan, be consistent. It condemns selfishness. It also condemns caprice. The first, as a motive, says, Give for the general good; the second, Always be true to your rational higher self. These two dispositions are found wherever conscience is found; and the developed conscience of any civilized man, with all its complexities, its inconsistencies, and its varieties, with all its assertion of universality and infallibility, and with all its changing and doubtful individual dictates, is a collection of opinions and interests founded on an effort to apply to life at the same time, and in a consistent manner, these two motives together. It is the dignity and immutability of the ideal that these two motives ought to be somehow completely harmonized, which makes the true conscience appear to us absolute. It is our ignorance of how to harmonize them which makes our actual consciences such variable and complex products of imperfect experience. The moral ideal in its most general form is, indeed, immutable. It may always be stated, once more, in the abstract, thus: Be humane and reasonable at once. The disposition to be both is born with us: the ideal conscience but formulates the fundamental tendency; but our embodied conscience is merely the best expression of what light our experience has thrown upon the problem how to be humane and reasonable at once. And so our conscience is at once, in one aspect, the most authoritative of ideal guides, and in another aspect is essentially a changeable and fallible collection of merely probable opinions about conduct. The author next passes over to the manifestation of the conscience problem in child life. Submissiveness strives against stubbornness only, perhaps, to become ultimately passive obedience or narrow conservatism. The child, at first apparently unselfish, but capricious, is guided toward rational self-control, when it is found that its pliancy was really uncertainty as to its own wants, which, being determined, become dominant selfish habits — a narrow reasonableness henceforth excludes all self-sacrifice. Thus the problem in ethical theory of reconciling humanity with rational self-development becomes in pedagogy that of combining pliancy in the child with stability.

CHAS. C. COOK.

Moral Deficiencies as Determining Intellectual Functions. GEORG SIMMEL. Int. J. E., II, 4, pp. 490-507.

This article, though bearing the above title, really contains an argument for moral free-thinking. The proof, which is experimental, includes these instances :

1. The scientist must live the life of his subject, on the principle 'It takes a thief to catch a thief.' "When the tendency to action is completely removed," says the author, "by other causes, a clear theoretical recognition and conception of it is impossible." . . . "Personal consummation of the deed is the condition of pursuing it in thought to its logical consequences." . . . "Unless we wish to assume a preëstablished harmony or miracle, the organic condition produced by any passion remains the only source of its further suggestions. Moral imperfection is, therefore, the source of the comprehension of immoral passions." The possible intellectual results of immorality are two: first, our immorality enables us to recognize immorality in others, and thus furthers knowledge; second, immorality in dealing with certain definite fields of knowledge develops and strengthens intellect as a function simply.

2. Morality and immorality are but the conventional color backgrounds, neither belonging to the picture.

3. The life of the dishonest man, because precarious, requires for its maintenance great memory and invention, and because up-stream, *i.e.*, against the current of humanity, requires strength and hardihood. Nature, admiring, responds generously to his need.

4. The artist is a moral free-thinker. He finds "a fascination frantic in a ruin that's romantic." The devastating prairie-fire, or the falcon striking at its quarry, which sights ought to produce moral pains, inspire aesthetic pleasures.

5. The logician avoids ethics. "Even," says the author, "if there is a common root for ethical feelings and logical forms, it certainly lies far enough away from them in the present stage of their development to allow them to appear as absolutely independent formations."

6. Finally, religion capriciously intervenes between the investigator and the secret which he craves.

Two positions for which S. contends are as follow: first, that we must live an event in order to know it. The recluse, he says, affords an anatomy of morality, not a physiology. The illustration, though clear and forcible, is unfortunate. The physician treats symptoms of disease that he has never felt. An insane man could not write a

treatise on insanity. The historian of the 19th century writes the history of the 16th, which a contemporary could not have done. One who has been, but now is not, a drunkard would be doubly fitted, to be sure, to write upon intoxication; but the presumption is against his telling how to avoid the evil. So, the presumption is against the poor helping the poor to become rich, or the evil, the evil to become good. The devil must know the depths of vice and crime, yet we would not pray to him to deliver us. The second position is that swimming against the stream makes strong. It has been well said, "Sweet are the uses of adversity." Yet this is not more than half true. The farmer living upon the border of starvation will have at least one son deadened by despair. Another may gain vigor in the struggle, but he will be hardened, and will make a greater despair for those who, in turn, he pushes to the brink. Greenland does not produce the best men. So much for unfavorable conditions and their effect; but when the author makes his plea for immorality, his argument weakens. Vice does not make a sound body, and this is against its making a fine mind. The desperate man is not the successful gambler; then why should recklessness succeed in life?

CHAS. C. COOK.

Kritik der Grundanschauungen der Sociologie H. Spencer's.

C. BARTH. V. f. w. Ph., XVII, 2, pp. 178-199.

The method of analogy can attain its object only when the likenesses and differences of the subjects compared are carefully discriminated, and an adequate basis of similarity is laid down. Assuming that Spencer's sociological method has fulfilled this condition in general, there remains the question: Are the like and unlike relations within the individual and social organisms fully set forth and carried out to legitimate inferences? The animal cell is made the homolog sometimes of the individual person, sometimes of the family. The former analogy is false as regards propagation, and, in fact, it is in some relations the individual, and in others the family, that must be viewed as the element. Spencer carries out the analogy between the animal and the social organism chiefly along the lines of growth and structure. As regards the former, he confines the comparison to growth by aggregation, although the other forms of increase show the analogy equally well. The validity of Spencer's parallel between the structural development of cells and that of society is evident for the most part, but becomes occasionally misleading and lacks complete-

ness in details. For example, not only the blood-vesicles but the outer and the inner skeleton belong to the structures which are homologous with those developing from the ectoderm and mesoderm. In general, the analysis of identical relations in growth and structure may be criticised as omitting homologous phenomena, failing to point out unequivocally the homologous elements, and leaving the sets of relations compared somewhat vague. Of the two differences which Spencer marks between the individual and the social organism, the first—distance *vs.* nearness of the elements in space—is given rather too much importance, while the second—the presence or absence of consciousness in the elements—is passed over much too lightly. Spencer, it is true, refers to this as a “cardinal difference,” but he fails to mention its most important implications. The capacity for turning back upon its own activity in conscious thought gives to society a power so far superior to any force within the chain of biological causation that it is able to destroy natural instincts and impulses and to alter its own growth and structure. This doctrine does not rest on the metaphysical opposition between ‘nature’ and ‘spirit’ which Spencer rejects; it is an undoubted deliverance of experience, and finds exemplification in the constant opposition between associative and apperceptive thought. Because Society is an organism, Spencer seems to conclude that it is therefore *Naturwesen*, and what he has given is the sociology of the age of nature, not the age of culture. True, there exists, according to Spencer, a progressive “adaptation to the social state”; but this progress is attributed not to the upward movement of mental life, but vaguely enough to “social conditions” and “growing industrialism.” The exclusive naturalism of Spencer’s system finds its logical result in his treatment of practical politics, where he leaves the facts of history and ethnology and falls back into the errors of the last century.

L. HANNUM.

METAPHYSICAL AND EPISTEMOLOGICAL.

Zu Kant's Lehre vom Ding an sich. L. BUSSE. Z. f. Ph., CII, 1, pp. 74-113.

This article is both critical and constructive. It first calls attention to a thesis presented to the philosophical faculty of Yale University for the degree of Doctor of Philosophy by Rikizo Nakashima in 1889. The principal positions taken by N. are stated and criticised, after

which B. states his own views on the subject. N.'s dissertation is divided into two principal parts, one systematic, the other historical. In the first part the author investigates (1) the notion of the 'thing-in-itself' in the Aesthetic; (2) in the Analytic; (3) in the Dialectic, where he discusses the relations of the 'ideas of reason' to the notion of the 'thing-in-itself'; (4) the question whether the notion of the 'thing-in-itself' is compatible with the subjectivity of the categories of causality and existence. In (5) he gives a summary of his views on the above points, and in (6) he defines the character of the Kantian idealism in opposition to that of Berkeley. In the Aesthetic Kant assumes the existence of 'things-in-themselves.' They are the unknown causes which, since they affect the subject, condition phenomena. Next N. investigates the relation of the 'noumenon' to the 'thing-in-itself' in the Analytic. The 'noumenon' in the positive sense, as object of a possible non-sensuous intuition, is to be distinguished from the 'noumenon' in the negative sense, as a problematical, limitative notion, which restricts the field of sensibility without increasing knowledge. The latter only is identical with the 'thing-in-itself' of the Aesthetic. Moreover, it is the same as the 'transcendental object.' B. does not agree with the first part of N.'s contention. In the Aesthetic nothing whatever is said as to the nature of the 'thing-in-itself.' It is only maintained that it is *not* an object of sensuous intuition. In the Analytic, however, the 'noumenon' in the negative sense is shown to be the only justifiable interpretation of the 'thing-in-itself.' As regards the other point, making 'noumenon,' 'thing-in-itself,' and 'transcendental object' synonymous, B. wholly agrees with N. The next part of N.'s dissertation treats of the relation of the notion of the 'thing-in-itself' to the 'ideas of reason,' as they are developed in the Dialectic. (1) The 'psychological idea' is the same as the 'synthetic unity of apperception'; (2) the 'cosmological idea' is 'substratum' or 'substance'; (3) the 'theological idea' is God. These 'ideas of reason' are *wholly different* from the 'noumenon' and the 'thing-in-itself' of the Aesthetic and the Analytic. B. does not think that this bold theory can be shown to be the doctrine of the *Kritik*. The Dialectic, which treats of reason, determines problematically the previously only negatively determined notion of the 'noumenon' or 'thing-in-itself' as 'idea of reason,' in the first case as 'psychological idea' of an intelligible, immaterial soul-subject. The object of the 'psychological idea,' then, is by no means without any relation to the 'thing-in-itself.' N. seems to regard 'substance,' the substratum and

constant correlate of all phenomena, of which Kant speaks in the proof of the first 'analogy of experience,' as the content of the 'còsmological idea.' Following Kant's example, we should beware of speaking of the 'cosmological idea.' Kant himself speaks of the 'system of the cosmological ideas.' Already in the Analytic Kant had made a thoroughgoing distinction between the 'mathematical' and the 'dynamical' categories and fundamental principles. The first two pairs of 'cosmological ideas' are 'mathematical,' and relate to the world as the mathematical whole of phenomena; the last two are 'dynamical,' and relate to nature or the dynamical whole. The first two, as Kant expressly maintains, have nothing to do with the 'noumenon,' but refer to phenomena. On the other hand, he recognizes that the two 'dynamical' ideas rise to intelligible conditions, standing outside the series of phenomena, and are transcendent. In the case of the third idea (freedom) there not only exists a relation to the 'thing-in-itself,' but the idea is wholly without meaning apart from this relation. Nor can it be maintained of the fourth idea (which B. would put with the Theological Ideal) that it has no relation to the 'thing-in-itself.' The absolutely necessary Being must, as the solution of the antimony shows, be thought as intelligible. B. thinks he has shown that, although the 'ideas of reason' originate in the reason and the notion of the 'noumenon' in the understanding, as N. rightly holds against Caird, the reason does not stand out of all relation to the notion of the 'noumenon.' The understanding prepares the ground for the reason, since it develops the categories, and, in the notion of the 'noumenon,' provides a sphere (in itself as yet empty and indefinite) which the reason fills and determines by means of the 'ideas.'

E. A.

Idealism and Epistemology. PROF. JONES. *Mind*, No. 7, pp. 289-306.

The tendency of recent English speculation is critical, leading to the division of Philosophy into special departments, *e. g.*, Psychology, Epistemology, Ontology, Logic. These critics of Idealism (Hegelianism) are liable to the charge of an appeal to common sense. They claim to criticise Idealism from the basis of Idealism. But they dwell on the opposition between 'knowledge' and 'reality,' not on their unity. They explain Kant as upholding the dualism of knowledge and thing known, after the fashion of Locke. Their positive theory is, (1) knowledge is not that which is known; (2) it is *of* the known; (3) the

universe is essentially related to intelligence. They object to Hegel from the standpoint of Reid, believing Hegelians to have confused knowledge with reality, and forgetting that Philosophy must unite these two under one principle. Idealism represents the universe as a thinking activity. It is accused of representing the universe as a tissue of thoughts. The critics contend for a science of the relation of 'subjective states' and 'trans-subjective realities.' But Idealism denies the possibility of this science, Epistemology, for it knows no 'world of ideas.' Charge this rather to Associationism. An idea goes and is gone forever, with the process that produced it. There is a 'world of knowledge' in books, one of symbols, objective, like art. A man does not accumulate ideas, he grows. The idea as subjective, and as having objective reference, cannot be made subject of two distinct sciences, for the two sides are inseparable. Our heritage is not knowledge, but the *means* of it. Hegel's universe is not a system of thoughts, it is the critics who believe in the 'world of ideas.' For Hegel the universe is a thinking reality, and there are no general ideas which do not perish in the making. To him reality is spirit, the laws of things are laws of thinking. Therefore this criticism emphasizes the fact that Hegel started, not, Kantwise, from opposition, but from unity. He starts with Reality and never leaves it. It is the critics who find themselves penned in a world of their own thoughts. To Hegel his ideas are the working of reality in him. Thinkers and things are not independent; they *are* real. Metaphysics thus becomes a Logic, a science of the *operation of mind*.

H. C. HOWE.

Essai sur le caractère général de la connaissance. G. REMACLE.

Rev. de Mét., No. 3, pp. 249-280.

The essential thesis of phenomenalism is the negation of substance or things-in-themselves, these terms being used as equivalents. Every state of consciousness, it is claimed, contains two elements,—a representative and a represented,—neither of which has any meaning without the other. Renouvier, taking his stand on this principle, shows, as against both Realism and Idealism, that neither an object in itself nor ideas in themselves can be known. While agreeing with the first part of Renouvier's argument, the author maintains that it is by no means necessary that thought should be representative of something else. We cannot assume at the outset that thought has any end or function save its own

existence, and in order that it may exist it is only necessary that it shall have a definite, determinate character, The view which makes 'thought' equivalent to 'representation' is always the result of that old theory of perception which regards the mind as a mirror whose function is to reflect things. R., however, holds that a state of consciousness as such, at the first moment of its appearance, before the mind has changed it by transforming it into an object, is at that first moment of its existence a thing-in-itself. In so far as a state of consciousness *is itself*, it *exists*, and that is all. If it appears as relative, this appearance of relativity is another state of consciousness, which has taken the place of the former, and in relation to which it has become an object, *i. e.*, something different from what it was originally. Renouvier's thesis that we cannot know anything except phenomena is then only true of deliberate knowledge (*la connaissance réfléchie*). But there still remains the domain of spontaneous knowledge, of consciousness properly so-called. The principle of phenomenalism does not apply to the states of consciousness regarded purely as such which from moment to moment constitute the ego. We cannot, indeed, *know* them, — hence our claim that they are things-in-themselves, — but we can know that they *are*, for they are *we* successively from moment to moment. We only know the true things-in-themselves, the absolute, in the unreflecting consciousness which simply feels and does not seek to know. Knowledge may be defined as the creation of illusion, or of phenomena, these terms being convertible. We find by analyzing the desire for knowledge that it is of two kinds: (1) curiosity; (2) the desire for truth. This latter impulse is not founded on a desire to know objects, nor upon a wish to extend our sway over nature; but is a purely egoistic tendency induced by the impulse to escape from the mental discomfort which attends illusory and contradictory experiences. In seeking to know an object, I do nothing but seek to establish an indissoluble — or at least very constant — association of ideas. But this does not annul the difference between subjective and objective knowledge; for knowledge is subjective when the established association is not self-contradictory, and objective when it is consistent as well with the actual and future content of consciousness. Knowledge always contains this element of foresight, and may be said to be the creation of a type for the formation of future associations, or to furnish the *law* of events in the mental world.

J. E. C.

La nouvelle théorie de l'hérédité de Weismann. YVES DELAGE.

Rev. Phil., XVIII, 6, pp. 561-589.

This article contains a clear exposition of Weismann's theory of heredity as set forth in his recently published work, *The Germ-Plasm*. Having shown how the idioplasm of the germ-cell is analyzed into idants, ids, determinants, and biophors, the writer gives Weismann's account of the mechanism of fertilization and ontogeny, and proceeds to state briefly the manner in which the new hypotheses are applied to explain the facts. Phenomena such as those of atavism, the persistence of family traits, and the characters of hybrids, may be easily accounted for by the re-distribution of hereditary substance, which becomes conceivable if we adopt Weismann's view of the function of the reducing division and the nature of the polar bodies. The theory encounters its greatest difficulties, and is least satisfactory, when dealing with the problem of the apical cell in plants, the budding of hydroids, and the facts of regeneration, alternation of generations, and polymorphism, since it is here obliged to assume such complications as the presence of "accessory idioplasm" and the existence of double or triple determinants. As regards Weismann's explanation of the origin of variation by the action of external conditions upon the germ-plasm, Delage remarks, "It is curious to observe that the author, after having totally rejected the theory of Lamarck, returns substantially to the main idea of the founder of Transformism." Whatever may be our final judgment, he concludes, on the Weismann theory, its importance as an effort to render account of all the facts cannot be denied. Detailed criticism and comment the writer promises in his own forthcoming work on heredity.

MARGARET WASHBURN.

HISTORICAL.

Das natürliche System der Geisteswissenschaften im 17. Jahrhundert (III and IV). W. DILTHEY. Ar. f. G. Ph., VI, 2, pp. 225-256, and 3, pp. 347-79.

Melanchthon is for Germany the connecting link between the philosophers of antiquity and the natural system of the seventeenth century. We find the fundamental features of this system clearly outlined in his works. At the same time he is full of the spirit of the Reformation; that devout religious 'inwardness' so peculiar to

the renewal of Christianity. The whole aim of the man's life was directed upon the moral regeneration of his race. Melanchthon is the best representative of Christian Humanism. In one respect, he might seem to us like a genuine product of scholasticism: in his attempt to mediate between Aristotle and Revelation. In truth, however, he repudiated all those artificial scholastic attempts to establish a systematic connection between Aristotle and Christianity. Aristotle was for him the representative of ancient knowledge, Græco-Roman philosophy the most perfect manifestation of that natural light of reason which dwells in man. The doctrine of the *lumen naturale* is the corner stone of M.'s philosophy. Of course the influence of scholastic tradition, which itself contained this teaching, cannot be ignored. Yet the whole character of the great reformer's philosophy and theology is entirely different from scholasticism; he drew upon the ancients for his system, especially upon Cicero. In the sciences, M. declares, certainty is founded on universal experience, immediate principles and demonstration. The articles of faith, on the other hand, are certain because God affirms them in sacred history and in Christian experience. But both kinds of truths are ultimately conditioned by the natural light of reason. All natural knowledge has three criteria: (1) universal experience, (2) innate principles, and (3) the order in the connection of truths (*ordo intellectus*). By (1) M. means that there is agreement in the experience of all normal persons. The Stoics are mentioned as the source of this teaching. The innate *principles* illumine man's activity and thinking. They are impressed upon the mind by God, and agree with His thought. Upon them depend the different sciences: mathematics, logic, metaphysics, ethics, jurisprudence, politics. Though this doctrine of an immediate knowledge through principles is found in Aristotle and in the Stoics, Cicero is M.'s source. Aristotle made no mention of innate practical principles, while Cicero, like the Stoics and the schoolmen, took account of both speculative and practical principles. The Stoa also emphasizes the need of experience to bring these elements of knowledge (*notitiæ*) into consciousness. Our consciousness of God is also innate. It is awakened in us by the rational order of the universe and the moral law in the heart of man. This immediate consciousness of God is also supported by proofs of God's existence. The teleological proof is Ciceronian as is also the proof which bases itself on the facts of the moral world. A spiritual being could not have sprung from matter, but presupposes an underlying intelligence.

But the ability to connect our experiences, to distinguish between right and wrong, and the idea of God are the surest signs of divinity in us. The moral law is an evidence of the divine origin of the human mind. The natural light manifests itself in conscience. Now our moral consciousness demands free-will as its basis. Indeed, without freedom there could be no ideal conception of life, no ethico-religious conception of Christianity. M. became the defender of freedom among the Protestants of his time. We are conscious that our external acts are in our power. Our moral consciousness excludes the possibility of God's being the cause of evil in the world. These arguments, which were originated by Carnoades, are found in Cicero and Plutarch. M. also combats the Stoical doctrine of an unbroken causal series in nature, appealing to Cicero's refutation of this teaching in *De fato*. The doctrine of necessity cannot be applied to psychical processes. Neither moral judgment nor punishment would have any meaning in a deterministic scheme. An inner free cause is the ground of our moral acts. The reasoning and the words used by M. are Cicero's. Dilthey concludes: Is not the entire teaching of natural theology, as this manifests itself in the English Deists and the German Rationalists of the eighteenth century, explicitly contained in Melanchthon?

Melanchthon's text-books are models of clearness, arrangement, and form. Their content is largely derived from Aristotle as he was interpreted by the Christian thought of the times. The progress of natural science since the days of Aristotle is also taken into account. In his *Dialectic*, M. teaches that systematic knowledge arises from the interaction of the qualities of reality with the predispositions of the human mind. The right to pass from a limited number of cases in Induction to a universal proposition is founded on the absence of negative instances. But instead of *universalia* we have here a limited number of notions and axioms which are grounded in man's predispositions, and by means of which the experiences are construed in thought.—The text-book of *Physics* begins with what forms the foundation of the whole work: the consciousness of God contained in the *lumen naturale*. Then follow a good exposition of the Ptolemaic system, the Aristotelian doctrine of final causes, of motion, the four elements, and the qualities of natural processes. But God is not, as in Aristotle, the end, he is the beginning. The Copernican theory is rejected, while the doctrine of an eternal world is replaced by the doctrine of creation. Instead of Aristotle's substantial forms we have a countless number of forces as the explanatory grounds of occurrence, e.g., God, planetary force, matter, vegetative, animal, and

psychic forces. A uniform and necessary connection is founded in God's reason, and is manifested especially in the motions of the stars. But in addition to such necessity, there is also contingency, and this is due to the freedom in God, and in all good and evil spirits, etc. Miracles prove that God's free-will is superior to the laws of nature.—M.'s treatise on the soul is a theological reconstruction of Aristotle's work. Among other things it contains an exhaustive treatment of anatomy, the physiology of nutrition, a chapter on dreams, a consideration of the generative faculty, the sense organs, the appetitive faculty, and mind (*mens*). The latter is an inner light and conscience. The soul is free and immortal.—In the ethical system the Aristotelian element is largely transformed by Ciceronian, scholastic, and theological notions. The natural light in conscience reveals to us an immutable moral law of divine origin. Hence philosophy also recognizes it as the end of man to know and obey the law of God. After the obscuration of the natural light God revealed the natural moral law in the decalogue. M. connects the latter with Aristotle's doctrine. The furtherance of society for the sake of God is embraced in the law. Justice, property, marriage, punishment, are some of the notions discussed.

The question of the relation between the *lumen naturale* and revelation is answered in Melanchthon's *Glaubenslehre*, one of the most influential books of the century. In order to appreciate this work, we must understand the historical conditions which produced it, the century of Protestant dogmatism. Dilthey denies that the essence of the Reformation consisted in the renewal of the Paulinic doctrine of the justification by faith. This doctrine was also held by Augustin, St. Bernhard, Tauler and the German Theology, and yet no religious epoch ensued. Nor did the return to Scripture form the kernel of reformatory faith. There was something entirely new in the Reformation. A number of historical motives combined to bring about the great change. The personality felt its own inner worth and force. This was the result of economic, social, and intellectual influences. Religiously expressed, it meant that man, alone with his God, in his own way and by his own exertions, establishes his relations with the invisible. The Catholic hierarchical discipline seemed to Luther and Zwingli to be a demoniacal mechanism which separates the soul from its God. Therefore they broke down the barriers erected by the church. The religious man frees himself from the domination of the pope, monkish obedience, and penitential discipline. He does this because he believes in free personality, and trusts that he forms a part of the invisible order of things.

NOTICES OF NEW BOOKS.

Hypnotism, Mesmerism, and the New Witchcraft. By ERNEST HART, formerly Surgeon to the West London Hospital and Ophthalmic Surgeon to St. Mary's Hospital, London. With 20 illustrations. New York, D. Appleton and Company, 1893.— pp. viii, 182.

This reprint of Dr. Hart's recent papers is most timely. The book constitutes a sally upon the camp of those who, according to Mr. Myers, form the left wing of experimental psychologists ("who follow the wider [!] vistas which hypnotism and kindred studies seem now to be opening up": *Mind*, No. 5, p. 95); and the confusion which it must there cause is likely to be serious. The author's tone is polemical; but this could, in the existing state of things, hardly be avoided. How long will it be before the 'educated world' learns that the facts of hypnotism must be explained in the light of normal physiological processes; that the marvels and miracles of hypnotic records are the results of imposture; and that the even tenor of psychological progress is not to be accelerated by any number of hypnotic 'experiments'? Considering the antiquity and persistence of the "attraction of the unknown" (pp. 1, 2), and of the tendency to explain it by itself, we shall not look for this millennium at any very early date. But the present series of Essays should do something to hasten its approach. The book is interesting as a novel; it is to be understood by the many:— let it be recommended to all!

1. The first paper, *Hypnotism and Humbug*, is the reprint of an address delivered in Toynbee Hall. Dr. Hart tells his audience of the circumstances which introduced him to the study of the hypnotic state. He describes his 'control experiments': the elimination of electricity, and the elimination of the will of the experimenter: and shows that the hypnotic condition is always subjective (p. 13). He then refers to the physiology of sleep ("in sleep the will is abolished, and consciousness fades gradually away as the blood is pressed out by the contraction of the arteries"), and of the ideomotor mechanism. The hypnotisation of animals is demonstrated and discussed. Finally, the influence of post-hypnotic or deferred suggestion is considered, and the normal presence of the time-element in active and passive brain-functioning rightly insisted on.

2. *Hypnotism, Animal Magnetism, and Hysteria* (reprinted from the *British Medical Journal*). (a) The magnet in medicine. (b) Mesmer and his dupes. (c) The 'possessed' and the 'demoniacs.' (d) The key to the phenomena subjective and resident in the patient. *Hypnotist or mesmerist counts for nothing* (p. 36). (e) Hypnotism and Hysteria conditions of disturbed equilibrium. (f) The identity of phenomena in Hysteria and hyp-

notic Suggestion. (*g*) Self-suggested emotions and attitudes of hysterics. Seven full-page figures illustrate this section (Richer, etc.). (*h*) Similar conditions induced in hypnotics by Suggestion, Autosuggestion, and physical impressions (*vid.*, esp. p. 58). Four figures. (*i*) The key to the mystery. The word 'hypnotism' is due to Braid. His explanation — suggestion — is the right one. (*j*) Verbally expressed or physical impressions only are capable of conveying suggestions. (*k*) The condition purely subjective: any one or anything can hypnotise. The puzzle is the *hypnotised*, not the operator. (*l*) The therapeutic uselessness and social mischief of Hypnotism. These are admitted by Charcot, Richer, Babinsky, Déjerine, etc. Wundt's review of the literature led him, on the other hand, to predict a therapeutic future for hypnotism. (*m*) The practice of Hypnotism, except by skilled physicians, should be forbidden.

3. *Mesmerism and the New Witchcraft*. The account of a visit to the 'hypno-therapeutic' department of La Charité Hospital (under the direction of Dr. Luys), and of an investigation of the phenomena there exhibited. Five persons were observed. The alleged susceptibility to magnetic currents exposed. "I . . . reproduced all the phenomena by methods which were quite incompatible with any truthfulness or reality in the acts or in the explanation given of them" (p. 103). 'Transfer'-experiments. Report of control-experiments, exposing the fraud of Dr. Luys's subjects, in this regard also; endorsed by Drs. de Cyon, Olivier, and Lutaud. The substratum of fact. Hypnotic phenomena, so long known, have not been elucidated even by the Salpêtrière work; Charcot's classification is artificial (due to autosuggestion; perpetuated by imitation, suggestion, ward-training, habit). The dangers of hypnotic practice witnessed to by Dr. Luys himself. The position of hypnotism in therapeutics. Negative evidence of Drs. Luys, Charcot, Babinsky, Forel, and of MM. Ballet, Magnan and Briand; criticism of Bernheim's positive view. Hypnotic suggestion before the law: *cf.* Liégeois and Ballet. Surgical application: Dr. Luys's negative verdict. Application in the domain of obstetrics: similar evidence. Conclusion: the balance is in favor of the faith-curer as against the hypnotiser. — Thirteen figures.

4. *Gropings after the Supernatural*. Criticism of Steadism.

5. *Appendix*. Reprint of *Times* letters, with Dr. Luys's reply.

When one considers the vast extent of the literature of Hypnotism, which the unfortunate psychologist is bound to attempt to digest, whether it be food-stuff or no; the ready popular acceptance of the crudities of 'Research' societies; the invasion of the psychological field by persons often eminent in other respects, but wholly untrained in psychology — or logic; the hindering of truly scientific work, occasioned by the absorption of so many students in the hypnotic problem: — one cannot be too grateful for a sharp and clear word of warning, such as this of Dr. Hart's. Hypnosis has to be explained: yes! But Hypnotism is not the whole of Psychology; it is a phenomenon, the discussion of which should occupy

in a text-book certainly no more space than that allotted to the consideration of normal sleep. It would, perhaps, be over-sanguine (as I said at the outset) to suppose that the inevitable reaction is already setting in. But it is to be hoped that this *exposé* of the Charité subjects will at least help in some measure to arrest the pendulum of public opinion, though it be not strong enough to give it an impetus in the contrary direction.

E. B. T.

Rousseau und die deutsche Geschichtsphilosophie. Ein Beitrag zur Geschichte des deutschen Idealismus von RICHARD FESTER. Stuttgart, 1890.— pp. 340.

The author dedicates his work to Professor Windelband of Strassburg, to whom he acknowledges his indebtedness for the first incentives to undertake these studies. The purpose of the work, as declared in the preface, is "to investigate how far Rousseau has influenced the world-view of the German writers on the philosophy of history." This investigation has been carried out in a scholarly and thorough manner, and the result is a volume which will be read with interest and profit both by professional students of history and of philosophy, and also by that growing class of cultivated but non-professional readers who are interested in the development and history of human thought. It presents an important chapter in the evolution of the thought of the eighteenth century into that of the nineteenth.

The term 'philosophy of history' is here taken in its very broadest sense as a study of "all the questions concerning the historical development of the human race," including, *e.g.*, the origin of society, nature of the state, influence of arts and science on morals, etc. In the first chapter a clear account is given of Rousseau's conception of history and theory of society and of the development which his views underwent as manifested in the differences between his earlier and his later works. In each of the succeeding chapters one or more of the most eminent German thinkers on the theory of history is taken up, their views of society given and compared with those of Rousseau, and all direct and indirect connections carefully traced and noted. This work has been performed so judiciously that the author has quite escaped the too frequent error of taking merely casual resemblances for evidence of causal relations. The quotations and references are numerous and greatly enhance the value of the book as a basis for further study. The list of chapter subjects will give a good idea of the scope of the work: Chap. II, "Rousseau and the German *Aufklärung*—Herder"; III, "Kant"; IV, "Schiller"; V, "Fichte"; VI, "Schelling"; VII, "Friedrich Schlegel"; VIII, "Schopenhauer and Herbart"; IX, "Krause"; X, "Hegel and Schelling's Positive Philosophy"; XI, "Wilhelm von Humbolt." The work closes with an appendix of twenty-two pages on "The Idea of Perpetual Peace in the 18th Century," and a chronological list of the chief sources.

F. C. FRENCH.

L'année philosophique, publiée sous la direction de F. PILLON. 3^{me} année. 8vo. Paris, Alcan, 1892. — pp. 324.

This serial keeps up its excellent character, or rather improves upon it. The first article is by Renouvier, on Schopenhauer and the metaphysics of his pessimism. After interesting remarks on the causes of the non-optimistic tendencies of our generation, M. Renouvier gives a sketch of Schopenhauer's system so far as it concerns itself with the badness of the will to live, and compares it with other religious philosophies. He finds that the nerve and force of S.'s pessimism, regarded as absolute and systematic, resides in his denial that individuality and time are real. Hence his belief in no history, no redemption, nothing but the *nunc stans* with the same fly buzzing, the same dog barking, the same heart aching forevermore. But Schopenhauer's *sentiment* is itself individualistic, for it is the impossibility of happiness for the individual that makes him despair of the world. M. Renouvier declines to go behind the individual or time. He finds evil as real as any other ingredient of the world; but he frees himself from radical pessimism by his belief that it is in the last resort an affair of individual *parts* of the world, and that in the *salvation of the person* (taking this of course in the largest possible way, as involving an immortal career) lies the only solution of the problem. It must certainly be said that until the individual has made *his* sins right, it is premature for him to arraign the Universe at large. The impressiveness and authority that characterize M. Renouvier's writing were never more strikingly shown than in this essay. Professor Dauriac next follows with a criticism of the physiological theory of emotion proposed by W. James. He holds that the latter has mistaken the echo for the original sound, and that the initial emotion is purely psychic, consisting essentially in the consciousness of disturbance or conflict produced by a sudden invasion of unexpected ideas. This would seem to make of the shock of surprise the original type of all emotion. . . . M. Pillon finally contributes an essay of 135 pp. on the Historic Evolution of Idealism from Democritus to Locke. The notion of primary or real, and secondary or apparent, qualities began with Democritus and was developed by Protagoras and others into an universal skepticism. Aristotle's distinction of common from proper sensibles, though it divided the same things as the earlier distinctions, allowed no difference in their reality, for all the senses give true knowledge, according to A. The scholastic doctrine of cognition by *intelligible species* might have brought in again a sort of idealism, but the mediæval doctors were kept from this by the dogma of Transubstantiation, which postulated real substances that could be changed, behind the 'accidents' of the Eucharistic elements. Hobbes made a clean sweep of the primary as well as of the secondary qualities, regarding them all as mental phantasms, except motion, which, by a sort of inconsistency characteristic of all who try to unite sensationalism with materialism, he left outstanding as that real property of matter which occasions, amongst other things, our

thoughts. M. Pillon then gives a full account of the positions of Descartes, Malebranche, and Locke, enlivened by copious citations; and, following M. Lyon's recent book, *L'idéalisme en Angleterre*, he makes clear the claims of Richard Burthogge, a thinker entirely forgotten in his native land, to be regarded as that one of Berkeley's predecessors who came nearest to his immaterialism, but who did not quite overstep the line. So many important steps in philosophy are in themselves so small! M. Pillon's essay is well written and instructive; and the sixty book-notices with which the volume concludes are full of pith and vigor. One confesses to no slight shock, however, when one finds this critic (on p. 260) deny that we have *duties* towards inferior animals, and hold a language which might come from the mouth of a doctor of the Catholic Church. W. J.

The Interpretation of Nature. NATHANIEL SOUTHGATE SHALER, Professor of Geology in Harvard University. Houghton, Mifflin & Co., 1893. — pp. xi, 305.

In the preface we read: "My first contact with natural science in my youth and early manhood had the not uncommon effect of leading me far away from Christianity. Of late years a further insight into the truths of nature has gradually forced me once again toward the ground from which I had departed." It is held that mechanism and materialism disappear before the inquiries of the naturalists, and that "they are compelled to suppose a kind of control operating in the world which is not purely dynamic." The so-called natural and supernatural methods are giving place to Monism as the ruling idea in the interpretation of nature. In this way the naturalist is approaching the position of the philosophical theologian. The general trend of thought in this work is an illustration of the theory that an interpretation of nature is little else than the mental history of the interpreter, and that it can have current scientific value only in so far as all minds are constituted and do operate in the same way. From this standpoint the work has great psychological interest. One is convinced at the outset that Professor Shaler has a keen appreciation of the difficulties as well as of the importance of the subject; and as one proceeds the suspicion arises that the time for fruitful generalizations in the sphere of natural science has not yet arrived. This latter suggestion is one that persists after the perusal of the work as a whole. But it is to be remembered that only through such efforts by broad-minded and competent scientists can the present status of the sciences be determined and general knowledge be advanced. The disposition of naturalists to take a hand in philosophy and attempt to explain things from their several points of view is a hopeful sign for the future. Professor Shaler starts out with a chapter on "The Appreciation of Nature," in which he fixes upon *curiosity* as the impulse which develops through the chain of living organisms, and is itself a leading feature in the explanation of mental development from the lowest to the highest types. This impulse

is inherited by man from pre-human stages of thought and action, and has exhibited itself most conspicuously in the Aryan race. In the author's monistic evolution no line of demarcation is allowed between natural and supernatural, mind and matter, organic and inorganic. We see in the efforts of matter a ceaseless striving toward a higher life. With the exception of elementary atoms, all things tend to give birth to forms like themselves. Crystals live and by contagion breed their like. To establish this neo-hylozoism a thorough-going sympathy with nature must be cultivated, and all those who believe that naturalism is to replace supernaturalism must throw their energies in this direction. This view originated with the Greeks who are regarded as the source of the true scientific spirit. But Professor Shaler's estimate of Greek science seems to be somewhat impaired by the Baconian spirit. The drift from the ἀρχή of Thales to the ἀρχή of Aristotle, the absorbing interest of the Pre-Socratics *περὶ φύσεως*, and the place of sympathy and friendship in Greek life are not sufficiently appreciated. The second chapter, "Critical Points in the Continuity of Natural Phenomena," holds, with Maxwell and Stephen, the doubtful character of the uniformity of nature. It is pointed out that the conception of uniformity gained from our limited knowledge cannot extend very far, that by variations in energy matter often behaves in the most unforeseeable way, and that these variations and modifications may occur with revolutionary rapidity. Experience shows a large field for these critical points at which new modes of action are introduced, so that we have "the most sudden departures from the direction which events have hitherto followed." It is suggested that in this way consciousness arose in the generational movement from the stored impulses of the past. The way in which this doctrine of critical points is stated and illustrated seems to toss the apple of discord among the sciences that rest upon the principle of continuity. It might appear as if physical science by its own method had shown itself to be impossible, and that the same shift of emphasis which took place in the days of the Sophists and Socrates might again occur. The evident import of 'critical points,' is to advise greater caution in analogical and inductive reasoning, especially in matters anthropological. But this reflection has little weight with Professor Shaler in fixing man's place in nature. Man, originally a member of the common dust, has in the process of time been so differentiated as to occupy "a realm apart from the rest of organic life"; he is the solitary distinguished success. The rule of mind over matter is "the one dominant characteristic of man which entitles us to class him as an entirely new kind of animal." Yet he has undergone, in his generational advance from the lowest forms of life, "a sudden, indeed we may say a very paroxysmal alteration." Notwithstanding these paroxysms, æons of time were required for man's development. It is held that life has endured on this earth not less than one hundred millions of years, that this is but an instant compared with the ages through which the material universe has endured, and that ancestral impulses have survived through millions or hundreds of mil-

lions of generations. "It is perfectly clear that the human body has passed through thousands of forms, specifically different the one from the other." It may be questioned, in view of the author's doctrine of 'critical points,' whether he is justified in reasoning in this way on the time question. However this may be, it is clear that he is much more prodigal with time than the present state of physical science will allow; and it is equally clear that some pretty well attested theories in physics vitiate his view of anthropological evolution. Lord Kelvin puts the consolidation of the earth's crust not more than one hundred millions of years since, while G. H. Darwin allows but half that time since the moon's mass was thrown off by the earth. Tait, Newcomb, and King think that ten millions of years is the outside limit for the existence of water on the earth. These celebrated physicists, reasoning from different standpoints, as the radiation of the earth's internal heat, influence of tidal friction on the earth's rotation, and the sun's loss of heat, agree in holding it to be impossible that life could have existed on our planet fifty millions of years ago. If, on the one hand, it is impossible to think the evolution of man from the lowest forms in a period of less than one hundred millions of years, as Professor Shaler holds, and if, on the other hand, life could not possibly have existed on this earth earlier than fifty millions of years ago, then it would appear that anthropological evolution is untenable and must remain so until this little difference of fifty millions of years is adjusted. Throughout the work the reader is perplexed by the lack of consistent terminology and well defined principles upon which an interpretation of nature should proceed. Confusion also arises from shifting points of view as regards leading problems. For instance, over against the most vigorous monism one finds such expressions as: "All we know of mind seems to indicate that it does not follow in its changes the same train of conditions as the body it occupies." The author seems to protest against the atomic psychology, and to remove the foundations on which the school of Münsterberg builds. It is even held that psychology is not a natural science, and that of morality and religion "the naturalist has little right to speak." On such questions, "an excessive, and in a way unreasonable, respect for the opinions of scientific men is characteristic of our modern thought." There is a vague super-naturalism brooding upon the work without once assuming a definite form, and we are frequently reminded of the author's words:—"The naturalists have been compelled to make suppositions concerning the action of natural forces which are almost, if not quite, as mystical as those which of old they condemned the theologians for holding." While the work cannot be called "the" or "an" interpretation of nature, it is yet one of the most stimulating and instructive books of recent days.

MATTOON W. CURTIS.

A. Bronson Alcott: His Life and Philosophy. By F. B. SANBORN and W. T. HARRIS, Boston, Roberts Brothers, 1893.—pp. ix, 1-354; 354-679.

In these two goodly volumes we have, for the first time, an adequate life of one of the most interesting of the Concord philosophers, together with an authoritative exposition of his philosophical system. With the life as such, we are not directly concerned. It will be found interesting and instructive, however, even to the many who, for various reasons, are somewhat reluctant to apply the term 'philosopher' to the subject of the biography. Moreover, it would be a great mistake for one wholly unacquainted with the main facts of Mr. Alcott's life to turn directly to the exposition of his system. The life and the doctrine are hardly to be separated.

Mr. Harris is particularly well qualified to act as Mr. Alcott's interpreter. He himself lived through the 'Transcendental' movement in all its phases, and is able now to describe with kindly humor the extravagance of the apostles of reform, as well as to point out what he believes to be elements of abiding truth in their doctrine. Also, he was for more than thirty years Mr. Alcott's personal friend, sympathizer, and admirer, without being his disciple. One feels that the Concord philosopher's system is being faithfully and accurately presented, but one's final attitude can hardly fail to be that of disappointment. Many of the 120 pages devoted to the exposition are almost necessarily taken up with semi-biographical details; and the further one goes with this final and really interesting chapter, the more one feels that one has to do with a benign personality, rather than with a man who materially helped either to state or to solve the ultimate problems of philosophy. Twenty pages are devoted to a popular exposition of Neo-Platonism, while the substantial obligations of our philosopher to this ancient school of thought are frankly shown throughout the chapter. Not that Mr. Alcott was altogether lacking in originality. Starting with a knowledge of the work of the Neo-Platonists which probably was neither very exact nor very extensive, he grasped the fundamental thoughts of the system and reiterated them in a form that was often suggestive, and that sometimes was even impressive, because of the philosopher's manifest earnestness. As Mr. Harris happily remarks, his works "present this world-historic theory as a 'survival' in a person born in our own age."

While such an exposition is all the more valuable for being sympathetic, the reader can hardly fail to rebel at the tone of exaggeration into which Mr. Harris is sometimes betrayed. The following passages, taken almost at random, will illustrate. "Mr. Alcott claims an eminent place among philosophers, on the ground that he revives and announces, from his own insight, this lapse theory of the world" (p. 604). "To one man—the wisest of his generation, however—here was an opportunity not to be neglected. This was Emerson" (p. 606). It is not reassuring to be told: "Mr. Alcott, seated before a company, looked about to see in the faces

of those present any gleams of this transcendental insight, any traces of emancipation from the senses and understanding" (p. 612), and a little further on: "Real proofs are insights into genesis, such as Plotinus and Proclus and Alcott offer us. Emerson's 'Over Soul,' 'Spiritual Laws,' and 'Experience' are models of real proof, though containing no trace of argument" (p. 617). Such passages suggest at once the bias of the writer and the essential weakness of the system which he expounds. One cannot but feel that such speculations belong rather to the realm of poetry than to that of philosophy.

E. A.

Sensation and Intellection, their character and their function in the cognition of the Real and the Ideal. A Thesis, presented for the degree of Ph.D. at the University of Minnesota, by HENRY WEBB BREWSTER, A.B. Minneapolis, The University of Minnesota, 1893. — pp. 164.

The title indicates the aim and character of this monograph. It consists of two parts: Book I investigates the character of sensation and intellection, and Book II the function of sensation and intellection in the cognition of the real and the ideal.

Book I falls into three divisions, and the following sentence from the "Preliminary Outline" explains the order of discussion: "In order clearly to set forth the correlative theory of sensation it is necessary first to analyze the nature of intellection, hence the two terms, sensation and intellection, will be treated in an order the reverse of that in which they appear in the title." Accordingly, in the first part, "Historical Review," Ch. II gives an account of the nature of intellection, from Socrates to Herbart, showing how there has been a general tendency to widen the meaning of the term intellection at the expense of the term sensation; and Chs. III-V present three theories of sensation: Sensational Theory, the identification, either in whole or in part, of sense-perception and sensation (Locke, Hume, Lotze, James, etc.); Component Theory, sensation a subordinate element of sense-perception (Kant, Spencer, etc.); and Correlative Theory, the mutual inclusion of sensation and intellection in every mental state (Green, Dewey, etc.). In the second part, "Critical Analysis," Ch. I gives an analysis of intellection, according to which there are two fundamental principles determining the character of finite knowledge, and three primary laws governing the universal processes of thought. These processes of thought are the categories, a tentative list of which is offered on p. 47; the primary laws are *contradiction*, *mutual limitation*, and *correlation*; and the fundamental principles are *relativity* and *correlativity*. Chs. II-IV contain a criticism of the theories of sensation, the author adopting the Correlative Theory, with the final result: There are three characteristics of consciousness — changing aspects, movements of attention, and fixed phases, corresponding respectively to "(1) the individual element related through (2) functions of the will to (3) the universal element," *i.e.* feeling, will, and thought. But feeling,

will, and thought have each two forms, subjective and objective, and *sensation* is the objective form of feeling, while *intellection* is the objective form of thought. The third part deals with the physical conditions of sensation : nervous system, sense organs, and modifying conditions — mental, physical, and metaphysical.

Book II falls into two divisions — the Real and the Ideal. “The real, . . . is any object of consciousness viewed as absolute and unchangeable in itself ; and the ideal is the same viewed as relative to the functions of consciousness.” The first part treats of the cognition of the real under the correlative phases of force, space, and time, — correlative respectively to will, thought, and feeling ; — and the second part treats of the cognition of the ideal under the similarly correlative phases of the good, the true, and the beautiful, closing with a chapter on the cognition of the ideal-real. In the cognition of each of the phases of the ideal and the real, sensation and intellection — and also will — are involved, but in varying degrees. The Ideal-Real is the infinite Consciousness, which, from the standpoint of the will, is represented (philosophically) as the First Cause and (theologically) as the Incarnate Word ; from the standpoint of sensation (feeling), is represented (philosophically) as an object of intuition and (theologically) as a personal Comforter ; and from the standpoint of intellection, is represented (philosophically) as the Designer of the Universe, and (theologically) as the omniscient Father. This trinity is a concrete Being, both real and ideal, and hence is the Ideal-Real, of which all finite selves are eternal elements.

W. B. ELKIN.

La morale de Spinoza : examen de ses principes et de l'influence qu'elle a exercée dans les temps modernes. Par RENÉ WORMS, ancien élève de l'école normale supérieure agrégé de philosophie. Ouvrage couronné par l'Institut (Académie des Sciences morales et politiques). Paris, Librairie Hachette et Cie., 1892. — pp. 334.

This interesting book consists of an introduction and two distinct parts. In the introduction, which occupies the first 25 pages, Spinoza's debt to previous systems is shown. Part I consists of an exposition and criticism of Spinoza's ethical system. The author believes that in logical consistency Spinoza's doctrine is almost all that could be desired. Moreover, it is a marvel of depth and of comprehensiveness, uniting as it does the best elements in both Epicureanism and Stoicism. But it fails in that it takes a wholly intellectual view of the world, thus neglecting two essential factors of the moral life, feeling and freedom of the will (in the sense of indeterminism). Part II, which occupies about the same space as Part I, shows somewhat in detail the influence exerted by Spinoza's ethical system from his own time to the present. (A review will follow.)

E. A.

Kantlexikon. Ein Handbuch für Freunde der Kant'schen Philosophie. Von GUSTAV WEIGNER. Berlin, Wiegandt & Schotte, 1893.—PP. 347.

The purpose of this book is to render aid to students of Kant by citing the more important passages which state or explain the most significant ideas and doctrines of his philosophical system. Hartenstein's edition of 1867 has been used, and the extracts from it are generally given literally. The work is furnished with two tables. Table A indicates the volumes and pages of Hartenstein edition, and the name of the treatises from which passages have been taken. From this we see that, although many of the extracts are from the Prolegomena and the three Kritiken, thirty-seven of Kant's works in all are represented. Table B gives an alphabetical list of the notions and doctrines expounded—nearly eight hundred in all—with the number of the explanatory passages, and references to the classification given in Table A. The quotations themselves are sometimes Kant's formal definitions of the concepts which he employs, sometimes longer discussions of important doctrines. The author seems to have compiled the work by gleaning significant passages from one after another of Kant's treatises, and setting them down *seriatim* without any attempt to bring together those extracts which deal with the same or with kindred subjects. Thus the book cannot take the place of a good index, but as none of the standard editions of Kant supply this desideratum, Herr Weigner's lexikon will prove extremely useful and convenient. J. E. C.

Lectures on the History of Philosophy. By GEORG WILHELM FRIEDRICH HEGEL. Translated from the German by E. S. HALDANE. In three volumes. Vol. I. London, Kegan Paul, Trench, Trübner & Co., 1892.—pp. xvii, 487.

Hegel's lectures on the history of philosophy were delivered, as Michelet tells us in the preface of the first German edition, in Jena, Heidelberg, and Berlin between the years 1805 and 1830 and were published in the last named city between 1833-36. They were prepared for publication from Hegel's MSS., which he used only in Jena when he had not yet begun to deliver his lectures extempore and from the lecture-notes of students who heard the courses in Berlin. This patch-work character of the lectures, due to the manner of their preparation for publication, enhances, as Haldane points out, the difficulty of translating them. This English version is made from the second and amended edition published in 1840 and prepared by Michelet from Hegel's MSS., marginal emendations and additions, and students' notes.

The first volume of the English translation contains all of the first volume of the original edition and the chapters on the Sophists, Sokrates, and the Sokratics of Vol. II, bringing the history of Greek philosophy down to

Plato. The translation is not always felicitous, nor is it always faithful; still, when regarded as the rendering of a very difficult piece of German prose, it is not without a certain comeliness of style. Now and again the English is inadequate or falls below the original in directness and intelligibility, as in the chapter on Sokrates (near the beginning): "For a mental turning-point exhibited itself in him in the form of philosophic thought"; "world-famed" (*welthistorische*) is hardly an equivalent of Hegel's word, nor is "shortly" (*kurz*) in the following sentence the best English word for that meaning. The third sentence in the section on the Cyrenaic School is cumbrous and by no means adequately represents the sharp, clear (not always characteristic of the German manner) expression of the original. Instances like these, which I have taken at random, may be found throughout the volume, and indicate that the translation is not quite all that could be desired.

W. H.

The Nicomachean Ethics of Aristotle. Translated with an analysis and critical notes by J. E. C. WELLDON, M.A., Head Master of Harrow School. London and New York, Macmillan & Co., 1892. — lxxvii, 352.

Welldon here continues after an interval of four years his translations of Aristotle. The *Politics* and *Rhetoric* were already favorably known. The text from which the translation is made is Bekker's octavo edition (1881). An analysis of the *ethics* by books and chapters, which precedes the translation, is full, clear, and skilfully made. Students will find it an important help in getting a brief and sharply defined idea of the whole or any part of the work. The value of the translation is greatly enhanced by marginal references facilitating the comparison of related passages; footnotes (written with a judiciously sparing hand) provide such elucidation of the text as the general reader needs. With an English translation such as this the moral philosophy of Aristotle ought to be widely read. The gaps are filled in, as far as is permissible in a faithful version, and such additions are italicised as translator's glosses; the rendering is as clear and readable as the scrappy and disconnected original allows, and altogether Welldon has given us by far the best translation of the *Ethics* we have in English.

W. H.

Grundzüge der physiologischen Psychologie. Von WILHELM WUNDT, Professor an der Universität zu Leipzig. Vierte umgearbeitete Auflage. Erster Band, mit 143 Holzschnitten. Leipzig: Verlag von Wilhelm Engelmann, 1893. — 8vo., pp. xvi, 600.

Students of psychology will welcome with unmixed satisfaction the appearance, in its fourth edition, of this first volume of Wundt's *Grundzüge*. The book is larger by some sixty pages than it was in the third edition. There are no very striking alterations in the Table of Contents; but the revision

of the work has been thorough, and there are many changes in the text, — corrections, modifications of opinion or of exposition, and amplifications due to the progress of the science. Review will follow. E. B. T.

The following books have also been received :

Negative Beneficence and Positive Beneficence. Being parts V and VI of *The Principles of Ethics.* By HERBERT SPENCER. New York, D. Appleton & Co., 1893. — pp. 263-485.

Political Economy and Ethics. By JAMES GIBSON HUME, A.M., Ph.D. Toronto, J. E. Bryant Co., 1893. — pp. 40.

Des phénomènes de synopsie. Par TH. FLOURNAY. Paris, Alcan ; Genève, Ch. Eggimann et Cie., 1893. — pp. 259.

Les lois sociologiques. Par GUILLAUME DE GREEF. [Bibliothèque de Philosophie Contemporaine.] Paris, Alcan, 1893. — pp. 181.

Le problème de la conscience du moi. Par le DR. PAUL CARUS. Traduit de l'anglais par A. MONOD. Paris, Alcan, 1893. — pp. 144.

NOTES.

When announcing the series of articles on German Kantian Bibliography at present appearing in the REVIEW, we referred to the author as "Professor Adickes of the University of Kiel." The editors alone are responsible for this statement, which Dr. Adickes now requests us to correct. Dr. Adickes is a gymnasium teacher in Kiel; and one of the foremost Kantian scholars in Germany. The theory advanced in his edition of the *Kritik der reinen Vernunft* regarding the composite nature of that work has been pretty generally accepted either wholly or in part; and his work entitled, *Kant's Systematik als Systembildender Factor* has oftentimes proved exceedingly 'light-giving' in accounting for Kant's method of treatment. The present series of articles we are sure bear witness to Dr. Adickes' excellent judgment as well as to the high character of his scholarship.

One of the important advances lately made by the University of the State of Missouri, has been the establishment of a separate chair of philosophy, all instruction in the philosophical sciences having been given hitherto by the Professor of Pedagogy. The new chair has been filled by the appointment of Dr. Frank Thilly of the Sage School of Philosophy, Cornell University. Dr. Thilly received his baccalaureate degree from the University of Cincinnati in 1887. He then spent four years at the Universities of Berlin and Heidelberg, studying mainly philosophy and psychology, but also hearing lectures from Adolf Wagner and Knies in political economy, and Dubois Reymond in biology. In 1891 he took the degree of Doctor of Philosophy at the University of Heidelberg. During 1891-92 Dr. Thilly was Fellow in the Sage School of Philosophy, and devoted his attention mainly to a study of modern ethical problems. At the expiration of his Fellowship, he was appointed Instructor of Logic and Metaphysics in the same School, and proved himself in that capacity an exceptionally successful teacher. Dr. Thilly's Inaugural Dissertation, *Leibnizens Streit gegen Locke in Ansehung der Angeborenen Ideen*, was favorably noticed in No. 2 of this REVIEW, and many book-reviews and critical notices from his pen have appeared in our pages from time to time. We are pleased, moreover, to state that we have assurances of his continued coöperation and support.

The vacancy in the Sage School of Philosophy caused by Dr. Thilly's resignation has been filled by the appointment of Mr. F. C. S. Schiller,

M.A. (Oxon.), who has already been a frequent contributor to the REVIEW. Mr. Schiller is the author of a metaphysical work published anonymously under the title *Riddles of the Sphinx*, which was reviewed in No. 5 of this journal.

Professor J. M. Baldwin of the University of Toronto has been appointed to the Stuart Professorship of Psychology in the College of New Jersey, Princeton, N. J. He will assume the duties of his new position at the opening of the collegiate year.

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OLD AND NEW IN PHILOSOPHIC METHOD.

IF it be true, as Hume said, that Metaphysics is the most contentious of sciences, it is because the problem of existence is vast and intricate, while our powers are limited. Only by slow advances do we come to know what the problem includes; and, in the midst of this attempt, we keep on constructing hypotheses which seem to account for what has been ascertained. We have only to bear in mind the situation in which we are placed, in order to understand how it should happen that old theories are constantly disappearing, and new theories arising. If any one ask, "Why has Philosophy not a fixed form as it is with the exact sciences?" this is the answer: — because the enigma of existence is great, and theories are apt to be found insufficient. This is equivalent to saying that knowledge is constantly widening, and thought continually striving to *account for* what is known. The want of fixedness of form, often urged as a complaint against Philosophy, is only the indication of human progress. The power of persistent thought proves the test of all past thought, and becomes a measure of possible advances in the immediate future. The rise and fall of theories thus belongs to the history of human thought. If, as Shakespeare says, man is a being of "large discourse looking before and after," each new theory which arrests attention is, as Carlyle suggests, telling the universe "what o'clock it really is." It marks the persistence of thought in the history of our race. It is this which proves the test of theory. Thus thought shows itself greater than observational science, coming more home to the heart of the

race, as it leads nearer to the understanding of existence as a whole.

This view, which gives a prominent place to our great thinkers, gives also a subordinate place to each of them. Somehow, the thought of the *race* becomes a test of the thoughts of our grandest thinkers themselves. It is not that the race as a whole can do its own thinking out of the great questions raised; but that it is equal to the task of testing the thought. Reason is greater than the thinker. By this we mean that the power commonly possessed proves the test of the achievements of the specially gifted. A new hypothesis is proclaimed; it appears a great discovery; there arises a considerable stir and din, followed by large disputation as to the merits of the new idea. By and by, the movement begins to slacken, things grow quiet again. Thereafter it is found that the universe has been silently moving on its way, with its problem still unsolved. The new idea was not so great as the dawn of enthusiastic admiration suggested. When sunset comes, the enigma of existence is still wreathed in mystic shadows.

But a fresh dawn is moving towards us, preparing for a new day of effort. This is the world's hope. Observational science has larger work before it; Philosophy has a fresh task for guidance of the general thought; God's gift of reason, entrusted to the race as a whole, will do its part,—testing, rejecting, and accepting. When the fixed relations of research and reflexion are understood, it appears that theories we are rejecting have not been mere phantoms and illusions. Our interest and inquiry have not proved waste of time; our expectations are not wholly belied. When we reject the alluring hypothesis, it is not as if we had torn a sheet of paper to fragments and given these to the winds. It is not as when the ashes of the engine-room are thrown overboard to settle in ocean-depths, while the ship holds on her way. Rejected theories count for more than exhausted steam-power. Theories belong to the organization of thought. The history of their relations, is the history of thought itself. While we

are tracing their history, thought is holding on its determined course,—its future, the outcome of its past. The greatest thinkers are the leaders for the time, whose fitness appears in their understanding of the times. Occasionally, we speak of them as 'before their time,' and so indeed they are, for the man must be in advance who is to lead; but very soon they are behind the time, and this also must be, else leadership had little meaning. Their presence and place have been marked enough; but their greatness may appear even more in that which follows, when the standard is borne onwards by other hands.

These considerations prepare the way for appreciation of the contrasts between old and new in philosophic method. The nature of the end we have in view, will become the test of the method we employ. The largeness of the problem of existence will require division of labor, and will impose the necessity for movement, now in one direction, now in another. From this it must follow that advance will not prove so large as at first sight appears. The chances are that the call to halt will sound, in order that other portions of the army of investigation may be brought up to line. And if in this way the next sign of gain be visible on quite another line, that too will be temporary in the annals of thought. Hence, it follows that no theory can be final, for all theory must gather into the continent of progress. The history of science and that of philosophy unite in supplying illustration.

The range of philosophic history spreads out in wide expanse, too large to be included in the present sketch. But if for a moment reference is made to the great names of antiquity, illustration lies ready to hand in the contrast of the theories whose elaboration gave to Greek thought the leadership of the nations, before the Christian era. We find Socrates dealing with the practical life of man; Plato unfolding an ideal theory of existence in which The Good appears the centre and source of all; and Aristotle subdividing the field of inquiry according as sciences are speculative or practical. The three great thinkers have each a marked individuality;

the theories advanced are as distinct in character as the men who worked them out; and nothing can be more certain, historically and philosophically, than that all three contributed to the advance of thought in a very remarkable degree. Nothing coming in immediate succession after these three, presented work capable of comparison with theirs. There is an action and a reaction in rational advance, as in the material world. It seems as if a period of still preparation must be interposed, in order that a later movement may stir enthusiasm with a sense of the promise of new achievements.

When observation is confined to modern times, the impressiveness of the lesson is even more marked. The revival of letters proves the revival of philosophic movement. Antiquity has its lesson, in order that the modern epoch may mark a new departure. Inquiry breaks out in all directions. We reach a scientific age, with appliances altogether new. Fresh knowledge bursts upon us in manifold forms. Under the common inspiration, Philosophy makes a new start. Theory follows theory in rapid succession. The spirit of scepticism comes with destructive power on the field, again the spirit of construction is roused to fresh effort, and appears in new force. There is no little confusion; but it is confusion belonging to advance. Man finds that the problem of existence is immeasurably more intricate than had been imagined. The vastness of the universe appears as before; but subdivision of labor, diversity of structure to secure ends only dimly recognized by us, and correlation of all in unity of system, stand out to view in the light of a new revelation. No wonder that observational science became exultant, and that a disposition arose to estimate philosophy as a thing of ancient history. Our minds are not large enough to take in Nature's revelations in single pictures. The lens is too small for the landscape. Hence novelties are the attractions of the day. These are the choice bits in the scene. But the great force of Reason is at the heart of things; the problems of existence are the same for all time; and when novelties begin to lose their freshness, old questions return upon us, and we desire

to know how they look in the altered circumstances. A new architecture has found expression in the enlarged structure, with much confusion of scaffolding and no little waste material lying around; but the possessor comes to enter upon occupancy, and adaptation to his requirements becomes the test of the new erection. Philosophy does not dwell out of doors, admiring only the front elevation. Philosophy must find a dwelling within, the outward structure must be put to proof by the life for which it is a dwelling. Even the newest structure may need some measure of remodelling. No less obviously, we need to say, that the possessor must adapt himself to the new dwelling,—must be content to regard cherished associations as things of the past,—and must find new attractions in his new dwelling. Beyond doubt, philosophy must adapt itself to a new scientific environment. The problem for the time is, how old and new can coalesce; how Science and Philosophy can together revise their relations, so as to show that knowledge and thought meet each other in the daily life.

When it is thus obvious that the end in view must shape our efforts, we are led to recognize the need for something new in method, and, along with this, a further demand for deciding its relation to the old. Some change in method will be a consequence of altered conditions connected with the advance of thought. Just as the angle of vision changes the aspect even of the mountain range, though that is the most enduring of all forms in Nature; so it is with the vast problem of existence itself. It is not that existence has changed from what it was in early ages; it is only that we, as observers and thinkers, have in these later days reached a point of vision, which men of earlier ages had never held. The world is seen to be greater than we knew, and our modes of thought must be expanded accordingly.

These references are designed to guide towards some appreciation of our present situation in philosophy, as that has been largely influenced by recent advances in physical science, pushing into prominence that field of investigation which

has come to be designated Physico-psychology. This has introduced references to the 'mechanism' of thought, and has concentrated wide interest on the relations of structure to the movements of intelligence and rational purpose. Physiology and Psychology have thus come into closer relations. A considerable range of investigation concerned with the problems of mental philosophy has been carried over into the physiological laboratory. There the investigation is prosecuted by use of complex instruments. By means of these, results are set down in exact measurements. What is the significance and promise of this new departure? This is a question of much interest as bearing on the future of philosophy.

The answer will be most readily found by considering the range of inquiry belonging to this division of work in the physiological laboratory. We need to mark with special care how much of it is concerned with organic action, how much with mental. According as results are placed on the one side, or on the other, will be their value as a contribution towards our knowledge of rational life. At the same time, whatever be the distribution of results, — both sets of facts held in combination must add greatly to our understanding of human life.

Research bringing into use mechanical contrivances must be largely physiological. It can come into relation with mental facts, only as these are related with the functions of organic life. The area of vision must be filled with manifestation of physical action. By this method we reach mind only indirectly, — only as we stand on the border-land, where exchange of contributions takes place, as commodities are exchanged across the frontier of neighboring nationalities. Such border-land, however, admits of some knowledge of the territory across the line; and such knowledge as this we desire to have, along with any wider knowledge of physical functions which may thus be obtained.

The range of observation belonging to experimental psychology must be concerned mainly with our sensibilities, as these depend upon our relation to the external world; and with the various forms of our activity coming under the

notice of others. Some illustrations will show how the physical and mental are taken in relation to each other. Ferrier's researches into localization of functions in the brain, showed well defined regions which could be marked as centres of sensibility, and other regions proved to be centres of movement connected with muscular activity. These results are concerned with the two sides of the nerve system, and their centre in the brain; the researches of Ward, and Wundt, and Münsterberg, and James of Harvard, have been directed on all questions bearing on the movements of the nerve system as related to experience in consciousness. Observation in this field has been aided by a set of instruments capable of recording graphically the movements taking place along the nerve lines. In this way investigations have been conducted as to the inflow of sensory movement, and the overflow of movement towards the muscles. The only thing new in these observations is the rate of communication between the extremities and the brain, on the one side, and the rate of communication on the other, when the purpose is formed to move the muscles, reckoning the discharge of force from the brain when it has to travel to the hand or to the foot. To these may be added estimates of the comparative coarseness or fineness of impression made on the nerves of sensibility. All this belongs to the physical side, and gives us nothing more than measurements making it possible to state in exact figures the variation which may appear between the minimum and the maximum rate or volume of movement.

For mental philosophy, interest concentrates on observations passing beyond these limits, enabling us to contemplate mental activity from the standpoint of the physiologist. This leads into a study of relations, and intervals, and associations, and coördination of movements by direct exercise of will. Here we come more closely into relation with conscious experience and self-determination. How fast an impression can travel to the brain, is a question which when answered throws little light on the mental facts following upon the sensory impression. But we are brought closer to the facts of the personal life,

when we come to observe combinations of physical movements concerned in the execution of our own purpose; and still closer, when we see how constitutional sensibilities react, and how habits come to affect activity. Such observations are likely to throw much light on the characteristics of a rational life as conditioned by our physical nature.

The value of the conclusions reached must, however, remain quite secondary and subordinate to the knowledge of mind itself, directly obtained from consciousness. Some states of mind have in them much closer affinity with physical functions than others. These have by their nature more of impulsive force, and in this way their effects come much more directly within the field of vision occupied by the external observer. But the boundary line between mental action and physical is very broadly marked. The impulsive experience is known in our consciousness, it is not known as in our nerves and muscles, even when the effect appears along these lines; movements in nerves and muscles are not known in consciousness, and cannot be known apart from external observation. The physiologist who challenges the claims of mental philosophy, invariably raises a protest against *the introspective method*, as if the turning in upon our own consciousness were quite untrustworthy. Such critics have the field of research undisputed in the inquiries just described. They have the additional pleasure of having their results accepted without challenge. No one presumes to question the accuracy of the chronograph and myograph. But the results are a record of physical actions. It is certainly true that the actions observed are all in close relation with action of mind. But the knowledge of this is obtained only through the testimony of consciousness. Psycho-physiology makes its appeal to Introspection.

Here the inevitable limitation of experimental psychology becomes apparent. Its discoveries concerning mind are only such as can be made by looking across the line; they cannot include anything belonging to the heart of the country, whose boundary-line marks the limit of advance. No possible objection can be offered to the point of observation chosen; nor can there be doubt of the value of the results obtained;

but these do not constitute a psychology, or doctrine of the soul. At best, they supply a view of the soul's relations with its environment, more especially with its own organism, as the vehicle of sensibility and of motion. But mental action is not included. The further we advance into the knowledge of mind, the further we travel from the border land on which the results are obtained. Thus Experimental Psychology is only an auxiliary to mental philosophy. The new method cannot displace the old; the new cannot do any part of the work which has been undertaken by the old. The two must do their several parts. Combined, they will yield a more complete representation of human life than has yet been found.

Testimony in support of this double conclusion may be gathered in abundance from the pages of experimental psychologists. Even while magnifying attendant physical phenomena, they grant the priority and superiority of mental activity. Thus, when Professor James, in his introductory claim for Experimental Psychology, says that "mental facts cannot be properly studied apart from the physical environment of which they take cognizance,"¹ he recognizes the distinction between body and mind, admits that knowledge belongs to the latter, and advances a plea which is good for no more than this, that life and its environment must be taken together. This is virtually to admit that mind is known only by introspection; that physical accompaniments can be known only by observation, aided by laboratory work; that even these accompaniments can be interpreted only as the mind takes cognizance of them. At the same time the claim is obviously a valid one, that we study mind in relation to its environment, organic and material. As we cannot contemplate environment without reference to the life unfolding in it, so is it true that we cannot study the life itself without regard to the range of its relations.

But all this being granted, the great perplexities of mental science remain untouched by the new method of investigation. By it the observer cannot approach the grand characteristics of rational life, including reflection and the self-direction of

¹ *Text-Book of Psychology*, p. 3.

ethical conduct. By the old pathways of introspection more must come and go as aforesaid, if they are to reach any adequate science of human life.

On the other hand, we have much to expect from the fresh start which has been given to study of the conditions of our life by experimental psychology. This expectation does not arise merely from the fact that nothing concerning human life can fail to interest us. It rests on the deeper reason, that many of the intellectual and moral characteristics of human life are incapable of being fully appreciated until we have obtained some larger knowledge of the physical conditions with which they are related. We are waiting for fresh discovery, in order to have fuller knowledge of the conditions of our life. But, if such discovery is to be made, as we have reason to desire, it must be observed that towards such achievement experimental psychology can be only auxiliary. We need to get much beyond the records of the chronograph and myograph; and beyond observations on the temperature of the brain during profound reflection, and beyond the effects of concentrated study on the nutritive properties of the blood. Things more subtle, and more closely connected with the higher life of the soul, are the things specially needing to be understood, in order to reach fuller knowledge of ourselves.

Without being able to forecast what remains for discovery, it is easy to indicate the great wants to be supplied by continued research on the border-land where soul and body meet, and where activity, physical and mental, acts upon the correlated life. Our deeper problems lie far in advance of the field of investigation here contemplated; yet many of those problems may have unexpected light thrown upon them by enlarged knowledge of the physical conditions of our existence. Specially, we desire to have a fuller knowledge of our emotional nature, and of the mighty influence of sentiment in the quickening of our activity. We need a more comprehensive view of the manner in which physical sensibilities react on mental life. Reversing the order, we need to know more fully how mind reacts on the physical condition. What are the varied forms in which physical susceptibilities influence

the development and action of the mind; on the other hand, what are the channels of influence by which mental activity comes to tell upon the physical life? There are large fields of enquiry here, giving promise of large gain in the future.

Beyond the questions concerning brain temperature, connected with thought-action, as well as with increased blood-supply, lies the more interesting enquiry, how certain exercises of imagination, contemplation, and reflection not only affect circulation, but exert a quickening influence over the bodily life as a whole. Along with this, we desire to have wider views of our relations to Nature, as these are connected with our sense of the beautiful in form, and color, and sound. What is the full explanation of the sense of pleasure experienced when we look on a vast landscape, richly varied in mountain and valley, in wood and river, in heath and greensward. We do not half understand what are the secret springs of physical susceptibility touched by the single act of vision which includes this wealth of scenery. Too vast in range the scene is to engage the efforts of the most skilled artist; yet the least skilled in eye, and deftness of hand, and blending of colors, shares with the artist in the thrill of delight when such a scene is stretched before us in the gorgeous sunshine. Turning to a different phase of experience, we have a series of questions, rising in rapid succession. What is musical susceptibility, — how wide is its physical and mental range, — how far does culture of musical taste affect the whole life, physical and mental, — and how far does mental susceptibility, capable of being cultivated by ourselves without participation in technique, act upon the physical condition, inducing a growing organic aptitude for appreciation of the riches of sound? Towards answering of such questions, our new methods of experimental psychology must render important help. The sooner a resolute advance is made into these regions, the better it will be for us all. There can be little doubt that, in approaching towards an answer of such questions, we shall come to a fuller understanding of the possibilities of human life in all its higher aspects.

HENRY CALDERWOOD.

UNIVERSITY OF EDINBURGH.

SELF-REALIZATION AS THE MORAL IDEAL.

IF one turn to any of the important ethical discussions of hardly a generation ago, he finds the center of interest in the origin of moral judgments. It was assumed, as matter of course, that ethical theory always has been and always will be divided between two schools—the empiricists and the intuitionists, and that this division exhausts the whole realm. It was assumed that the opposition between utilitarianism and intuitionism is essentially this question of the origin of our knowledge of moral distinctions. Indeed, I do not know a discussion of that period which even suggests the fact so obvious to us, that the division of ethical theories into these two kinds is a cross-division, one relating to the ethical criterion, the other to the method of arriving at knowledge of it. Three main influences were at work, however, in shifting the center of attention to the question of the nature of the moral end itself. Utilitarianism tended to call attention to the character of the end involved in action; the appearance of intuitive utilitarian systems, like that of Sidgwick, showed the insufficiency of the old disjunction; finally the introduction, from Germany, of a mode of ethical thinking which was neither utilitarian nor intuitive, yet agreeing with >the former in holding that the morality of all acts is measured by their efficiency in establishing a certain end, and falling in with the latter in holding that moral ideas are not the result of mere association, but of something in the facts themselves, brought in new problems and new controversies.

In the newer contentions regarding the moral end, the idea of 'self-realization' insists upon its claims. The idea seems to me an important one, bringing out two necessary phases of the ethical ideal: namely, that it cannot lie in subordination >of self to any law outside itself; and that, starting with the self, the end is to be sought in the active, or volitional, side

rather than in the passive, or feeling, side. Yet with those who use the phrase, there is often a tendency, it seems to me, to rest in it as a finality, instead of taking it as a statement of a problem. As warning off from certain defective conceptions, in pointing to an outline of a solution, it is highly serviceable; whether it has any more positive and concrete value depends upon whether the ideas of self and of realization are worked out, or are left as self-explaining assumptions.

As a part of the attempt to give the conception of 'self-realization' a somewhat more precise content, I propose in this paper to criticize one idea of the self more or less explicit in much of current discussion. I thus hope to bring out, by way of contrast, what appears to me the important factor of the conception of self as the ethical ideal. The notion which I wish to criticize is that of the self as a presupposed fixed *schema* or outline, while realization consists in the filling up of this *schema*. The notion which I would suggest as substitute is that of the self as always a concrete *specific* activity; and, therefore, (to anticipate) of the identity of self and realization. It is extremely difficult to find an explicit statement of the doctrine of the presupposed or schematic self, and of realization as the filling up of this outline, and I am, accordingly, to some extent, under the difficulty of having to build up the notion criticized through the very process of criticism. One or two considerations, however, will show that the notion is not a figment or man of straw. Such a theory as that of T. H. Green, for example, with its assumption of an "eternally complete consciousness" constituting the moral self to be realized by man, illustrates what I mean by a fixed and presupposed self. Any theory which makes the self something *to be* realized, which makes the process of moral experience a process of gradually attaining this ideal self, illustrates the same conception. Any theory which does not make the self always 'there and then,' which does not make it a reality as specific and concrete as a growing tree or a moving planet must, in one form or another, set up a rigid self, and conceive of realization as filling up its empty frame-

work. In a previous number of THE PHILOSOPHICAL REVIEW,¹ I criticized the opposition made by Green between the moral ideal as self-satisfaction in general and all special satisfactions of desire. The present paper may be considered a continuation of that, save that now I desire to discuss the question of realization, rather than the question of the ideal, and to emphasize *the notion of a working or practical self* against that of a fixed or presupposed self.

The idea of realization implies the conception of capacities or possibilities. Upon the basis of a presupposed complete self, the *possibilities* of the present, working or individual self are the *actual* content of this presupposed self.² I do not propose to go into the strictly metaphysical difficulties of this conception. The difficulty, however, bound up with the question why a completely realized self should think it worth while to duplicate itself in an unrealized, or relatively empty, self, how it could possibly do this even if it were thought worth while, and why, after the complete self had produced the incomplete self, it should do so under conditions rendering impossible (seemingly eternally so) any adequate approach of the incomplete self to its own completeness—this difficulty, I say, should make us wary of the conception, provided we can find any working theory concerning unrealized powers (capacities) which will avoid the difficulty.

We may accept as a *practical* fact that we do, at a given time, have unrealized powers, or capacities, and that the realization of these powers constitutes, at the time, our moral goal. The question is as to the interpretation of this 'fact.' As the first objection to the interpretation which makes the capacities simply the blank form corresponding to a presupposed perfect

¹ Vol. I, No. 6, Green's Theory of the Moral Motive.

² *E. g.*, "The one divine mind gradually reproduces itself in the human soul. In virtue of this principle in him man has definite capacities, the realization of which, since in it alone he can satisfy himself, forms his true good. They are not realized, however, in any life that can be observed . . . and for this reason we cannot say with any adequacy what the capabilities are." Green, Prolegomena, p. 189. Here we have it definitely implied, the capacities of man are simply the already realized content of the presupposed self. On p. 181 it is even more explicitly stated.

self, let me point out that the only capacities which demand realization, thus forming our ideal, are *specific* capacities; that, if there is any such thing as capacity in general, it never presents itself to our consciousness, much less imposes an end of action upon us. The capacities of a child, for example, are not simply of *a* child, not of a man, but of *this* child, not of any other. So far as they have to do with the ideal to be realized, it is the precise capabilities existing at that exact moment, capabilities as individualized as that place in space and that portion of time which are concerned. Make the capacities 'infinite,' or the content of some presupposed self, instead of actually then and there, actually knowable, and they furnish no end to be executed. And if it be objected that the child should be trained to act with reference to some 'infinite' capacity, some unlimited and immeasurable power which will keep appearing as he grows older, and that failure to take that into account from the first, means a stunted development for the child, the objection will serve to emphasize the point. If this capacity is anything which may be taken into account, then it is a part of the actual definite situation; it is not infinite in the sense of indefinite, although it may be 'infinite' in value — which means, I suppose, that it is the only thing worth specially considering at the time. Suppose, for example, the self which the child is to realize involves some artistic capacity. Let it be said that this end transcends the child's consciousness, and therefore is not an actually present capacity. None the less, the realization of this artistic self can be made the end only if it is present in *some one's* consciousness. The objection means simply that the situation which the parent or the educator sees, the reality upon which he has his eye, is larger than the one which the child sees. It is not a case of contrast between an actuality which is definite, and a presupposed but unknown capacity, but between *a smaller and a larger view* of the actuality. If the child's real end is different from that which would immediately suggest itself to him, it is not because some capacity transcending his specific self (belonging to some presupposed ideal

self) has been set up for him, but because the child is not adequately aware of his specific self. Furthermore, the wider range of the educator's knowledge would be useless merely as wider. The mere fact that he saw further ahead, that he foresaw a later development would not avail in determining the self to be realized unless the educator were capable of translating this development back into the present activities of the child. In other words, in no sense does the artistic capacity of the child, *in general*, fix his end; his end is fixed by the fact that even *now* he has a certain quickness, vividness, and plasticity of vision, a certain deftness of hand, and a certain motor coördination by which his hand is stimulated to work in harmony with his eye. It is such considerations as these, having absolutely nothing to do with *mere* or with general possibilities, but concerned with existing activities, which determine the end of conduct in the case referred to. Capacity, in any sense in which it requires to be realized for the sake of morality, is not only relative to specific action, *but is itself action*.

If capacity is itself definite activity and not simply possibility of activity, the question arises why we conceive of it as capability, not as complete in itself. If, for example, the artistic capacity of the child is already activity of the eye, hand, and brain, and if the realization of this capacity refer not to some remote attainment, but to the immediate activity of the time, why do we think of it as *capacity* at all?

In answer, we may note that our first conception of our activity is highly vague and indeterminate. We are conscious of the activity of our eye and ear in general, but not of just the way in which they work. We are apt, almost certain, however, to identify this partial and abstract conception of their activity with the real activity. Then, when the more specific factors of the activity force themselves into consciousness, these lie outside of the previous *idea* of the activity, and (the activity having been identified with our consciousness of it) seem, therefore, to be external or indifferent to the activity itself.

One of the many of Professor James's important contributions to psychology is his demonstration of the fact that "the only meaning of essence is teleological, and that classification and conception are purely teleological weapons of the mind."¹ He goes on to state that the essence is that *which is so important for my interests* that, comparatively, other properties may be omitted. Now, in our recognition of our own activity, we are, of course, first conscious (consciousness, as explicit, and immediate interest being one and the same) of that phase of our activity which most interests us. When other parts of the activity force themselves upon consciousness, they seem, to some extent, to be accidental, because lying outside of that which we have conceived as *the* activity. We thus come to divide our activity into parts—one the factor which permanently interests us, the other that in which our interest varies from time to time. The factor of enduring interest comes to be thought of as a sort of fixed permanent core, which is *the* reality, but which may, from time to time, go through more or less external changes, or which may assume new, but more or less transitory operations—these further changes and operations corresponding, of course, to those phases of the activity in which our interest is shifting. In the act of vision, for example, the thing that seems nearest us, that which claims continuously our attention, is the eye itself. We thus come to abstract the eye from all special acts of seeing; we make the eye the *essential* thing in sight, and conceive of the circumstances of vision as indeed *circumstances*; as more or less accidental concomitants of the permanent eye. Of course, there is no such thing as the eye in general; in reality, the actual fact is always an act of seeing, and the 'circumstances' are just as 'necessary' and 'essential' parts of the activity as is the eye itself. Or more truly, there is no such thing as this 'eye'; there is only the seeing. Nevertheless, our continuing interest being in the eye, we cannot surrender our abstraction; we only add to it another one—that of certain 'conditions of exercise' as also necessary

¹ James, *Psychology*, Vol. II, p. 335.

and essential to every act. On this side, too, we carry our abstraction to the utmost possible; we say that light, or vibrations of ether, is the essential condition of the act of vision. *The eye now becomes the capacity of seeing; the vibrations of ether, conditions required for the exercise of the capacity.* That is to say, instead of frankly recognizing that eye and vibrations are pure abstractions from the only real thing, the act of seeing, we try to keep the two in their separateness, while we restore their unity by thinking of one as capacity, or possibility to be realized only when the other is present. Instead of the one organic activity we now have an organ on one side, and environment on the other.

But we cannot stop here. The eye in general and the vibrations in general do not, even in their unity, constitute the act of vision. A multitude of other factors are included. These vary from time to time. Those which continue to attract attention least often are dismissed as merely indifferent; others appear with sufficient frequency so that some account of them has to be taken. The original core which was abstracted and identified with the reality, comes to be conceived as capacity for reaching these things as ends also, while they are conceived as conditions that help realize it.¹

With this in mind let us return to our child possessed of an artistic capacity. I hope the preceding discussion has made it obvious that the recognition of artistic capacity means that we are now becoming more aware of what the concrete reality of the child's activity is. We are not primarily finding out what he *may* be, but what he *is*. But having already identified his self with what we previously knew of it, we try to reconcile our two different conceptions by still keeping our old

¹ In my *Outlines of Ethics*, pp. 97-102, I have developed this same idea by showing that we may analyze individuality into the two sides of 'capacity' and 'environment' (this, of course, being what I have above termed 'conditions of action'), and then destroy the separateness seemingly involved in this analysis by recognizing that either of these, taken in its totality, *is* the other. In an article entitled "The Superstition of Necessity" in the *Monist*, Vol. III, No. 3, I have developed at greater length the idea that necessity and possibility are simply the two correlative abstractions into which the one reality falls apart during the process of our conscious apprehension of it.

idea of the child's powers of his eye, hand, etc., but attributing to them new capacities to be realized under certain conditions — these conditions, in turn, being simply the new factors which we have now found involved in the activity, though external to it *so far as our previous knowledge was concerned*. We call any activity capacity, in other words, whenever we first take it abstractly, or at less than its full meaning, and then add to it further relations which we afterwards find involved in it. We first transform our partial conception into a rigid fact, and then, discovering that there is more than the bare fact which we have so far taken into account, we call this broken-off fact capacity for the something more.

To realize capacity does not mean, therefore, to act so as to fill up some presupposed ideal self. It means to act at the height of action, to realize its full meaning. The child realizes his artistic capacity whenever he acts with the completeness of his existing powers. To realize capacity means to act concretely, not abstractly; it is primarily a direction to us with reference to knowledge, not with reference to performance. It means: do not act until you have seen the relations, the content, of your act. It means: let there be for you all the meaning in the act that there could be for any intelligence which saw it in its reality and not abstractly. The whole point is expressed when we say that no possible future activities or conditions have anything to do with the present action except as they enable us to take deeper account of the present activity, to get beyond the mere superficialities of the act, to see it in its totality. Indeed, if required to go here into the logic of the matter, I think it could be shown that these future acts and conditions *are* simply the present act in its mediated content. But, in any case, to realize capacity means to make the special act which has to be performed an activity of the entire *present* self — so far is it from being one step towards the attainment of a remote ideal self.

One illustration will serve, possibly, to enforce the point practically as well as theoretically. We have to a considerable

extent, given up thinking of this life as merely a preparation for another life.¹ Very largely, however, we think of some parts of this life as merely preparatory to other later stages of it. It is so very largely as to the process of education ; and if I were asked to name the most needed of all reforms in the spirit of education, I should say : "Cease conceiving of education as mere preparation for later life, and make of it the full meaning of the present life." And to add that only in this case does it become truly a preparation for after life is not the paradox it seems. An activity which does not have worth enough to be carried on for its own sake cannot be very effective as a preparation for something else. By making the present activity the expression of the full meaning of the case, that activity is, indeed, an end in itself, not a mere means to something beyond itself ; but, in being a totality, it is also the condition of all future integral action. It forms the habit of requiring that every act be an outlet of the whole self, and it provides the instruments of such complete functioning.

To suppose that an infant cannot take a complete and present interest in learning to babble simple words because this is not the same as rolling off ponderous polysyllables, or that there is any way for him to attain the mastery of the complexities of language save as his attention is *completely* taken up at the proper time with his babbling, is equivalent to that conception of the realization of capacity which makes it a possibility, with reference to some 'infinite' ideal in general.

¹ This separation of 'this' world and the 'other' world serves itself to illustrate the point. The conception of the other world arose with the dawning conception of spiritual meanings beyond those as yet realized in life. But life had been identified with the previous conceptions of it and thus hardened into a rigid fact which resisted change ; the new meaning could not, therefore, be put into life (or this world), and so was dislocated into another life. But the value of the spiritual ideal thus set off was in deepening the insight into the significance of actual life, until it was read back into this actual existence, transforming its meaning. So far as we are yet half way between the complete separation and the complete identification, we consider this world as preparation, or capacity, for the next. We thus attempt to retain the separateness of the two activities while at the same time we recognize the facts which point to their identity. The conception of capacity, when analyzed, will be found in every case to be just this go-between in our understanding of an activity.

In conceiving of capacity, then, not as mere possibility of an ideal or infinite self, but as the more adequate comprehension and treatment of the present activity, we are enabled to substitute a working conception of the self for a metaphysical definition of it. We are also, I believe, enabled to get rid of a difficulty which everyone has felt; in one way or another, in the self-realization theory. In the ordinary conception of the presupposed self, that self is already there as a fixed fact, even though it be as an eternal self. The only reason for performing any moral act is then *for* this self. Whatever is done, is done for this fixed self. I do not believe it possible to state this theory in a way which does not make action selfish in the bad sense of selfish.¹ When we condemn an act as bad, because selfish, we always mean, I think, exactly this: the person in question acted from interest in his past or fixed self, instead of holding the self open for instruction; — instead, that is, of finding the self in the activity called for by the situation. I do not see that it is a bit better to act to *get* goodness *for* the self, than it is to get pleasure for the self. The selfishness of saints who are bound to maintain their own saintliness at all hazards, is Pharisaism; and Pharisaism is hardly more lovable, or more practically valuable, than is voluptuarism. *Fiat justitia, ruat coelum*, will serve, if it means: Let the needed thing be done, though the heavens of my past, or fixed, or presupposed self fall. The man who interprets the saying to mean: Let me keep my precious self moral, though the heavens of public action fall, is as despicable personally as he is dangerous socially. He has identified himself with his past notions of himself, and, refusing to allow the fructifying pollen of experience to touch them, refusing to revise his conception of himself in the light of the widest situation in which he finds himself, he begins to disintegrate and becomes a standing menace to his community or group. It is not action *for* the self that is required (thus setting up a fixed self which is

¹ Selfish, of course, in one sense, all action is; but the point here is that if the self is there in some fixed sense already, and action takes place for this self, then, logically, action is selfish in that sense of selfish motive for which we condemn any one.

simply going to *get* something more, wealth, pleasure, morality, or whatever), but action *as* the self. To find the self in the highest and fullest activity possible at the time, and to perform the act in the consciousness of its complete identification with self (which means, I take it, with complete interest) is morality, and is realization.

The method with which Green meets the difficulty (though he never, as far as I recall, *specifically* recognizes it) is to split the presupposed self into two parts, one the self so far as realized up to date, the other part the ideal and as yet unrealized self. The realized self then becomes the agent, the ideal self the goal of action. The realized self acts *for* the ideal self. In so acting, its motive is the ideal self, perfection, goodness.¹ We might ask, how, with such a break between the already realized self and the ideal self, the ideal self can possibly become an end at all; we might ask, that is, how this ethical theory is to be reconciled with Green's psychological theory that the object of desire is always the self. With this complete breach of continuity, it is difficult to see how the 'ideal self' can interest the agent (the realized self) at all. But this might take us too far from our immediate purpose; and it is enough here to repeat, in changed form, the objection just made. If the particular act is done for the sake of goodness in general, then, and in so far, it is done immorally. For morality consists in not degrading any required act into a mere means towards an end lying outside itself, but in doing it for its own sake, or, again, in doing it *as self*. It is, I think, a simple psychological fact that no act can be completely done save as it absorbs attention.² If, then, while doing the act attention must also be directed upon some outside ideal of goodness, the act must suffer, being divided. Not being done for its own sake, or as self, it is only partially done.³ In other words, acts are to be

¹ See, for example, Prolegomena, pp. 202-205.

² I cannot refrain from saying that to my own mind this statement is purely tautological. The attention is not something outside the act, and then directed upon it, but absorption of attention and fulness of activity are two ways of naming the same thing.

³ We should, then, reverse Kant's statement. Instead of saying that an act

done *as* good, not for the sake of goodness; for to call an act good means that it is the full activity or self.

It will take us back to our starting-point and round out the argument, if we note the fact that this division of the self into two separate selves (one the realized self, the other the ideal self), is again the fallacy of hypostatizing into separate entities what in reality are simply two stages of insight upon our own part. This 'realized self' is no reality by itself; it is simply our partial conception of the self erected into an entity. Recognizing its incomplete character, we bring in what we have left out and call it the 'ideal self.' Then by way of dealing with the fact that we have not two selves here at all, but simply a less and a more adequate insight into the same self, we insert the idea of one of these selves realizing the other. We have an insight which first takes the activity abstractly, and, by cutting off some of its intrinsic relations, arrests it and makes of it a merely realized, or past self; when we perceive these intrinsic relations, instead of using them to correct our previous idea, thus grasping the one continuous activity, we set them off by themselves as ideal — as something *to be* realized. Such is the natural history of the fixed distinction between the realized and the ideal self. It has same source as the process which gives rise to the notion of capacities as possibilities in general.

The more one is convinced that the pressing need of the day, in order to make headway against hedonistic ethics on one side and theological ethics on the other, is an ethics rooted and grounded in the self, the greater is the demand that the self be conceived as a working, practical self, carrying within the rhythm of its own process both 'realized' and 'ideal' self. The current ethics of the self (falsely named Neo-Hegelian, being in truth Neo-Fichtean) are too apt to stop with a metaphysical definition, which seems to solve problems in general, but at the expense of the practical problems which alone really

is moral only when done from consciousness of duty, we should say that it is immoral (because partial) as long as done *merely* from a sense of duty, and becomes truly moral when done for its own concrete sake.

demand or admit solution. The great need of ethical theory to-day is a conception of the ideal as a working ideal—a conception which shall have the same value and which shall play the same part in ethics that the working hypothesis performs for the natural sciences. The fixed ideal is as distinctly the bane of ethical science to-day as the fixed universe of mediævalism was the bane of the natural science of the Renaissance. As natural science found its outlet by admitting no idea, no theory, as fixed by itself, demanding of every idea that it become fruitful in experiment, so must ethical science purge itself of all conceptions, of all ideals, save those which are developed within and for the sake of practice.

JOHN DEWEY.

UNIVERSITY OF MICHIGAN.

CERTITUDE.

THAT there are truths which are proof against scepticism, is a view widely entertained. Not only are mathematical axioms to be recognized as such ; there are principles that refer to the nature of the mind, and the constitution of the universe in general, which are regarded as necessary beliefs. Passages to this effect from Reid, or Père Buffier, or Dr. McCosh need scarcely be quoted. Cardinal Newman holds that indefectible certitude is possible, and that in the interest of true religion "we need something higher than a balance of arguments." Professor Caird also seems to be upholding the view that we are under necessity to construe the actual world in certain ways, when he says in the Introduction to his *Critical Philosophy of Kant* that "there are principles which scepticism does not and cannot assail"; or, similarly, that "scepticism ends in disclosing a fundamental belief, in relation to which it is impossible to be sceptical."

On the other hand, many thinkers might be cited to whom such confidence appears baseless. Hume held that in regard to matters of fact intuitive or demonstrated certainty is impossible. Bishop Butler's well-known maxim is that Probability is the guide of life. And the common doctrine of logicians, that the inductions of science do not pass beyond probability, has for its consequence a view regarding all matters of fact, which in important respects, resembles that of Hume. How far, then, have we certainty in knowledge? How far are we restricted to probability? A solution of this problem would be of value as a contribution to Logic, or the Psychology of man's rational nature.

We shall first of all examine some of the commonly accepted certainties, with a view to testing their claims. One of the primary assurances is that which each man has of his own existence. The name of Descartes is so intimately associated

with the enunciation of this certainty, that, for our present purpose, it is best to institute a critical examination of his arguments. Descartes professed to have sounded the possibilities of doubt : he doubted the reports of the senses, the existence of external things, the validity of his most careful reasonings, even mathematical demonstrations. But he touched the rock of certainty in the assurance of his own existence. *Cogito, ergo sum.* He who should doubt his existence, would thereby prove it. Descartes set out to search for an Archimedean point, and he believed that he had found it.

This certainty of Descartes has been allowed with great unanimity. Not only does it seem impossible to move a step unless so much is granted ; the most thorough scepticism seems unable to forbid the concession. "It is," says Mr. Huxley (Hume, p. 55) "a clear result of the investigation started by Descartes, that there is one thing of which no doubt can be entertained, and that is the momentary consciousness we call a present thought or feeling." Yet this certainty must be carefully examined, for the case may be regarded as crucial.

It is to be noticed that it is in the form of a judgment. It is the more important to point this out, for Mr. Huxley's words, quoted above, are somewhat ambiguous. A momentary feeling has in itself neither certainty nor doubt. There must be two conscious elements brought into relation to each other, or, in short, there must be a judgment. Descartes had the present consciousness, and he attributed to it existence.

But was Descartes entitled to certainty in this judgment ? He attributes Being to his thought, but what is Being ? Has this category, thus attributed, been defined and made clear to the mind ? It is requisite that it should be so defined, before it can with absolute certainty be affirmed of anything. But further, suppose it is clearly defined, is it applicable to the real ? Being seems to be a vanishing line across time. Time devours its children as they are born. "There is no Being," said Heraclitus, "all things are becoming." May there not be some truth in this which we had not originally taken into account ? The notion of Being, as applied to the actual, had

falsity in it as well as truth. Shall we then try this new category of 'Becoming'? But the becoming may not be a mere change; it may be an evolution. We find we are a considerable way from a knowledge that is absolutely certain.

The difficulties are enormously increased, if we turn our attention to the Ego. "I am sure of my existence." What is the "I" to which existence is thus confidently attributed? Usually he who makes this affirmation means that the individual he is a hard, not-to-be-dissipated lump of fact in the universe. But it is one of the most serious problems for Science or Philosophy to say what the Ego is. And until we know what it is, how shall we affirm its existence? It would not be to it that our affirmations would apply. Probably indeed we are referring them to what is only a phantasm of our brains. It is unnecessary to criticise at length the somewhat petulant assertion, that we are sure that at least *something* is.

It thus appears that even this primary certainty is not absolute. Even the existence of the Ego is hypothetical. An Archimedean point is not easily found. In truth, the proposition of Descartes seems to acquire its appearance of certainty, just in so far as it is analytical. He denied that it was an analytical proposition; but possibly he was more completely deluded by traditional notions than he was himself aware. In the concept of thinking, as he entertained it, was not the existence of an Ego given? Was it not for him an assumption, which he never questioned, that thought was an attribute of a thinking thing? Accordingly, since he construed his experience as that of thought, he found necessarily that he had existence. To construe his experience thus was, however, to make assumptions with too great facility.

The sense of personal identity seems to many to be an irresistible belief; but this 'sense' can be readily seen to be of the nature of a hypothesis. To those who have studied Psychology, it can show little of the character of an infallible certainty. We identify ourselves with the past by virtue of memory. The past self, with which our present is identical, is a past of concrete experiences, emotions, and ideas, and these

are united to our present by the bond of memory, the memory being accompanied by certain emotions. It is the present content of consciousness, which we interpret as the experience of a self that has been identical throughout changes. But the deceptiveness of memory is familiar to us all. The emotions that go with it give no infallible sign. Much of the past is omitted; something is added; and the complexion of the whole is changed. It is not quite our actual self with which we identify ourselves. It is our past, as altered and colored by memory. Moreover, grosser illusions as to personal identity are common. The insane man is convinced of his identity with Washington, or Shakespeare, or even with the Almighty. We need not inquire further into the nature of identity; we see the assumptions on which it is based. It is a judgment regarding the present content of consciousness, and one that may be erroneous.

But, it may be urged, men are endowed with a large number of intuitions, self-evident truths, laws of thought. Have we not in these a knowledge that can lay claim to certainty? Let us examine those intuitions as they have reference to real existence. Among such the intuition of space is usually ranked, and this instance is typical. It is meant that the soul directly sees space, or that it has *a priori* a notion of space, which corresponds to the actual space. Such an intuition is said to have necessity for thought. Yet it is assuming much to say that this conception is necessary. And even if it has a certain necessity, the necessity may be, so to speak, accidental. In order to walk we must use certain muscles, but other animals have other modes of locomotion. Space may be a necessity of our thinking, but this may be due to human peculiarities. But to prove that space has necessity, either of the first or second degree, is to know the constitution of our minds with a clearness and completeness of insight, to which as yet we can lay no claim.

But suppose it were, as Kant suggested, a necessity for all finite thinkers, and suppose we were certain of this, could we be certain of anything further? Are we obliged to regard

space as actual? When such thinkers as Kant, or Lotze, have felt themselves forced to the view that space is ideal, we should hesitate to infer its actuality from the presence of the idea in our minds. If we say that mind is non-spatial, we have passed the primitive stage of thought which gives a spatial character to everything. It may be that the objectivity of space should be eliminated altogether. It may be, after all, that we should regard this idea as an effort to render intelligible to ourselves the universe; and it may be, we should regard it as a mistake.

In short, those who contend for intuitions should recognize, first, that they are constructing a theory of the mind which is itself problematical; and, further, that were their theory established, they would still have the task of showing that such intuitions have objective applications.

If, in such a case as we have considered, certainty has not been found, we need not look for it in the laws of the particular sciences. These, or some of them, are in current language spoken of as absolutely certain, but a little reflection shows that they are hypotheses, which further experience may show to be untenable. Yet this question is not to be confounded with the question as to the place of certainty within the domain of a particular observational science. Wundt, in his *Logik*, discusses the criteria of certainty, and shows that that is certain which in the course of advancing experience does not admit of correction. The proof of such certainties can be put in the form of a disjunctive syllogism. Thus, either the earth moves round the sun, or the sun moves round the earth. The latter supposition is impossible. Therefore the earth moves round the sun. The certainty in such a case seems to be absolute. Yet it is unnecessary to show that it depends on a number of assumptions as to space and motion. It is a hypothetical certainty.

We seem justified in concluding that our judgments, so far as they refer to reality, are not possessed of absolute certainty. We are trying to interpret the universe, but we often fail to catch its meaning; and a long experience of mistakes has

taught us to be wary in affirming that in anything we have the perfect truth, and that nature has spoken the last word to us, that last word which may give a new meaning to the whole context. Our knowledge consists of more or less tentative hypotheses. Probability is the guide of our lives. Absolute knowledge is not our assured possession. We must still be wooers of truth.

This account of knowledge must in the meantime be held provisionally. Hypothetical certainties have been referred to. There are various classes of certainties which may be so designated, and the nature and bearing of these must be investigated, especially since their relation to our knowledge of the actual world is often so grievously misunderstood. Prominent among them are the truths of mathematics. The laws of thought afford another illustration. We shall begin with the latter.

According to the law of Identity we must affirm A to be A ; according to the law of non-contradiction we cannot think A to be not A . There is necessity laid upon our thinking; we have reached absolute certainty. Yet the nature of this certainty must be carefully observed. It is not said that we must always think thus. It is not said that this is a law of the mind. As soon as we venture to say what a law is, and what the mind is, we are involved in questions of infinite complexity. Neither is it said that the real world, independent of mind, has this as its fundamental principle. Descartes thought it possible, that a demon might be misleading him in what seemed most certain, and though our fears may not take this shape, we need at least to be chary in handling the relation of the subjective to the objective. What is meant by these 'laws' is, that when, at this present moment, A and not- A are before me, I am unable consciously to interchange them.

Have the laws thus explained any limit to their application? Aristotle regarded them as holding in their original form absolute sway over all thought, and in a sense this is true. An idea cannot take its negative to itself. In deductions from a hypothesis, that only which logically accords with it, can be

admitted. A theory is overthrown, so soon as any fact out of harmony with it is accepted. These principles seem to be sure guides, whatever may be the object matter of thought, and whatever the stage of thought we have reached.

But it is not to be supposed that these are the only laws of thought, or that they have any special sanctions attaching to them. Even Aristotle did not recognize all the distinctions, gradations, evolutions of thought. The Hegelian way of viewing the nature of thought is important in this among other respects, that it emphasizes the difference of categories. According to it, while there is one thought in all things, this thought is protean. There is not one category only ; there is a scale of categories. There is one law of thought, and yet it would be equally true to say, that there is an indefinite number of laws of thought. Being belongs to one plane of thought, the lowest ; but there are higher planes represented by such conceptions as substance, cause, organism.

It would then be legitimate to say that, so long as we keep to the category of Being, we are bound by the laws of non-contradiction. But it is only so long as we keep to this category. Not that this law is violated ; it is simply unable to express the procedure of thought, when it passes to higher relations. Being stands in abstract opposition to nothing : A is not non-A. Let the world, however, be recognized as a world of individual things, one thing is the negation of another. Yet the negation may be of a much less definite kind. The two things which refuse to surrender their individuality may yet be essentially the same. This oak-tree is not that oak-tree, but unless the identities of the two are recognized the surface of the facts has scarcely been touched. The negative is not a sheer negative. The relation is that of similarity, or it is one still closer. It is no longer, A is not non-A. The essence of A and non-A is one ; and the thought which perceives this relation is a new thought, or has a new law.

Similarly the treatment of space by mathematical science involves the recognition of specific laws. The law of non-contradiction still holds : a triangle cannot be thought to be a

square. But when the relation of the angles of the triangle to the length of the sides has to be determined, the law of non-contradiction is comparatively irrelevant. Thought has a new method for its new subject. Different from all these, and each possessing a law of its own, are the conceptions of substance, and causality, and spirit.

In each of these cases the laws of thought are on the same footing, and possess the same necessity, as the primary 'laws of thought.' The axioms of mathematics, and all the deductions from them, are as necessary to thought as the laws of Identity and Contradiction. In at least part of the system of Spinoza may be seen the necessity laid upon us when we touch the conception of Substance. Thus each conception has a law of its own. The laws of identity and non-contradiction are the logical methods we follow when we use the conception of Being. Each other conception that we employ has a method of its own. So that we have other certainties than the so-called 'laws of thought.' These are simply the mind's employment of one conception. It has other certainties, as it has other conceptions.

Further, the relation of these necessities of thought to the actual world is, in all cases, of the same kind. The laws of identity and non-contradiction obtain, so long as we hold to the conception of Being. And it is a necessary corollary to this to say that if there is a reality answering to the conception, it is governed by these laws of thought. And it may also be said, that a world to which none of our conceptions apply, is for us a nonentity. But this is not to say that Being is a true category, that is, a counterpart of the actual universe. In fact, as we have already seen, it is unable to represent the reality, and as usually employed, has in it an element of falsehood.

Mathematics also is an ideal construction. It starts from an assumption. There may be tridimensional space; and if there is, it is a space governed by the principles of geometry. But the existence of geometry does not prove the objectivity of space.

The mathematician has often bemoaned the metaphysician, who spins theories out of his brain, and he has pointed with pride to the solid fabric of his own science. Yet his science has no superior solidity ; it may prove to be only a projection of his mind. It has not the dignity of a science of observation. The metaphysician is the sane man who wishes to satisfy himself whether this specious fabric may not be after all a vast cobweb of the mathematician's brain. Given the idea of space, the science of geometry follows. But of the reality of space geometry has nothing to say. Such criticisms on the mathematical sciences have often been made before, and it would be less necessary to repeat them, were it not that such an axiom as "The whole is greater than its part" is pointed to as an instance of irresistible certainty. The axiom is necessary when once the idea of quantity is introduced, and if the universe is to be construed quantitatively, it is true of it that any whole in it is greater than its part. But is the universe to be construed quantitatively ?

In regard to substance, Spinoza showed what may be, by a rigorous logic, deduced from the conception. But he simply assumed the conception. It never occurred to him that it might be simply a subjective idea, which advancing science and philosophy might dissipate. His 'Substance' was an *idolum fori*, if ever there was one.

That this is the nature of the necessities of our thinking, it is well to remember, in view of certain current refutations of scepticism. Professor Caird, in the passage already referred to, writes thus: "If I say that all I know is appearance, and that I do not, and cannot know the reality which is beyond appearance, I must have some positive reason for the distinction which I make between appearance and reality. . . . The last work of Scepticism is to disclose the basis of truth on which it must rest." But doubt is scarcely to be exorcised by such an appeal. If the sceptic uses such a term as appearance, the correlative reality may be implied, and it is further possible that there is implied a power of distinguishing between the two. But what if the sceptic is doubtful of the claims of

these terms? It will still be said that such doubt implies a new criterium. But the implication is of another sort. It may be that the sceptic must as a matter of fact go on exercising his faculty of thought, and it may be that to think is to apply such categories as Being, Substance, Space, and the rest. But this implies no Archimedean point of certainty. All the categories available may prove useless. The organism inevitably reacts on its environment, with the hope of using it; but its environment may be rock walls, and it may perish of hunger. We go on thinking, but it is claiming a great deal to say that this involves of necessity our reaching truth. It does not even imply an ineradicable assurance in our own minds that the world is thinkable. Lotze, when discussing scepticism, argues that scepticism presupposes truth. The question whether after all our ideas agree with the reality is, he considers, a barren one. Then he comes to the conclusion that it is unanswerable, and the supposition of an intelligence that should know that its ideas and the facts agree is, he says, an absurd and impossible one. Now it is surely possible to conceive an intelligence for which the facts of the whole infinite universe are known, for which there is no beyond, by whose activity these facts are constituted; and recognizing this possibility, we may yet humbly admit that that intelligence is not ours, and if we be forced to say that we cannot determine whether our ideas and the actual world are in consonance, the conclusion may not be barren, but may prove most instructive.

The nature of knowledge may now in some important respects be clearer. All thought is the effort of the mind to explain the world. Within the mind the categories are born; they come to light as explanations of the world. Not, however, as infallible; they are, from the thought of Being to the 'laws' of science, gained by induction; and thus they are tentative and hypothetical; and as in the political life of nations there have been so many revolutions that men become chary of accepting any constitution as final, there may in the structure of knowledge be acknowledged a similar want of finality. What was regarded as truth has to be contradicted,

or merged in a larger truth. This instability of knowledge is not lamentable; it is the condition of growth. The spirit of denial wills the evil, and seems destructive; yet always accomplishes the good. Knowledge advances; it is in process of evolution; it is the realization of an ideal.

Is the assurance of knowledge ever to be reached by us? We approach it, in proportion as we complete the work of knowledge. Knowledge is the interpretation of experience. As that experience widens, as our senses have fuller revelations, and our inward life discloses itself, that scientific interpretation becomes more comprehensive and accurate, and there may be a growing hope of insight into that rational necessity by which things are. Yet our experience is incomplete; it can never be complete; how incomplete it is, we cannot know. Absolute certitude is impossible. Finality in knowledge is not for finite beings.

Yet, while knowledge sunders itself into certainties of a subjective and hypothetical nature, on the one hand, and on the other, beliefs in regard to 'facts,' it is necessary to enter a protest against certain views of belief which have been advocated. It is sometimes said that our knowledge rests ultimately on beliefs indeed, but beliefs which are irresistible. But it is scarcely necessary at this stage to dwell further on the fact that our beliefs are irresistible only when they cannot be described as beliefs, but are necessary developments of conceptions already held. In other cases they have simply the degree of irresistibility which belongs to more or less approved inductions.

A further question that concerns us here is the relation of belief to will. In his work on Psychology, Professor James claims that Belief and Will are ultimately identical. In each case there is attention to something. Professor James regards the practical interest as ultimately, in all cases, the primary. Such a view seems to ignore the difference between the emotional and intellectual interest. In practical life a man chooses what is healthy. To the intellect, however, the laws of disease are beautiful, as Emerson puts it, as those

of health. For our well-being, as capable of pleasure and pain, we must make selections in the world; the intellect knows no such selections. When, therefore, Professor James says a theory to be acceptable must satisfy not only the intellect, but also other human interests, he says what is in one sense true. A theory of the world must take account of all human interests and aspirations as facts; if true, it will also probably satisfy all legitimate human desires. But only those that are legitimate; and especially it cannot be called upon to satisfy those that owe their origin wholly or in part to false views of the world and of life. But this at least is true that, in proportion as the intellect develops, its theories are decided, not by any inclination or wish of men, but by the presence of facts as elements in a scientific problem. Whatever may be the genesis of Intellect, it has now its own differentiated function, which is distinct from that of practical will. And if it fail to comprehend in its synthesis all the facts, it is because its vision is weak, and has been marred by previous education, not because it has made a *selection* of facts and said, "These being good shall be reality to me." The latter alternative is always a possible mode of action, but it is to be repented of.

WALTER SMITH.

LAKE FOREST UNIVERSITY.

PSYCHOLOGICAL MEASUREMENTS.

MENTAL *Phenomena and Physical Phenomena.* — Experimental psychology, like every empirical science, starts with the facts of our immediate experience. The innumerable phenomena which we experience directly, *i. e.*, of which we are conscious, fall naturally into various classes according to the point of view we happen to take. One of the divisions is that into sights, sounds, tastes, etc., on the one hand, and impulses, emotions, memories, etc., on the other. Just what distinguishing characteristics we find in each class it is impossible to say. Indeed, the division is not at all complete or distinct ;¹ many experiences that we on one occasion put into one class, *e. g.*, hallucinations which we believe to be realities, we at another time place in the other, *e. g.*, hallucinations recognized as such ;² in very many cases we are in doubt as to which class a certain experience belongs. The experiences of the former class we regard as belonging to an objective world, as we call it ; those of the latter, and in some degree those of the former, to a subjective world. The objective class consists, by supposition, of phenomena constant in character for constant objective conditions ; the actual variations in these phenomena under constant objective conditions we ascribe to mental elements. For example, we consider colors to be phenomena of the objective world (I am speaking from a purely introspective standpoint) ; under the most careful physical conditions we can maintain the color in a condition which we know by secondary means to be constant within a very small range of variation. Yet the color actually experienced will be subject to considerable variations ; these we ascribe to the influence of mental phenomena, *e. g.*, attention, fatigue, etc. Suppose we wish to compare two colors together ; we so arrange matters that the two classes of variations, the physical and the psychological, are kept as small

¹ Wundt, *Physiol. Psychol.*, 3. ed. II, 2.

² Wundt, *Zur Frage der Grosshirnfunktionen*, *Phil. Stud.*, 1891, VI, 18.

as possible. If we wish to determine that the two colors are physically alike, we seek out the most favorable method for reducing the psychological sources of variation to a minimum. In the spectral photometer the principle of contrast is employed in quite a complicated and unmeasurable way, but the maximum of sensitiveness is obtained and the variations due to psychological influences are quite negligible. On the other hand, if we desire to determine some mental characteristic in regard to the two colors we must obtain sources of light under such conditions that the measurements of their values are carried out with an accuracy to a degree beyond our own sensitiveness ; we must not use complicated and unmeasurable psychological arrangements but the simplest ones possible. Under such conditions the variations measured will be due to psychological influences. In both physical and psychological experiments the same fundamental principles are used. The difference lies in the sources of variation ; in physics we must eliminate psychological influences, in psychology we must make the physical variations comparatively negligible.

Both physical and psychological measurements are concerned directly with the phenomena of immediate experience. In physics we measure certain objective phenomena of consciousness on one another ; in psychology we also measure phenomena of consciousness on one another.¹

It may seem strange that we should treat the objective phenomena of consciousness as physical phenomena. We are accustomed to think of the physical world as something with a separate existence apart from consciousness. By deductions from the objective phenomena of immediate experience physics has built up a system of independent processes subject to the laws of the conservation of matter and of energy, and expressed in the terms of touch and muscular sensations.² The attempt is made to reduce the other phenomena of immediate experience (light, heat, etc.) to these terms, or, as the physicist says, to reduce all physical phenomena to the laws of mechanics. This

¹ Wundt, Ueber die Messung psychischer Vorgänge, *Phil. Stud.* 1883, I, 255.

² Schwarz, Das Wahrnehmungsproblem, 1. Theil.

attempt has not been successful ; it is not possible to transfer the concepts of that most developed portion of physics to the other domains, each of which requires the formation of its own special concepts.¹ The three units, time, space and mass, are not sufficient for the definition of physical quantities except in mechanics ; to these a special unit must be added for each domain of phenomena. We have been so long accustomed to attempt to translate all objective phenomena into terms of touch and the muscle sense, and have gotten into such hopeless difficulty that with such a point of view it is quite intelligible that so many should absolutely deny the possibility of psychological measurements. As soon as with Ostwald we look upon the relations of the various classes of objective phenomena as those of equivalence and not of identity, the close interrelation between psychology and physics becomes comprehensible. The two sciences divide the field of immediately experienced facts. Each phenomenon has an objective or physical side and a subjective or mental side, the two being intimately related and sometimes indistinguishable. We can compare physical, or objective, phenomena directly with mental, or subjective, phenomena. Experimental psychology has in great part to do with such comparisons ; in a large part of the work the experiments are psychophysical.

Rejection of Metaphysics as a Basis.—We have become so accustomed to certain hypotheses that it is difficult for us to look at matters as they are actually given us. From the study of the objective phenomena we have constructed our physical world, in which we find other beings to whom we are inclined to attribute conscious phenomena like our own. By a series of conclusions we suppose that their nervous systems are most closely connected with such phenomena, and it then becomes an object to determine what conscious phenomena are connected with the activities of the nervous system. Thereupon we turn the matter around again and try to look at our own facts of immediate experience as if they were some one else's. When we make a psychological experiment, instead of comparing the

¹ Ostwald, Studien zur Energetik, *Zt. f. physikalische Chemie*, 1892, IX, 565.

resulting subjective phenomenon directly with the physical facts of immediate experience, we take a stand outside of ourselves and imagine the physical phenomenon to be some external affair conducted along our nervous system to a certain place where it is turned into a mental phenomenon. Now, this might all be very well if we had a satisfactory system of concepts for the physical world; our present representation of physical processes as entirely a matter of mechanics with concepts drawn from the muscle sense is not only unsatisfactory in physics, but leads to utter incomprehensibilities in matters of physiological psychology. We cannot represent brain processes in any way that will bring them into harmony with what we know as our facts of consciousness.

If we consider the physical phenomena as something quite outside of and incommensurate with the facts of our immediate experience, then, in the present state of our knowledge, we can readily agree that mental phenomena cannot be measured.¹ We can suppose that mental facts form a world of their own with which physical facts cannot be compared. But we have here broken up the facts as first given us into two classes, drawn hypotheses from the one set, and are now trying to bring the facts of the other class into harmony with hypotheses with which they will not agree.

There is one philosophical theory which goes a step further than this. So far, at least, we are all agreed as to the existence of a mental world governed by its own laws, but even this latter fact is denied by one class of objectors. This school, represented by numerous English and French writers and lately championed by Professor Muensterberg, would claim that no causal relations exist between mental phenomena, that after analyzing them into their elements we should next determine the brain processes to which they belong, and that the co-existence and sequence of mental phenomena find their explanation only in the relations of the brain processes.² Of the very naïve

¹ Zeller, Ueber die Messung psychischer Vorgänge, *Philos. u. hist. Abhandl. d. Berliner Akad.*, 1881, 3. März. Berlin, 1882.

² Muensterberg, *Ueber Aufgaben und Methoden der Psychologie*. Leipzig, 1891, p. 117.

metaphysical theory laid as the foundation for a science that should be empirical I do not need to speak, although probably few things have done more injury to our science than the general belief that the new psychology finds its justification for existence in such speculations. We can also readily see why even professed psychologists put forward the plea that there is no use in being exact in their measurements. At present we know absolutely nothing of the nature of the brain processes to which mental phenomena correspond; if the only way to trace any connection between mental phenomena is to first get at the brain processes, it is really very hard to see why we should make any experiments at all.

We shall, however, be obliged to reject these and all other metaphysical theories at the outset, and confine ourselves to the facts. In doing so we take up the development of psychology just where the old psychology left it. The material of the new psychology is exactly the same as that of the old psychology, the facts of immediate experience; the only difference lies in the substitution, wherever possible, of exact records and measurements in place of vague descriptions in general terms. The older attempts at applying the method of introspection led to results as often erroneous as true; with the introduction of experimental methods a trustworthy application of the fundamental method of introspection (or reflection, became for the first time possible.¹

Measurement in General. — The fundamental form of measurement is the expression of the judgment that the quantity measured is equal to or unequal to the standard. The primitive method of weighing articles was by balancing them in the two hands; we measure off a yard of cloth by laying a yard-stick down on it and cutting off enough to be equal to the stick; we run the eye over one line, then over the other to see if they are equal; we measure lights by determining that they are alike or unlike in intensity, tones by judging that they are alike in pitch.

¹ Wundt, *Physiol. Psychol.*, 4. ed., I. 4; *Vorlesungen über Menschen- und Thierseele*, 2. ed., p. 14.

All measurements, physical as well as psychological, consist ultimately in the comparison of two phenomena of consciousness, generally two sensations. All physical measures have been developed out of psychological estimates.¹ We measure temperature by noting the agreement of the length of the column of mercury with a certain portion of the scale; we measure the strength of an electric current by noting the angle through which the mirror is deflected or through which the needle passes, and this very angle is in turn measured by some length; we measure time by the agreement of the angle over which the hand has passed with a mark denoting the end of another angle taken as a standard.

Some confusion has been caused by the statement that psychologically we are able to judge only likenesses or difference, with the implication that in physics we are able to do something more, namely, to measure one object as a fraction or a multiple of another. Even if in physics we could directly do this, it would mean nothing more than that we could do so in psychology also, as when we compare two physical lengths we are only performing a psychological process. When we say that one line is apparently three times as long as another, we simply mean that the two mental pictures bear that relation, or that the series of muscular sensations produced by running the eye over the lines bear that relation. The fact is, however, that in the absence of graduated scales we express one quantity as a multiple of another only by estimates directly from our sensations. The graduated scales, by means of which we always work wherever possible, and by means of which we can obtain the accuracy of modern science, are really only records of direct judgments of likeness or difference. The 0 point on the thermometer means that the mercury column occupied that place under certain definite conditions, namely, immersion in the water of melting ice; the 100 mark means that the column was just so long when the thermometer was surrounded by steam at 760 mm. barometric pressure. We usually divide the intermediate space into 100 parts, but these

¹ Wundt, *Die Messung psychischer Vorgänge, Essays*. Leipzig, 1885, p. 158.

divisions of themselves mean nothing. It is only by placing the thermometer in liquids of the intervening temperatures and directly recording the height of the column at each temperature that we could get a definite graduation. As this latter method is too cumbersome, the marks are made at intervals by the dividing machine, and then the actual value of each mark is determined by sending the mercury up to it and noting the temperature required to do so. Thus each mark on the thermometer means that at some previous occasion of a certain character the mercury column reached to that point; when we now make a measurement of temperature we simply compare the length of the column at present with the record of its length at some previous time. The same is true of the galvanometer, the clock, and all apparatus in which the graduation is in units of length; exactly similar processes are used to arrive at other scales.

Exactness in Measurement. — Since we always measure physical quantities by means of a psychological judgment as to the agreement of two sensations or sets of sensations, we must so arrange matters that in a given case the psychological judgment introduces only a small uncertainty into the measurement. Since all psychological and physical measurements are made by means of apparatus, the error of the apparatus must be sufficiently small in comparison with the quantity measured. For example, in measuring the time between two successive culminations of the same star, the uncertainty introduced into the results by the variations of our judgments in the eye-and-ear or the graphic method are too small to be of importance for most physical purposes, the length of the sidereal day being determinable to within .05 seconds, or $\frac{1}{10000}$ of 1%. In measuring mental times an outside limit of error of $\frac{1}{1000}$ of a second is beyond the needed accuracy; the length of the time measured seldom is less than $\frac{1}{1000}$ of a second; we can thus allow an outside limit of error of 1%. We can therefore use a fork vibrating 100 times per second, whose accuracy has been determined to within 1%, that is, one whose vibrations during a sidereal day amount to $8,616,400 \pm 3,200$. The

accuracy required for astronomical purposes is something far beyond that for psychological purposes in this case; yet the very thing which we want to measure psychologically, the reaction time, and which we do measure with an accuracy at present beyond our usual needs, is used to determine the unit of measurement, namely, the second; in the latter case we arrange our experiments so that the variations of the psychological quantity are negligible, in the former the inaccuracy of the physical apparatus is negligible.

It is readily seen that if we do not eliminate or render negligible the psychological sources of variation in physical measurements, as was the case in astronomy before the discovery of the personal equation, we are introducing errors into our physical results. Likewise, if we are measuring psychological phenomena, and yet do not know how much of our results and how much of the variations are due to mental influences, and how much to the apparatus, we really do not know what our results mean. It is from the side of psychologists who are not acquainted with the science of measurements that we often hear the remark that it is of no use to be exact in psychological work. They are careless in their methods, careless in their measurements, and careless in their statements. In the published accounts of the work there is often no information as to the elimination or presence of errors. An experimental result whose reliability is unknown to us is nearly worthless. In order to form a judgment on the accuracy of the result, all the necessary data must be given. Any description of a method and result can be criticised as materially incomplete if it does not give all the data needed for such a judgment. Failure to give such data can only be ascribed to the urgent necessity for condensation or to ignorance or neglect on the part of the observer; and either of the latter casts grave doubt on the character of the work.¹

Variations in Measurements.—If we make n independent measurements of the same quantity, physical or psychological,

¹ Holman, *Discussion of the Precision of Measurements*. New York, 1892, p. 36.

we get n different results, provided we make the unit of measurement fine enough. If by x we denote the variations from the arithmetical average, and if n be infinitely large, then the variations will occur with probabilities according to the well-known law,

$$y = ke^{-h^2x^2}dx,$$

provided we make one of two suppositions: (1) the single variations are made up of small elementary independent variations, which are equally likely to be positive or negative; (2) the most probable value is the arithmetical mean. The former is the supposition of Laplace and Hagen; the latter is that of Gauss.

Neither of these suppositions is allowable in psychological measurements, or in physical ones, either, except as furnishing results sufficiently accurate. That they have justified themselves in physics is due to the facts: (1) that in all physical measurements the surrounding conditions are kept in a high degree of constancy; (2) that in all judgments in regard to the accuracy of physical work we presuppose that there were no sources of error comparable in magnitude with the measure of precision. Under such circumstances the occurrence of the elementary errors (or variations) in groups would have comparatively little effect, and we can suppose them to be independent. In psychology the case is different. We cannot yet get our conditions so completely under control as in physics; the state of affairs somewhat resembles that in statistics. We are not justified in supposing that the variations are independent;¹ on the contrary, from the very large and irregular mean variations that we obtain, from our experience in gradually eliminating sources of error, and from our knowledge of varying circumstances that we cannot eliminate or measure, we know that the variations must occur in groups. The variations will therefore not follow the law of probability, and the arithmetical mean may or may not be the most probable value. A critical treatment of the variations, their signs, their successive differences, and the signs of the

¹ Cattell, On Errors of Observation, *Am. Jour. of Psychol.*, 1893, V. 287.

differences¹ will show whether the measurements follow the law of probability or not. If they do not, we have no recourse except to empirical treatment.

Empirical Treatment of the Results. — When the usual treatment of our results is not applicable, we are forced to fall back on empirical methods. Let us take our n measurements, say of reaction-time, and lay off on the axis of abscissas values corresponding to the successive results obtained, *e. g.*, 180^σ , 181^σ , 182^σ , . . . and erect ordinates proportional to the number of times each value occurs. If the variations conformed to the suppositions mentioned above we would get a curve resembling the ordinary probability curve. What we actually do get, is a curve with several maxima instead of one; and the curve can be regarded as made up of several probability curves with different mean values and different degrees of steepness. This shows us that our measurements are running in groups, and that the factors going to influence the results are working in combinations. Our measurements were made under conditions that were not controlled so as to give a well defined result. In the measurements of simple reaction-time a curve with two maxima, say one much more prominent than the other, would show that what we had been measuring as simple reaction-time had not been well defined, that there was one form which had predominated and another form not so prominent. If we take the arithmetical mean of all the results we are averaging two different classes of things together. Exactly the same results are obtained in statistical measurements. The arithmetical mean has been found quite unsatisfactory; if we take the mean height of a community composed of part English and part French, we have a mixture of two groups and will get a curve of results with two maxima.

This indication of the grouping of variations leads to a further analysis of the quantity measured till the variations from the probability curve become small in comparison with the desired or the possible accuracy. When this point is

¹ Weinhold, *Physikalische Massbestimmungen*, I, ch. VII. Berlin, 1886.

reached, we have a definite value for each quantity under given constant conditions, namely, the arithmetical mean, and the average of the variations or the probable error will give an index of the accuracy with which that value has been determined.

Deductions from Results. — Suppose we have such a value as just mentioned, *i. e.*, the arithmetical mean, what are the conclusions to be drawn? In the first place we can foretell the average value and the probable variations from that value when the conditions of future measurements are exactly the same as those of the set made, or do not differ to a greater degree than is negligible. In the second place, presuming that the same probability relations exist in another set of measurements, we can be sure of obtaining results within a given limit of variation with a definite degree of probability. In the third place, if we have two sets of measurements we can determine within what limits and with what sureness the probability underlying the one is the same as that underlying the other. The formulas for these deductions have been worked out by Poisson (*Recherches sur la probabilité des jugements*) and have been illustrated by Lexis (*Einleitung in die Theorie der Bevölkerungsstatistik*, Ch. V).

Applications. — Nothing has been said in regard to how accurate the measurements are to be before we can apply the principles just mentioned. Nothing should be said except that, whenever measurements of any kind are made, the computation of the results must follow the laws laid down by the science of measurement. Whether the accuracy is to 10% or to $\frac{1}{10}$ of 1% is a matter of indifference for the calculations. The claim put forth by some psychologists that the lack of accuracy in the measurements justifies the presentation and lumping of the results without observance of the rules and without a statement of the characteristic variations, enables them to prove anything they please with their figures. One psychologist not long ago made his measurements in groups of twenty-five and then selected twenty of each group from which to compute the result. Concerning the accuracy of the

method we can know nothing without the calculation of some one of the characteristic variations; yet the same experimenter remarks that it was hardly worth while to calculate the mean variations, from which we can draw only one conclusion, that it was hardly worth while to present the results at all. Another psychologist rises superior to the charge of not possessing the faintest idea of accuracy by declaring that psychological phenomena are not measurable quantities, that our measurements are physical, etc., not knowing that the science of measurements has stringent rules for *all* measurements and not seeing that his plea for carelessness simply denies him the right to make any measurements.

No matter how accurate or inaccurate the measurements may be, the amount of trust to be given to the results will be indicated by a proper treatment of the variations and their differences, that is, so far as chance errors and changing systematic errors may have influenced the work. The sources of constant error must unfortunately be left to the experimenter; it is easily seen how fatal the reputation for carelessness must be. There can be no question that the results obtained by many a poor investigator are actually measurements of some error of apparatus or of method and not of a psychological phenomenon at all. One by one we are getting the psychological conditions under control and reducing the amount of error. That some psychologists choose to declare themselves superior to such slow and careful work and prefer to make startling experiments where little or nothing is known of the method or of the complex mass of phenomena measured, is only too unfortunate.

When measurements are made at all, the experimenter must know just how accurate his apparatus, his methods, and his conditions are to be made and are made. Ignorance of the apparatus, laxity in method, and carelessness in work will be shown in the published records, provided a proper account of the apparatus and methods is given and a proper computation of the results is undertaken. In any case where such data are not given, we cannot accept the results.

Conclusions. — 1. Experimental psychology differs from the older introspective psychology only in the accuracy and trustworthiness of its results.

2. All measurements involve both physical and psychological elements; in physical measurements the psychological elements are kept at a minimum and *vice versa*.

3. Measurements may be of all degrees of accuracy, but in each case the degree of accuracy must be known and stated.

4. The lower grade of accuracy in psychological measurements is due to the inability to maintain more constant conditions. This furnishes no excuse for still further lowering the accuracy by careless methods.

5. The inference seems justifiable that the main work in psychology should be directed to the attainment of constant conditions and the simplification of methods.

E. W. SCRIPTURE.

BIBLIOGRAPHY OF WRITINGS BY AND ON KANT
WHICH HAVE APPEARED IN GERMANY UP TO
THE END OF 1887. (IV.)

In 1790 Kant himself appeared upon the stage, with the treatise :

516a) *Kant: Ueber eine Entdeckung, etc.* Cf. no. 70. (It was not the intrinsic value of Eberhard's polemic, in the first volume of the *Magazin*, but the reputation which Eberhard undeservedly obtained as head of the Leibnitz-Wolff school, which led Kant in this instance to depart from his usual principle, and enter upon a controversy. Eberhard fully merited this sharp correction; but I am at least doubtful as to whether Kant's personal reproaches [of purposed misunderstanding, disingenuous character, etc.] are justified. According to Vaihinger [*Ph. Mh.*, 1879, pp. 321-332; 513-532] Kant himself must share the blame of some of Eberhard's misunderstandings, since he has not noticed a misplacement of pages in the *Prolegomena*. A series of Essays, directed against Kant's treatise was published in the *Magazin*. They are mostly couched in the personal language which Kant himself had introduced; and their polemic is not happy, — still less their positive assertions. Especial pleasure is taken, in them, in the proving of contradictions between the R. V. and the criticism of Eberhard, which are explained as due to the fact that, impelled by the weighty reasons urged in the *Magazin*, Kant has approximated to the Leibnitzian philosophy. But with one exception these pretended contradictions have only arisen from misunderstandings and distortions of sense. That one, it is true, contains an important deviation from the *Kritik*, and is constantly adduced: but it rests only upon a carelessness of Kant's, and not upon any alteration of view. He says, on pp. 55, 56 of the Reply: "S. 258, No. 3 und 4, sagt Herr Eberhard: 'Raum und Zeit haben ausser den subjektiven auch objektive Gründe, und diese objektiven Gründe sind keine Erscheinungen, sondern wahre erkennbare Dinge'; S. 259: 'ihre letzten Gründe sind Dinge an sich': welches alles die Kritik buchstäblich und wiederholentlich gleichfalls behauptet." In writing the relative sentence, Kant was plainly thinking only of the quotation on p. 259, and of the two first sentences of the quotation on p. 258, — overlooking the final sentence of the latter. Of this, the relative sentence does not hold. — I will only enumerate the Essays which belong in this connection:)

517) *Eberhard: Vorläufige Antwort auf Hrn. Kant's Schrift: Ueber eine Entdeckung, nach der alle neue Kritik der reinen Vernunft durch eine ältere entbehrlich gemacht werden soll.* In the *Ph. Mg.*, 1790, iii, pp. 148-172.

518) *Maass: Ueber den Satz des zureichenden Grundes.* In the *Ph. Mg.*, 1790, iii, pp. 173-194. With a sequel by Eberhard, pp. 194-204.

519) *Eberhard: Berichtigungen einer Stelle in dem phil. Mag. B. i. St. 2 S. 159, mit Beziehung auf H. Prof. Kant's Schrift über eine Entdeck. nach der alle neue Krit. der reinen Vern. durch eine ältere entbehrlich gemacht werden soll, S. 12 und ff.* In the *Ph. Mg.*, 1790, iii, pp. 205-211.

520) *Eberhard: Eigentlicher Streitpunkt zwischen dem Leibnitzischen Dogmatismus und dem kritischen Idealismus.* In the *Ph. Mg.*, 1790, iii, pp. 212-216.

521) *Eberhard: Ueber den Unterschied der Sinnenerkenntniss und der Verstandeserkenntniss.* In the *Ph. Mg.*, 1790, iii, pp. 251-279.

522) *Eberhard: Ueber die analytischen und synthetischen Urtheile, zur Beantwortung des zweyten Abschnittes von H. Prof. Kant's Streitschrift.* In the *Ph. Mg.*, 1790, iii, pp. 280-303.

523) *Eberhard: Ueber die Categorien, insonderheit über die Kategorie der Causalität.* In the *Ph. Mg.*, 1791, iv, pp. 171-187.

524) *Eberhard: Kurze Widerlegung der Transscendentalen Aesthetik in der kritischen Philosophie.* In the *Ph. Mg.*, 1791, iv, pp. 188-194.

525) *Schwab, I. C.: Prüfung des Kantischen Beweises von der blossen Subjektivität der Categorien.* In the *Ph. Mg.*, 1791, iv, pp. 195-208. Sequel by Eberhard; pp. 208-213.

526) *Eberhard: Ausführlichere Beantwortung des Einwurfes, welchen H. Kant meinem Beweise des Satzes vom zur. Grunde entgegengesetzt hat, mit Beziehung auf eine Recension des phil. Mag. (B. iii, St. 2) in den Tübing. gel. Anz., St. 6, S. 44 u. ff.* In the *Ph. Mg.*, 1791, iv, pp. 214-224. Cf. with this:

527) *Eberhard: Nachtrag zu dem Beweise des Satzes vom zureichenden Grunde in Beziehung auf die Einwürfe, welche in dem 97 St. der Tübingischen gelehrt. Anzeigen v. Jahr gegen diesen Beweis sind gemacht worden.* In the *Ph. A.*, 1792, i, 1, pp. 55-68.

528) *Schwab, I. C.: Ist H. Kant, in seiner Streitschrift gegen H. Eberhard, seinem in der Kritik der reinen Vernunft aufgestellten Begriffe vom Raum getreu geblieben?* In the *Ph. Mg.*, 1791, iv, pp. 225-230.

529) *Eberhard: Unmöglichkeit des kritischen Idealismus.* In the *Ph. Mg.*, 1791, iv, pp. 231-234. (Connects with Jakobi's remarks on things-in-themselves, without which one cannot enter upon Kant's System, but with the assumption of which one cannot remain there.)

530) *Rz.: Eine Frage, den Satz der Causalität betreffend.* In the *Ph. Mg.*, 1792, iv, pp. 482-489.

531) *Eberhard: Einige Erklärungen der Kantischen Vernunftkritik, nach dem Sinne des Leibnitzischen Systems der dogmatischen Philosophie.* In the *Ph. Mg.*, 1792, iv, pp. 490-503. (Besides these, there belong here the following articles of later date:)

532) Schwab, I. C.: *Beweis, dass den griechischen Philosophen der Unterschied zwischen den analytischen und synthetischen Urteilen nicht unbekannt war.* In the *Ph. A.*, 1793, ii, 1, pp. 112-116.

533) Schwab: *Noch einige Bemerkungen über die synthetischen Grundsätze a priori in der Kantischen Philosophie.* In the *Ph. A.*, 1793, ii, 1, pp. 117-124. — Eberhard and Maass, especially the numbers 512, 522, 518, 493, were again attacked by Born in the *N. ph. Mg.*, 1791, ii, pp. 292-320 and pp. 397-425.

534) Born: *Ueber den materialen Unterschied der Verstandesurteile, mit Bezug auf Herrn Eberhard's philosophisches Magazin, zweyten Bandes drittes Stück, S. 258 u. ff., und dritten Bandes drittes Stück, S. 280 u. ff.*

535) Born: *Ueber die vorgebliche transcendentale Gültigkeit des Satzes von der zureichenden Ursache, mit Hinsicht auf Herrn Eberhard's philosophisches Magazin. 3ter Band, 2tes Stück, S. 173 u. ff., vergl. mit 1stem Band, 2tes Stück, S. 163 u. ff.*

In another series of Essays, Eberhard and his friends direct their arguments against Kant's deduction of necessity and universal validity in judgments. Here they show themselves most weak — incapable of understanding the problem which Kant (after Hume) had propounded. From first to last, the apodeictic certainty and necessity of metaphysical, as of mathematical judgment depends, in their opinion, on the clear knowledge, gained in accordance with the law of contradiction, that the predicate is determined by the concept of the subject. Untaught by Kant's annihilating criticism, therefore, they peacefully continue to judge of objects by pure reason. An exceptional position, they say, must be allowed only to certain geometrical axioms; which, as Kant puts it, depend upon intuition, and are therefore synthetic, — whose concepts, as Eberhard and company prefer to say, contain simple pictorial characteristics, which the finite understanding cannot derive from the objective reasons of the image, since this cannot be analysed in any way by the finite understanding. These axioms, therefore, possess for us only a sensible certainty, on account of the limitations of our understanding; but for an infinite understanding, an apodeictic rational certainty. Many valid objections are raised to Kant's special mathematical theory; but what is intended to take the place of this has still less value, simply indicating a retrogression as against Kant's (not understood) formulation of the problem. Not without value, on the other hand, are the acute essays of *Bendavid*. Those of *Kästner* are of interest only for the reason that they are the work of an expert, taking his stand simply and solely on the Leibnitz-Wolff doctrine. First to be mentioned is a paper, which stands in a certain, though not very close connexion with our present topic; since, according to a later explanation of the author's, it was intended to form a pendant "zu dem phoronomischen und mechanischen Theile von Kant's metaphysischer Naturwissenschaft, welcher für Mathematiker ganz unbefriedigend ist":

536) Klügel, E. Gf. Ch.: *Grundsätze der reinen Mechanik*. In the *Ph. Mg.*, 1789, i, pp. 435-468. ii, pp. 1-28. (Reprinted in: *Kästner und Klügel, philosophisch-mathematische Abhandlungen*. 8vo. Halle. 1807. Gebauer.) Besides this, there belong here the following articles:

537) Eberhard: *Von den Begriffen des Raums und der Zeit in Beziehung auf die Gewissheit der menschlichen Erkenntniss*. In the *Ph. Mg.*, 1789, ii, pp. 53-92.

538) Eberhard: *Ueber die apodiktische Gewisheit*. In the *Ph. Mg.*, 1789, ii, pp. 129-185.

538a) Maass: *Ueber den höchsten Grundsatz der synthetischen Urteile; in Beziehung auf die Theorie von der mathematischen Gewisheit*. In the *Ph. Mg.*, 1789, ii, second section, pp. 217-231. Cf. no. 514.

539) Eberhard: *Ueber den Unterschied der Philosophie und der Mathematik, in Rücksicht auf ihre Gewisheit*. In the *Ph. Mg.*, 1789, ii, pp. 316-341.

540) Eberhard: *Recapitulation der Hauptsätze, die bisher in diesem phil. Mag. sind bewiesen worden*. In the *Ph. Mg.*, 1789, ii, pp. 380-383. (Extends also to the other fields of debate.)

541) Kästner, A. G.: *Was heisst in Euklid's Geometrie möglich?* In the *Ph. Mg.*, 1790, ii, pp. 391-402.

542) Kästner: *Ueber den mathematischen Begriff des Raums*. Same place. pp. 403-419.

543) Kästner: *Ueber die geometrischen Axiome* (*Phil. Mag.*, ii B., 2 St., S. 153 u. s. w.). Same place. pp. 420-430. (All these essays were reprinted in *Kästner und Klügel, philosophisch-mathematische Abhandlungen*, 1807.)

544) Eberhard: *Ist die Form der Anschauung zu der apodiktischen Gewisheit nothwendig? und beweiset die Mathematik aus Begriffen?* In the *Ph. Mg.*, 1790, ii, pp. 460-485.

545) Eberhard: *Genauere Bestimmung des Streitpunktes zwischen der kritischen und dogmatischen Philosophie über die Gründe der Wahrheit der mathematischen Urteile*. In the *Ph. Mg.*, 1790, ii, pp. 511-514.

546) Eberhard: *Antwort des Herausgebers auf das Schreiben in des 2ten B. 4 St. No. IX*. (The proposal had there been made, by X, under the title: *An den*

547) *Herausgeber des phil. Mag.* [pp. 493-496] that Eberhard, in order to be free of the ever-recurring reproach, that he had 'misunderstood' Kant, should pay more attention to the writings of Kant's followers, who must surely understand his system. Eberhard thereupon published in the third volume, 1790, pp. 55-69, under the title given above, two brief papers: *Die ersten Erkenntnisgründe sind allgemein objektiv gültig*, and *Die Mathematik demonstrirt aus Begriffen*: with reference to the first volume of Schultz' *Prüfung*. Cf. no. 734.)

548) Eberhard: *Ist die Mathematik durch ihre synthetischen Urteile in Ansehung ihres Wahrheitsgrundes von der Metaphysik verschieden?*

In the *Ph. Mg.*, 1790, iii, pp. 89-110. (Against vol. i of Schultz' *Prüfung*.)

549) *Eberhard: Von dem Einflusse der sinnlichen Anschauungen auf die Wahrheit und Gewisheit. Ein Nachtrag zu Philos. Mag. B. iii, St. 1, No. 5.* (pp. 89-110.) In *Ph. Mg.*, 1791, iv, pp. 68-83. (Also against Schultz' *Prüfung*.)

550) *Eberhard: Vergleichung des Skepticismus und des kritischen Idealismus.* In the *Ph. Mg.*, 1791, iv, pp. 84-115. (Since universal truth and necessity are not possible without objective truth, Criticism, which can only base them upon subjective reasons, cannot but lead to complete subjectivity of knowledge, and so to scepticism.)

551) *Schwab, I. C.: Ueber die geometrischen Beweise, aus Gelegenheit einer Stelle in der Allgemeinen Litteratur-Zeitung.* In the *Ph. Mg.*, 1791, iii, pp. 397-407.

552) *Schwab: Vergleichung zweyer Stellen in Herrn Kant's Schriften, betreffend die Möglichkeit der geometrischen Begriffe.* In the *Ph. Mg.*, 1791, iii, pp. 480-490.

An article in the *Ph. Mg.* (1792, iv, pp. 447-460) is directed against these two essays of Schwab's:

553) *Rehberg: Ueber die Natur der geometrischen Evidenz.* (Schultz, in the *A. L. Z.*, 1789, iii, p. 802, and Rehberg, in the *Neues deutsches Museum*, 1791, March [cf. no. 505] required from the dogmatists the proof of a synthetic geometrical proposition from concepts. Schwab imagined that he had furnished this in the first essay. Rehberg denies this; but his first position is defended by:)

554) *Schwab: Einige Bemerkungen über vorstehenden Aufsatz.* Same place. pp. 461-469. In the first volume of his collected works (Hannover, 1828) Rehberg treats again of the same topic, pp. 52-60, under the title: *Ueber den Grund der mathematischen Evidenz.*—Further to mention, from the fourth volume of the *Ph. Mg.*, are:

555) *Bendavid, L.: Deduction der mathematischen Principien aus Begriffen.* (1) *Von den Principien der Geometrie.* In the *Ph. Mg.*, 1791, iv, pp. 271-301. (2) *Von den Principien der Arithmetik.* 1792, iv, pp. 406-423. (Mathematics as a whole is, according to Bendavid, an a priori, conceptual science. None of her axioms is based upon intuition: all, therefore, are in Kantian terminology analytic. Thus, Bendavid proves the proposition, that only one straight line is possible between two points, from the fact that the understanding, which cannot independently of intuition pay regard to difference of place, distinguishes lines simply by their different lengths. If now the shortest length between two points be termed the 'straight line,' then there can exist for the understanding but one single straight line,—since it would have at its disposal no characteristic for the distinguishing of two shortest lines from one another. But, Kant would object, if Mathematics is a necessary science, from concepts, whence comes its universal validity, its applicability to objects? How is it that only

geometrical constructions are possible, if it is not proven, that in intuition also — when regard must be paid to difference of place — there is possible only one single straight line between two points? Consideration of Bendavid's two papers led Eberhard also to retract his earlier admission that certain geometrical axioms possess sensible certainty only, and to set down ontological concepts [in place of concepts with simple, sensible characteristics] and the law of contradiction as the sole principles of geometry. See :)

556) *Eberhard: Beweis dass die Principien der Geometrie allgemeine Begriffe und der Satz des Widerspruchs sind.* In the *Ph. A.*, 1792, i, 1, pp. 126–140. — In the same volume there belong here :

557) *Schwab, I. C.: Prüfung des Schulzischen Beweises von der Möglichkeit einer völlig bestimmten unendlichen geraden Linie.* In the *Ph. A.*, 1792, i, 2, pp. 109–119.

558) *X.: Probe einer neuen Anwendung der kritischen Philosophie auf die Geometrie.* In the *Ph. A.*, 1792, i, 2, pp. 120–123. (Against an article by H. . . . ch, in *K. A. M.*, 1792, i, 2, pp. 61 ff.)

559) *Eberhard: Neue Bestätigung des Satzes: dass die Geometrie aus Begriffen beweise.* In the *Ph. A.*, 1792, i, 3, pp. 96–99.

560) *Maass: Beweis einiger (nicht identischen) mathematischer Sätze aus blossen Verstandesbegriffen.* In the *Ph. A.*, 1792, i, 3, pp. 100–113.

561) Against the second volume of the *Ph. Mg.* there appeared in the *A. L. Z.* (1790, iii, nos. 281–284, pp. 785–814) a cutting review by *Schultz*, based on a number of essays of Kant's which had been put at his disposal. The article of Kant's directed against Kästner is preserved (cf. nos. 157, 158). Kant attempts in it to present the matter in such a light that Kästner's assertions can be squared only with his own, and not with Eberhard's views. To this review a reply was published by :

562) *Eberhard: Beantwortung der Recension des zweyten Bandes dieses Magazins in der Allgem. Litt. Zeit. 1790, No. 281, 282.* In the *Ph. Mg.*, i, 791, iii, pp. 408–479. — Directed mainly against the views of the nature of space and time, and the theory of mathematical certainty, represented in the *Ph. Mg.*, is the following, which may be regarded as a continuation of no. 561. :

563) *Schultz, Ih.: Prüfung der Kantischen Kritik der reinen Vernunft.* Second part. Large 8vo. Königsberg, 1792. Nicolovius. pp. vi, 296. Pirated, 1794. Frankfurt and Leipzig. (The title of the work, therefore, does not correspond with its contents, which consists entirely of polemic against the *Ph. Mg.* It is convincingly proved that, because geometrical demonstrations are not possible without construction of concepts, a purely conceptual development of geometry, independently of intuition, cannot be carried through. Lasting value must be ascribed to the third part: *Die Theorie der Sinnlichkeit*, pp. 275–296 : a brief exposition of the results of the *Aesthetik*, clear and thoroughly Kantian. That space and time cannot also be attributed to things-in-themselves is, it is true, not proven

stricte, — and therefore not by the adducing of the antinomies, — by Kant, in the writer's opinion ; but it is by *Reinhold*, in his theory of the 'Vorstellungsvermögen.') In defence of the *Magazin*, Schwab published three essays in the *Ph. A.*, 1792, i, 3 :

564) *Schwab, I. C.*: *Einige Bemerkungen über den zweyten Theil der Schulzischen Prüfung der Kantischen Vernunftkritik.* pp. 1–21.

565) *Schwab*: *Vergleichung zweyer Stellen in Hrns. Hofpr. Schulzens Schriften.* pp. 63–69.

566) *Schwab*: *Ueber das Unendliche des Hrns. Hofpr. Schulz.* pp. 70–79. (As regards Schwab's views of mathematics, cf. also *Schwab* under 1796.) Contemporary with this battle of the mathematical principles are certain other separate articles of Eberhard's :

567) *Eberhard*: *Wie weit stimmt die Leibnitzische und Kantische Vernunftkritik überein ?* In the *Ph. Mg.*, 1790, ii, pp. 431–435.

568) *Eberhard*: *Fernere Vereinigungspunkte der Leibnitzschen und Kantischen Vernunftkritik.* In the *Ph. Mg.*, 1790, ii, pp. 486–492.

569) *Eberhard*: *Ueber den Unterschied des logischen und Realwesens.* In the *Ph. Mg.*, 1790, iii, pp. 83–88. Against this :

570) *Born*: *Ueber den Unterschied zwischen dem logischen und dem realen Wesen in Beziehung auf Herrn Eberhard's philosophisches Magazin, 2ter Band, 4tes Stück, S. 431 und ff. und 3ter Band, 1stes Stück, S. 83 und ff.* In the *N. ph. Mg.*, 1790, ii, pp. 71–86.

571) *Eberhard*: *Ueber die Anschauung des inneren Sinnes.* In the *Ph. Mg.*, 1791, iv, pp. 354–359. (The single peculiar intuition of the internal sense is intuition *a priori* of ideas, empirical and abstract as well as infinite; through which last we acquire with apodeictic certainty the truths of natural theology, by applying the categories to intuition *a priori*. All this is ostensibly proven from the principles of the critical philosophy. The article is the most foolish which appeared in the whole course of the *Ph. Mg.* and *Ph. A.*, and clearly shows Eberhard's want of capacity for true philosophy.)

572) *Eberhard*: *Ueber den höchsten Grundsatz in der Moral.* In the *Ph. Mg.*, 1791, iv, pp. 366–372.

573) *Eberhard*: *Vergleichung der peripatetischen, academischen, stoischen, wolfischen und Kantischen Moralphilosophie.* In the *Ph. Mg.*, 1791, iv, pp. 373–379. (Principally against Schmid's *Versuch einer Moralphilosophie*. Cf. *Schmid*, 1790.)

574) *Eberhard*: *Unterscheidung einiger Wörter, die gleichbedeutend scheinen. Angenehm. Gut. Schön. Nützlich.* In the *Ph. A.*, 1792, i, 2, pp. 92–98. (Against Kant's doctrine of uninterested pleasure in the beautiful.)

575) *Eberhard*: *An den künftigen Prüfer von Reimarus nothwendigen Wahrheiten der natürlichen Religion.* (*Vid. Schlessw. ehem. Braunschw. Journ.*, 1792, May, p. 86.) In the *Ph. A.*, 1792, i, 3, pp. 80–95. (Against Kant's moral proof of the existence of God. Cf. *Ideen*, 1792.)

576) *Eberhard*: *Urtheil eines Engländers über die Kantische Philosophie.* In the *Ph. A.*, 1794, ii, 2, pp. 120–122. (From the appendix to

the tenth volume of the *Monthly Review*, where in the course of a review of *Der Kantische moralische Beweisgrund von dem Daseyn Gottes* ['gekrönte Preisschrift' of the Dutch Society of Sciences at Harlem] a summary of Kant's philosophy is given, a pretty severe judgment passed on Kant himself, his obscurity complained of, and his Idealism put in the same category with Berkeley's "ingenious sophistry.")

577) *Eberhard: Entscheidender Gesichtspunkt zur Beylegung der Streitigkeiten zwischen der kritischen und dogmatischen Philosophie.* In the *Ph. A.*, 1794, ii, 3, pp. 121-124. — Eberhard's final fulminations against the critical philosophy, which proved, however, as innocuous as the earlier ones had done, are to be found in a connected series of articles.

578) *Eberhard: Dogmatische Briefe.* In the *Ph. A.*, 1792, i, 2, pp. 37-91; 1792, i, 3, pp. 22-47; 1793, i, 4, pp. 46-90; 1793, ii, 1, pp. 38-69; 1794, ii, 3, pp. 44-73. (In these he collected together once more all the objections urged in the *Ph. Mg.* Characteristic of the work is an entirely geometric [a point which he repeatedly emphasizes] proof of the existence of God, based on the existence of eternal, absolutely necessary truths, which presuppose a similar, that is a divine understanding. Vol. I, Part 4, pp. 49 ff. The most valid, which are at the same time the most obvious objections raised by Eberhard, are those urged against the table of categories. Vol. II, Part 3, pp. 51 ff. With these letters Eberhard concluded his campaign against Kant; after he had, in 1794, again expounded his real-dogmatic system, in the closest connection with Baumgarten's *Metaphysik*.)

579) *Eberhard: Kurzer Abriss der Metaphysik, mit Rücksicht auf den gegenwärtigen Zustand der Philosophie.* 8vo. Halle. Waisenhausbuchhandlung. pp. 224. (Eberhard had not for some time previously been honored by further refutation in the *A. L. Z.* Schultz had snubbed him unmercifully. The philosophical public, too, showed no great regard for him. He therefore found it preferable to exchange the dangerous battleground of philosophy for more peaceful fields, and betook himself to philological studies.) I append here the anonymous articles:

580) *N. N.: Versuch einer Entwicklung des Begriffs vom ewigen Wesen.* In the *Ph. Mg.*, 1791, iv, pp. 58-67.

581) *N. N.: Etwas über den Begriff des nothwendigen Wesens, und den daraus hergeleiteten Beweis seiner Wirklichkeit.* In the *Ph. Mg.*, 1792, iv, pp. 470-476. (Possibility presupposes necessary, eternal existence. A proof, therefore, which is very similar to that of Kant in the *Nova Dilucidatio* and in the *Beweisgrund*.)

582) *N. N.: Beweis des Daseyns Gottes aus dem Begriffe eines unabhängigen Wesens.* In the *Ph. Mg.*, 1792, iv, pp. 477-481.

583) *v. K.: Versuch eines konzentrirten Beweises für die Substantialität und Einfachheit des Ich.* In the *Ph. A.*, 1792, i, 3, pp. 114-120. (As valueless as the three previous papers.)

584) *X.: Das feste Land. Eine Erzählung.* In the *Ph. Mg.*, 1790, iii, pp. 349-357.

584a) X.: *Noch etwas über den Begriff des Vorstellungsvermögens.* In the *Ph. A.*, 1792, i, 3, pp. 121-124.

585) X.: *Von der Proportion zwischen der Moralität und der Glückseligkeit.* In the *Ph. A.*, 1793, i, 4, pp. 22-39.

586) X.: *Auszug aus einem Schreiben, als ein Nachtrag zu der Abhandlung über die Proportion zwischen Sittlichkeit und Glückseligkeit.* In the *Ph. A.*, 1795, ii, 4, pp. 114-116.

587) X.: *Ueber das Glaubensbekenntniss eines Gottesläugners in der Französischen National-Convention.* In the *Ph. A.*, 1793, i, 4, pp. 40-45. (Held up to the Germans as an awful warning of what they will come to, if they base religion on morality.)

588) X.: *Ein Dilemma gegen den Kantischen Beweis von der Unsterblichkeit der Seele.* In the *Ph. A.*, 1794, ii, 2, pp. 10-12.

589) X.: *Ueber den Kantischen Begriff vom Genie.* (*Vid. Krit. d. Urtheilskr.*, pp. 190 ff., and p. 239.) In the *Ph. A.*, 1794, ii, 2, pp. 13-25.

590) X.: *Ueber das Kantische radicale Böse in der menschlichen Natur.* In the *Ph. A.*, 1794, ii, 2, pp. 34-47.

591) X.: *Priifung eines scheinbaren Kantischen Gedankens von dem moralischen Vortheile unsers eingeschränkten Wissens.* In the *Ph. A.*, 1794, ii, 2, pp. 48-59. (*Scheinbar* = only apparently true.)

592) X.: *Ueber die Kantische Teleologie.* In the *Ph. A.*, 1794, ii, 3, pp. 1-16. (If for the realisation of the highest good one must presuppose a highest intelligence, then the assumption is just as necessary for the explanation of teleology in nature.)

593) X.: *Dreyerlei Disorganisationen gegen das Ende unsers Jahrhunderts.* In the *Ph. A.*, 1794, ii, 2, pp. 17-31. (Kant correlated with Mesmer and the French Revolution.)

594) X.: *Gespräch zwischen Charlotte Cordé, der Mörderin des berühmtesten Marat zu Paris, und einem kritischen Philosophen.* In the *Ph. A.*, 1795, ii, 4, pp. 110-113. (These articles of X.'s, the list of which must be supplemented by no. 251 and three short papers quoted under *Fichte*, 1792, are extremely, almost passionately bitter in tone; but for the most part evidence an acute mind, and are at times really clever.)

Schwab is especially conspicuous in the *Archiv* from the number of his contributions:—

595) Schwab, I. C.: *Ueber die Zweyerley Ich, und den Begriff der Freyheit in der Kantischen Moral.* In the *Ph. A.*, 1792, i, 1, pp. 69-80. (Especially directed against Schmidt's *Versuch*, 1790.)

596) Schwab: *Ueber eine ungerechte Beschuldigung der Leibnitzischen Lehre von der besten Welt, in Hrn. Prof. Schmidt's Moral-Philosophie.* In the *Ph. A.*, 1792, i, 3, pp. 48-62.

597) Schwab: *Wie beweiset die kritische Philosophie, dass wir uns absolut-frey denken müssen?* In the *Ph. A.*, 1794, ii, 2, pp. 1-9.

598) Schwab: *Ueber den intelligibeln Fatalismus in der kritischen Philosophie*. In the *Ph. A.*, 1794, ii, 2, pp. 26–33. (Against Schmid's *Versuch*.)

599) Schwab: *Neuer Beweis für die Unsterblichkeit der Seele nach Analogie des Kantischen*. In the *Ph. A.*, 1794, ii, 2, pp. 123, 124.

600) Schwab: *Einige Einwürfe gegen den Kantischen Grundsatz der practischen Philosophie*. In the *Ph. A.*, 1794, ii, 3, pp. 116–120. — The joy of battle carried Schwab so far, that he even attacked, with weapons that were wholly inadequate, Kant's views of the origin of the universe, which had met with such general acclamation:

601) Schwab: *Prüfung der Kantischen Hypothese von dem mechanischen Ursprung des Planetensystems*. In the *Ph. A.*, 1792, 2, pp. 1–36.

602) Schwab: *Prüfung der Kantischen Hypothese von dem Ursprung des Ringes des Saturn, und der Berechnung der Achsendrehung dieses Planeten*. In the *Ph. A.*, 1793, i, 4, pp. 1–21.

Nos. 479, 491–493 in the *Ph. Mg.* belong to the year 1788. A copious index to the *Ph. A.*, 1794, ii, 2 and 3, with critical remarks, is to be found in Abicht's *phil. Journal*, vol. ii, 1794, pp. 213–245.

603) Pistorius, H. A. (over the signature *Sg*) speaks in the course of a review (*A. D. B.*, 1788, 80, ii, pp. 461–465) of Meiners' *Grundriss der Seelenlehre* (no. 240) of the success which the Kantian philosophy enjoyed with men of ripe judgment and trained mind. Reprinted in *Mtr.*, I. pp. 88–93.

603a) Rehberg, A. *Wlh.*: cf. no. 394.

604) Reuss, Mat.: *Aesthetica transcendentalis Kantiana una cum thesibus ex historia Philosophiae et Matthesi publicae disquisitioni exposita*. 4to. Würzburg. Nitribitt. pp. 27. (For the most part a literally translated summary of the R. Vb. Its only importance lies in the fact that Reuss was one of the first Roman Catholic professors to present the Kantian philosophy to a student-audience and to cause them to defend it.)

604a) Riem, A.: cf. no. 638.

604b) Schlettwein: on the dispute between Feder and Kant; cf. no. 324.

604c) Schmid, C. *Chr. E.*: cf. no. 294.

605–619, Schmid, *Ih. Wlh.*

605) Schmid, *Ih. Wlh.*: *De consensu principii moralis Kantiani cum ethica christiana. Programmata duo paschalia*. 4to. Jena. 1788. Strankmann. 4to. 1789. Same place. pp. 12. (Schmid was the best of the rationalistic German theologians, who attempted by arbitrary interpretation to banish from christianity everything that went beyond Kant's 'rational belief.' Kant's moral system is to him the only true one. It is brought into harmony with scriptural doctrine by forced exegesis. Revelation was not necessary, but only desirable for the sake of the more speedy

propagation of religious and moral truths-of-reason. This position, taken up in no. 605, is represented also in :)

606) *Schmid, I. W. : Ueber den Geist der Sittenlehre Jesu und seiner Apostel.* 8vo. Jena. 1790. Cuno's heirs. pp. 428. — Against a review of no. 606 in the :

607) *Hallischen gelehrten Zeitungen* (1790, Part 74) Schmid defended himself in the :

608) *A. L. Z.*, 1790, I. B., pp. 1107, 1108.

609) *Schmid, I. W. : Kurzer Abriss der Religions- und Sittenlehre für die Jugend.* Large 8vo. Jena. 1791.

610) *Schmid, I. W. : Programma de eo, quod nimium est in comparanda doctrina rationis practicae purae et disciplina morum christiana.* 4to. Jena. 1791.

611) *Schmid, I. W. : De disciplinae christianae cum principiis rationis practicae purae consensu.* 4to. Jena. 1792.

612) *Schmid, I. W. : Programma de populari usu praeceptorum rationis practicae purae.* 4to. Jena. 1792.

613) *Schmid, I. W. : Programma quo diversus philosophiae ad doctrinam Christianam habitus demonstratur.* 4to. Jena. 1793. pp. 12.

614) *Schmid, I. W. : Theologische Moral.* Large 8vo. Jena. 1793. Cuno's heirs. pp. 674.

615) *Schmid, I. W. : Lehrbuch der Theologischen Moral, für akademische Vorlesungen.* 8vo. Jena. 1794. Cuno's heirs. pp. 326.

616) *Schmid, I. W. : Christliche Moral, wissenschaftlich bearbeitet.* Large 8vo. Jena. Stahl. Vol. i. 1797. pp. xlvi, 555. Vol. ii, published by K. Ch. Erh. Schmid. 1800. pp. 509. Vol. iii, — also under the title : *Christliche Ascetik*, — published by K. Ch. Erh. Schmid. 1804.

Schmid was influenced by Kant also in dogmatics. The work which falls under this head bears the title :

617) *Schmid, I. W. : Ueber christliche Religion, deren Beschaffenheit und zweckmässige Behandlung als Volkslehre und Wissenschaft für das gegenwärtige Zeitalter.* 8vo. Jena. 1797. Stahl. pp. 512.

Schmid attempts to make the fruits of his theoretical investigations useful for practice, in the following publications :

618) *Schmid, I. W. : Anleitung zum populären Kanzelvortrage zum Gebrauch bey akademischen Vorlesungen.* Large 8vo. Jena. Cuno's heirs. i. *Theoretischer Theil.* 1787. pp. 296. ii. *Practischer Theil.* 1787. pp. 160. iii. *Historischer Theil oder kurzer Abriss der Geschichte der geistlichen Beredsamkeit und Homiletik.* 1789. pp. 296. Second edition, enlarged, improved, and in part entirely rewritten. Same place. Parts I, II. 1795. pp. 378, 310. Part III. 1800. pp. viii, 307.

619) *Schmid, I. W. : Katechetisches Handbuch zum Gebrauch für akademische Vorlesungen und Uebungen.* Large 8vo. Jena. Cuno's heirs. Part I. *Regeln der Katechetik.* 1791. pp. 188. Part II. *Katechetisches Lehrbuch der christlichen Religion.* 1791. pp. 420. Part III. *Beyspiele*

von *Katechisationen*. 1792. Sixteen sheets. Second edition, enlarged and improved; edited and supplemented by K. Chr. E. Schmid. Part I. 1798. pp. 305. Part II. under the title: *Abriss der Religions- und Sittenlehre für die christliche Jugend*. 1798. pp. 391. Part III. 1801. pp. 276.

620) *Schmitt, Jak. Praeside exponet systema Em. Kantii et propugnabit ortum, objecta generalia et praecipua, modumque cognitionis Hm. Jos. Zech.* 4to. Heidelberg. 1788. Wiesen. pp. 19.

621) *Schübler, Chr. Ludw.: Versuch der Einrichtung unseres Erkenntnisvermögens durch Algebra nachzuspüren, durchgehends mit Rücksicht auf die Kantische Philosophie.* 8vo. Leipzig. pp. 264. (Schübler follows out to its consequences Kant's view, that all mathematical knowledge proceeds only by construction of concepts. He thinks that Kant's statements, especially in the *Aesthetik* and *Analytik*, would prove this claim to apodeictic certainty best, "wenn sie durch algebraische Vorstellungsart fixirt, in der Probe des dabey anzuwendenden allgemein-gültigen Calculs beständen." Thus he bases, *e. g.*, the four species on the technical expressions of the *R. V.*, such as 'synthetische Einheit,' 'Recognition der Synthesis,' 'Einheit der Apperception,' etc.)

622) *Schultz, Ih.: Versuch einer genauen Theorie des Unendlichen. Erster Theil, vom Unendlichgrossen und der Messkunst desselben.* 8vo. Königsberg and Leipzig. Hartung. pp. 368, with two copper-plates. (Space is a given infinite, and nevertheless measurable, if regarded as a circle with infinitely long radius, *i. e.* $= \frac{4}{3} \pi \infty^3$. On the other hand, the continuity and infinite divisibility of space cannot be made intelligible. The first theory has, rightly enough, found no supporters: for why should not ∞^3 be taken as unit in place of ∞ , if Schultz regards the former concept as capable of construction?)

623) *Schulze, Glo. E.: Grundriss der philosophischen Wissenschaften.* Large 8vo. Wittenberg and Zerbst. Zimmermann. Vol. i. 1788. pp. 413. Vol. ii. 1790. One alphabet, four sheets. (Vol. i contains a brief introduction to Philosophy and Psychology; vol. ii, Ontology, natural Theology and Cosmology. The author does not wish to recruit for a definite system, but aims at introducing his pupils to self-examination and to thinking for themselves. He therefore expounds the most important philosophical systems, emphasising their strengths and weaknesses. On the whole, he is praiseworthy impartial. Full justice is done to the Kantian philosophy, though very important objections to it are urged.)

623a, b) *Schütz, Ch. Gf.:* cf. nos. 219, 220.

623c) *Selle, C. G.:* cf. no. 197.

624) *Skizze einer Geschichte der Aufklärung in Deutschland von der Reformation an bis auf Kant; und wie weit wir in der Aufklärung kommen können, wenn wir diesem Philosophen folgen?* By *n-s-h.* In the *Berlinisches Journal für Aufklärung*, vol. i, Parts I and II. (All 'enlightenment,' which is referred only to religion and morality, has been given its foundations, confined within impassable barriers, secured and pro-

tected against every attack of fanaticism, dogmatism and scepticism in the impregnable bases of man's faculty of thought, by the Kantian philosophy.)

625-634, *Stattler.*

625) *Stattler, Bened.: Anti-Kant.* Two volumes, large 8vo. München. Lentner. Vol. i, pp. xxx, 482. Vol. ii, pp. xiv, 429. With an appendix in a refutation of Kant's *Metaphysik der Sitten*. pp. 332. (Stattler, who was by no means a worthy opponent for Kant, had worked out a philosophical system as early as the end of the sixties. This professed to have happily avoided all the cardinal errors of previous logic and metaphysics, and to have convincingly proved, for the first time, the universality and necessity of metaphysical concepts. Despite this claim, Stattler derives all knowledge, even mathematics, from experience, as its ultimate basis. "Mittels der Abstraktion der einfachsten und sich widersprechenden Merkmale der Gegenstände derselben" we attain to "allgemeinen Verstandesurtheilen," before all to the analytical proposition of the sufficient reason, from which follow analytically the law of contradiction, the law of excluded middle, etc., as well as all general judgments of the understanding. From these, again, are derived the "reinen Vernunftschlüsse pur a priori." [§§ 323 ff., in the second part, give a brief *résumé* of Stattler's fundamental principles.] None the less does the *Satz vom Grunde* possess transcendental validity; and much can be said with certainty of God, the world and the soul. It is plain, that Stattler has not understood Kant's problems at all, if he can undertake his refutation from this obscure and contradictory standpoint. The refutation is couched in language which is often ambiguous, and replete with provincialisms. Boastful and conceited references are made to the author's own works, which have banished all problems from the world; the arguments alleged are absurdly insufficient, and they are frequently replaced by vulgar invective or cautions against the danger to religion and morality arising from the Kantian philosophy. Only on one point does the writer admit that Kant deserves recognition: by his annihilation of the philosophy of Leibnitz, he has pointed to Stattler, without any suspicion of doing so, as the only philosophical saviour. Since the result was precisely the opposite, and the reviewers showed no gentleness in handling Stattler, his later works became still more despicable. The place of argument is taken more and more by distortions of reasoning, lamentations and complaints of the pernicious opinions of Kant, contemptible perversions of the latter's utterances, calls upon the regents to suppress his philosophy, etc.)

626) *Stattler: Schreiben des Antikants an den Freund der Wahrheit über drei allerliebste Recensionen.* 8vo. 1789. pp. 16.

627) *Stattler: Schreiben des Verfassers des Antikants an die Theilhaber der A. L. Z. von Jena über eine in selber erschienene, äusserst seichte, aber eben darum viel bedeutende Recension seines Antikants.* 8vo. 1789. pp. 23.

628) *Stattler: Anti-Kant im Kurzen. Oder kurze vollständige Widerlegung aller von Hr. Joh. Schulz, Hofpr. und Prof. der Mathematik zu Königsberg im ersten Theile seiner Prüfung vertheidigten entscheidenden Hauptsätze der Kantischen Critik der reinen Vernunft.* 8vo. Vienna. 1792. Cf. no. 724.

629) *Stattler: Kurzer Entwurf der unausstehlichen Ungereimtheiten der Kantischen Philosophie, sammt dem Seichtdenken so mancher gutmüthigen Hochschätzer derselben. Hell aufgedeckt für jeden gesunden Menschenverstand, und noch mehr für jede auch nur Anfänger im ordentlichen Selbstdenken.* 8vo. München. 1792. p. 70.

630) *Stattler: Meine noch immer feste Ueberzeugung von dem vollen Ungrunde der Kantischen Philosophie und von dem aus ihrer Aufnahme in christliche Schulen unfehlbar entstehenden äussersten Schaden für Moral und Religion gegen zweien neue Vertheidiger ihrer Gründlichkeit und Unschuld, und Abhandlung über die Unmöglichkeit eines Beweises vom Daseyn Gottes aus blosser Vernunft.* 8vo. Landshut. 1793. Hag. Thirteen and a half sheets.

631) (*Stattler:*) *Wahres Verhältniss der Kantischen Philosophie zur christlichen Religion und Moral nach dem nunmehr redlich gethanen Geständnisse selbst des Herrn Kants und seiner eifrigsten Anhänger, allen redlichen Christen zum reifen Bedacht vom Verfasser des Anti-Kants.* 8vo. München. 1795. Zängl. Ten sheets.

Against *Stattler* appeared :

632) *Mutschelle, Seb.: Kritische Beyträge zur Metaphysik, in einer Prüfung der Stattlerisch-Antikantischen.* (Anonymous.) 8vo. Frankfurt. 1795. pp. xl, 216. Second edition, with author's name. 8vo. München. 1800. Lindauer. pp. xl, 216. — In reply to the first edition *Stattler* wrote :

633) (*Stattler:*) *Kritik der kritischen Beyträge zur Metaphysik. Vom Antikant.* Large 8vo. München. 1795. Lindauer. Three and a half sheets. Besides this :

634) (*Stattler:*) *Fernere Behauptung der Kritik über die kritischen Beiträge zur Metaphysik u. s. w. gegen den gegenwärtigen Recensenten in der oberdeutschen Literaturzeitung, vom Antikant.* Large 8vo. München. 1796. Lindauer. pp. 52.

635) *Stoll, Ih. Gli.: Philosophische Unterhaltungen, einige Wahrheiten gegen Zweifel und Ungewissheit in besseres Licht zu setzen, auf Veranlassung Hr. Kants Kritik der reinen Vernunft.* 8vo. Leipzig. 1788. In commission with Sommer. pp. 322. (This work, which possesses no significance whatever, is written — in tedious, declamatory, disjointed language — for the satisfaction of a friend, who has fallen a prey to doubts owing to the objections raised to proofs of God's existence, of immortality, etc. Kant is defended against the charges of Spinozism and atheism.)

636) *T.* : p. 737. Review of R. Vb.

637) *Tennemann, W. Gli.: Disputatio philosophica : Num sit subjectum aliquid animi a nobisque agnosci possit. Accedunt quaedam dubia*

contra Kantii sententiam. 4to. Jena. pp. 28. (By the two attributes 'thought' and 'consciousness' the soul can be known as substance, as thing-in-itself.)

638-649, *Tieftrunk.*

638) (*Tieftrunk, I. H.:*) *Einzig möglicher Zweck Jesu.* In the *Berlinisches Journal für Aufklärung.* Vol. i. 1788. Parts 2, 3. The latter part with notes by the editor, *A. Riem,* to which *Tieftrunk* replies anonymously in vol. ii, 1789, part 2 :

639) (*Tieftrunk:*) *Zusätze und Erläuterungen zum einzig möglichen Zweck Jesu.* The articles were published separately, in enlarged form and still anonymously, under the title :

640) (*Tieftrunk:*) *Einzig möglicher Zweck Jesu, aus dem Grundgesetze der Religion entwickelt.* 8vo. Berlin. 1789. Akademische Kunst- und Buchhandlung. pp. 160. Second edition, improved and enlarged, with the author's name. Same place. 1793. Large 8vo. pp. 250. (Between the religion of Jesus, rightly understood, and Kant's moral-theology, there obtains the most beautiful harmony. Christianity satisfies the demands of reason better than any other theory, reveals the dignity of man, and furthers his improvement. A fuller continuation of these thoughts is given in nos. 641, 642. Their aim is to prove the complete identity of the Christian and the pure moral rational-religion ; to establish, as the one fundamental law of the Christian religion, the proposition "Liebe Gott und deinen Nächsten als dich selbst," — a proposition which reason also discovers in itself, in the form of the Kantian moral principle ; to derive from this law all really Christian doctrines ; and on the basis of it to test, and where necessary to purify all positive religion, and in especial dogmatics as hitherto formulated. *Tieftrunk* hopes in this manner to allay all conflict between the religion of reason and the religion of revelation. The source of it does not lie at all in these themselves ; it is simply due to the fault of their dogmatising counsel on both sides.— No. 642 is particularly tedious in its diffuseness. Against *Tieftrunk*, cf. *Stäudlin*, 1791.)

641) (*Tieftrunk:*) *Versuch einer Kritik der Religion und aller religiösen Dogmatik, mit besonderer Rücksicht auf das Christenthum. Vom Verfasser des Einzigmöglichen Zwecks Jesu.* 8vo. Berlin. 1790. Akademische Kunst- und Buchhandlung. pp. 344.

642) *Tieftrunk:* *Censur des christlichen protestantischen Lehrbegriffs nach den Principien der Religionskritik, mit besonderer Hinsicht auf die Lehrbücher des Hrn. Dr. J. C. Döderlein und Dr. Sm. F. Nth. Morus.* Large 8vo. Berlin. Akademische Kunst- und Buchhandlung. Part i. 1791. pp. 238. Continuation i. 1791. pp. 136. Part ii. 1794. pp. xvi, 396. Part iii. 1795. pp. clxiv, 322. Second edition, altered and enlarged. Part i. 1796. pp. 380.— To be mentioned here are also the following works, which take their source in the same line of thought :

643) *Tieftrunk: Briefe über das Daseyn Gottes, Freyheit und Unsterblichkeit.* In the *Deutsche Monatsschrift.* 1790. Vol. i. Sept. pp. 195-210. 1791. Vol. ii. Febr. pp. 307-316.

644) (*Tieftrunk:*) *Ueber Vernunftmässigkeit des Christenthums vom Verfasser des einzig möglichen Zwecks Jesu.* In the *Berlinisches Journal für Aufklärung.* 1790. Vol. vi. Part 2.

645) *Tieftrunk: De modo Deum cognoscendi quaerit suasque simul indicit lectiones per hoc semestre habendas.* 8vo. Berlin. 1792. The elder Vieweg. pp. xii, 55.

646) *Tieftrunk: Dilucidationes ad theoreticam religionis christianae partem, ita ut libelli a Sm. F. Nth. Morus editi et, epitome theologiae christianae, inscripti potissimum ratio sit habita.* Large 8vo. Berlin. 1793. The elder Vieweg. Vol. i. One alphabet. Vol. ii, pp. 398. (The title does not accord with the contents. In reality the book presents a prolix philosophical system of dogmatics.)

647) *Tieftrunk: Dissertatio de argumento ex Ethicologia ad Dei existentiam vindicandam petito. Praes. Tieftrunk. Resp. I. Gf. A. Kroll.* 8vo. 1794. Halle. Two sheets.

648) *Kroll, I. Gf. A.: Philosophisch-kritischer Entwurf der Versöhnungslehre. Nebst einigen Gedanken über denselben Gegenstand, von I. H. Tieftrunk.* 8vo. Halle. 1799. Gebauer. pp. 172.

649) *Tieftrunk: Die Religion der Mündigen.* 8vo. Berlin. 1800. Akademische Buchhandlung. Vol. i. pp. cxv, 412. Vol. ii. pp. xxii, 534.

650) *Ulrich, I. A. H.: Eleutheriologie oder über Freiheit und Nothwendigkeit. Zum Gebrauch der Vorlesungen in den Michaelisferien.* 8vo. Jena. 1788. Cröker. pp. 106. (A logically elaborated determinism, which, rightly apprehended, does not abolish but rather supports morality. Man is in possession of freedom, in so far as his activity is not conditioned by shock or feeling, as in the case of mechanisms or animals, but is the activity of thought. Polemic against Kant's artistic but vain attempt at the unification of transcendental freedom and natural necessity. — Against it:)

650a) *Kant -Kraus:* in the *A. L. Z.*, 1788, ii, pp. 177-184. Cf. no. 68. Against it also *F. W. D. Snell*, no. 734 h.

651) *Versuch über Gott, die Welt, und die menschliche Seele; durch die gegenwärtigen philosophischen Streitigkeiten veranlasst.* (By I. H. Korrodi.) Small 8vo. Berlin and Stettin. Nicolai. pp. 424. (Since Kant's rational belief is only an acceptance-as-true founded on necessity and not on arguments from knowledge, the writer seeks to make some contribution towards the improvement of philosophic dogmatism. He treats therefore, in the first section, of the grounds of the common rational-knowledge of the soul, the world and God; in the second, he gives his system of transcendental philosophy; in the third, polemises against Kant's *Kritik*, particularly against its Idealism, — not without showing himself guilty of very grave misunderstandings of his author.)

651a) *Versuche über Gr.* Cf. no. 403.

652) *Wahrheiten, die vornehmsten — der natürlichen Religion, vortragen, und gegen die neueren Einwürfe vertheidigt, von E. n. d. E. r. W. (i. e., by 'Einem nach der Ewigkeit reisenden [Erkenntniss ringenden?] Weltweisen')* 8vo. Leipzig. Weidmann. pp. lvi, 100. (According to the Preface, there is no formal difference between mathematical and philosophical knowledge. The existence of God is, therefore, demonstrable; the law of causation possesses transcendental validity; men, animals, *etc.* are not phenomena. Kant's view upon the latter point is totally misunderstood; and in the other cases, criticism cannot say anything very different. In the work itself are given the customary proofs of the existence of God; and sections are devoted to the consideration of his attributes and works.)

652a) *Weber, Aug. Gli.*: cf. no 398.

652b-d) *Weishaupt, Ad.*: cf. nos. 303-305.

653) *Will, G. A.*: *Vorlesungen über die Kantische Philosophie.* 8vo. Aldorf. Monath. pp. 200. (On the history of the Kantian philosophy, with incomplete bibliography; the concept of philosophy in Kant; signification of the title of the *R. V.*; its contents, according to the author (Will) himself and to Schultz; contents of *Gr.*, and appreciation of Kant's system, — in which last Kant is blamed for his bad and involved style, his deviation from philosophical usage to employ his own scholastic terminology, his repetitions, and the severity of his judgments upon Leibnitz and Wolf; problematical passages are enumerated; and well-founded objections taken to the table of categories and Kant's abuse of it. Besides this, a request is put forward for enlightenment concerning a number of apparent contradictions, and the happiness-principle in ethics defended. The writer shows in all his conclusions conspicuous discretion and modesty. Much right criticism is passed by him. Of least importance is his exposition of the Kantian system.)

654) *Wörterbuch zur Kritik der reinen Vernunft und zu den philosophischen Schriften des Hrn. Kant.* (With Preface by *Sm. Heinicke.*) 8vo. Presburg. Mahler. pp. 133. (An almost verbal piracy of Schmid's *Wörterbuch* [no. 294]. Only here and there occur alterations for the worse by Heinicke, or quotations from his writings. The piracy was denounced by:)

655) *Schmid*: in the *A. L. Z.*, 1788, I. B., p. 184.

1789.

655a-d) *Abicht, I. H.*: cf. nos. 406-409.

655e) *A. D. B.*: cf. no. 362.

656) *A. L. Z.* iii., pp. 537-552. Review* of *M. A.* First and second editions (no. 64). Other reviews from the *A. L. Z.* are mentioned under nos. 476, 481, 500, 502, 508-510, 658.

657) *Born, Fr. Glo.: Prüfung der Klagen über die Dunkelheit der Kantischen Philosophie.* In the *N. Ph. Mg.*, vol. i. pp. 1-15. (In Kant's system, every concept is employed always with one and the same meaning, and the work is of the utmost precision and without contradiction. Obscurities the system has, — owing to the difficulty of its subject-matter and of the synthetic method; but only for persons whose minds are not adequate to the study of it: a judgment, which will hardly be confirmed nowadays even by the blindest partisan of Kant. Born was attacked for this exaggeration in the :)

658) *A. L. Z.*, 1789, iv, pp. 882 ff. (and defended himself in the *N. Ph. Mg.*, 1790, i, 3, pp. 414-425 :)

659) *Born: Ueber die Verwirrung der Deutlichkeit mit der Leichtigkeit der Begriffe. Ein Pendant zu der im ersten Stücke dieses Magazins S. 1-15 enthaltenen Prüfung der Klagen über die Dunkelheit der Kantischen Philosophie.* (Born admits that Kant's writings have no claim to aesthetic clearness, but asserts that they have to logical. The concepts employed are difficult, it is true, but not obscure, — or, if obscure, only for beginners in philosophic thinking.)

659a) *Born:* article in the *N. Ph. Mg.* 1789. Cf. no. 507.

659b) *Breyer, J. F.:* cf. no. 204.

660) *Briefe über mancherlei Phänomene in der deutschen gelehrten Welt.* In *I. W. v. Archenholtz' neuer Litteratur und Völkerkunde.* Large 8vo. Leipzig. Göschen. Vol. ii. pp. 33-43. (The reason for the frequency of opposition to Kant is said to lie in the difficulty of learning to change one's opinions in advanced life, in Kant's *Critik der rationalen Theologie*, and especially in the many current misunderstandings of him.)

661) *Determinismus, Ueber — und moralische Freiheit.* (Von Chr. Wlh. Snell. Vergl. No. 840.) 8vo. Offenbach. Weiss and Brede. pp. 85. (There is no metaphysical, but only a moral freedom. Of this we are conscious by *Selbstgefühl*. It consists in the fact that the operations of the soul are not inhibited or occasioned by a force which is foreign to her. With this freedom the consciousness of duty, responsibility, morality is, as experience teaches, compatible; though the manner of their reconciliation is for us unintelligible.)

662) *Dorsch, Jos. Ant.: Theorie der äusseren Sinnlichkeit.* Part V of the *Beiträge zum Studium der Philosophie.* 8vo. Mainz. 1789. Häfner's heirs. pp. 119. (Employs certain of Kant's technical terms: but does not treat, as it must according to the title, if Kant were strictly followed, of space, but of the five senses.)

662a-l) *Eberhard, I. A.:* cf. nos. 450, 499, 501, 509, 511-513, 537-540.

662m) *Erz-Räthsel der Vernunftkritik, etc.* Cf. no. 380.

662n-p) *Feder, I. G. H.:* cf. nos. 322, 326, 361.

662q-t) *Flatt, I. F.:* cf. nos. 446, 449, 451, 453.

663) *Fürstenau, C. Gtfr.: Ueber die Frage: Was ist von der Kantischen Philosophie zu halten? Für Dilettanten, nicht für Adepten.*

Programm. 4to. Rinteln. pp. 24. Reprinted in *Mtr.* i, pp. 3-51. (After a brief summary of Kant's theoretical and practical philosophy, which is in general correct and well adapted to serve as an introduction to its study, the position is established that it is neither dangerous to religion, idealistic, nor sceptical. Fürstenau does not venture upon a positive estimation; but he rightly blames Kant for his neglect of form throughout his writings, and very wisely cautions those who are but beginners in speculative thinking not to commence with the study of him.)

663a) *Geheimniss, Das offene* —, etc. Cf. no. 382.

664-673, *Gräffe.*

664) *Gräffe, I. F. Cp.: Neuestes catechetisches Magazin, zur Beförderung des catechetischen Studiums.* 8vo. Göttingen. Vandenhock and Ruprecht. Vol. i. Section 1. *Ueber Begriffe in catechetischer Hinsicht bei der Landjugend.* 1789. pp. 126. Second and enlarged edition. 1793. pp. 114 (smaller print). Vol. i. Section 2. With a short index of recent catechetical literature. 1793. pp. 311. Vol. ii. *Die Socratik nach ihrer ursprünglichen Beschaffenheit in catechetischer Rücksicht betrachtet.* 1791. pp. xxvi, 427. Second edition. 1794. Third edition, improved and enlarged. 1798. pp. 566. Vol. iii, also under the title: *Die Katechetik in ihren wesentlichen Forderungen betrachtet.* Part i. 1792. pp. 422. Second and enlarged edition. 1796. pp. 461. Vol. iv. 1801. (Gräffe was governed in his theological writings by the desire to base practical theology, and in particular catechetics, his favorite subject, on Kant's moral philosophy and moral theology, and to derive from these their principal contents. In addition to this, he attempted to discover the proper scientific form of catechetics, by an industrious thumbing of Kant's scheme of the categories. He believed that Kant's philosophy would exercise a great influence upon popular exposition. His text-books had a high reputation for some time, and were much used. He propagated his views by means of his *Katechetisches Journal*, which was devoted to reviews and items of news, and had the pleasure of seeing a considerable number of catechists following in his footsteps.)

665) *Gräffe: Katechetisches Journal.* First year. 8vo. Göttingen. Vandenhock and Ruprecht. pp. viii, 654. 1793; parts 1, 2. 1794; parts 3, 4. Third year (the second did not appear). 8vo. Hannover. 1795. Ritscher. 4 parts. pp. viii, 628. Fourth year. Same place. 1796. Parts 1-4: pp. 154, 131, 143, 151, and appendix, 1797, pp. 93. Fifth year. 8vo. Celle. Schulze. 1798; parts 1-3: pp. 184, 160, 176. 1799; part 4: pp. 176. Sixth year. Same place. 1799; parts 1-3: pp. 422. 1800; part 4: pp. 162. Seventh year. 1800. Parts 1-4. (From the third year on, also under the title: *Neues Journal für Katechetik und Pädagogik.* Years 1-5.)

666) *Gräffe: Vollständiges Lehrbuch der allgemeinen Katechetik, nach*

Kantischen Grundsätzen, zum Gebrauch akademischer Vorlesungen. Large 8vo. Göttingen. Vandenhock and Ruprecht. Vol. i. 1795. pp. xxi, 515. Second edition. 1805. Vol. ii. 1797. pp. xv, 551. Vol. iii. 1799. pp. xx, 592.

667) *Gräffe: Grundriss der allgemeinen Katechetik nach Kantischen Grundsätzen, nebst einem kurzen Abrisse der Geschichte der Katechetik von dem entferntesten Alterthum bis auf unsere Zeiten. Zum Gebrauch akademischer Vorlesungen.* Large 8vo. Göttingen. 1796. Vandenhock and Ruprecht. pp. xiv, 424.

668) *Gräffe: Versuch einer moralischen Anwendung des Gesetzes der Stetigkeit; ein Beytrag zur Pastoral, Homiletik, Katechetik, Pädagogik und natürlichen Theologie.* 8vo. Celle. 1801. Schulze. (Cf. *Gräffe*, 1798.)

669) *Gräffe: Ausführliche Katechisationen über den Hannöverischen Landeskatechismus.* 8vo. Göttingen. Vandenhock and Ruprecht. First part. 1801. Also under the title: *Ausführliche Katechisationen über den 1sten Abschnitt des Hannöverischen Landeskatechismus.* Second part. 1802. Also under the title: *Ausführliche Katechisationen über den 2ten — 4ten Abschnitt, etc.* Third part. 1804. Also under the title: *Ausführliche Katechisationen über den 5ten, 6ten und den Anfang des 7ten Abschn., etc.* Fourth part. 1805. Also under the title: *Ausführliche Katechisationen über die Pflichten gegen Gott und gegen sich selbst.* Fifth and last part. 1807. Also under the title: *Ausführliche Katechisationen über die Pflichten gegen den Nächsten, das Verhalten des Christen in besonderen Verbindungen, und über die Sakramente, nach dem 7ten und 8ten Abschn., etc.*

670) *Gräffe: Die Pastoraltheologie nach ihrem ganzen Umfange.* Large 8vo. Göttingen. Vandenhock and Ruprecht. First half, containing *Homiletik, Katechetik, Volkspädagogik* and *Liturgik.* 1803. Second half, containing the pastoral charge, the administration of ecclesiastical lands, behavior under certain circumstances, the internal and external calling of the preacher, and general protestant church-law. 1803.

671) *Gräffe: Ueber den Werth akademischer homiletischer Vorübungen, nebst Beschreibung meines homiletischen Seminars.* Large 8vo. Göttingen. 1812. Dieterich.

672) *Gräffe: Philosophische Vertheidigung der Wunder Jesu und seiner Apostel.* Large 8vo. Göttingen. 1812. Dieterich. Cf. with this no.:

673) *Gräffe: De miraculorum natura philosophiae principis non contradicente commentatio.* Large 8vo. Helmstädt. 1797. Fleckeisen. pp. 106.

673a) *Grosse, K.: Einige Ideen über die Dauer des menschlichen Lebens.* In *Grosses Magazin für die Naturgeschichte des Menschen.* Vol. i. Part 2. pp. 161–192. (Kant's moral proof of the existence of God and of immortality is presented, among others.)

673b, c) *Heinicke, Sm.:* cf. nos. 213, 214.

(Continued.)

E. ADICKES.

REVIEWS OF BOOKS.

Eine neue Darstellung der leibnizischen Monadlehre auf Grund der Quellen. VON EDUARD DILLMANN. Leipzig, O. R. Reisland, 1891. — pp. x, 525.

Since the "Secret of Hegel" was so brilliantly concealed some twenty-eight years ago, various attempts have been made to show that the philosopher *par excellence* has come and gone, unknown to a heedless and perverse generation. Descartes, Berkeley, Hume, Spinoza, and even "good old Dr. Reid" have all had their worshippers. The exponents of these thinkers, however, have been willing to see some defects in their philosophical hero, while the author of this work can see none in Leibnitz. "The Monadology is the most perfect fruit of philosophical reflection, the most complete and brilliant system in the history of philosophy." The reason why this has not been recognized long ago is that the current expositions of Leibnitz rest upon a radical misconception of his whole point of view, and therefore mistake every one of his doctrines. The source of the misconception is to be found in the assumption that Leibnitz developed his Monadology in a revolt from the Cartesian conception of Substance, whereas it really originated in the persistent endeavor to reconcile the mechanical view of the world, which had arisen from the new zeal for physical science, with the ancient and medieval idea of substantial forms. When we have got hold of this clue, we see at once that Leibnitz was not seeking to explain phenomena by any independent substantial reality, anything in itself, but his aim was to show that the external world itself has no reality apart from the activity of souls or monads. Accordingly he shows, by analysis of all the conceptions employed in the mechanical view of the world, that body as extended, moving, and resistant has only the reality of a well-ordered dream, while space and time are but the abstraction of the constant relations of coexistence and succession which obtain between phenomena. The only substantial realities are finite monads, and these again, though each is self-active or self-determined, are dependent for their continued existence upon God, the absolute substance or monad.

It is maintained by Leibnitz that, as body is divided to infinity, and therefore cannot be a real substantial unity, we are compelled

to recognize that it is phenomenal, or presupposes a real substantial unity. But his meaning has been variously misunderstood. (1) Zeller supposes him to be arguing that body is composed of an infinity of indivisible, simple beings. But this is to confuse the monad with the atom. Leibnitz nowhere maintains that body may be analyzed into ultimate elements; he holds, on the contrary, that it has no ultimate elements, since every part of it is divided to infinity. The unity of body is therefore not in body itself, but in that which makes body possible. (2) Zeller also supposes Leibnitz to be dealing with the question of how we come to have the perception or apprehension of body. An infinity of individual substances are presupposed in body, but these can appear to us as a corporeal mass, only if we suppose a soul which combines those substances into a whole: body is therefore the confused idea of the relation subsisting between the soul and those substances. This is not the doctrine of Leibnitz: his view is that body is in *itself* a mere phenomenon, and therefore has no reality apart from soul.

Again, Leibnitz in his analysis of the idea of motion points out that motion conceived as mere change of place is purely relative, and hence he infers that it implies something permanent and unchangeable. This is very different from saying that it implies an underlying substrate. There is, in his view, no such substrate, but force is the unchangeable unity of substance, which manifests itself in time in the form of motion. Thus force is a name for the spiritual or quasi-spiritual unity containing in itself implicitly the totality of past, present, and future motions of a body. This capacity can, however, only be realized in so far as from moment to moment there is a tendency (*nisus*) to change of place. Now this tendency which is manifested outwardly as tendency to change of place is in the monad desire, *i.e.*, the continuous effort after self-realization of all that is implied in its own unchangeable nature. The explanation of motion is therefore not to be found in the untenable hypothesis of an underlying substrate, which manifests itself in motion, but in the self-active realization of a spiritual unity.

As the current interpretation misconceives the Leibnitzian conception of motion, so it naturally misstates his views in regard to resistance and impenetrability. Starting from the false assumption that Leibnitz was asking in all cases how a certain phenomenon is produced by a thing-in-itself, his exponents have imagined him to affirm that a body occupies space because it is composed of forces. How preposterous this view is we may at once see if we consider

(1) that Leibnitz is really asking what space-occupation *means*, not how it is *produced*, (2) that body is not made up of substances at all, and therefore not of forces, (3) that a substance as a spiritual unity cannot occupy space. Accordingly, Leibnitz's explanation of resistance has been entirely misunderstood. It is supposed that resistance is the activity by which a body repels all other bodies and maintains its own place. But this makes resistance not a passive but an active force; in other words, a mode of motion. Leibnitz, on the other hand, contends that there are two distinct forces — an active force, which is expressed as motion, and a passive force, which does not involve motion. This passive force or *materia nuda* is simply the limit to activity which is implied in the very nature of a finite being. Hence the resistance of a body is not a form of activity, a reaction, but the passivity or inertia bound up with the nature of the finite monad. Accordingly, the dynamical law, that as the mass increases the velocity diminishes, just means that in proportion to the degree of passivity or "matter" the greater is the inertia. It need hardly be added that impenetrability is another form of the same law.

Dillmann finds that Leibnitz's conception of the representative character of monads has also been misunderstood. (1) Fischer's view, that the monad represents the world in the same way as a torso represents a statue, finds no support in Leibnitz. (2) Nor can Zeller's view, that the monad has an idea or image of the world, be accepted; for this assumes an independently existing world to which the monad is in no relation. The true view is that the world is actually present in each monad, but present from the point of view of its own limited activity. Each substance is a representation of its own body and movements, and through these of the external material world and its changes. The world so present, however, is phenomenal; it is not a mere idea-representation of an independently existing world, but the presentation in a single spiritual being of what it is itself in its inner nature. This phenomenal world is thus the means of sensualizing the inner activity of the monad, and hence the most abstract thought must present itself in the form of an image.

So far it has been shown that the mechanical conception of the world, when taken as absolute, leads to insuperable difficulties, which can be got rid of only if we regard it as the form in which real substantial unities express their inner nature. Every monad is a primitive force or unity, which is continually realizing itself in an active or moving force, but realizing itself only in the limited way possible

to a finite being. We have now to inquire more particularly into the nature of those real unities, and to consider their relations to one another, to the universe, and to God.

What did Leibnitz mean by an "individual substance" or monad? The current view is that, in opposition to the Cartesian school, he was seeking to show that the world consists of a number of separate and distinct substances, since corporeal phenomena imply the existence of forces in nature, and every active being is necessarily individual (330). To disprove this interpretation, it is enough to say that for Leibnitz God is an active substance, and yet He cannot be called a separate individual (333). By individual substance he means the completely specified subject (334). No doubt such a substance must also be distinct from all others, but its essence does not lie in this distinction, but in the fact that it contains within itself all the predicates by which it is specified as individual (335). Leibnitz was not protesting against the denial by Spinoza of all separate individuality to finite substances, but against the Scholastic substantiation of merely general predicates (339).

As monads express their whole past and future, so they express the whole universe. For the world is not a number of separate systems, but one connected whole, in which any change in one part involves a change in all. Moreover (and this is the main point) our ideas are not produced by independent things-in-themselves. If they were, some substances would naturally act upon us, some would not. Since, however, we represent things themselves, which are all connected in a system, we must represent the whole world, and not merely a part of it (343-4). But, though all monads express the whole world, they do so only from their own point of view; they are the special aspects of the one organic system, and naturally the world is mirrored in the most various ways (347).

From what has been said the true view of the "pre-established harmony" of monads will be understood. The ordinary account is that while the Cartesians explain the harmony of substances by the direct interference of God, Leibnitz maintains that they harmonize because they were originally *brought* into harmony by God. Dillmann contends that this is a thoroughly distorted account of Leibnitz's doctrine. It conceives of monads in a purely mechanical way, instead of regarding them as self-active beings. The truth is that no *deus ex machina* is needed to explain the harmony of monads, for their essential nature is to harmonize. The monad contains in itself a representation of the whole world, and the process of development

in time is just the realization of the relations subsisting between it and other monads, each of which as a representative of its own body reflects the universe from its own point of view. They *must* harmonize, because all the changes in the body of each are relative to the totality of changes of the whole world, and the monad represents the changes of its own body and thus of the whole world.

One of the most interesting sections is that in which the free activity of substances is discussed. The ordinary view entirely fails to apprehend the doctrine of Leibnitz, because it supposes 'inclination' to be a purely mechanical impulse. In truth 'inclination' is just the desire for a conceived good, attainable by means of a greater or less series of acts, and a will ruled by inclination is therefore free. It is true that Leibnitz rightly rejects the so-called 'liberty of indifference,' but in doing so he does not deny but substantiates self-determination.

In his account of the Leibnitzian conception of God, our author finds himself equally at variance with the traditional interpretation, according to which the idea of God is introduced in order to bring the monads into harmony with one another. This is not Leibnitzian. What Leibnitz says is, that while in point of fact substances from their very constitution are in harmony with one another, *they might not have been so*. Reflection upon the facts of experience proves their harmony, but experience cannot show that they might not have been of a totally different nature. We can only explain ultimately why they are what they are by attributing their nature to the will of God. Before the intellect of God all possible worlds were presented, and he selects that world in which all the parts harmonize. This act of choice, however, is determined by reason. God is pure activity, and his intelligence is therefore entirely free from temporal limits; hence his act of choice is not to be regarded as subsequent to his intuition of the possible worlds: the relation is logical not temporal. True, we cannot represent to ourselves the inner nature of God's activity, but we can see that it must be a timeless activity, free from all limitation. And, as the world is an expression of the rational choice of God, we must hold that nature is not a mere mechanical system, but must also be viewed as the realization of ends. Hence we must in interpreting nature make use of the idea of final cause as well as of efficient cause.

There are other interesting points in this work which I have been forced to pass over, as, for instance, the explanation of the principle of continuity; but enough has been said to indicate its stimulating

and suggestive character. Even the ample citation of passages from Leibnitz will be found of great value, and the exposition is in my opinion on the whole sound. The main defects of the book seem to me to be its too polemical character, which prevents either completeness of statement or proper perspective, and its almost childlike faith in Leibnitz as the only genuine philosopher. There is no doubt that Leibnitz marks a most important advance in the development of modern philosophy, but he cannot be regarded as the exponent of an ultimate synthesis. His system is valuable rather because it states a series of problems than because it solves them. To show this in detail would be a long task, and I shall limit myself to one or two points. (1) The category of force by which he seeks to determine the ultimate nature of reality cannot be regarded as final. For, when all forms of reality are so characterized, we are abstracting from the differences by which the various orders of existence are determined. Hence Leibnitz is compelled to conceive of self-conscious beings as in their essence identical with beings not self-conscious. (2) Every monad contains in itself potentially the whole series of acts by which it is realized; in other words, each monad is what it is even apart from the process through which it passes. This view seems to me inadequate. We cannot regard any reality as being what it is apart from the process by which it realizes itself. Hence Leibnitz, in his conception of substance, as containing summed up all that it becomes, makes the whole process of realization superfluous; he is really separating the unity of the being from all that gives it meaning, and then speaking of it as if it were still real. The best that can be said for Leibnitz is that he *means* to affirm the relativity of unity and difference, and that he is feeling after the category of self-consciousness as the only ultimate conception. But though his intention is good, his performance leaves much to be desired. (3) Dillmann maintains that for Leibnitz God is substance alongside of other substances — apparently without the least perception of the insuperable difficulties involved in such a conception. He does not even do justice to one aspect of Leibnitz's doctrine, but it may be admitted that this is the prevalent idea which Leibnitz countenances. Hence the thoroughly inconsistent conception of a choice between an infinite number of possible worlds. Nothing can be more easily shown than that the opposition of possible and actual worlds is untenable. The only possible world is the actual, unless we are to suppose that infinite reason may contradict itself.

JOHN WATSON.

La psychologie des idées-forces. Par ALFRED FOUILLÉE. Paris, Alcan, 1893. — 2 vols. 8vo., pp. xl, 365, 415.

Those who read the chapters on the Will which Professor Fouillée published in the *Revue Philosophique* last year, probably felt, as the present critic did, a strongly heightened appetite to see the rest of the long-announced book of which they were obviously an instalment. The book is here, but the result is a little disappointing, for the said chapters, reprinted with but little alteration, form, on the whole, its best part. The entire work is, in fact, little more than an amplification of them, and an extension of what is affirmed in them to the whole of our mental life. Professor Fouillée is a thinker with such sincere perceptions of his own, is so receptive a reader, too, and has often such a felicitous way of putting things, that the fact that his book is not so 'epoch-making' as he would doubtless have it, is a rather pathetic instance of the darkness in which Psychology still has to grope. Evidently what Psychology needs most is new conceptions, but all that Professor Fouillée brings is an unwontedly lively way of handling and combining old ones. These qualities, however, make his book important; and an acquaintance with it seems indispensable to all serious students of the vicissitudes of psychological opinion in our day.

Fortunately, although in details a certain prolixity and lack of sharpness make an abstract difficult, the author's main contentions can be briefly and simply defined. In the first place, he is animated by an overpowering desire to be full and concrete in describing the mental life, and he is convinced that the current accounts by the analytic or associationist school have grievously mutilated the reality in giving to the appetitive and volitional side of our nature a place so much less significant than that which it really owns. "The conception of mental states as *representations* is at bottom almost childish. In truth my sensation of the sun neither represents it, nor is its copy or its portrait. It is a means of passion and reaction on my part, . . . and to treat it as merely resembling the sun or differing from it is to put metaphysical speculation in the place of practical life" (I, viii). It is the inner life of which we are conscious in its fulness that M. Fouillée insists on; and the feeling of common men that there is something 'dead' and 'hollow' in the prevalent accounts, has never received a more articulate expression than in his pages. The true, primordial, and continuous consciousness is that of appetite. Underneath all our other feelings is the feeling

of something in us that suffers and reacts. That we can frame no image or representation of this foundation of our consciousness is no ground for doubting its existence. We live, but cannot represent to ourselves what life is; pleasure and pain are real, but cannot be made into *objects*; and psychological analysis can mount no higher than this sense of acting and willing, or give a definition or description of that from which the observer cannot be detached. The future is perpetually engendered by appetite. The being who enjoys or suffers does not repeat to himself continually: I suffer, therefore I suffer; I enjoy, therefore I enjoy. He says: I suffer, therefore I must *cease* to suffer; I enjoy, therefore I must *continue* to enjoy. Give what name you please to this movement towards the future, it is certain that it exists, and certain that it must play an ineradicable part in all our mental states and operations.

Accordingly Professor Fouillée passes in review the various sections of Psychology, as memory, association, the perception of difference and that of resemblance, that of time and that of space, the functions of conception, judgment, and reasoning, etc., and finds that appetite is the essential feature in even the most intellectual among them. The formation of those cerebral habits on which the conservation and revival of images in the memory are based is inexplicable without the supposition of an original desire and effort to retain the objects. In association mental selection organizes or destroys the couplings which cerebral forces may originally bring about. The primordial perception of difference is dynamic, being the feeling of the contrast between our inner activity and some resisting sensation which we would fain expel. The primordial perception of resemblance occurs, on the other hand, when we get the return of the desirable state. Affirmation, again, is but nascent action, and motor processes are vital factors in generalization and reasoning — we *handle* the new as if it were the old, we *obey* the suggestions of analogy, etc. The primitive revealer of time is the active attitude of waiting, of expectancy, and in space perception the active factors are notorious. Similarly M. Fouillée leads us through the sense of self and of not-self, through the ideas of reality, causality, infinity, etc., everywhere to find appetitions and motor processes playing a vital part. In all this it must be confessed that he remains upon the descriptive rather than upon the explanatory plane, for he hardly ever seems to pretend that appetitions help us to account for the precise nature or quality of the various forms of consciousness which they are

instrumental in bringing forth. But faithful description is the first (if not the last) of all good things in psychology, and the emphatic and vivid manner in which M. Fouillée has recorded the presence of the conative aspect of our nature is an immense service to have rendered. No one has hitherto done this as well as he.

When, however, one goes on and asks what the ulterior philosophic significance of all this celebration of the will's ubiquity may be, one finds that everything crumbles away. One might naturally have expected from M. Fouillée's enthusiasm for the motor-power of 'ideas,' and the primacy of the appetitive function in them, that he held a brief either for orthodox spiritualism or for some sort of a Schopenhauerian metaphysics. Neither is true. His tendencies are towards an evolutionary naturalism, interpreted in the 'double-aspect,' or 'parallelistic' manner, with which we are nowadays so familiar, and differing from Spinozism pure and simple only in the way in which it insists that the mental or inner aspect of the always double-faced event is the more genuine of the two. The outer cerebral mechanism is phenomenal, the feeling that goes with it is real. Nothing can surpass the vivacity with which M. Fouillée reprehends those who would reduce the entire science of life to animal mechanics, and explain man's intercourse with his environment by successive complications of reflex action. He insists on the concrete fulness: consciousness is there, and cannot be there in vain. It must be there because of its dynamic efficacy, towing the organism along and imprinting such habits and dispositions upon it as harmonize with wished-for goods. From its first dawn consciousness is desire, and desire means motion in the outer world. "It is the same process which perceives itself inwardly and directly as striving, and externally by its repercussion on the senses of touch and vision, as a cerebral movement of innervation issuing in muscular contraction." Of course this seems infinitely more rational than the fashionable treatment of feeling as an 'epiphenomenon' [O invaluable word!], for it makes our own sense of life give the clue to the world's interpretation, as a *génération perpétuelle de l'Avenir par l'appétition*. Only to make this process tally *fully* with our sense of life, one ought further to admit that the said generation of the future has dramatic decisiveness from moment to moment, and settles now or never *which* future shall occur. This additional connexion with life is, however, lost from M. Fouillée's philosophy by the determinism, which is one of its most systematically emphasized features. Few philosophic theses can show as many masterpieces

of argumentative writing as that of the determination *a parte ante* of the will; and it is no mean praise of M. Fouillée to admit that his exposition may rank with the best. He has lived with the problem intimately, as one may say; and his exposition is singularly subtle, persuasive, and complete. He thinks he brings back the sense of life into the matter by showing that the ideas of personal power and independence (like other ideas) are forces, and that, freedom being itself an object of desire, the wish to manifest it may determine action in a unique manner and decide alternatives presented by lower ranges of idea. A completely free act, in other words, would be an act performed under the empire of the idea of freedom. Only since, by M. Fouillée's deterministic metaphysics, this idea is itself the fated result of all the past, the 'now-or-never' character disappears from the operation; the dramatic decisiveness from moment to moment, which it seems to envelop, is at bottom an illusion; and the river of time, with this sort of freedom in it, rolls goods and evils as unintelligibly together to a common doom as if the *idée-force* of freedom had never been evolved. Far be it from me on this occasion to challenge the truth of determinism. Let it, for argument's sake, pass for rigorously true. Only then, it seems to me, this reflexion inevitably follows upon reading such a book as M. Fouillée's: Why grow so hot in argument to prove that the only forces in nature are our strivings, when after all the strivings bring nothing into being of themselves, but are mere moments of transition through which antecedent forces flow? And if the one and only possible 'next moment' was from eternity as certain in all its details as it becomes certain now, what deep difference does it make whether we conceive this unspontaneous and unoriginative 'now,' this inert channel for the *vis a tergo*, in mechanical or in spiritual terms? Such a point seems hardly worth the trouble of dispute. Hence the curious impression of *ignoratio elenchi* which M. Fouillée's attempt at morally reconciling us with determinism makes. We feel, as with Paulsen, with Hodgson, and other 'free-will determinists,' that something vital is forgotten. The only really promising way of softening the rigors of determinism would be by an optimistic metaphysics. Nothing short of a theodicy will serve the turn; for the important point is not to save that truly insignificant fact, our 'sense of freedom,' but to save the reality of morals altogether. The things deemed *evils* must either be proved to be, if fated, less evil, or if perforce still evil, then less essential and less fated parts of the universe than determinism can

allow. M. Fouillée's discussion inevitably suggests all these deeper questions, and that is one of its great merits; but the almost exclusively psychological point of view from which it is carried on, and the absence from it of any fundamentally original conceptions, keep it from effectually 'laying' all that more properly philosophical dust which it so well succeeds in stirring up.

WILLIAM JAMES.

Negative Beneficence and Positive Beneficence. Being Parts V and VI of the Principles of Ethics. By HERBERT SPENCER. New York, D. Appleton & Company, 1893. — pp. v, 483.

This volume completes Mr. Spencer's Ethical Philosophy, the later portions of which have already been reviewed in this journal. (See Nos. 1 and 10.) The title of the present work indicates its divisions. There is a section devoted to Negative Beneficence (pp. 263-332) and a section devoted to Positive Beneficence (pp. 333-433), besides appendices on the Kantian Idea of Rights, the Land-Question, the Moral Motive, and Conscience in Animals (pp. 437-460).

Justice is the fundamental principle of social co-operation. Justice, according to Mr. Spencer, requires that each individual shall take the consequences of his own character and conduct. Beneficence qualifies this law in the interest of the weak, the suffering, and the less favored members of the species. Negative Beneficence consists of restraints on activities, which, though not unjust, yet under certain circumstances operate to the detriment of others. Of this group of pain-giving actions Mr. Spencer treats of several varieties, which appear to have been selected quite arbitrarily. They are Free Competition, Free Contract, Undeserved Payments, Displays of Ability, Blame, and Praise. The time, place, manner, degree, conditions, and circumstances of the restraints in each case are discussed with amplitude of illustration, after the manner of the ethics of casuistry and the morality of exhortation. "Live and let live" is the principle accepted. Competition is good—so good that trades-unions are criticised for abolishing it among their members; yet the competitive warfare which large manufacturers and merchants often practise should be checked before it reaches the stage of commercial murder which annihilates smaller rivals. So successful lawyers and doctors should relinquish a portion of their business in the interest of less favored competitors. Even contracts, which justice would enforce, must yield when their enforcement would ruin one of the contracting

parties. Both employers and employed are reciprocally enjoined by negative beneficence not to insist upon ruinously hard terms. From these popular illustrations, Mr. Spencer turns, in the chapter on Restraints on Undeserved Payments, to rebuke those who unduly 'tip' cabmen, porters, and guards, much to the injury of the general public. This chapter like the following on Restraints on the Displays of Ability, which deals with wits, talkers, and experts, is strikingly suggestive of personal experiences. "One who monopolizes conversation loses more by moral reprobation than he gains by intellectual approbation." (See p. 308.) But is it not better to listen to one good talker than a dozen poor ones? As to the Restraints on Blame and Praise, the rule of wise moderation is recommended, and parents, children, employers, employees, friends, and strangers furnish cases for its application.

All this is, in the main, as true as it is trite. But there is a preliminary question to which Mr. Spencer gives an answer which, though dogmatically reiterated, seems to have no other foundation than an arbitrary theory of the limits of the functions of the State. Holding that justice may be enforced, Mr. Spencer claims that beneficence must be left to voluntary action alone. Compulsory beneficence is the taking from some and giving to others or the restraining of some for the sake of others; and this Mr. Spencer considers a violation of the primary law of social life in the interest of a secondary law, while at the same time it injures "social stability, social prosperity, and social health" (p. 274). Now, as a matter of fact, these detrimental results have not followed from the legal restraints on free competition and free contract which so many modern legislatures have established. Nor does reason furnish any dictum that forbids the State, that is, the people in their corporate capacity, to make enactments which shall modify the operation of natural or artificial advantages or disadvantages in the struggle for existence. It is not denied that beneficence is pre-eminently a field for voluntary service. What is denied is that the coercive power of the State must be altogether excluded from this field.

The first five chapters of the division on Positive Beneficence are devoted to Marital, Parental, and Filial Beneficence and Aid to the Sick, and Succor to the Ill-used. It is a region of commonplace and truism. In the next chapter on Aid to Relatives it is shown that community of blood has not in itself any ethical significance, and a forcible application of the doctrine is made to dealings between brothers and sisters and more remote relations. The following chapter on

the Relief of the Poor is the most important in the volume. It is characterized by hostility to the system of poor relief by means of the State and even of benevolent societies. "The beneficiary is not brought into direct relation with the benefactor" (p. 382). No doubt this individual ministrations to the poor is greatly to be desired. But in the complex organization of modern society, it is a form of ministrations which could not go far. In New York City, for example, how are the individual benefactors to find those who stand in need of aid? Organization is the magic word of modern society. And charity, too, must be organized. The charity organization societies which aid benevolent persons to dispense their gifts properly, and which serve also to bring benefactors and beneficiaries individually together, would seem to satisfy better than anything else all the conditions of this complex problem. With his predilection for individual ministrations alone Mr. Spencer overlooks this method of caring for the poor. But, on the other hand, he sees that in many lines of industry, economical ties might be sublimated into moral ties. Householders care for their servants; why may not employees in different industries be cared for by their employers? This will involve organization, which Mr. Spencer fails to recognize. Indeed the insurance of railway men by the corporations against death, accident, and old age is a problem now occupying the attention of philanthropic and prudent directors. History is already giving an affirmative answer to Mr. Spencer's question: "May we not expect that without re-establishment of the ancient powers of superiors over inferiors, there may be resumed something like the ancient care for them?"

The chapter on Social Beneficence proposes a "rationalization of social observances" (p. 409) in the matter of entertainments, dress, appearances, funerals, weddings, etc. Mr. Spencer bursts with indignation at the inconveniences to which custom and tradition put him. So far as the chapter is ethical, it imparts new vigor of treatment to an old theme. So far as it is aesthetical, it might have been enriched by a study of the second volume of Von Ihering's *Zweck im Recht*, in which there is an acute and exhaustive examination of Social Observances.

The chapter on Political Beneficence is an arraignment of representative, that is, party, government. The United States is governed by "an oligarchy of office-holders, office-seekers, and men who exercise irresponsible power" (p. 414). The British House of Commons is made up of "political incapables, popularity-hunters, and

time-servers" (p. 417). Political beneficence dictates strenuous exertions against this system. But the mode of action is not further particularized.

This volume does not touch any questions of ethical theory which have not already met us in the preceding portions of Mr. Spencer's ethics. The old confusion in regard to the ultimate end of life is perpetuated (see pp. 329-30). Is it Happiness or Preservation? And whether Happiness or Preservation, is it the Happiness or Preservation of the Individual or Society? So, again, the conception of Justice is clouded with ambiguity. At one time, as in the volume on that subject, Justice is conceived as the survival of the fittest, or, as Mr. Spencer puts it, the taking by each individual of the consequences of his own character and conduct. But at other times Justice is identified with equality—an idea directly contrary to the other. Thus on page 273 we are told it is "unjust that the inferior should be left to suffer the evils of their inferiority, for which they are not responsible." (See also pp. 425-6.) Of Justice, therefore, as of the End of Life, Mr. Spencer has two theories so discordant with one another that there is room for all minor varieties between them. He is thus able to answer Yes *and* No to all questions on these fundamental points. And, what he appears to enjoy still more, he is able from some or other point of view to criticise most other theories.

There has been a suspicion that Mr. Spencer's ethics does not forbid suicide and murder. If the end is the well-being of the species, is not the taking-off of those whose lives are a burden to themselves and to others a good riddance for society? Indeed, this conclusion is unavoidable for every merely hedonistic theory of life. Mr. Spencer comes pretty nigh to an explicit declaration of this morality or immorality of despair in the following passage (p. 393):—"If left to operate in all its sternness, the principle of the survival of the fittest, which, as ethically considered, we have seen to imply that each individual shall be left to experience the effects of his own nature and consequent conduct, would quickly clear away the degraded. But it is impracticable with our present sentiments to let it operate in all its sternness."

From the standpoint of "absolute ethics" the fittest should survive and the weakest perish; but "with our present sentiments" this is "impracticable"! Nothing could show more conclusively the mistake of making general happiness or the preservation of the species the end of life. The true end is the perfection of the individual agent; and the starting-point of ethics is the infinite worth of his

inviolable personality. Here Christianity and Moral Philosophy are at one.

Mr. Spencer's ethics is vitiated by an inadequate conception of the moral agent. The essential life of the mind, which is the man, consists in activity. And without volition there is no virtue. Moral life is not merely a scene of physical forces, but a theatre of ideals and efforts. It is the doom of Mr. Spencer's ethical philosophy that it is written in the passive voice.

I have elsewhere insisted that the doctrine of evolution does not furnish us with an ethical theory. The contention at the time created some surprise and even gave offence. But the whirligig of time brings its vindication. Mr. Spencer is the philosopher of evolution *par excellence*; and in the preface of the volume before us Mr. Spencer makes this confession: "The doctrine of evolution has not furnished guidance to the extent I had hoped." Though this is a mild statement, it is very suggestive. Has Mr. Spencer, on the completion of his evolutionary ethics, awakened to the discovery that there is no such ethics? For evolution means gradual progression; and as this is an historical process, a series of progressing occurrences, it can throw light on none of the fundamental questions regarding the nature of right and the ground of duty which have engaged the attention of Mr. Spencer and other moralists. It is true that evolution is sometimes used as synonymous for the Darwinian principle of natural selection, or struggle for life and survival of the fittest; and Mr. Spencer does not always avoid this usage. But in this sense, the adjective "evolutionary" would have such a meaning that the phrase "evolutionary ethics" would be a contradiction in terms. A history of struggles, survivals, and destructions, whatever else it may be designated, is certainly no doctrine of *ethics*. It is a matter of regret that Mr. Spencer did not observe at the outset of his ethical studies that the doctrine of evolution could not furnish him with the matter, and only to a very limited extent with the method, of his ethical speculations.

J. G. S.

Geschichte der neuern Philosophie. Von KUNO FISCHER. Neue Gesamtausgabe, VIII. Band. Arthur Schopenhauer. Erstes Buch, Schopenhauer's Leben und Character. Zweites Buch, Darstellung und Kritik der Lehre. Heidelberg, Carl Winter's Universitäts-Buchhandlung, 1893. — pp. xvi, 495.

In 1872 Kuno Fischer published the sixth volume of his well-known work on the History of Modern Philosophy, the life and

philosophy of Schelling constituting the subject of the book. Since then, the sage of Heidelberg has been devoting his attention to the revision of what he wrote before, as well as to the study of German literature. His work in the domain of literary criticism certainly takes rank with the best done in that line. The student of the great German masters cannot fail to be benefited by a careful examination of Fischer's books on Lessing, Goethe's *Faust*, Goethe's *Tasso*, and Schiller, all of which are productions of acknowledged worth. But though we must admire the versatility of this German Taine, and welcome his contributions as valuable additions to a sadly neglected field, we cannot but feel that whatever energy he expends in other directions means so much of a loss to philosophy. We should not like to have Kuno Fischer leave his *Hauptwerk* unfinished. The philosophical world is patiently waiting for his interpretation and criticism of the Hegelian system, the absence of which the appearance of the volume under present consideration renders especially conspicuous. The publication of *Schopenhauer* assures us that Professor Fischer's interest in other branches of knowledge has neither deadened his love for philosophy nor detracted from his ability as an author. Indeed, the work shows unmistakable signs of increased intellectual freshness and vigor.

The general plan of the book before us is the same as that followed by its predecessors. Book I, pp. 1-146, presents a carefully prepared biography of Schopenhauer, and enters into an examination of that odd genius's problematical character. A concluding chapter enumerates his writings, and reviews the various editions of his works. Professor Fischer agrees with Grisebach in his condemnation of Frauenstädt's edition, which is a thoroughly unreliable piece of work and in no way justifies the trust placed in its editor by the great pessimist. Grisebach receives high praise for having succeeded where Frauenstädt failed; his edition of Schopenhauer meets all the requirements of a good edition, as these are set forth by the philosopher himself.

Kuno Fischer makes a careful study of Schopenhauer's character, paying due regard to inherited characteristics as well as to the influences of environment. As a rule, an agreement of some kind exists between a man's *Weltanschauung* and his personality; or, in the words of Fichte: "Was für eine Philosophie man wähle, hängt davon ab was man für ein Mensch ist." But in Schopenhauer's case there seems to be no agreement whatever between practice and preaching. He, the heartless, arrogant, conceited egotist, preached

the gospel of self-abnegation. Our historian deserves credit for not attempting to ignore contradictions that cannot be reconciled, contradictions acknowledged by Schopenhauer himself. And he, forsooth, was not given to underestimating his worth!

Book II (pp. 147-495) gives an exposition of Schopenhauer's system (pp. 149-453), and then criticises the same (pp. 454-495). In his exposition, Professor Fischer follows the most natural order. The system must be approached from its epistemological side. Writings on the theory of knowledge are first considered (pp. 149-218), the material used being: the dissertation *Ueber die vierfache Wurzel, etc.*, *Die Farbenlehre*, *Die Welt als Vorstellung*, *Parerga und Paralipomena*. (References are made at the foot of the page to the original passages.) The metaphysical teaching, as this is expressed in the works, *Die Welt als Wille*, *Der Wille in der Natur* (which contains the metaphysical system *in nuce*), is next set forth (pp. 218-350). The portion presenting the philosophy of art (pp. 291-350) is simply admirable. The philosopher's ideas are illustrated by most appropriate selections from the works of great poets. The ethical system is explained (pp. 350-425) from *Die beiden Grundprobleme der Ethik*, parts of *Die Welt als Wille*, and selected passages from other writings. A review of Schopenhauer's critical estimate of the philosophy of his predecessors, as well as of himself, completes the expository part (pp. 425-454).

In his critique, Kuno Fischer first points out the fundamental error of the entire system, which consists in Schopenhauer's utter lack of historical appreciation and insight. In this respect he is wholly out of touch with his age, which is distinctively historico-critical in its tendencies, as well as with Kant, whose sole and true heir he so constantly claims to be. But after having depreciated the scientific value of history and denied its philosophical significance, he suddenly adopts the opposite view. Indeed, he is continually contradicting himself. Thus his system may be characterized as a monistic scheme of development, when it holds that the world-principle, will, objectifies itself by passing from lower to higher stages. But it also maintains the antithesis, when it proclaims the serial order of the universe to consist of immutable species, of eternal, timeless, Platonic ideas.

The philosopher also entangles himself in irreconcilable contradictions when he tries to advance an idealistic theory of knowledge alongside of a materialistic psychology. Time, space, and causality are merely brain-functions; *i. e.*, time and space are in the brain

and the brain is in time and space. A veritable *circulus vitiosus!* But this is not all. The intellect, the function of an organ, becomes conscious of its organ, it becomes conscious also of itself! And then this secondary manifestation of the will, the function called intellect, reflects on itself, and by so doing finally negates its organ, the will. On Schopenhauer's hypothesis, a Schopenhauer would be an absolute impossibility. His pessimism also abounds in contradictions. The world is a vale of tears and non-existence, therefore, "a consummation devoutly to be wished." And yet this world of ours is a means of purifying the soul, of negating the will; hence, it cannot be such a bad thing after all!

Kuno Fischer has taken exceptional pains with the critical part of his work. He applies to the system the test which must be applied to every organized body of thought. Is the deduction self-consistent throughout, does it explain the facts? It requires a great deal of critical acumen to answer these questions, and our author successfully accomplishes his task. Reasoning from a blind will-principle, how can we ever explain the fact of consciousness? At what stage of the process does this important fact appear? Is not consciousness as much of a principle as will or force?

We miss in Professor Fischer's critique a criticism of Schopenhauer's fundamental principle as well as of his views concerning the free-will problem. We should also like to know what progress the system marks in the history of philosophy, and what of permanent value it contains. According to Schopenhauer, will is the underlying principle of the universe, the *ἐν καὶ πᾶν*, the thing-in-itself of which we are the manifestations. Is not such a thing-in-itself a mere abstraction of thought, and is not Schopenhauer's attempt to pass from an idea to reality a return to the practices of scholasticism? Could we not apply to his own philosophy the epithet which he was so fond of applying to the systems of Fichte, Schelling, and Hegel, and call it *Wortphilosophie*? He says, too, that we become immediately conscious of the thing-in-itself, of the *Wille an sich*. We do not. We become conscious of ourselves as individual beings, and never come 'face to face' with a *Ding an sich*. To speak of a will manifesting or objectifying itself, is to apply the form of causality to the thing-in-itself, which, by hypothesis, is not permissible. Schopenhauer feels the difficulty, when he says that, after all, the ideality of time, space, and causality is but *relative*. "Consistency thou art a jewel!" The absence of a critique of our philosopher's position on the question of free-will is

not an accidental omission on the part of Professor Fischer. Both he and Schopenhauer accept Kant's doctrine of the intelligible and natural character. The latter is determined, the former free. Freedom is eliminated from the phenomenal world and relegated to the mysterious realm of the intelligible. Of course, the solution of the problem in this way is as unsatisfactory as it is simple.

No one acquainted with Kuno Fischer's writings can help admiring the logical arrangement of his thoughts, the clear and simple manner in which he expresses them, and the fertility of his imagination. "Um schön zu schreiben, muss man klar und geordnet denken." From the point of view of style, the new volume is exceptionally fine. It is as fascinating as though Schopenhauer had written it himself. Replete as it is with epigrammatic sentences, suggestive illustrations, and apt quotations, it stimulates and inspires. It is *geistreich*. — The exposition is not a cold, lifeless abstract of Schopenhauer's writings, but a vigorous reproduction of his spirit. Kuno Fischer discovers to one the possibilities of the summary. Abstracts are usually more difficult to understand than the original, because they are skeletons of the same, so many bones without flesh and blood. Professor Fischer takes up a system into his very blood, as it were, and then re-creates it. He is not a mere copyist, but an artist. And if he ever errs in his interpretations, it is due, in my opinion, to his artistic sense, which cannot bear to see gaps, but would contemplate things as one complete and beautiful whole.

FRANK THILLY.

SUMMARIES OF ARTICLES.

[ABBREVIATIONS.—*Am. J. Ps.* = *American Journal of Psychology*; *Ar. f. G. Ph.* = *Archiv für Geschichte der Philosophie*; *Int. J. E.* = *International Journal of Ethics*; *Phil. Mon.* = *Philosophische Monatshefte*; *Phil. Stud.* = *Philosophische Studien*; *Rev. Ph.* = *Revue Philosophique*; *R. I. d. Fil.* = *Rivista Italiana di Filosofia*; *V. f. w. Ph.* = *Vierteljahrsschrift für wissenschaftliche Philosophie*; *Z. f. Ph.* = *Zeitschrift für Philosophie und philosophische Kritik*; *Z. f. Ps. u. Phys. d. Sinn.* = *Zeitschrift für Psychologie und Physiologie der Sinnesorgane*; *Phil. Jahr.* = *Philosophisches Jahrbuch*; *Rev. de Mét.* = *Revue de Métaphysique et Morale*.—Other titles are self-explanatory.]

PSYCHOLOGICAL.

La sensation de plaisir. BOURDON. *Rev. Phil.*, XVIII, 9, pp. 225-237.

Pleasure is a peculiar psychological phenomenon. It has been far less exhaustingly studied than has Pain. There is only one extant theory, that of Wundt. The views of this psychologist and of Richet are open to criticism on many points.—My own theory is as follows: Pleasure is a special sensation, and not a common sensation or a property of sensation in general. It is of the same nature as the special emotion of tickling (*chatouillement*). [Characterization of tickling.] Pleasure is a diffused tickling, of slight intensity.—The following arguments may be adduced in favor of this theory: (1) Authoritative. (a) Descartes, so far as he has any definite view, tends to identify pleasure with tickling (*titillation*). (b) Bain emphasizes the rôle of contact in pleasure (sexual and maternal love, etc.). (2) Factual. (a) There are certain nerves, whose excitation gives rise neither to pleasure nor pain. These seem, then, to be *special* states. (b) Pleasure always implies cutaneous excitation. This is obvious (a) for the sensation of contact. It is hardly less so (b) in the case of temperature sensations. The common view that extreme heat and extreme cold are sensed identically is incorrect. (c) The same holds of non-retinal sensations of movement, whether of our own or of some other body. And the hypothesis explains (d) the pleasantness of certain tastes and (e) scents. [We may distinguish here between the agreeable and the pleasant, the disagreeable and the painful. Pleasure is

agreeable, pain disagreeable; but not every 'agreeable' produces pleasure, and a 'disagreeable' need not be painful.] (ξ) The sounds which we emit are attended by mechanical excitations, not only in the buccal region, but often also over a considerable portion of the body. My theory explains the terms 'high,' 'low,' 'scale,' etc., as applied to sound. Deep notes should be theoretically the more pleasant: but association complicates matters. Heard sounds are pleasant or unpleasant through tactile association. (η) Visual sensations do not cause pleasure or pain: they are rather agreeable or disagreeable. Still, there is pleasure involved in the movements of the eyeball, in conjunctival excitation, etc. And association may be strong, — of easy or impeded movement, of 'warm' and 'cold' (in color), etc. (θ) The internal or general sensations allow of ready subsumption to my hypothesis. All are probably reducible to special emotions, and in particular to different kinds of cutaneous sensation. (ι) A consideration of the emotion of joy gives support to the theory. Cf. Lange's analysis. (κ) So with the so-called 'higher' pleasures, which are psychologically identical with the sense-pleasures. — The will has been plausibly reduced to a sensation-group. The question of pain-organs and pain-nerve has been carefully discussed. My aim has been the indication of an organic substrate and a sensory basis for pleasure.

E. B. T.

Théorie vibratoire et lois organiques de la sensibilité. J. PIOGER.
Rev. Phil., XVIII, 9, pp. 238–262.

(1) *General ideas as to sensibility.* Its general or synthetic study has been neglected. But this is important, because it is the study of the uninterrupted transition from objective to subjective phenomena. — We must not confuse Sensibility in general with Impressionability or general sensibility; we must not restrict it, either to the sensations of pleasure and pain, or to conscious sensibility. Sensibility is a modifiable term, covering a group of 'sensible' phenomena; it is a generalization or abstraction, which expresses the fact that living organisms react 'sensibly' to excitation, — the 'sensible' reaction being by differentia active or spontaneous in its lowest forms, perceived or conscious in its highest. — There is an intimate connexion in our minds between the idea of Sensibility and that of Essentiality. Cf. Cuvier. There are two tendencies. For some, Sensibility is the essential, an entity, as opposed to special sensibilities. Others analyze the former into the latter, its con-

stituents, desiring to discover the common element in them. — Always there is the difficulty that we cannot take facts as they are, but view them through the medium of our own mentality. — Sensibility is the animal attribute *par excellence*. We begin with the simple reactions of the protoorganisms. And this is the last notion of Sensibility; contraction or movement in presence of an external or internal excitant. Consider the sensibility of an amoeba. — The relation of things to us must be kept in view: not us, or the things. Necessary to the production of Sensibility is the coupling of excitant (object) and excited (subject). This is fundamental. Cf. my work *Le monde physique*. — To define: Sensibility is reducible to the idea of the property, common to all living bodies, of reacting intrinsically upon every external or internal excitation, in the special way of function (physiological) or faculty (psychological), but always essentially in the form of a molecular modification which we must term *vibration*. (2) *Vibratory theory of Sensibility*. Consideration (a) of the ear; law of vibratory synchronism. (b) The eye; simile of organic photography. (c), (d) The current theories of olfactory particles and of gustatory chemistry are *sub judice*, and the verdict may be predicted to be against them. (e) For touch, which readily accords with the theory, see *Le monde physique*. (f) Temperature, the bridge connecting special with general sensibility, presents no difficulty. — The best idea of the phenomenon of objective Sensibility is that of a transmitted vibration, variously impressed on the molecules of our organism, the transmission being differentiated in direct ratio to our organic differentiation. Living matter is molecularly excessively unstable; hence its high sensibility. — In a word, Sensibility is Vitality. Only we express different modes of manifestation by different terms, and thus confuse words with things. Every reflex is a resultant of organic sensibility; and all life is a resultant of reflexes. — A crowd of problems is solved by the right definition and appreciation of Sensibility. Living matter becomes more complex, unstable and motile as we advance along the scale of life: hence, *e. g.*, the greater sensibility of civilized peoples, of oppidans, of the rich. Our ‘molecular’ vibration is vibration within the limits of change of constitution: there are, *i. e.*, in the universe, constitutive movements and vibratory movements, which must be distinguished. — Molecular motility increases with complexity and instability. We understand, then, the maintenance of the general organic equilibrium; we note the function of nervous specialization; we begin to grasp the genesis and mechanism of Sensibility proper, —

internal and psychical sensibility and consciousness. The 'sensible' reaction is the repercussion of a local modification on the whole, a necessary result of the equally necessary organic solidarity. And as we find in the physical world complications, interferences, polarizations, so may there well be a similar play of action and reaction in the psychical. (3) *Laws of Sensibility*. Our leading ideas must be those of differentiation and incessant equilibration. And we distinguish dynamic modification of the organism (Sensibility proper) from organic (nutrition and organization; our general idea of Sensibility). So we have (a) the law of differentiation and (b) the law of organization. The dynamic is always tending to pass over to the organic, as is readily seen in physical examples. — The first law has many corollaries. Necessity of differentiation of an excitation in time and space. Perception of vibration-totalities or groups. (Cf. Taine.) — A simple variant of (b) is (c) the law of habituation. And a fourth law is (d) that of the uniformization of Sensibility, implying the coördination of individuals to a whole, or the gradual attenuation of differences till there is a resultant fusion. — Fundamental for consciousness, as for our mentality and knowledge, is differentiation. To repeat: Objectively there is necessary, for Sensibility, an intraorganic modification, extrinsically originated; this implies a general reaction to the local difference, — and this repercussion (generalized, analyzed, or redistributed by the nervous system) constitutes the subjective perception of the objective excitation. The intrinsic vibration (conscious perception) is subject to the same laws with objective Sensibility. Here is the key to many philosophic riddles, — subject and object, consciousness and subconsciousness, instinct and reason. — Every sensation (registration at tension in a nerve-cell of an external impression) is at once a gate of entry for any similar sensation, and a store of activity, to be increased or energized by its own repetition. Hence the possibility of education, and the complexity of our concrete mentality.

E. B. T.

The Psychological Basis of Hegelism. ALEX. FRASER. Am. J. of Ps., V, 4, 472-95.

The psychological process of apperception plays a very large part in the development of the sciences. The dominant scientific conception of an age tends to be carried into all realms of thought. All phenomena are interpreted in the light of this conception. In

Hegel's time the dominant conception was that of polarity, the attractive and repulsive agency manifested in galvanism. Chemical processes and the processes of life and thought were alike regarded as manifestations of electric agency. The same thought of polarity was deeply rooted in the philosophy of Schelling and Hegel, and they based all the sciences on it. In Hegel's *Logic* the one dialectical principle (positive, negative, indifference point) is over and over again repeated. This can best be seen in the doctrine of essence. The *one* passes over, not into *any* other, but into *its own other*. The opposition is *real* (not logical) *polar* opposition. "The conception of polarity," says Hegel, "which is so dominant in Physics, contains by implication the more correct definition of opposition." Schelling emphasized the identity or indifference-point of the magnet, Hegel the difference of the poles. Hegel applied the physical conception of polarity to the constitution of thought. The facts which Hegel seeks to explain are empirically arrived at and then interpreted and strung together by the principle of polarity or electric synthesis. The synthetic principle does not develop. The evolution is a repetition of the one principle, repeatedly read into experience. The real development is the movement from abstraction to the concrete forms of experience. In all the Hegelian categories the valuable thing is not the interpretation given, but the statement of the facts. The principle of polarity fails to explain things. With Hegel, Nature always remains irrational, and yet he maintains that it is ultimately rational. The principle which harmonizes Mind and Nature, the rational and the irrational, cannot be rational. It must transcend reason. It is the principle of polarity. Hegelism has value: first, in the facts which Hegel observes and the general conclusions reached; secondly, in showing, by breaking up the old hard and fast lines, not indeed the positive *infinity*, but the wonderful *plasticity*, of thought. Our main thesis suggests that all the great systems rest on psychological presuppositions.

J. A. LEIGHTON.

Origine et nature du mouvement organique. J. LOURY. Rev. Phil., XVIII, 7, pp. 32-55.

M. Loury gives an account of the theories of Max Verworn in regard to the origin and nature of protoplasmic movement. Verworn distinguishes three classes of facts to be accounted for in the study of movement in unicellular organisms: (1) the formation of pseudopods, (2) phenomena of protoplasmic excitation, (3) phenomena of the degeneration of denucleated protoplasm. He offers a physico-

chemical explanation of all these facts, the substance of which explanation is that all expansion, whether 'spontaneous' or in response to external stimulus, is due to the affinity of certain protoplasmic particles for oxygen, which can be obtained only at the surface of the protoplasmic mass; while all contraction results from the opposite affinity of the most highly oxidized particles for the nuclear substance. A cell deprived of its nucleus disintegrates, because it lacks the substance which can give rise to the centripetal currents. Verworn, however, deprecates the exclusive importance ascribed by Kölliker and others to the nucleus, holding that the cell-body is equally essential.

The same general principle of a protoplasmic affinity first for oxygen and second for the nuclear substance is used to explain all forms of organic movement. Each segment of a muscular fibre, for example, is composed of a layer of contractile substance between two layers of a non-contractile substance which is in direct connection with the surrounding highly nucleated sarcoplasm. An excitation causes the contractile substance to decompose. Like all highly oxidized protoplasm, it is strongly attracted to the nuclear substance, which can be reached only through the non-contractile layers on either side: hence the whole fibre is shortened.

MARGARET WASHBURN.

Der Blinde und die Kunst. FR. HITSCHMANN. V. f. w. Ph., XVII, 3, pp. 312-20.

The author confines himself chiefly to a discussion of the significance of poetry for the mental life of the blind. Blind persons are perhaps more receptive than others to the influence of psychological poetry. When poetry is descriptive of the phenomena of external nature, they must, of course, form make-shift images (*Surrogatvorstellungen*) of these objects. Their own poems on Nature show that these are oftentimes exceedingly minute and accurate. It is generally lyric poetry for which blind persons show greatest talent, but they are also much influenced by the dialogue. They exhibit an extraordinary susceptibility for rhythm, and are able to reproduce large portions of poems without any effort. In general, the fine arts (1) enrich the mental life of the blind by a host of ideas and sensations which nature would bestow neither in such rich variety nor with such force and liveliness; and (2) they enliven and ennoble his whole being, and at the same time extend and raise his mental outlook.

J. E. C.

ETHICAL.

The Relations of Religion and Morality. WILHELM BENDER.
New World, II, 7, pp. 453-478.

At the close of the Middle Ages men began to abandon theological foundations for law and morality, and sought to explain both exclusively from the nature of man and of society. Yet the emancipation of morality from religion was not then thoroughly accomplished, since the declaration that the moral law would preserve its validity, even if there were no God, was invariably accompanied by the assurance that it might be regarded at the same time as the expression of the will of God for mankind. Only when, after Schleiermacher, men began to understand the special nature and independence of religion, and to study it historically and psychologically, were they prepared to determine its true relation to morality. Religion is neither the pure product of the human subject, nor the pure result of an influence working from without, but rather the product at once of outer forces and inward responsive action. It always appears in history as belief in powers operating upon man, to which he offers prayer and sacrifice in order to win their help and avert their punishment. He does not understand the nature of those conditions upon which the realization of his life depends, and finds his purposes thwarted or promoted in an inscrutable manner by overpowering forces. These incitements to the formation of religion are : objectively, the laws and forces of the universe ; subjectively, our dependence on them and the necessity of subordinating ourselves to them because we cannot thoroughly understand and master them. These factors lead us to feel our weakness, our need of help and salvation, and concentrate desires and hopes and faiths upon the belief that, where our own insight and power fail, we may reckon upon the support of a general world-order in the fulfilment of our life interests, so far as these do not run contrary. Thus religion has no other origin than civilization has—the impulse to the preservation and enrichment of life. But religion manifests itself in desire, in hope, in faith and prayer ; civilization in productive, moral, and intellectual labor. Now as all human affairs are conditioned by a course of things superior to man, these religious prayerful desires will attach themselves to all forms of activity without distinction—the productive and economic, as well as the social and political. Hence religion stands in no closer connection with moral life than with the

productive activities. Prayer for the needs of economic life arises with the same power when we have reached the limits of our own strength, as prayer for forgiveness when we have violated the moral order. The independence of morality and religion is made plain in three essential features. First : religious action, as faith and prayer, is distinct from the moral deed. Second : the religious act is connected with every activity, not merely with the moral. Third : the religious act is called forth not only by moral, but also by immoral efforts, as the history of religion shows. Now morality is to be explained purely from the interaction of man with man in social relations. There is, then, only one opening by which religion can enter the moral life : the supplementary sanctioning of custom, law, and morality, through which those moral regulations which have arisen naturally are designated as the laws of the world-governing power, a revelation of the divine will. Thus religion is not the productive and guiding power in moral progress. The moral law could develop itself independently, and had so developed before it received the religious sanction. On the other hand, morality influences religion in three ways. It is the social-moral necessities which call forth and condition the religious expression of duties and laws. Again, the collision into which man falls with the moral law furnishes the strongest incentive to the formation of religious views. Lastly, it is especially when we consider the progress of morals in its relation to the whole world-process that the necessity of a religious interpretation and foundation of this process comes to the front.

E. L. HINMAN.

Can Economics furnish an objective standard for Morality?

SIMON N. PATTEN. *Journal of Speculative Philosophy*, XXII, 3, pp. 322-332.

This paper consists of a criticism of Spencer's theory of ethics, and an argument in support of an 'economic' theory—a system whose objective standard is deduced from the conditions determining the 'food-supply.' The 'greatest happiness' principle is assumed throughout. Spencer asserts that it is the business of moral science to deduce from the laws of life and the conditions of existence what kind of conduct tends to produce the most happiness and least unhappiness ; and he holds the view of a progressive evolution, during which pain is gradually eliminated, which has as its goal an ideal social state where pleasure is unalloyed with

pain anywhere. But an examination of the conditions of existence, which Spencer neglects, shows that a progressive evolution is possible only in a world of change, and that the ideal social state is possible only in a world of uniformity, and consequently his theory is inapplicable to the world which exists. An objective standard for morality may, however, be deduced from 'the external conditions of existence'; these conditions are mainly those surrounding the food-supply, and they must determine what are 'the highest types of moral action.' The greatest amount of happiness or pleasurable existence being the goal, the world must be filled with happy beings. But the number of these is limited by the conditions of the food-supply. Consequently, there is demanded the greatest economy in consumption and a maximum of production, and this latter requirement implies the use of all land in the most productive manner. Thus a person's conduct is determined, 'in an objective sense,' by his demand for land, that is, by that kind of consumption which it requires a fewer or greater number of acres to supply, *e.g.*, if an acre of land will produce the food-supply for one person in a year, and he consumes besides the produce of another acre in "liquor and tobacco," he is cutting off the existence of a fellow-being from the world. "Only that conduct can be absolutely right" which allows of these two ends: "the greatest economy of the food-supply and the use of all the land in the most productive manner."

W. B. ELKIN.

METAPHYSICAL AND EPISTEMOLOGICAL.

Ein unaufgeklärtes Moment in der kantischen Philosophie.

ROBERT HOAR. *Phil. Mon.*, XXIX, 5 u. 6, pp. 278-291.

This article puts the question: Was Kant a Mystic? Considerable highly interesting evidence is presented for both the affirmative and the negative, but no solution is attempted. Some time ago Carl du Prel published Kant's lectures on psychology together with an introduction: "Kant's mystische Weltanschauung." These lectures form a portion of a work which was published in 1821 by K. H. Ludwig Pölitz, entitled: "Immanuel Kant's Vorlesungen über Metaphysik." This work, as is explained in a quotation from its preface, was constructed from two manuscripts of notes taken down in Kant's lecture room—the first older, fuller, and without date,

the second dated 1788, and being on the broad margin by a second hand in 1788 or 1790 "theilweise berichtet, mehr aber noch erweitert und ergänzt." Pölitz considered that he had in these manuscripts the report of the same course of lectures given at three different times. In one portion of his edition of these lectures the first manuscript, and in another the second, had been made the basis, without any alteration by the editor except in the arrangement of the punctuation, the omission of an occasional superfluous *aber* or *also*, and the striking out of a few passages where the copyist had apparently missed the sense. Pölitz assures his readers that they have before them "the true Kant" in every line of the work. It is to be observed now that those lectures on metaphysics from which Du Prel extracts the mystical lectures on psychology had passed through four hands—the writer of the first manuscript, the writer of the second, the writer of the margin of the second, and the editor, Pölitz. A number of quotations from different parts of the work of 1821 are given, which seem to show the absolute incapacity both of the original copyists and of the editor. The lectures on psychology in this work are indeed in the highest degree dogmatic and mystical. Can it be that we have here "the true Kant," as Pölitz asserts? Quotations are given from Schulze, Borowski and Jachmann, which show that to his most intimate friends Kant never displayed the least tendency towards mysticism, although he seems to have been charged with such by some of his contemporaries. Could these lectures be assigned to his early pre-critical years the discrepancies might be explained, but besides the date given by Pölitz, Du Prel reports having examined a copy of a fragment dated 1788, and agreeing almost word for word with the text of Pölitz' edition. There is a problem here that remains to be cleared up before we can be sure that we have "the true Kant."

F. C. FRENCH.

Die Religion der Wissenschaft. Eine Skizze aus dem philosophischen Leben Nordamerikas. PAUL CARUS. Phil. Mon., XXIX, 5 u. 6, pp. 257-278.

This article, by the editor of *The Open Court* and *The Monist*, is intended to set forth to European readers the aims of the Open Court Publishing Company and the character of the 'religion of science,' for the establishment, development, and propagation of

which this company was formed. By religion is here understood a world-view as guide to action. It has to do with the whole man; it is the sum total of his ideas as they affect his feelings and thereby determine his will; it is a matter at once of the understanding, the heart, and the practical life. The object is to retain all that is true and good in the old religions, and summarily to eliminate the errors; to establish religion on the verities of modern science rather than on the myths of a supposed revelation. The idea of developing out of the old religion a religion of science which shall recognize no revelation but the facts of nature is no more utopian than was in earlier times the idea of developing astronomy out of the superstitions of astrology or chemistry from the errors of alchemy. The philosophical principles by which the Open Court Publishing Company is guided may be expressed in two words: positivism and monism. By positivism is meant the principle that all knowledge is a description of facts. Laws of nature are formulas which describe the facts of a certain class with the greatest possible economy. Our abstract concepts represent, not metaphysical essences or forces which act upon things from without, but certain properties of the things. Our world-view must be built up on such facts only as are indubitable and are always open to fresh investigation, and, further, to be regarded as indubitable, a fact must not come into contradiction with other facts. A description of all facts must form a unitary system, in itself congruent and free from all contradictions, *i.e.*, a monism. Monism regards the world as an inseparable and indivisible whole, all different truths as so many different conceptions of one and the same truth. There is only One Truth, and this One Truth is eternal. Positive Monism can be called a new philosophy only in opposition to the philosophies which still think that there is a philosophical or metaphysical knowledge radically different from scientific knowledge. The last half of the article is given to a concise summary of the application of these principles to theology, ethics, and religion. The following subjects are treated in paragraphs of from one to two pages in length: The Data of Experience and the Soul; the Object and its Reality; the Unity of Subjectivity and Objectivity; One-sided Conceptions; the Ethics of the Religion of Science; Character of the Religion of Science.

F. C. FRENCH.

Die philosophische Bedeutung der Ethnologie. TH. ACHELIS.
V. f. w. Ph., XVII, 3, pp. 285-311.

I. Psychology. The human mind is, to a great degree, the product of society. Therefore, to completely understand its nature, we must leave the individual standpoint and attend to the psychology of social man. We must consider races as great complex wholes. First in importance is the light that is thus thrown upon the action of our unconscious mental processes. What we can discover by introspection is soon exhausted, but the field of knowledge may be indefinitely extended when we infer from the phenomena of sense the nature of our own mental activities. For our sense world is not the world in itself, but only a group of images which are the product of our own inner life. We can, therefore, discover in it much concerning our unconscious soul-life, and, in this way, become more fully acquainted with our own inmost nature than we could by introspection alone. Ethnology also enables us to explain the origin of many concepts and notions that have hitherto been regarded as mysterious. II. Epistemology. Ethnological studies furnish evidence from many fields to the fact that knowledge is the resultant of reciprocal action between the external environment and the human soul. III. Ethics. The first gain for which ethics must thank ethnological induction, is the proof which it furnishes of the complete relativity of the content of our moral ideas. The form of our moral consciousness—the ability to distinguish right from wrong—may indeed in a certain sense be called *a priori*; but the morals of each individual are determined by the social organism in which he lives. From the point of view of ethnology the moral ideas of the individual are perceived to be the necessary result of the relations which he sustains to society. Ethnological sciences, and especially ethnological jurisprudence, show us that scientific treatment demands a purely objective standpoint, and that we should furnish explanations of the origin and nature of the various ethical notions and customs without any individual estimation of their moral quality and worth.

J. E. C.

Jugement et ressemblance. V. EGGER. Rev. Phil., XVII, 7,
pp. 1-31.

This article is intended to suggest an empirical explanation of the principle of identity. The ordinary *a priori* theory supposes, first, a

concept, A , concerning which we make the analytic judgment " A is $b + c$." Here $b + c$ may be considered as the analysis of a second or predicate A ; hence the judgment " A is $b + c$ " presupposes the judgment " A is A ." The steps of development are therefore as follows: A , $A - A$ (a simple reduplication), A is A , A is $b + c$. Since it is impossible to obtain the form of a judgment from the analysis of a mere concept, though reduplicated, and since " A is A " is the primitive form of judgment, presupposed by all others, the principle of identity is *a priori*. To this theory E. grants that no analysis of a concept will give the copula. But we need not therefore despair of tracing the origin of judgment. Its source is simply the process of association by similarity. Resemblance is partial identity. When the child associates A with B on the ground of resemblance, he does so because he perceives in them a common element, a , and he tacitly affirms that a (in A) is a (in B). "The association by resemblance and the judgment differ as the Cartesian obscure and clear idea, and what is clear in a judgment has been produced from an association by an ordinary and well-known mental operation, to wit, abstraction." What, then, becomes of the distinction between analytic and synthetic judgments? It practically disappears, for while every judgment — being the connecting of two terms — is a synthesis, it is when compared with the general idea, "whose point of departure is also association by resemblance," an analysis. For the general idea is a fusion of elements, while to make a judgment it is necessary to extract a simple element from the genus. As for association by contiguity, its result in consciousness is a simple enumeration, it never gives the copula. It may be objected that even at the beginning of speech a distinction is made between " A is B " and " A is like B "; the latter expression being a secondary form of the first, having as predicate the class "like B ." To this it is answered that the beginning of speech is not the beginning of thought, but so much later that the original habit of uniting individual to individual by means of the copula has already yielded to the tendency to generalize. The further objection that enumeration of resembling objects is as natural as enumeration of contiguous objects is met by distinguishing between "natural contiguities" of space and time, which can only be enumerated, not united by the copula; and "artificial contiguities" of resemblance, which may indeed be enumerated, but which also furnish material for a complete judgment.

MARGARET WASHBURN.

Ejective Philosophy. THOS. P. BAILEY, JR., Ph.D. Am. J. of Ps. V, 4, pp. 465-471.

Psychology is the basis of Philosophy. Mind is a 'permanent possibility' of movement. Knowing and feeling exist for doing and the capacity for doing. Muscular strain is the *starting point* of Philosophy. The *standard* is impulse, the basis of will and work. The *criterion* is catholic human *instinct*. Ejective philosophy seeks its leading principles in the philosophy of character and religion. It will exalt aesthetic anthropomorphism. Philosophy is representative and therefore ejective. Man is not *objective* (matter), not *subjective* (feeling), but *ejective*, self-objective, actively personal.

J. A. LEIGHTON.

Sur l'origine de la vie terrestre. SULLY PRUDHOMME. Rev. de Mét. I, 4, pp. 324-345.

Naïve notion of children ascribes life to everything which seems to feel, think, and act voluntarily. With them sensation, especially that of pain, is the most patent characteristic of life. Later under the influence of observation and study, the way of regarding it is changed,—becoming at once narrower—wider. Purely physiological life is distinguished from psychical. Scientists ascribe to the phenomena of consciousness (sensation, ideas, will, feeling) a character which cannot be reduced to definite properties by the so-called natural sciences. This character of psychical life does not take into account at all the metaphysical question of the relationship between physiology and psychology. Scientists confine themselves to the determination of the relationship of phenomena of the two forces of life, leaving aside the metaphysical question of the relation of their essence. In the vegetable the organic seems entirely separated from the psychical life, owing to the lack of a nervous system. In the development of forms according to inherited types, nutrition and reproduction are the only characteristics which these two kinds of life have in common. No germ continues to exist at the high temperature the earth must have had in its evolution (in the theory of Laplace), and we must therefore regard life as having been generated by a particular collocation of certain mineral elements. But the conception of the germ as made up alone of physico-chemical elements differentiated by the manner of arrangement does not accord with the data of experience and observation.

The body known as germ reveals an action which is not explicable by physico-chemical forces — *e.g.*, vegetable growth counteracts the force of gravity. The force which realizes the type of a plant is different from anything we know of the mineral elements. The work of Pasteur has overthrown the hypothesis of spontaneous generation of life, formerly held by Pouchet, and has shown that life presupposes always a germ or elementary organism. But if spontaneous generation is impossible, when or how do these organisms arise? In the author's hypothesis the appearance of the first living cell is explained as the initial attempt of the principle of life, whose activity up to this time has been impersonal, latent, unconscious, to become individualized in organizing itself. The organism may be regarded along with the principle of life as a condition of feeling, for every sensation presupposes an impression and every impression an organ. It is for this reason that there is no occasion to ask what has been the effect of extremely high temperature of the earth on the principle of life prior to the appearance of animal and vegetable forms. This effect was zero by reason of the lack of organization. The work of the principle of life existed only potentially, not actually. The principle of life in the author's hypothesis is, like gravity, a force revealed by its effects; its action exists in a potential state before being manifested without, and its development was from the simplest rudimentary form up to the stage of consciousness.

W. H.

Le problème de l'infini. I. La relativité. G. MOURET. Rev. Phil., XVIII, 7 et 8, pp. 56-78; 141-153.

The fundamental law which furnishes the primitive idea of all mathematical notions is, at bottom, an extension of the relation which the well-known principle of the conservation of energy supposes, unlimited extension, for this law applies to all orders of physical phenomena. Reduced to its simplest and most general expression, it means that for a change to take place in a "continuous and isolated" material system, it is necessary that this system be heterogeneous, and that the like homogeneous elements of which it is composed be not all in the same state. The cause of every change, then, is a difference of state, just as the cause of every manifestation of energy, is an absence of equilibrium. It results from this law of the association of like elements that, in the particular case of the association of two bodies in different states, two phenomena and only two are possible, according as the total change with which

the system is affected takes place simultaneously in both bodies or in only one. We conceive, in the first case, a series of changes which mutually determine each other, and in the second case a change which may take place in one of the bodies without a corresponding change taking place in the other. The opposition between a symmetrical and an asymmetrical relation, both reduced to a common term, becomes the foundation of a new kind of relation, the relation of the finite to the non-finite, these last words serving to designate two correlative attributes, *i.e.*, the places of the two terms in the relation. But this asymmetry which gives rise to the non-finite, has a definite sense relatively to the common term, a sense defined by the relative rôle of the unique body whose state is not modified in spite of its association with another body. This unique body, indeed, may be either the body taken as a standard or the body compared, and that allows one to conceive the existence of two joint asymmetrical relations of opposite import with regard to the common term, a system which gives rise to another kind of relation, that of zero to a finite quantity. These last words designate, moreover, two correlative attributes, two aspects of the relation. This common origin of zero and of infinity involves, as regards that which more particularly concerns infinity, the following consequences, already admitted for zero. Infinity is conceivable, like zero, as expressing a particular, relative position of its object, considered as a term of a certain rational system. Infinity may be conceived as the attribute of objects finite and limited in their other qualities. But while a negative concept in so far as it is a species of the genus non-finite, it is positive in so far as it is a species of the great genus which includes finite and non-finite, by which genus a change, simple or double is affirmed. It should be added that this change is always a finite, limited change, and that thus an infinite does not rest upon any other infinite. The infinite is not, as one would be tempted to think *a priori*, a complex, formed of the infinites of space, or of time. The infinite may be composed of finites, and its primitive elements are not only real, but finite. Finally, the infinite is not an absolute, it is a relative; it is the place of a term in a system of relations. Whoever believes in the absolute ought to seek for it elsewhere than in the data of science, for he never will find anything there, in the last analysis, except differences between states of consciousness. We shall see later whether this conclusion stands the test in the case of the true infinite, which is that of quantity, the mathematical infinite.

HISTORICAL.

Die neuplatonische Lebensbeschreibung des Aristoteles. A. BUSSE. *Hermes*, XXVIII, 2, pp. 252-276.

I. *The Vita Pseudo-Ammoniana.* In all of the MSS. of the *Commentaries of Ammonius and Philoponos to the Categories* a brief Vita of Aristotle is prefixed, and this is followed by a slight treatise on Logic as the Organon of philosophy. In the editio princeps of the works of Aristotle the Vita appeared without the treatise on Logic under the title βίος Ἀριστοτέλους κατὰ Φιλόπονον. In the following edition (Venetiis 1503, 1545, 1546), it was ascribed to Ammonius, and so acquired the name Pseudo-Ammoniana. This Vita is closely related to the Vita Marciana, and the question arises whether one is derived from the other or both are from a common source. From the evidence of language Pseudo-Ammoniana must be later than the Marciana; the former on linguistic grounds must be referred to the Byzantine age, while the latter belongs probably to the time of the last Neoplatonists. This fact taken with the evidence found in the manner of composition and the contents of the two Lives, indicate that the Vita Marciana is the source of the Pseudo-Ammoniana. The author of the *Byzantine Commentary to the Isagoge of Porphyry* (Elias, a pupil of Olympiodoros), is the probable author of the *Vita Pseudo-Ammoniana* and the accompanying treatise on Logic. II. *The Vita Marciana.* This is a collection of disjointed excerpts from some older Vita. The chief source as given in the Vita itself is Andronikos and Ptolemaios, and these two are quoted by Elias in his *Commentary to the Categories* as authorities (Brandis, p. 22^a 12, 24^a 20). The work of Ptolemaios, which contains an account of the life, an enumeration of the writings, and a copy of the will of Aristotle, furnishes the chief source of the Marciana, and was used by Elias, as is shown by parallel passages. In addition to Ptolemaios, the Vita is dependent on Simplicius and Olympiodoros (*cf.* Simplic. *de coelo*, p. 41^a and Vit. Marc., p. 433, 5; Olymp. in Plat. Gorg., p. 391 and Vit. Marc., p. 431, 20; Olymp. in Ar. Meteor., f. 32 and Vit. Marc., p. 432, 15.)

W. H.

NOTICES OF NEW BOOKS.

Die bewusste Beziehung zwischen Vorstellungen als konstitutives Bewusstseinsmoment. Ein Beitrag zur Psychologie der Denkerscheinungen. Von DR. ERNST SCHRADER. Leipzig, Duncker & Humblot, 1893. — 8vo., pp. xii. 84.

Dr. Schrader is a writer in whom the German vices of over-formality and punctiliousness of method almost eclipse the German virtues of acuteness and profundity. His results seem to me undeniably true, however, and corroborative of theses which I have set forth in my own *Principles of Psychology*, so I am glad to call the reader's attention to this, his maiden work.

He begins by asking how much of the material present to consciousness at any one time can be called a single idea. Is the table with the pencil on it one idea, or two ideas? If two, why then is not the table itself, with its four distinct legs and top, five ideas? etc., etc. He decides that the test of unity in a percept or concept is *functional*: whatever objects of consciousness *act together* in determining what further associates shall be reproduced, must be considered as forming on that occasion a complex unity. Whenever the pencil calls up associates of its own exclusively, then it is an idea by itself; whenever, whilst on the table, it reminds us of So-and-so who always keeps pencils upon his table, then it is part of the complex idea 'table + pencil.' This point settled, Dr. Schrader takes three simple examples out of his own experience, and, seeking to explain the sequence of thoughts and acts in them by the laws of association rigorously applied, finds that the latter cannot be made entirely to suffice. Schematically stated, these cases are examples either of the fact that whereas neither *a* nor *b* singly will suggest *c* to the mind, both together will suggest *c*; or of the fact that *a* singly may suggest *c*, but that when *b* adds itself to *a*, *c* is expelled and *d* is suggested in its place. The result of Dr. S.'s discussion is first to show that a bead-like string of single ideas following each other by association will explain none of these cases, and that the least we can suppose, as the antecedent in any such reproduction, is a complex idea, *a + b*. But Dr. S. then shows that where *a + b* actually drives out a *c* which had been suggested by *a* alone, we must suppose more than this, we must suppose a repugnancy, a 'negative relation,' namely, between the *b* and the *c*, which repugnancy does not merely act *mechanically* as it would if it simply made us *forget c*, but acts *consciously* by forcing us to feel *c*'s incompatibility and to seek for another consort for the given *a + b*. [In the case given, *a* is a retinal picture which first suggests 'lady';

but presently *a* is perceived to be attached to *b*, a wheelbarrow, whereupon 'lady' is corrected into 'workman.'] Consciously realized *negative relations* being thus proved necessary to the complete determination of certain thought-sequences, Dr. S. tries to show that *positive relations* must also be felt between the elements *a*, *b*, and *c* of the mental sequence in the other examples, relations such that, if they were changed, the same sequences would not result. That the relations cannot be clearly represented by themselves in abstraction from their terms is no ground for denying their existence before the mind, for such an argument would also lead us to deny the existence of emotional feelings, which notoriously cannot be reproduced in abstraction from objects. The causes of association work subconsciously, calling up and expelling ideas; but the ideas called up and expelled are not insulated mental atoms, for as we become conscious of them we become also conscious of their relations *inter se*, and to different felt relations different associative processes belong. This is what our author means by calling consciousness of relations a 'constituent element' of our thought.—For remarks on 'apperception' and 'judgment' see the work itself. It is shrewd and sound, but too pedantic. There are some theories not worth dislodging by a siege *en règle* with its length and all its apparatus; and the theory that we have no consciousness of relations is surely one of them.

WILLIAM JAMES.

Grundriss einer einheitlichen Trieblehre vom Standpunkte des Determinismus. Von JULIUS DUBOC. Leipzig, 1892. Otto Wigand. — pp. xiv, 308.

A work that boldly takes as its motto the maxim "Thue was du willst," would seem to offer a solution of various troublesome problems, upon which, however, the present endæmonistic "Impulse-Theory" cannot be said to throw much new light. The main body of the book is divided into four parts. In the first of these, on Conscience, the writer states the deterministic thesis that all action is the result of impulse, and defines conscience as the impulse to preserve the logical unity of the individual nature. Disobedience to conscience means self-contradiction, logical suicide. Part Second treats, with much repetition and digression, of the relation of impulse to pleasure. Every impulse when gratified results in pleasure; when inhibited, in pain. When conscience is resisted, the resulting pain is that of self-annihilation, which it is human nature to avoid at any cost. In Part Third the *summum bonum* is discussed, and defined as that which all humanity desires. But the whole race can agree in desiring only what is in accordance with the supreme law of its nature; hence obedience to conscience, the most universal impulse, is necessary to the attainment of the highest good.

The last section of the book is entitled Man and Humanity. The moral progress of mankind, according to the writer, consists in increasing recogni-

tion of the unity of the human race. The individual's primitive consciousness is of himself as a force. At this stage he acknowledges no law of his nature save the right of the stronger. With advancing culture he becomes aware of his humanity, and recognizes as the condition of that humanity the law of justice and benevolence. Conscience having been defined as the impulse to follow the law of one's nature, evidently the point where that law becomes transformed from the law of force to the law of justice and benevolence, is a crucial point for the theory. The two factors which the writer mentions as influential in doing away with the rules of force, namely, religious consciousness and sensuous culture (*Empfindungsleben*) seem hardly adequate without the aid of the utilitarian idea of welfare which Dr. Duboc expressly rejects. His chief objection to utilitarianism is that it substitutes the idea of welfare for that of pleasure. "Inasmuch," he says, "as utilitarianism requires the exercise of justice and benevolence, not for their own sakes, that is, for the pleasure attached to their exercise, but from the motive of self-interests, it sanctions that which has nothing to do with true morality." This is not quite fair to the utilitarian, who may acknowledge that pleasure is the motive power, and action is the result of the strongest motive, but who declares the strongest motive to be attached to the idea of welfare, while the present writer declares it to be attached to the idea of preserving the fundamental law of human nature, the law of justice and benevolence. The former goes a step further back in his explanation, but the theories are not mutually exclusive.

MARGARET WASHBURN.

Leibniz als Jurist und Rechtsphilosoph. Von DR. GUSTAV HARTMANN, ordentlichem Professor der Rechte in Tübingen. Tübingen, 1892. Laupp'sche Buchhandlung. — pp. 121.

This book is dedicated to Rudolph von Iherring on the occasion of his *Doctorjubiläum*. It is a fresh study from the original sources of Leibniz's treatment of the most important questions of Ethics and Jurisprudence. The first part of the work gives a somewhat full analysis of several of the philosopher's earlier treatises on legal questions. *De casibus perplexis in jure*, *De nova methodus descendae docendaeque jurisprudentiae*, and others. It also gives an account of his legislative projects, and without going into too great detail, brings clearly before the reader the versatility of the man and the development of his method.

The most interesting portions of the book from a philosophical point of view, are the VI and VII sections, which deal respectively with *Die Prinzipien des Rechts bei Leibniz*, and *Einfluss der Leibnizschen Jurisprudenz auf seine Philosophie*. In the first of these division (pp. 64-105), Professor Hartmann seeks to determine, from the various utterances of Leibniz in his many papers and letters, what must have been his real doctrine in regard to the fundamental questions of Morality and Law. Much

of the material for such a study, the author claims, has been published since the monographs of Zimmermann and Trendelenburg appeared, and he hopes to complete and fill out the outlines which they have drawn. Two points are especially emphasized in this account: (1) The harmony which Leibniz conceived to exist between the Good in itself—that which is prescribed by the *jus naturale*, and that which is useful to the individual and society; and (2) The distinction between natural and positive law. In the section dealing with the influence of Leibniz's jurisprudence on his philosophy, the author contends that it was the conception of Law, which gave his entire *Weltanschauung*, etc., its characteristic coloring. He quotes, in support of this view, a passage from a letter of Leibniz to the Herzog Johann Friedrich of Hanover, in which he expressly states that it was his jurisprudence in the field of jurisprudence which had led him to his doctrine of substance. The legal notion of the retributory nature of punishment demanded the freedom of the will, for which a different view of the individual and of the world was necessary from that adopted by Spinoza. "For one who had always employed the conception of end in the domain of Law and of Spirit it was a necessary postulate that the strict mechanical laws according to which the phenomena of the material world are explained should harmonize with the principle of end, and be themselves founded on the most general teleological conceptions" (p. 117). J. E. C.

Berkeley's Three Dialogues between Hylas and Philonous. With an Introduction and Notes by SATISH CHANDRA BANERJI, M.A. Calcutta, Hare Press, 1893. — pp. lx. 134.

This edition of *Three Dialogues between Hylas and Philonous* has especial interest as coming to us from India, and as the work of a graduate of one of the Indian colleges. In itself, too, the book is doubly welcome; for these Dialogues are the simplest and most entertaining form in which Berkeley presented the principles of his Immaterialism, and they have not been included by Professor Fraser in his *Selections*, nor, so far as I am aware, have they hitherto existed in a form convenient for class use. The editor of this book merits our thanks for doing for these *Dialogues* what Professor Fraser did for the *Principles* and the other writings of Berkeley contained in the above-mentioned work. Besides the text, the book contains an introduction of fifty pages, and explanatory notes. The Introduction sketches the main facts of the philosopher's life, and traces in outline his historical relations to his predecessors, as well as his kinship with Leibniz and Kant—the former of whom, by the way, he refers to as "the philosopher of Leipzig." The Introduction also gives an exceedingly good analysis of Berkeley's most important treatises, and attempts to exhibit the later phases of his thought as shown in *Siris*. While there is nothing distinctively new in these pages, they yet furnish a first-rate exposition of Berkeley's doctrines, and suggest as well the weak point of the system.

The Notes, too, are just what notes to a philosophical work should be—short, clear, and suggestive, rather than exhaustive, whenever the subject requires personal reflection on the part of the student. The editor has in this respect evidently taken Fraser's notes as models. Indeed, the constant reference, both in the Introduction and Notes, to Fraser, Hamilton, Sterling and other Scotchmen, would make us certain, if we had not seen the title-page, that the edition was the work of an Edinburgh man. J. E. C.

Appearance and Reality. A Metaphysical Essay. By F. H. BRADLEY. [Library of Philosophy.] London, Swan Sonnenschein: New York, Macmillan & Co., 1893.—pp. XXIV, 558.

In Mr. Bradley's *Principles of Logic*, he frequently touches on problems which he declines to discuss fully, on the plea that they belong to 'Metaphysics.' The book before us fulfils the hope that readers of the *Logic* have often expressed, that a writer so well qualified to deal with fundamental questions might yet have strength to give to the world the result of his thinking on Metaphysical subjects. The author does not claim that this volume contains a system. It is, he tells us, "a more or less desultory handling of perhaps the chief questions in Metaphysics." "It is meant to be a critical discussion of first principles, and its object is to stimulate inquiry and doubt. There are few, if any, historical references, and no direct polemic; but Mr. Bradley endeavors to express his own doubts and convictions regarding the most important metaphysical questions, with the arguments by which he sustains them.

The first Book, "Appearance" (pp. 11-132), has twelve chapters, and discusses, among other subjects, Relation and Quality, Space and Time, Motion and Change, Causation, Activity, and The Self. Among the fifteen chapters of Book II, "Reality" (pp. 132-552), are discussions of the General Nature of Reality, Error, Evil, Goodness, Nature, The Absolute and its Appearance, Ultimate Doubts, etc.

There can be no doubt that Mr. Bradley's book is one of the most important examinations of metaphysical problems that has appeared during the present generation. Review will follow. J. E. C.

The following books have also been received:—

Lehrbuch der theoretischen Philosophie. Auf thomistischer Grundlage. Von DR. VIRGIL GRIMMICH. Freiburg im Breisgau, Herder'sche Verlags-handlung, 1893.—pp. xv, 565.

Natural Selection and Spiritual Freedom. By JOSEPH JOHN MURPHY. London and New York, Macmillan & Co., 1893.—pp. xiii, 241.

Apperception. A Monograph on Psychology and Pedagogy. By DR. KARL LANGE. Translated by members of the Herbart Club. Boston, D. C. Heath & Co., 1893.—pp. ix, 279.

An Introduction to the Study of the Dependent, Defective, and Delinquent Classes. By CHARLES RICHMOND HENDERSON, A.M., D.D. Boston, D. C. Heath & Co., 1893. — pp. x, 277.

Abnormal Man. Being Essays on Education and Crime and Related Subjects, with Digests of Literature and a Bibliography. By ARTHUR MACDONALD. Washington, Government Printing Office, 1893. — pp. 445.

History of Modern Philosophy. By RICHARD FALCKENBERG. Translated from the second German edition by A. C. ARMSTRONG, JR. New York, Henry Holt & Co., 1893. — pp. xv, 655.

Les bases économiques de la constitution sociale. Par ACHILLE LORIA. Deuxième édition. Paris, Félix Alcan, 1893. — pp. xii, 430.

Zoroaster. Von DR. ADOLF BRODBECK. Leipzig, Verlag von Wilhelm Friedrich, 1893. — pp. xii, 346.

Sturz der Metaphysik als Wissenschaft. Kritik des transcendentalen Idealismus Immanuel Kants. Von HENRI GARTELMANN. Berlin, S. Fischer, 1893. — pp. vii, 246.

Grundzüge der Logik. Von THEODOR LIPPS. Hamburg und Leipzig, Verlag von Leopold Voss, 1893. — pp. viii, 233.

Die Philosophie des Nicolaus Malebranche. Von DR. MARIO NAVARO. Berlin, Mayer & Müller, 1893. — pp. vii, 107.

Die Analogie im volkstümlichen Denken. Von DR. L. WILLIAM STERN. Berlin, Philos.-histor. Verlag Dr. R. Salinger, 1893. — pp. 162.

Souls. By MARY ALLING ABER. Chicago, R. R. Donnelley & Sons Co., 1893. — pp. 76.

Cours de philosophie. Par CHARLES DUNAN. Paris, Librairie Ch. Delagrave, 1893. — pp. 336.

Empfindung und Bewusstsein. Monistische Bedenken von B. CARNERI. Bonn, Verlag von Emil Strauss, 1893. — pp. 31.

Therapeutical Superstition. By GEORGE T. WELCH, M.D. Transactions of the Medical Society of New Jersey, 1893. Newark, N.J., L. J. Hardham. — pp. 29.

NOTES.

The philosophical division of the Department of Science and Philosophy of the World's Congress Auxiliary held its separate opening session on Monday evening, August 21. Addresses of welcome or introduction were given by the President of the congresses, Charles C. Bonney, by the officers of the Philosophical Committee, and by Professor Royce of Harvard University. To these, brief responses were made by Professor J. Macbride Sterrett and others whose names appeared on the programme of later meetings. On the following morning, the reading of papers began with a thoughtful and scholarly study by Professor Gardner of Smith College, on the concept of teleology in philosophy since Kant. Each paper was followed by a discussion as general as time and the inclination of the speakers permitted. It was the aim to have three contributions read during the morning, and two during the evening session, leaving the afternoon free for other engagements. It was not, however, always necessary to carry out this plan, and a few of the speakers promised were unable to be present; but several of these sent papers, and only a few, chiefly foreign philosophers, were entirely missed from the programme. Professor Royce, with others, was constant in attendance, and ably seconded the chairman in making the discussions suggestive and profitable. Among the papers which called forth especially lively interest were, "Is there a Science of Psychology," by Professor Shorey of Chicago University, and "The Twofold Nature of Knowledge, Imitative and Reflective," by Professor Royce of Harvard University. The attendance at the meetings was never large, the audience being naturally made up of those philosophers who proved insensible to the more striking allurements of the Psychological Congress across the way. On the field of the latter department no encroachments were made, but the programme was otherwise varied, including treatment of philosophical interests in their relation to art and to moral and economic problems. The purely social side of the assembly was also given its due share—the philosophers were lodged so as to be easily accessible to one another, and several receptions were given to the speakers, beside many private courtesies. Some annoyance was experienced by both readers and hearers on account of the incompatibility of sufficient ventilation with freedom from disturbance in a building like the Memorial Art Palace, where outside doors had sometimes to take the place of more complicated means of admitting air. On the whole, however, conditions were favorable to such a moderate and quiet success as would be expected of a congress devoted to a subject possessing few attractions for a popular audience.

L. HANNUM.

New courses in experimental psychology are this year offered by the University of Minnesota, and a laboratory for carrying on this work will be equipped during the year. Mr. James R. Angell, A.M., who has charge of this work, is a graduate of the University of Michigan, and has pursued special studies in psychology at Harvard and in the laboratories of several German universities.

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