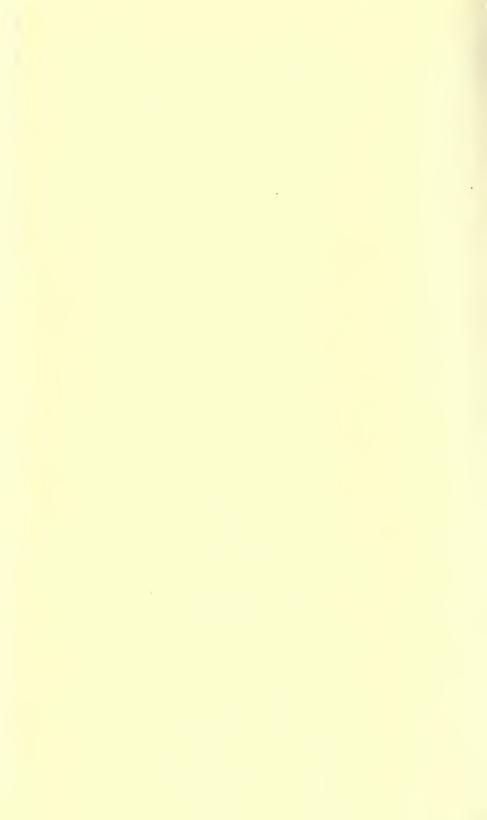




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THE

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PHILOSOPHICAL REVIEW

EDITED BY

J. E. CREIGHTON

OF THE SAGE SCHOOL OF PHILOSOPHY, CORNELL UNIVERSITY

WITH THE COÖPERATION OF JAMES SETH

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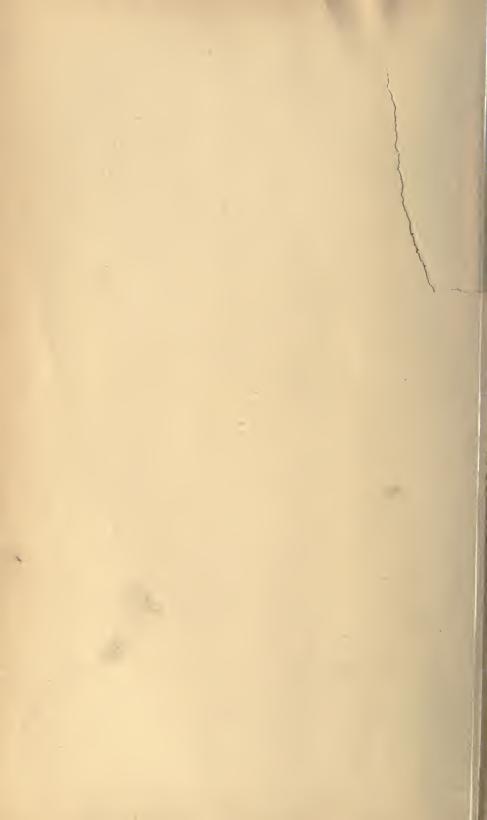
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THE

PHILOSOPHICAL REVIEW.

CONTRIBUTION TO THE HISTORY OF THE CONCEPT OF REALITY.¹

N historical discussion of the development of the Concept of Reality should be prefaced by an explanation of the concept itself. Under the Concept of Reality are included those objects whose determination is arrived at by the several empirical sciences and their supplementary metaphysics, this determination being regarded as independent of the cognizing subject. When, for example, natural science speaks of electrons as carriers of electric charges, or of elements in chemical compounds, or of cells as the bases of biological growth; when it speaks of minerals and heavenly bodies, or plants and animals, it is concerned with objects which are as little identical with our concept of them as they are with the content of our sense perception. Psychology has also just such objects in mind, when it speaks of sensations and ideas, of feeling and attention, of thought and will, and it makes an essential distinction between our conception of these processes and the processes themselves. Further, the humanistic sciences, which latterly it has been the fashion to characterize as sciences of fact, aim to treat language and art, religion and law, historical persons and events, as self-dependent objects, having their own spontaneous and immanent determinations. Finally one need only mention the metaphysical concepts of a monad or an idea, a world-will or a causa sui, and the fact becomes clear that in these cases there is something postulated. whose being and becoming are quite independent of all thinking and cognizing.

¹ An address presented to the International Philosophical Congress at Bologna, on April 6, 1911.

We designate the process of postulating and defining such objects as realization (Realisierung), and the objects themselves we call real or realities. These are not experiences of consciousness, although they are attained by the elaboration of experiential data. Neither are they ideal objects, such as are produced by abstraction from a given reality, or by the combination in thought or fancy of elements of reality. Realities are rather objects that are independent of our apprehension and knowledge, independent of our sensation, representation or thought, independent of our postulation and definition. They are not created by us as ideal objects are, quite as little are they given in bare experience, as facts of consciousness; they are merely grasped by us, and enjoy their own being and becoming, their own independent laws of activity. Their limits are given in pure experience and in pure reason. Both of these participate in the knowledge of reality. They can be thought of, only in so far as abstraction from empirical elements is necessary in their determination. But, on the other hand, they can be grasped only when regard is had for the actually given.

Furthermore, there is need of particular criteria of reality, i. e., need of specific grounds for the postulation of reality. What causes us to separate certain elements from the immediate reality of consciousness with its unclarified facts and to regard them as objectively real, while we segregate other elements from this reality and regard them as subjective admixture? To this question the various (real) sciences reply by setting up different criteria. The sciences of nature regard as the primary mark of nature-reality its independence of the psycho-physical organism. Psychology sees the chief criterion of psychical reality in the independence of the cognizing subject from the apprehended content of consciousness. In addition to this, where one is concerned with the knowledge of psychical life other than one's own, psychology employs as criterion the interpretation of expression and of its trustworthiness in representing actual conditions in another psyche. These two criteria are applicable also to the humanistic sciences. In addition to these, other grounds are employed for the determination of the real. If, for example, it is maintained in the case of physical reality, that it is irrefutably established by the sense of touch, we then have an *empirical* criterion for the quality of the reality. If, on the other hand, freedom from contradiction (as in the case of the Eleatics or Bradley) is regarded as the fundamental principle in determining the real, then we have a *rational* criterion. If, however, the real natural object is regarded as cause of the content of perception, then we have a *mixed* criterion, a criterion composed of experiential and rational factors.

In speaking of primary criteria for the realization, we have made reference to other supplementary criteria. Realization has several stages. One of the first stages consists in the determination of the real, as it is in any way met with in consciousness, although confused with subjective admixtures. The (real) sciences, however, cannot stop with this. They either proceed to the assumption of substances or bearers of real phenomena, or they extend the concept of the given through the assumption of the not-given, that attaches to possible experience. All of these supplementations rest upon deductions, and so there is need of criteria for these, in so far as they bring about trustworthy and indispensable additions to the system of realities, in the construction of which all of these sciences are employed. The problem of epistemology consists in the investigation of the principles by which the real sciences are guided.

A critical history of the concept of reality can be developed down to our time almost exclusively in connection with the history of philosophy. There is no need of proving this in the case of metaphysics, which has always counted as a specifically philosophical discipline. For psychology, which has only recently taken on the character of an independent science, there is just as little need of proof. In natural science and humanistic science, discussions of the problem of the reality of the external world or of historical fact have played only a small rôle. In these sciences, one has for the most part taken the appropriate and practical point of view that one may and must assume these forms of reality, and has followed this procedure, without examining or testing the grounds for the postulate. To the

philosopher were referred questions of idealism, realism, phenomenalism, questions as to the existence or non-existence of a corporeal world, of soul-substance, questions of rejecting or accepting the concept of a real, of a transcendent; and so down to the 19th century orientation in the problem of reality is to be found only in the history of philosophy. Here, however, we must distinguish between naive and critical realism. The former pre-scientific form of realism is understood in our daily lives; it is the forerunner of the scientific determination of the real, in that it recognizes a real external world, the reality of other souls, of historical events and persons and the supersensuous power of objects of faith. Scientific, critical realism is to be regarded only as a continuation, refinement and purification of naive realism, in so far as it sets up more adequate criteria and makes a more logical application of the same, as guiding principles. The fundamental tendency of both forms of realism is the same. To what extent it is a need of the human spirit, is seen nowhere so clearly as in Hume, whose epistemology excluded all realism, yet Hume was nevertheless disposed to retain it practically.

The Pre-Socratics emphasize constantly the activity of the understanding in the postulation and determination of the real. But this principle is variously conceived by them. To the Eleatics it appears preëminently as something conceptual, as something universally valid and self-consistent, at the same time in content as an ideal of perfection. Reality must consequently be determinate, static, continuous, and uniform. It is in its essence pure being; it cannot, therefore, have been or ever become non-being. Consequently, the entire sensible world with its evident origin and decay, with its changes in space and in constitution is really non-being. On the other hand, the nature-philosophers of this epoch conceived an original elemental Being from which everything is derived. They emphasized the difficulty of its essential determination, and explained all origin and decay as mixing and dissolution. For Heraclitus, finally, Being is reduced to an eternal Becoming. Change has become the constitutive mark of its existence. In all of these views there is lacking a

clear distinction between theoretical questions and questions of value, also between logical and empirical elements in the concept of reality. In view of the unclarified and contradictory character of these conceptions, the Sophists were in a position to postulate "Man as the measure of all things," and so to cast doubt upon the entire possibility of a real.

The essential advance made by Plato in this field consists in his analysis of the concept of being, in his distinction between degrees of being, in the sundering of the attributes of Being and Non-being from the Being and Non-being themselves, and in the first steps towards a separation of the question of value from the question of reality. According to the Republic there are four stages or degrees of Being and the same number of degrees of knowledge; of these, two belong to the conceptual sphere (ideas and mathematical objects) and two to the sensible sphere (immediate objects of sense perception and images or shadows). To the new criteria, which have contributed to the above distinctions. belong efficiency and self-existence and independence. process of determining the real is more particularly described in connection with Socrates. It consists in the discovery of the universally valid and, therewith, in the discovery of the essential mark of objects. As far as these essential marks occur in particular and variable expression in the sensible world, to that extent sensible things participate in true being.

As elsewhere, so here, Aristotle develops the doctrines of his master. In his opinion, also, the idea is the essence of all things, but the idea is not the real, nor is the most important component element of objects the real; only the concrete thing is the real. Thought-objects, according to Aristotle, are immanent in sensible things and have no metaphysical existence apart from sensible things. Only God and, in a certain sense, the human vovs, form an exception to this principle of immanency. Consequently, the metaphysical reality of the Prime Mover and of the immortal part of the soul is sundered from all other substances. In addition to this, Aristotle analyzes the concept of cause into the well-known four causes, and the attributes of reality into essential (forming the substance) and accidental attributes. Here

the ground for the postulation of the reality of individual substances is naturally sense perception. Only the metaphysical reality of God must be discovered in a different way, by a dialectic, purely rational process.

While the post-Aristotelian philosophy of antiquity adopted the view that sense perception is the starting point and the source of all determinations regarding Being, the attempt was made to distinguish between reliable and unreliable perceptions, between objectively valid perceptions and those that are purely subjective. When the Stoics, e. g., speak of φαντασία καταληπτική, of cogent presentation, the aim is to exclude illusion and hallucination, which present to our minds a deceptive reality. At the same time the real, e. g., the physical world, becomes here a plain intermediate thing between sensible and conceptual objects, the result of a syllogism based on facts of consciousness. uncertainty that clings to such syllogisms and the inadequacy of the criteria, induce the sceptic to concede the existence of a real behind the given of consciousness, but to deny the possibility of determining the same, and consequently to adopt the position of phenomenalism.

With this we have the occasion for a new turn in the history of the concept of reality. Phenomena, whose certainty not even the sceptic was disposed to deny, were the facts of consciousness, experiences; and, hence, the knowledge of one's own states was distinguished from all other knowledge by its indubitable certainty. At the same time, a reality seemed here to be immediately accessible, viz., one's own psychical life. And so it could be maintained by Augustine, and from his time down to the present, that experience and reality at this one point coincide. Descartes, in his "Cogito ergo sum," discovered merely a pregnant expression of this truth. Also Fichte, Schopenhauer, and Beneke, and later Fechner and Wundt, made self-knowledge the key of all insight into the reality of things, and in regard to psychical events they insisted that they are of such nature as they immediately and cogently appear to us. Inner perception or intuition in the cognition of one's own self was typical and fundamental for all knowledge. Mysticism attempted to penetrate even the transcendent reality of God in this way, and exalted intuition to ecstasy. But dialectic, too, made use of this foundation of all certainty, and through it arrived at the ontological proof for the existence of God. There was needed here only the transition from the indubitably certain concept, from the completely attested idea of God, to his existence. One is not fair to the ontological proof, if one overlooks the fact that it is rooted in this certainty of consciousness. The much criticised controversy between realism and nominalism has its basis and justification in its relation to the problem of reality.

The awakening physical science of the sixteenth and seventeenth centuries turned the treatment of the notion of reality to the problem of the external world. Galileo, Descartes, and Locke undertook to investigate more precisely the postulate of a real nature. Here attention was called to the distinction between sense perception and mere presentation, between the visions of a dream and the perceptions of the waking state. Further, attention was directed to the essential, primary qualities of bodies, qualities which thought cannot disengage from things, and therewith to the principle of the subjectivity of sensible qualities, and so to the dependence of reality impressions on the will of the perceiving subject. Here, also, consciousness was the fixed point of departure, from which the proof for the existence of an external world must start, if such proof is at all possible.

That all of these arguments afford no adequate proof of the existence of a material world, and that this is not even thinkable without difficulties, was demonstrated by Berkeley in an acute and penetrating polemic against the postulate. He demanded, therefore, that one should stop with the psychical reality of God and of finite spirits. If there are ideas and wills, it is self-evident that there are souls, which express or possess these. God might also be regarded as the seat of sense impressions, which, while evidently independent of the soul, enter into and emerge from the soul's domain. But this further determination of the real in the psychical sphere, whether supported by the ontological proof or by some other form of proof, was shown by Hume to be inadequate. Thereby he shattered every form of realism and

established an anti-realistic tendency, a subjective tendency based entirely on the facts of consciousness, according to which the elements of inner and outer experience with their psychological uniformity must furnish not merely the point of departure, but also the legitimate content of all knowledge.

Thereby inner experience lost the admittedly higher realityvalue, which had hitherto been accorded to it. It was, together with outer experience, reduced to a mere fact of consciousness, and furnished no more certain knowledge of the objects, to which it was directed. Especially, however, the step from inner experience to a psychical reality of a second grade was neither shorter nor easier, neither safer nor more permissible, than the corresponding step from outer experience to a physical world. To the same tendency an important innovation by Leibniz contributed. He denied the immediate reality of consciousness, which had been a strong characteristic of English empiricism, as also of Descartes's philosophy. To experience a psychical process, to have a perception and to be aware of it, to apperceive it, is a twofold matter according to Leibniz. The doctrine of the unconscious now makes its entry into psychology. Not everything can become known that is concealed in the Unconscious. In extension and intension it transcends the sphere of consciousness. The priority of psychical reality over physical reality is indeed still conceded by Leibniz, but it is no longer based on the principle of the immediate certainty of consciousness. The given experience is no longer even the first stage in postulating psychological reality.

By a somewhat different method, Kant arrived at a similar position. He clothed not only perception but also thought, as well as every sort of experience and knowledge, with indispensable coefficients of an a priori kind. Outer experience is bound up with space, inner experience with time, and they can be thought only in and through categories. And so all realities of the several sciences, nature as well as soul, become phenomena. The knowing mind places on every object its stamp. A reality independent of the mind, a thing in itself, is therefore absolutely unknowable, a mere limiting notion. We can speak, therefore,

only of an empirical reality, i. e., a reality in whose constitution a priori forms have an ineradicable share. The metaphysical reality fared worst through this trend of interpretation. Now that the ontological transition from a thought to the objective existence of the thought had been blocked by Hume and Kant, and no sort of experience could any longer furnish an immediate entrance into the transcendent realm; now that experience had lost its significance even as psychical reality, the principle of transcendence could no longer be established by theoretical procedure. Consequently, one now appealed to the will and to conduct, to the needs of the spirit, to the demands of the practical reason, and so Hume's scepticism became an academic matter, which neither aimed to supersede living belief, nor was it able to do so. In this way the primacy of the practical reason arose, which overcame the inadequacy and caution of scientific knowledge. In this way intellectualism and rationalism, which had put their trust in the competency of reason, were overthrown by the philosophy of will, a philosophy which shifted the center of gravity in the inquiry to the active side of psychical life.

The last phase in the evolution of the reality-concept is introduced by the tremendous efflorescence of the natural and humanistic sciences, as well as by the development of inductive metaphysics in the nineteenth century. The splendid successes of the special sciences in the determination of reality had the necessary effect of shattering the philosophical position regarding the reality-problem. Psychology was so insecure in the determination of its realities that it saw its means of rescue in association with the more highly developed natural sciences. humanistic sciences, particularly history, secured through the development of critical methods in the investigation of sources, a valuable and practical criterion for distinguishing between authentic and unauthentic opinions, adequate and inadequate testimony. Fechner promulgated the idea of an inductive metaphysic, which should supplement and comprehend the special sciences, without superseding them and without attempting to penetrate into the nature of the real, apart from their assistance. This new conception of metaphysics relieves it of the obligation to formulate and justify a particular procedure for the determination of reality. For this reason Epistemology and Logic now become inquiries into the methods, fundamental concepts, and basic principles of the special sciences. John Stuart Mill in his admirable Logic, adds to the discussion of the natural sciences a detailed estimate of the humanistic disciplines. The Neo-Kantians, as also Comte, find in the mathematical natural sciences the ideal of all scientific knowledge. Besides this, the significance of values receives its due recognition. The peculiar methods of the real sciences and of the sciences of value did not, however, receive here adequate attention. The fault is partly with the working efficiency of Kant's a priori epistemology and partly with the renaissance of subjective procedure (conscientialistische Gedankengänge), even among representatives of the several physical sciences. The theory of the real sciences has become a pressing question of Epistemology. In this way Kant's theory of the formal sciences must be supplemented. The solution of the problem will settle and ought to settle the unfruitful controversy which idealism and realism still feel obliged to carry on regarding the possibility and meaning of the postulate of reality. The problem presents an extensive and fruitful field of inquiry, in which opposing tendencies are active and ought to find ground for compromise. The truth remains, as we have pointed out, that in all sciences of fact, psychology and the humanistic disciplines included, reality is postulated and determined. The investigation of this process, its forms, grounds and results constitute for the philosopher of immanence a significant task.

OSWALD KUELPE.

BONN, GERMANY.

THE PROBLEM OF TIME IN RECENT FRENCH PHILOSOPHY.

I. RENOUVIER AND RECENT TEMPORALISM.

THE purpose of the study here begun is to set forth certain important episodes in the development of temporalism, and, in doing so, to make a critical examination of the argument from temporalism to 'anti-intellectualism.' By temporalism in metaphysics (and it is with the metaphysical aspects of the tendency that I am here concerned) I mean any doctrine which maintains the following four propositions: first, that time is not 'ideal' in the sense that it can be regarded as unreal, as an illusion or a 'false appearance' of something non-temporal; second, that temporal succession and duration constitute a qualitatively unique mode of reality, which can not, without falsification, either be reduced to any other type of serial ordering or be conceived as forming part of any whole which, as a whole, is non-successive or changeless; third, that, since the experience of temporal succession involves an essential distinction between the givenness of past content of experience and the unrealized character of the future, the reality of the time-experience proves that reality as a whole can at no moment be truly called complete, self-contained, an organic unity; fourth, that the reality of the time-experience likewise shows that the total sum of given reality receives from moment to moment an increase in some sort of content, and that, therefore, the notion of becoming or process is fundamental in the description of the general nature of reality. To put all this more briefly and loosely, temporalism is the metaphysical theory which maintains the reality and irreducibility of time (or at the least, of the successiveness of conscious experience), the essentially transitive and unfinished and selfaugmentative character of the reality known to us through experience, and the pertinency and primacy of the time-concept and of temporal distinctions in the treatment of most, if not all, philosophical problems.

It is manifest that the doctrine thus defined is incompatible with the more extreme sort of rationalism in metaphysics—i. e., with the assertion that all that is real is rational and all that is rational is real. For 'rational' here must mean 'forming part of an organic system of which all the parts, with strict logical necessity, reciprocally imply one another and are implied by the idea of the whole, which latter idea is one of which the essence involves existence.' But in such a 'rational' system all the parts or elements must obviously be realized all at once and eternally; in so far as the idea of time is introduced into it, and it is declared that at some moments certain elements are not yet 'realized' in the same sense or to the same degree as others, the rationality of the system is destroyed. Between the purely logical, and therefore non-temporal, notion of reciprocal implication, and the notion of the actual successiveness of the moments in a timesequence, there exists the utmost uncongeniality; and a metaphysics which takes the one notion as primary can not come to terms with a metaphysics which is based upon the other.

The term 'intellectualism' has sometimes been used to designate this sort of rationalism. Thus M. P. Landormev defines an intellectualist as "one who believes in the absolute value of the principle of intelligibility or sufficient reason and affirms that everything has its reason for being, that everything is intelligible." It is not merely as the negative of this doctrine that the word 'anti-intellectualism' is used in this paper; for such a negative 'alogicalism' would be the better word. It is one thing to maintain that reality, because it is temporal, contains an alogical factor, that the universe is not wholly reducible to a system of intelligible conceptual necessities; and it is quite another thing to maintain that reality is illogical, that entities may exist, and are known to exist, which are not merely undeducible from, but are in conflict with, the supposed fundamental requirements of conceptual thought-which, in a word, are incongruous with the principle of contradiction as well as the principle of sufficient reason. It is this more extreme view that I here mean by 'antiintellectualism.' It is true that some of the writers whose opinions are presently to be examined do not always themselves use

¹ Rev. de Mét. et de Morale, IX, 1901, p. 481.

the word in precisely this sense. They sometimes, indeed, in their disparagement of 'the intellect' as a means of acquaintance with reality, seem to say no more than that concepts are never identical with, or so 'full' as, the realities conceived; or again (what comes in the end to the same thing) that experience itself contains other elements besides conceptual thought—sensation, feeling, volition,—which elements necessarily can never have their entire essence expressed in terms of conceptual thought. But this, it seems to me, must appear, to everybody except the type of extreme rationalist already mentioned, to be a harmless truism. It can shock only those who have seriously supposed that the universe is and contains nothing whatever except "an unearthly ballet of bloodless categories." That there is in any concrete item of given sensible experience something not wholly given in any concept or scheme of concepts by which that item is represented in reflective thought, few in these days would be likely to deny; and there seems no good reason for calling all who make this admission anti-intellectualists. I shall, then, employ the term in its stricter use as a name for those who affirm, not simply that reality transcends and overlaps conceptions, but also that it flouts and nullifies the logical principles of conceptual thinking. But since these two positions, and others intermediate between the two, are apparently sometimes treated by the writers in question as identical, it will not be possible to adhere absolutely to this use of the term. In what follows, then, 'anti-intellectualism' will denote both those doctrines which explicitly assert that reality may be in conflict with the 'laws of thought,' and also those doctrines which imply this assertion but, through insufficient analysis, fail explicitly to discriminate it from the other forms of anti-rationalism which have here been defined.

That temporalism is one of the most important and vigorous of the new tendencies in philosophy must be apparent to all who follow current philosophical literature. That temporalism shows a marked tendency to issue in anti-intellectualism is equally apparent. It is, for example, in consequence of the paradoxical characters which he believes himself to have discovered in "real duration" that Bergson is led to his assertion of a congenital incompatibility of temper between "intelligence" and reality as

given in intuition. Similarly Professor James was brought, through Bergson's and his own reflection upon the paradoxes of our time-consciousness, to an impeachment of "conceptualist logic," and even to doubts about the applicability of the principle of contradiction to reality. In the flux of experience, James¹ found that "every minutest thing is already its Hegelian 'own other,' in the fullest sense of the term," and this, he observed, unquestionably "sounds self-contradictory. But as the immediate facts don't sound at all, but simply are, until we conceptualize and name them vocally, the contradiction results only from the conceptual or discursive form being substituted for the real form." This appears to be equivalent to saying that as "conceptualized," and when viewed from the conceptual or logical point of view, temporal reality is self-contradictory. An extreme expression of the same opinion is given by E. D. Fawcett. "Contradiction," he writes, "is not always a test of falsity. . . . If A is real and if, when analyzed, . . . it proves . . . [to be both B and not B, what more is there to be said? The Real, while alogical, may be rich. And if it genuinely supports both sides of the Antinomy-well, both sides of the Antinomy will have to be accepted." And as a conspicuous example of a "Real" which is at the same time self-contradictory, Fawcett instances "the time flux." "We cannot admit change as an ultimate fact and uphold the sacrosanct generalization of contradiction as well." But "the empiricist" is not disturbed by this; he is prepared to discover that "the universe as a whole ignores the rigid 'law' of contradiction. The entire universe is perchance continually becoming what it is not, the expression of its native contradictoriness being what we call Time." A recent German writer³ has employed similar language. "The essence of motion consists precisely in a thing's being in a certain place and at the same time not being in it. But these two predicates are contradictory, and according to the Principle of Contradiction they can not both at once be ascribed to one and the same subject. Yet in the concrete we find them united in the same thing.

¹ A Pluralistic Universe, p. 272.

² The Individual and Reality, p. 60.

³ Erich Frank, Das Prinzip der dialektischen Synthesis und die Kantische Philosophie. Ergänzungsheft der Kantstudien, 1911, pp. 9-10.

Equally incongruous with the principle is change of any kind. . . And the idea of time is so far from rendering the conjunction of two contradictory predicates conceivable, that it is itself simply a case of such a contradictory conjunction. For in time the moment before and the moment just after must be simultaneous, since there can not be any time—nor, therefore, any temporal boundary—between the two."

To some readers the last two citations will probably give the impression that the argument from temporalism to anti-intellectualism consists simply in making the fallacy of accident the basis of metaphysics—in treating the expression 'becoming what it was not' as directly equivalent to 'becoming what it is not.' But in the case of the more important recent representatives of the argument in question, the logical procedure employed, though perhaps not wholly different in essence, is a trifle more complicated; and the resultant anti-intellectualism is not quite so unambiguous or so simple. The considerations which have led James and Bergson and their disciples to their despair of "conceptualist logic" and to their paradoxical characterizations of the time-flux can not be quite so concisely formulated. There is, however, nothing really novel in the paradoxes which these latter temporalists discover in the time-concept. Their difficulties are ancient, long-familiar and long-troublesome difficulties. They are in the last analysis reducible to certain of the paradoxes of the Eleatic Zeno (or to the corresponding antinomies of Kant), especially those arising out of the infinite divisibility of the continuum; and to Kant's favorite puzzle concerning the apparent inconceivability that a succession of perceptions should constitute a perception of succession.

From these and kindred difficulties various forms of scepticism or of mysticism have, in the past history of philosophy, repeatedly arisen. It is not, therefore, in its logical roots that the novelty of the new anti-intellectualist argument inheres. It appears to me to inhere rather in two things: first, in a redundant complication of the analysis of the time-notion whereby these difficulties are again brought to light; second, in the nature of the conclusion drawn from the discovery of these difficulties. That conclusion, when properly put, is in essence such as I have already indicated;

and it is the reverse of the conclusion usually drawn from the same premises. The common conclusion is that time, since, upon analysis, it proves subject to these logical difficulties, must be 'unreal': the temporalist's conclusion is that logical difficulties of this sort, since they have been shown to belong to the most certain of all realities, time, are no evidence of unreality, and that reality accordingly is not to be reached in its true nature through the processes of the intellect. Unfortunately, in M. Bergson's case, as we shall see, the conclusion can not be quite so unequivocally stated. Bergson has the air, though it is an illusory air, of finding in the notion of 'duration' not so much an example of, as a means of escape from, these ancient antinomies; when our idea of the nature of the temporal experience is properly purged and rectified, he seems to assure us, we shall at last have a conception of reality that is free from the Zenonian and the Kantian perplexities. It turns out, however, that this writer's purgation and rectification of that idea consists precisely in leaving at the heart of it the baldest self-contradictions and, with some slight disguises, the old paradoxes. In their true character, therefore, his mode of argument and his conclusion do not differ from the type which I have formulated.

The series of episodes in the history of temporalism here to be considered covers the work of four philosophers-Renouvier, Bergson, Pillon, James. Of these four I shall examine the reasonings with respect to the reality of time, to the alleged paradoxes of the time-notion, and to the consequent relation of the principle of contradiction to reality. In view of the title borne by this article, the reader will perhaps ask what William James is doing in this company. We all, certainly, like to think of him as a characteristically American philosopher; and we are not unjustified in doing so. But though his personality and his style were singularly American, he none the less truly belongs, as a technical metaphysician, to the apostolic succession of French temporalism. At the beginning of his career he was decisively influenced by Renouvier; though that influence doubtless served chiefly to strengthen, and to give form to certain temperamental inclinations of James's own mind. To Renouvier he seems unquestionably to have owed his initial conversion to a conscious No. I.l

and explicit pluralism and temporalism. From Renouvier, also, he took that life-long preoccupation with the antinomies of the notion of infinity, which was apparent to all who knew him, though in his writings it was not conspicuous until the posthumous publication of his Some Problems of Philosophy. And it was apparently Renouvier who inspired in him that sturdy loyalty to the principle of contradiction, and that conviction that philosophizing consists in fairly facing and choosing between incompatible alternatives, which was especially characteristic of his earlier attitude. The essentials, also, of what may be called James's voluntaristic epistemology may be discerned in Renouvier's teaching. For example, Renouvier's statement of what he considers the proper meaning (largely missed by Kant) of 'the primacy of the practical reason,' might pass for the programme of James's essay on "The Will to Believe." Neo-criticism, Renouvier pointed out, does not maintain that a thing may be true from a practical point of view and false from a theoretical point of view. But it maintains "that certain truths indemonstrable to the reason when it is reduced to its intellectual elements (purely theoretical reason), obtain grounds for being believed (motifs d'être crues) when we take account of the moral elements of the reason (practical reason)—though with this proviso, that we limit our affirmations to points against which no insurmountable objections can be raised on theoretical grounds." But in the course of his own reflection upon the implications of temporalism James came upon certain difficulties; and—by his own account of the matter-it was Bergson's example which emboldened him to seek an escape from these difficulties by that plunge into antiintellectualism—though into an anti-intellectualism not quite fully conscious of its own meaning-which was exemplified in A Pluralistic Universe. Thus, in passing from a pluralistic, temporalistic and voluntaristic philosophy not associated with a radical anti-intellectualism to the anti-intellectualist temporalism of his later years, James represented in his own career the movement of French reflection from Renouvier to Bergson; and at least in the logical formulation of his positions at these two termini of his intellectual history he owed much to the direct influence of

¹ Crit. Philos., 1874, t. II, no. 29; cited by Séailles, La Philosophie de Charles Renouvier, pp. 29-30.

these two writers. Thus, though he was an eminently American philosopher, his work in a proper and an important sense constitutes a chapter in the history of French philosophy.

I. Renouvier.—Of temporalism as a definite and explicit tendency in recent French and (through James) in recent Anglo-American philosophy, Renouvier may, I suppose, more justly than anyone else be considered the initiator. Of the outlines of his system it would, in this Review, be superfluous to offer an exposition; though I am not sure that even professional philosophers always adequately appreciate how interesting and important a figure in nineteenth century speculation le Solitaire d'Avignon is. The purpose of the present study requires only a brief indication of the logical sources of Renouvier's temporalism, of its relation (as conceived by him) to the rationalism of the 'principle of sufficient reason' and to the principle of contradiction, and of his neglect of certain aspects of the notion of time which left some pregnant difficulties to his temporalist successors.

The temporalism of Renouvier is a special consequence of his general phenomenalism. Like the German post-Kantain idealists, he transformed the Critical Philosophy by eliminating from it that dualistic agnosticism latent in the conception of an unknowable thing-in-itself over against the world of experience. But he did so in a very different spirit and with an essentially different result. Kant's more influential successors in Germany, inspired as much by the preconceptions of Spinoza as by those of the Kritik der reinen Vernunft, speedily rehabilitated the sort of metaphysical speculation over which Kant's greatest work had ostensibly been a funeral oration. For they developed the Synthetic Ego of the Transcendental Analytic into a supersensible and supratemporal Absolute—an achievement in which they were encouraged by Kant's own persistence in the affirmation of a noumenal Ego in his ethical writings, and by certain tendencies manifested in the Kritik der Urteilskraft. Renouvier, on the contrary, proceeded by rigorously purging the Critical Philosophy of what he regarded as a noxious residuum of "the ontological tradition." The 'principle of relativity' is fundamental with him; according to this principle, "the nature of mind is such that no knowledge can be reached and formulated, and consequently no existence can be conceived otherwise than by means of its relations and as, in itself, a system of relations." Renouvier does not hesitate to say that the principle of Comte's positivism is 'correct,' though it does not justify that "systematic abandonment of the psychology of knowledge and of the criticism of knowledge" which was characteristic of Comtism. general types of relatedness to which all phenomena are subject and by means of which they are constituted are the categories; and these, as Kant rightly held, can be known a priori. But it is precisely the known indispensability of these categories in the constitution of our world of objects which makes it certain that nothing which transcends their limitations can be conceived by us as real, or be thought without paralogisms and self-contradictions. Even the conscious self, the 'person,'-though this is the culminating conception of Renouvier's metaphysics -is for him no supernatural entity behind experience, no 'substance' ontologically antecedent to an experience whose forms it generates; it is neither more nor less than the phenomenon of self-consciousness as actually found in experience, complemented by the phenomena of memory and of anticipation.

"The idea of the person thus given by the individual's own consciousness, when extended to other like consciousnesses, becomes the general idea of a conscious being—an idea which has nothing in common with the Ego of Fichte's doctrine, that universal Absolute of realistic idealism. The character of a law and a function remains attached to the proper definition of this being; to which there is added, in every individual ego, that inner self-perception which constitutes it."

There is no such entity as "le moi théorique de l'idéalisme absolu," no représentatif prior to the empirical characters and contents of representation; there is only the concrete empirical ego. "La représentation n'implique rien qu'elle-même et . . . ne sort d'elle-même que pour poser la représentation, la représentation á d'autres titres, en d'autres termes, mais encore et toujours et partout la représentation."

It was primarily through his fidelity to this méthode phénoméniste that Renouvier was a pioneer of that reaction against

¹ Dilemmes de la métaphysique pure, 1901, p. 234.

'absolutism,' and against the whole procedure and temper of 'neo-Kantian' rationalistic idealism, which has come to be so conspicuous in recent metaphysics. But it was, more particularly, through the combination of this phenomenalism with apriorism in epistemology that his own species of temporalism was generated. Time, as the 'form' or mode of relation characteristic of the process of consciousness itself, as one of the 'categories' apart from which we are incapable of representing experience, can be known a priori to constitute a determination of all possible concrete existences. "It is evident that both the subjective and the objective element in consciousness equally imply relations of succession. And this property is not peculiar to sensible things or those which belong to immediate experience. Duration is, in the last analysis, a law that conditions predications (attributions) of every sort, since, . . . however abstract a proposition may be to begin with, and however independent of all succession, we always are brought round finally for the subjects of our predications to ensembles of phenomena represented in time; outside of such ensembles no attribute whatever can subsist. Finally every representation relative to the categories of causality, finality and personality, as well as becoming, implies relations of succession as conditions presupposed by those categories."1

Thus "all the phenomena which experience offers belong to Becoming"; not only is this true of each particular phenomenon but likewise "Becoming is characteristic of the Whole of Being." For by definition, the "Whole of Being" embraces all the relations among phenomena; consequently "le Tout-être devient, en ce sens que les choses deviennent dans le Tout-être."

Such, very briefly indicated, are the logical grounds and the historical relations of Renouvier's temporalism. It is not upon these, but upon the further consequences and applications of the doctrine that I wish chiefly to dwell. The particular detail in the working out of the principle which is of most interest in connection with the theme of this paper, is due to Renouvier's combination of temporalism with finitism. This is not an arbi-

¹ Essais de critique générale, 2^e edition, Premier Essai, 1875, I, p. 343.

² Premier Essai, 1875, III, p. 147.

trary nor a merely external combination. Every metaphysician (unless he be a pure illusionist), whether he conceive reality as ultimately temporal or as ultimately eternal, is called upon to face the question concerning the quantitative aspect of reality, and, consequently, to make choice between finitism and infinitism; and while his choice may be partly predetermined by his theory concerning what may be called the qualitative nature of reality, it will in any case itself determine the interpretation of the latter theory in certain fundamentally significant respects. Not a few philosophers, however, by one lame device or another, evade the quantitative problem in metaphysics. Renouvier attacks it with the utmost directness. For him (after his first period) the primary obligation of the philosopher is to bring all speculative hypotheses to the touchstone of the principle of contradiction; and to that principle he finds the notion of an infinite number or quantum to be manifestly repugnant. Hence, the series of successive phenomena which constitute reality (or, at any rate, the only reality which we are capable of apprehending) is limited a parte ante; in the phraseology of Kant's first antinomy, the world had a beginning in time.1 Now, a temporalism thus interpreted in a finitist sense has obviously broken decisively with metaphysical rationalism. Renouvier himself, perhaps, did not always realize the extent of this breach; but it has been sufficiently apparent to his disciples. M. Pillon, for example, has pointed out2 that the real basis of Kant's argument for the antithesis of the first antinomy is the principle of sufficient

¹ M. Henri Bois, a neo-criticist theologian writing in L'Année Philosophique, 1909 (p. 117), finds a certain wavering in Renouvier's utterances on this question. "At times," says M. Bois, "he boldly affirms, as a positive dogma, that all things—including God—had a first beginning; at other times he merely regards the first beginning as a limit reached by our thought, behind which he does not forbid us to assume the existence of something else. The world we know, the God who now exists, had a beginning; but behind, before, there was—what? Renouvier answers: 'l'abîme;' and this abîme he seems, at bottom, to conceive somewhat after the fashion of the Kantian Ding-an-sich, which thus—exorcised from all the other parts of Renouvierism—here reappears." M. Bois doubtless knows his Renouvier far better than I; yet I cannot but think he gives much too positive a sense to Renouvier's references to this abîme; which I take to be nothing but the vacuity which our imagination now necessarily represents as antecedent to the beginning of concrete existence.

² L'Année Philosophique, 1909, pp. 50-57.

reason; the antinomy, in fact, consists precisely in an opposition between the principle of contradiction and the principle of sufficient reason. The former calls for the finitist answer to the quantitative problem; the latter protests against that answer. "The world, you say, is limited in time. But why one limit rather than another? You declare that the sum of coexisting and successive beings, up to the present moment, constitutes a number, and a finite number. But why one number rather than another? The number of coexisting and successive beings, it logically follows from the doctrine of the finitude of the world, is inexplicable, arbitrary; therefore, one is justified in saying, irrational." To accept the thesis of the antinomy as valid is, therefore, to rule this protest, and the principle which gives rise to it, out of court. The world of a finitist temporalism is a world which came into temporal existence out of nothing, without antecedent or cause or reason; and it is therefore a world in which the like discontinuous and causally inexplicable and nonrational emergence of new entities and characters may conceivably at any time occur again. For the principle of sufficient reason once abandoned, there remains no reason why new beginnings of existence should be limited to the first moment of the cosmic calendar.

The scope of this paper does not call for a defence of finitism, a doctrine now much out of fashion. But (though it is a digression from my theme) I think it worth while at least to point out that it was through no ignorance of 'the new infinite' that Renouvier adopted that doctrine. The property of infinite numbers which forms the basis of the so-called 'new definition' of infinity—the fact, namely, that in such numbers a part may have all of its elements put into a one-to-one correspondence with all the elements of the whole—was set forth at length by Renouvier in his earliest discussions of the subject as constituting precisely the evidence of the self-contradictoriness of the notion of infinite number.² The new number-theorists have, in the neo-criticist's eyes, somewhat naïvely supposed that they have rendered the notion "harmless" (as Russell has called it) by merely explicitly

¹ Pillon, op. cit., p. 50.

² Cf. Troisième Essai, 1864, I.

incorporating the contradiction into the definition itself! "The radically illogical character of such a definition," as Renouvier wrote in one of his later volumes, "consists in this, that the concepts of whole and part and of equality are introduced into it and at the same time are violated by the proposition itself."

The doctrine of the possibility of absolute and spontaneous 'first beginnings' in the temporal order, which follows from Renouvier's finitism, results, when it is elaborated, in a philosophy of nature that anticipates many of the elements of Bergson's. Both philosophers, though in the main for different reasons, introduce indeterminism not only into psychology but also into biology. Most of the traits of that élan vital of which our distinguished contemporary has so much to say were already apparently in the spontanéité radicale et irréductible of which his predecessor discoursed eloquently over forty years ago. primal spontaneity," wrote Renouvier, "this energy which awakes and comes into existence of itself at the beginning of time and in the nothingness of space—whether it bursts forth [s'élance —the figure is the same as Bergson's at once in a highly complex form or starts from humble beginnings, growing by shoots (jets) which merge with one another and augment the whole, through the ever-unfinished period of Becoming-this ought not to surprise the philosopher whose reason has once led him to reject self-contradictory definitions of the nature of things, . . . and to consider phenomena as pulsatile, erectile, intermittent, and consequently to recognize in all of them something of that character of spontaneity which was the exclusive law of the earliestappearing of them." Such a sentence as the following, again, might easily pass for an excerpt from L'Évolution créatrice:

"The world is one immense pulsation composed of an unassignable (though always determinate) number of elementary pulsations, of which the harmony—whether less or more comprehensive, whether blind or conscious—after being established and developed in many kinds and degrees, finds its consummation in the production of autonomous beings, in whom it, appearing at

¹ Dilemmes de la métaphysique pure, 1901, p. 121.

² Troisième Essai, 1864, I, p. 44.

first merely as spontaneity, tends finally to become voluntary and free."1

With all this there is naturally associated the doctrine of the logical discontinuity of the hierarchy of the sciences, of the impossibility of ever 'reducing' psychology wholly to biology, or biology wholly to physical or chemical principles. Thus organisms, though they are combinations of physico-chemical complexes that, when existing separately, obey mechanical laws, are in their characteristic vital functions êtres nouveaux, and manifest lois irréductibles which it will never be possible to deduce from any more fundamental laws manifested alike in the organic and inorganic realm. This doctrine was emphasized by Renouvier as early as 1864, some ten years before it (together with several other important contentions common to Renouvier and to Bergson) was more methodically developed by Boutroux in his La contingence des lois de la nature. Finally, Renouvier's cosmology gets a certain intelligibility and consistency which I find lacking in Bergson's very ingenious but elusive views of the nature of matter, from the fact that it is frankly animistic. Even inorganic matter is supposed by him ultimately to consist en de certaines représentations pour soi, the character of which we can not define with precision, but which we must conceive somewhat after the analogy of our own sensation and appetition. Physico-chemical phenomena, Renouvier writes, are, "I do not say so inert and inanimate as abstract mechanics assumes (agreeing in this with the superficial appearances of things), but are at least limited to the degree of consciousness—of feeling and of invariable spontaneity—which the simple forces of attraction and repulsion presuppose."2

In spite of these approximations to the later doctrine of Berg-

¹ Troisième Essai, 1864, I, p. 43. In view of these expressions of Renouvier's one is not surprised to find M. Pillon saying, in his review of L'évolution créatrice: "We applaud this conception of the élan vital. It is in fairly close accord with the views which we have often had occasion to express concerning the minimal degree of consciousness and of liberty which it is necessary to ascribe to the elementary beings or inferior monads. The study of organic and mental evolution has led M. Bergson to a doctrine of contingency which in a certain measure . . . approximates that of neo-monadistic idealism, as we understand it" (L'Année Philosophique, 1907, p. 183).

² Troisième Essai, 1864, I, p. 100.

son, Renouvier (in the first edition of the Essais de critique générale) refused to see in evolutionary cosmology and biology the
philosophical importance and value which the author of L'Évolution créatrice seems to find in them. Renouvier held back from
this in part for reasons of philosophic caution. About "the
Whole-of-Being" we can not generalize, except in so far as a priori
necessities of thought are available. Our planet, even our solar
and galactic system, is not the universe; and even though, within
their limits, we could discover the total tendency of the sequence
of changes, we should have no right to universalize the results
of so partial an induction. Though we can logically demonstrate
that the Whole-of-Being is subject to becoming, we can not
prove any specific kind or direction of change in the whole.

"The change of the Whole, as a whole, could be determined by science only if we could compare the Whole with itself at two successive moments. . . . And even if, per impossibile, we could do this, it would still remain to discover the general law of the series of changes." But, apart from these considerations, Renouvier had, at the time at which he was formulating the neo-criticist system, a curious aversion from biological evolutionism even as a purely scientific hypothesis. This seems to have sprung chiefly from a conviction, bred of his finitism, that the abrupt, discontinuous diversities of things, organic or inorganic, can never be eliminated or explained away by conceiving those diversities as parts of a series of continuous, imperceptible gradations. Of all continua the philosopher of finitude had a natural suspicion; and evolutionism seemed to him to consist precisely in the pretension to account for all diversities by assuming a real continuum of temporally successive forms. Consequently, in the first edition of the Troisième Essai (1864) we find him admitting the modifiability of species only within limits, and rejecting Darwinism and cette thèse du progrès, fondée si peu profondément et si peu garanti. The "principle of specificity" he sets up as a primary law of thought. "Species, their genesis, their number, are irreducible given facts" (données). In the second edition of the Premier Essai (1875) this position is slightly

¹ Premier Essai, III, p. 148.

modified. Darwin is absolved from the charge of error in scientific method, on the ground that "he carries out the desired reduction of species" to unity only "with a happy timidity": he still admits that there may have been, for example, "four or five primeval forms" of animals. Thus the principe de l'espèce is by him sufficiently conserved; and, with that principle properly safeguarded, philosophy need have no prejudice against "the legitimate hypothesis of the indefinite variability of organisms and of the gradual formation of new species." Renouvier's real concern, it is manifest, was for the logical principle of the discontinuity of qualitative differences and the consequent impossibility of 'explaining' new forms in terms of the properties of the antecedently existing forms from which they are supposed to have arisen. In other words, his initial attitude of suspicion towards both Darwinian evolutionism in biology and Spencerian evolutionism in cosmology was due to a conviction closely related to that which has made M. Bergson a far more radical evolutionist than Darwin or Spencer—to the conviction, namely, that any emergence of qualitative novelties would always amount to a sort of new creation, to an abrupt, discontinuous irruption into existence of new reality, not in any intelligible sense 'given' in what went before. But Renouvier, overlooking the most obvious possibilities of his temporalism and the most natural biological implications of his conception of a "radical spontaneity" in things, tended, when dealing with the problem of the origin of species, to construe his principle of discontinuity in a static rather than a temporalistic sense. His general attitude towards the theory of organic evolution was thus, even in his middle period, rather one of reluctant and quibbling acceptance than of enthusiastic adoption of a conception important for the elaboration of his own system. He laid down the principles which logically generate the idea of 'creative evolution'; he did not himself quite fully work out that idea in its biological applications.1

¹ In the writings of his final period Renouvier's acceptance of the theory of descent was complete and unequivocal enough (cf. *Le Personnalisme*, 1903, pp. 121-3). But behind this he placed those fanciful hypotheses concerning cosmogony and embryogeny to which he had by that time become attached; and these

It should, however, by this time be evident that Renouvier's temporalism carried with it not a few of those subsidiary ideas which play so great a part in contemporary forms of the doctrine. But the anti-intellectualism which has accompanied much recent temporalism can be traced to him only in the sense that he raised the problem which has chiefly generated that tendency, and failed to deal with the problem in a wholly clear and conclusive manner. That the problem had latent in it difficulties which would presently cast a shadow of uncertainty upon the principle of contradiction itself, he was apparently far from imagining. In his treatment of the 'category' of time, Renouvier was guilty of three omissions. (1) He never made it altogether clear how duration can be free from the antinomies of the continuum. (2) He seems never to have fully considered Kant's difficulty concerning the possibility of deriving a perception of succession from a succession of perceptions. (3) He made no radical difference between time and space with respect to their ontological status or 'degree of reality'; and he ascribed to the two a large number of common attributes. It was precisely at these three points that the later growths of French temporalism germinated.

Renouvier had avoided the admission of an infinite regress, in the case of time, by his doctrine of a first beginning. But there remained the question of "the infinite of composition." On the face of it, duration seems, like space, to be a continuum. But a continuum is divisible ad infinitum, and a 'given' or realized continuum must therefore constitute an actual infinite magnitude; otherwise the possibility of its endless subdivision would not be grounded in the reality of which that possibility is Thus the worst of the old Zenonian paradoxes predicated. hypotheses were, in a metaphysical sense, essentially non-evolutionary. For they assumed that the world was originally 'created,' and created perfect; that through the abuse of the freedom of the originally created spirits a 'fall' took place; and that this led to the destruction of the primitive physical order and the conversion of the material universe into the nebulous state-from which the present scheme of things has gradually evolved. The 'germs' of the original monads, however, he supposed to be indestructible; they therefore have survived the cosmic catastrophe, and, passed through the lower and higher forms of animal life, appear as human beings, who will eventually be restored to their original perfection in a perfect society.—But upon the aberrations of a great intelligence in old age it is not fitting to dwell.

about change and motion seem to return to plague the temporalist-and most of all the temporalist who is determined to be also a finitist. It is true that Renouvier repeatedly denied that duration is a continuum of the sort that involves infinity. In the Troisième Essai, 1864, he endeavored to formulate the conception of a minimum divisibile of duration. a durée dernière; these ultimate elements of succession are "extremely small," much too small to be separately perceptible. "Thus it is only through the composition or excessive accumulation" of these "elementary durations" that there are produced "phenomena of which we can appreciate the duration by our senses." Because we can not, in clear consciousness, apprehend these time-elements separately, they appear to us as a continuum, just as a series of small dots, at a certain distance, is perceived as an unbroken line. But in fact, behind this continu apparent," there are intervalles réelles, intermittences réelles. "Intermittence is," in fact, "a universal law of nature; and the rational proof of it is to be found in the reductio ad absurdum of the doctrine of a real continuum or actual infinite." Here, evidently, our finitist philosopher is making a hard struggle to save time from the fatal charge of continuity. Yet the struggle can not be regarded as successful, nor as consistent with the same philosopher's account, in other passages, of the attributes of time. Have the ultimate units of duration themselves any duration or temporal magnitude? If so, the whole problem breaks out afresh within their limits, no matter how "small" they may be supposed to be. If not, they are mere temporal points, and not even an "excessive accumulation" of them could amount to a real duration. Again, if between the "pulses" of duration there are "intermittences." what are these intermittences made of, where and how do they subsist? And if they do not enter the consciousness of duration, does not that mean that, in consciousness, duration is continuous, without intermittences? To such questions, Renouvier's doctrine seems to offer no satisfactory reply.

Moreover, in his own formal analysis of the meaning of the category of time, he plainly implies that duration is a continuum. Anything which is represented as in time, as having temporal relations, is thereby given a certain "position" in a certain

scheme of ordering. Now position, whether in time or space, involves two other distinguishable though inseparable notions, that of a "limit" and that of an "interval." In space, for example, there must be determinate points; and between any two distinct points there must be an interval not reducible merely to more points. In succession the limit is the "instant," the interval is "time," the synthesis of these two constitutes "duration." "In the definite interval between any two instants, other instants may be placed at will, ad indefinitum. Were it otherwise, the instant would be something other than a limit and time something other than an interval; for two instants can not be represented as two without an interval between them, nor can an interval be represented unless it be thought as affording places within itself for other possible limits. Thus duration is a synthesis of the interposition of possible instants between two given instants."1

When Renouvier describes this as a merely "indefinite" possibility of the interposition of "instants" within any duration, he is patently evading the consequences of his own definitions. His logic requires that there be an infinite possibility of such interposition, and not of points merely but also of intervals, since each pair of points presupposes an interval. And if duration is 'real,' this contained infinity must apparently be not merely a possibility but an actuality. The reader may, however, urge that Renouvier's phenomenalism saves him here; that these necessities apply only to conceptualized duration, while real duration, for a phenomenalist, need have neither more nor less magnitude and division than it is immediately experienced as having. But it is not clear that the neo-criticist phenomenalism means quite this. Renouvier frequently seems to argue in this manner: An immediate datum, A, if it is to be conceived as other than self-contradictory, implies a certain other fact, B, not immediately given; in such a case B is known to be not less real than A. It is by an argument of just this type that the assertion of a first beginning of time is reached. Why, then, should not a like argument be applicable to the internal constitution of time? The temporal experience, the fact of succession, it is assumed, is

¹ Premier Essai, 2d ed., 1875, I, p. 339; the italics are Renouvier's.

an immediate datum; but in order to avoid contradictions, it seems necessary to represent succession as a continuous quantity; the notion of a continuous quantity, however, is itself (upon Renouvier's principles) self-contradictory; hence the conclusion of an anti-intellectualist temporalism—a reality actually given baffles the 'intellect' by refusing to be conceptually 'thought through' without absurdity.

Besides the Zenonian paradoxes of the continuum, there is another puzzle about time, which, somewhat obscurely indicated by Kant, has become a common-place of the psychology of temporal perception. This is what Ward calls "the truism-or paradox—that all that we know of succession is but an interpretation of what is really simultaneous or coexistent," that in our time-perception "all that corresponds to the differences of past, present and future is presented simultaneously." If two moments, A and B, are not merely to be successive, but also to be experienced as successive, it seems necessary that both be present in consciousness together; the time-relation can not be given, it appears plausible to say, unless the two terms of the relation are both jointly given. "Unless," as Royce2 has put it, "we could overlook a succession and view at once its serially related and mutually exclusive events, we should never know anything whatever about the existence of succession." Now this paradox has more than once been used as an argument against temporalism of all sorts; it is one of the principal weapons in the armory of idealistic eternalism. It therefore calls for very serious consideration from the temporalist. If it be not disposed of, his temporalism at least seems obliged to avow itself a paradoxical type of metaphysics. The requisite consideration can hardly be said to be given it by Renouvier. In Bergson's earliest discussion of the time-problem it will be found to play a not unimportant rôle.

Finally, Renouvier has been criticized by his principal disciple, Pillon, for ascribing to time and space the same sort and degree of reality and, consequently, leaving the actual ontological

¹ Enc. Britannica, 11th ed., art. "Psychology."

² The World and the Individual, II, p. 117. The best exposition of this paradox known to me is to be found in this chapter of Royce's.

standing of both curiously ambiguous. For Renouvier's monads are in space just as truly as in time; they are, in Pillon's words, "nothing but the dynamic atoms of Boscovich endowed with perception and appetition." But if the monads exist at least punctually in space, it is necessary that the space-with its 'intervals' as well as its 'limits' or points—be there for them to exist in. Thus Renouvier still "leaves subsisting the realistic view of spatial relations"—a view which "accords ill with the law of number and with the finitist logic in general." In other words, the spatial as well as the temporal continuum reappears, and reappears as a reality necessarily implied by a given reality; and with the real continuum those bêtes noires of Renouvier, the paradoxes of the actualized infinite, again invade his philosophy. This is not only awkward in itself, but it incidentally endangers his temporalism. For if time is no more genuinely real than space, if the category of succession has no more coherency and no more fundamental significance than that of position, it is, from the logical point of view, in a rather bad way. The proper view for a finitist temporalism to take, Pillon insists, is that "space ought to be separated" in these regards, "from time and the other categories," that the phenomena of the "outer sense" have an "illusory character," precisely because the antinomies, and especially the paradoxes of the continuum, are applicable to these in a way in which they are not applicable to time. In other words, a temporalist, if he be unwilling to be an antiintellectualist, can not be a physical realist, even in the modified sense in which Renouvier may be so described.

Such seem to be the ways in which Renouvier anticipated the more recent developments of temporalism in French philosophy, and such were the oversights by which he left to his successors unsolved problems, out of which anti-intellectualist tendencies were generated. With these later developments I hope to deal in a subsequent paper.

ARTHUR O. LOVEJOY.

THE JOHNS HOPKINS UNIVERSITY.

¹ Année Philos., 1905, p. 116.

NIETZSCHE AND DEMOCRACY.

THE critic of aristocracy does well to remember always that the real object of his attack is not an institution, or a class, or a theory of society, but a disposition, a state of mind, a certain mode of evaluating life. The reason why he may be apt to forget this lies in the fact that while such a disposition supplies the motive force of aristocratic claims, it does not often come itself clearly into the field of intellectual discussion. was when the aristocrat did not feel the need to justify himself; his strength lay in his inner sense of conscious superiority, which had not been forced by conditions to give an account of itself. To be compelled to resort to theory at all is to enter a realm foreign to his genius. And particularly this is so because at the present day the current forms of thinking are not naturally favorable to his claims; and so a defence of the institution is apt to take a roundabout course, and even to avail itself of the aid of such democratic notions as the common welfare, which are repugnant to its natural bias.

It is a large part of Nietzsche's significance, that in him the aristocratic temper itself steps forth into the daylight of philosophical expression, naked and self glorifying as in life the mood which it attempts to justify. And partly for this reason, it may as well be confessed that the difficulty in meeting him effectively is a considerable one. Nietzsche's philosophy is, on principle, not a thesis to be argued, but an insight to be gained. It is a matter of taste in the end, held with all the superciliousness that belongs to what is intimate and personal—so personal that while it may have the seductiveness of an instinctive appeal, it is precluded by its very nature from the form of argument if another man happens to dislike what we approve. Another reason also for the difficulty in the way of an effective criticism, is the cunning and the literary skill with which there is intertwined with the more novel aspects of his philosophy other motives much less difficult for ordinary people to agree with. It is always hard to

fight epigrams with distinctions; but a distinction needs to be drawn at the start, before it is possible to appraise intelligently Nietzsche's transvaluation of ethical values.

To state first, then, Nietzsche's doctrine in the form which, with some qualifications perhaps, it would be most likely to find acceptance among any considerable number of present-day philosophers. Roughly it comes to this: that the world and its distinctions of worth are the outcome of a process of evaluing which has its source in the unconscious depths of our instinctive nature. 'Reality' is a construct, the medium for the expression of this dark subconscious will, which alone therefore constitutes all that we can call good, since it is the source of that very attitude itself which distinguishes good from evil. The strong man eschews all ends, all reasons, beyond the imperious dictates of his own self-justifying instincts. The one fundamental fact is the will to expression, to achievement, or, as Nietzsche prefers usually to put it, the Will to Power. "From the bottom one loveth nothing but one's child and work; and when there is great love unto oneself, it is a sign of child bearing." Or again, "A living thing seeks above all to discharge its strength; self-preservation is only an indirect result."

Now to this conception there belongs an ideal of life as alone desirable and admirable—the ideal of the strong, positive, forceful man, autonomous, manly, conquering, imperious, "free from the happiness of slaves, saved from gods and admirations, fearless and fear-inspiring, great and lonely." The distinction which I wish to draw concerns one particular aspect of this ideal. Briefly, it has to do with the necessity of a connection between creation, achievement, as the outcome of a healthy nature, and those qualities of a sense of 'power' which involve brutal exploitation, domineering, cruelty, and a consequent denial of the supposed virtues of sympathy, neighborly kindness, and justice toward the weak. It is this which, in point of content, is central in Nietzsche's transvaluation of values, in so far as it can make good its claims to novelty; it is not merely the setting up of power as the aim of life, but the justification of 'cruelty' as an integral part of the notion of power.

To show that this is so, Nietzsche follows mainly three paths.

The first is what may be called the appeal to 'nature.' For Nietzsche, wherever in men you come across those spontaneous expressions of strength and virility which have left their mark. justified themselves by results, invariably also you find an impatience at weakness and maudlin pity, a readiness to exploit others, a preference given always to accomplishment which overbears alike opposition and flimsy moral scruples, an exultant glorying in the sense of power which cannot really come home to one fully apart from a joy in the very havoc it has created. "In itself the act of injuring, violating, exploiting, destroying, can of course not be anything wrong, inasmuch as life essentially, that is, in its fundamental functions, works injury, violation, exploitation, and destruction, and cannot be conceived otherwise." Such a type Nietzsche find in the history of the past, in Greece, in Rome, in Venice, in Florence, in contradistinction to modern man; only sporadically does it make its appearance in the present age, and then as a portent, a monster, against which our vitiated tastes cry out. Just such a man is Nietzsche's ideal; masterful, filled with the thirst for life, for power, for impressing himself, making himself felt; joyous, free, recognizing no rights which cannot maintain themselves against his aggression, lusting for conflict, for danger, for pain even so as only he can attain the fullest sense of living. His equal he will respect—his enemy even, if he proves himself a worthy antagonist, for to meet a foeman worthy of one's steel is to attain the highest zest of life. But to be told that one should love his neighbor, should pity the poor and helpless, and devote himself to their service—to such words primitive man, natural, unspoiled man, would listen with a stare of bewilderment or a burst of Homeric laughter. What has life to do with disease and death, strength with weakness, except to ignore it, or throw it contemptuously a largess, less in pity than in consciousness of its own superfluity. Instead of weakly lamenting pain and suffering as a blot on the face of the world, the strong man finds it a spur to his own enjoyment, a zest to tickle his palate. All primitive festivities are built up on pain inflicted; and almost everything that we call higher culture,

including knowledge itself, is based upon the spiritualizing and intensifying of cruelty.

Now a familiar answer will be forthcoming to such a claim. It will be said that this is indeed the character of the 'natural' man, but that development consists precisely in overcoming it and subjecting it to a social morality. Nietzsche's reply to this constitutes the second point in the grounding of his ideal -a reply which, if it can be maintained, disables at one blow the whole battery of his opponents. The facts he admits. But what if this whole progress, so-called, were in a totally wrong direction, were retrogression and not progress at all? Nietzsche declares that this is so, and that we can lay our finger on the cause. Our morality of sympathy and altruism, and all that goes with it—Christianity, democracy, universal education, philanthropy is simply a mark of physiological degeneration, of weakened vitality. We congratulate ourselves that we no longer delight in the cruelty of our ancestors; actually this is our condemnation, for it is due simply and solely to the failure in us of that source of ebullient physical energy and sound nerves of which in the natural man it is an expression. Our softening of manners is mere degeneracy. "Severity, frightfulness of manners, may inversely be a consequence of superabundance of life; for then much can be dared, much can be challenged, and much also can be squandered." This test of degeneration is applied by Nietzsche to a new interpretation of man's spiritual history; and whatever may be one's judgment upon this, it is impossible to deny that it is intellectually not a little impressive. Historical moralities are of two totally opposite sorts—master-morality, and slave-morality. Primitive moral ideas are of the former sort. The good man is the strong, the courageous, the dominating man, who exalts his strength and success into an ideal which contains no place for weakness, or the virtues that flow from weakness. The morality and religion of love, sympathy, forbearance, on the contrary, are the creation of a less virile stock, whose weakness has brought them into subjection to a master type. Under such conditions there comes about a complete reversal of values. By a "grudge of the weak," the

very qualities that hitherto have alone been considered admirable are turned into the concept of the bad. Such an attempt to impose the valuation of impotence upon strength is for Nietzsche a sinning against nature. "That the lambs should bear a grudge to the big birds of prey is nowise strange; but that is no reason for blaming the big birds of prey for picking up small lambs." "We do not bear at all a grudge to them, those good lambs; we even love them. Nothing is more delicious than a tender lamb." The consequence of this new valuation is a morality of the coward, the sneak, timid and modest, counselling peace of soul, an end of hatred, love towards friend and foe-the morality of "weaklings who think themselves good because they have lame paws"; and a religion which is at bottom a religion of smothered vengeance, which one prescribes for himself as a narcotic, to alleviate the suffering which is a sign of weakness. Christianity is the supreme instance of such a religion, whose God has "sunk to the symbol of a staff for the fatigued, a sheet anchor for all drowning ones, poor people's God, sinners' God, the God of such par excellence." In the hands of ambitious priests it has been the great instrument for 'improving,' that is, for taming, sickening, deteriorating the race, the human animal, and making him subservient and harmless. The supposed potency of religion is nothing but a fallacy which a true psychology enables us to detect. We flatter ourselves that our fine sentiments, our conscious logic, our intentions, are the guides and springs of conduct. Nothing could be farther from the fact. What we exalt as spirit, ideal, is no more than the unsubstantial aura which floats above the one veritable fact—the physiological functions of our bodily frame. All our customary judgments in the light of this new insight have to be reversed. Thus sinfulness is not a fact, a cause, but simply the interpretation of a physiological depression; and religion psychologically defined is nothing but the treatment of this in moral terms, which ignores its real physiological nature. So religion feigns that hopefulness and peace are the result of God's forgiveness. In reality we are in a condition to be hopeful because our fundamental physiological feeling is again strong and rich; we trust in God because the feeling of fulness and of strength gives us peace.

The only thing of worth, then, is physiological well-being; and the condemnation of any negative morality, which despises the instincts and the natural world, is that it represents the expression of sickness, and low vitality. The true end of man is to get away from all that devitalizes, to learn the joy of perfect vigor, of instincts that function easily and fully. And this brings me back to sympathy and the supposed virtues of altruism. It is the sign of conditions profoundly awry, that we have all this emphasis on mutual assistance and kindliness, 'everybody sick and everybody a sick nurse.' Vigorous eras, noble civilizations, see something contemptible in sympathy, in brotherly love, in the lack of self-assertion and self-reliance. "That the sick may not make the sound sick, surely this should be the first point of view on earth. But for that the first condition is that the sound be removed from the sick, that they may not confound themselves with the sick." And the reason is not merely that sympathy stands in antithesis to the tonic passions, operates depressively, and so interferes with the individual's zest of life. There is to Nietzsche a still more important reason, and that is its effect upon the physical stock of the race. "The sickly are the great danger of man, not the evil, the beast of prey." "The weak and ill-constituted shall perish-first principle of our charity. And people shall help them do so. What is more injurious than any crime? Practical sympathy for the ill-constituted and weak— Christianity."

What we call therefore the social virtues are nothing but a "herding animal morality," the sacrifice of quality to numbers, the abandonment of any fresh, full, vigorous life for peace, security from danger, and such petty comforts as are compatible with quietness and safety—"minute joy, mutual benefit, machinal activity, the joy of love for the neighbor, herd organization, the arousing of the communal feeling of power." But such a life is the denial of all grand values, it is the reduction of everyone to a dead level of mediocrity. A caste system, inequality, is presupposed in the very notion of relative worth. "The gap between man and man, between class and class, the multiplying of types, the will to assert itself, to stand out in contrast, belongs

to every vigorous period. The only justification for society is as a foundation and scaffolding by means of which a select class of beings may be able to elevate themselves to a higher existence." The weak have no rights. "One has duties only toward one's equals; a noble morality tells me that I may act toward beings of a lower rank, toward all that is foreign, just as seems good to me." Indeed the more I am compelled to leave ungratified my lust for power toward my equals, the more surely must it get an outlet in my dealings with inferior classes. "Ordinary men, the majority of the people, exist frankly for service and general utility, and are only so far entitled to exist;" to keep them in their place as a "modest and self-contented species of human being, a type like the Chinese," is the obvious course to which every rational consideration points.

Nietzsche's doctrine of the will as the creator of all values is thus an endeavor to do away with every limit to its autonomy, any standard and criterion that claims to set bounds to it in any way. In particular has he attempted to simplify the logic of the ethical life so that the paradox, which has come to appear almost a truism in the modern ethics of self-development, of an obligation which is really due to our own nature, a restraint in the interests of freedom, is swept aside. His philosophy is that of a perfect and thoroughpaced relativity. Men's temptation has been to arrest this eternal activity of creation, and to take human valuations as final and authoritative. "Ye will create the world before which to kneel down. The unwise, the folk. they are like unto a river down which a boat glideth, and in the boat the valuations are sitting solemn and disguised. Your will and your valuation you placed on the river of becoming. What is believed by the folk as good and evil betrayeth unto me an old will unto power." Nietzsche will accept nothing as fixed, no coercive ideals, no supposed world of reality standing firm and everlastingly true behind the flux of phenomena, simply because life demands a clear field, an unlimited power to live and create and enjoy. "Oh these Greeks," he writes, "they know how to live. For that end it is necessary to remain bravely at the surface, the fold, the skin, to worship appearances, to believe in

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39 forms, in tones, in words, in the whole Olympus of appearance." "The seeming world is the only one; the 'true' world has been deceitfully invented merely." There must go along with the other superstitions the last and greatest of them all—the superstitition of "truth." Belief is not to be constrained by truth; it is rather the direction taken by the hidden force within us which is self-justifying, insistent, independent of reasons. It is nothing more than a moral prejudice that truth is worth more than semblance. "The falseness of an opinion is not for us any objection to it. The question is how far an opinion is lifefurthering, life-preserving, species-preserving, perhaps speciesrearing." In fact, Nietzsche assigns to the thinker precisely that attitude toward truth which the patrician takes toward the petty rules of commonplace dealing among the multitude. 'will to truth' of the typical philosopher is bad taste. To be 'earnest' in truth-seeking is an unmistakable sign of an impeded metabolism, of a struggling and wrestling life. "When I saw my devil, I found him earnest, thorough, deep, solemn, he was the spirit of gravity, through him all things fall." The true philosopher, quite the contrary, approaches his task with the gusto, the abandon, the gleefulness, the sure touch of him who is master of his weapon, and can use it as his fancy directs. "Grand passion uses, uses up convictions; it does not subject itself to them-it knows itself sovereign. The need of a belief is a requirement of weakness." So just as the patrician loves fighting rather than ease, danger rather than safety, so to the intellectual aristocrat it is unseemly to give heed to the soft desires and sentiments of a weak human nature. His pride will allow no thinking to be 'honest' which affects modesty, tries to placate emotion and desire, but only when it attains to the harsh, the brutal, the

Now to deal with such an attitude as this fully would lead me too far, and I can only suggest briefly one or two rather common-

masterful boldness.

forceful, the unwelcome, when it is characterized by an intellectual haughtiness, a pride of the elect "at home in many distant and frightful worlds." That only does he will to accept which flatters his adventurous soul, and calls forth the exercise of a place queries. To stand above all law, reality, truth, has a certain splendid sound; but-since we are not allowed to ask whether it is true—is it really practicable, will it work? For Nietzsche the one source of man's insufficiency lies in the weakening of the will. The sound will is omnipotent against every wind of destiny, because it is itself destiny. An inner lack of harmony, the warring of instinct against instinct, is a symptom of decadence. It is foreign to the oneness, the singleness of aim which is our birthright; and no other compulsion can come from a world which the will itself creates. But it is well to recall that there is another way in which the facts might be interpreted. The turmoil of man's life as he has developed from the spiritual naivete of his primitive state, might logically quite as well be due to the more familiar explanation—to a growing nature imperfectly adjusted as yet both to itself and to a world beyond. If this should happen to be the true case, then Nietzsche's reading of the universe would have to be condemned as only another of those artificial simplifications of reality of which philosophy has seen so many.

And I submit that there is some apparent evidence for the alternative interpretation. I see no way of demonstrating by logic that there are limits to the absoluteness of my self assertion, my 'natural' instincts-limits which, because they are necessary, I ought to take into account as conditioning the expression of my own nature. In a way the logical neatness of the opposite conception makes a certain æsthetic appeal. But experience, I should say, hardly bears out our claims to be world-creators. and omnipotent. The spectacle of a courageous soul defying danger, exulting in pain and suffering when it is the road to achievement, bringing its will to pass against a hostile or reluctant universe, is an inspiring one up to a point, just because it is the matching of human powers to world forces that are really there and active, which we must take therefore into serious account, but which yet we can view resolute and unafraid. to patronize the powers of the universe, and exalt his unfettered and independent will alone to the seat of power, ceases to be heroic, and becomes foolhardy and ridiculous. The pigmy

brandishing his sword in the face of the hurricane is no unfair type of a philosopher who would find reality and the conditions of success solely in the self-confident assertion of his own powers. And if a metaphysics which denies that we must purchase life and satisfaction by subjecting will to the hard necessities of a natural world independent of us, and requiring constantly to be taken into account before we act, is not a theory that working experience would seem to recommend, we should not be unprepared to find that also the social world presents limiting conditions to which the assertive instincts will have to adjust themselves, and to ignore which would be not to entrench our instincts, but foolishly to squander the content of life. True, we may be so in love with sheer fighting that it seems a coward's part to count any odds. But such a taste, if as taste it is unassailable, is certainly not nature's way of survival. Now it surely is no very forced reading of history, a reading which needs more than a philosopher's dictum to set it aside, to see in the decay of the particular type that Nietzsche admires, not a mere regrettable and remediable decadence, hastened if not brought about by the cunning of priests, but an indication of the fact that beyond a certain point the type fails to wear well in a world constituted as this one is; and so that it is bound to suffer a modification in the direction of a less egoistic, and a more social and subordinate quality. Nietszche deplores the fall of aristocracies before the power of the mob, and he speaks as if this were due to some dereliction of duty on the part of the patrician, who could, had he set about it, have kept the lower orders in their place, as contented, or, if discontented, as helpless hewers of wood and drawers of water. But if anything is evident, it is that such measure of freedom and power as the people have obtained has been what they could conquer for themselves. Call it weakness if you like, but nevertheless it collectively is power, which actively limits the possibilities of egoistic expression; and while it persists—and the way to curb it has not yet appeared—it is useless to talk and act as though the qualities which are incompatible with it had still free course.

What I am trying to say amounts simply to this, that the

validity of Nietzsche's ideal of life is not independent of the question whether it really can be lived successfully in the actual world; and that there is some ground for believing that when any man or set of men tries to set aside the claims of the so-called social virtues, there is created a situation which will prove unmanagable. The world shows itself inclined to eliminate a type which refuses to allow milder qualities to be grafted on to its original self-sufficiency. Even though it be granted that this is a subtraction from the crude physical energy of primitive man, such an admission would not be an end of controversy. The nearest conclusion would be that 'fitness' does not turn out to be mere unbridled strength, ebullient animal spirits, and so that if we are to follow 'nature' rather than our æsthetic admirations, such physical loss is, in terms of adjustment and survival—the only terms relevant to the scientist—not a loss but a gain. Still, this is not something one would care to grant, probably, unless he were driven to it. The admiration for virility is part of us, which the normal man would find it hard to keep from affecting his judgment. A social ideal that really meant a weakening of the human animal could hardly be embraced with entire mental content. A few words, therefore, may properly be said about this point of Nietzsche's contention.

And, in the first place, it perhaps is worth while to make it plain that there is an aspect of Nietszche's criticism of sympathy to which one may very well subscribe. The good name which sympathy bears ought not to blind one to the fact that it carries with it certain dangers. It may be that in my charitable absorption I am running the risk of losing sight of larger interests, and of degrading where I think to exalt. Pity for the unfortunate may sometimes be after all a betrayal of human dignity. It is possible that in handling human weakness with such tenderness, I am simply acquiescing in the lack of the toughness of fiber which alone has any serious worth, am taking men at the level of their ignobler demands, at the expense of the ideal of man and manhood. If one has resources of strength within himself, the last thing that he wants is pity; and why then should he think that he owes as a duty to others what he would reject as degrading

when offered to himself? Why should we spend ourselves to mitigate woes which have back of them no possibilities of life but such as our very attitude shows that we ourselves despise?

The traditional notion of charity—and it is this from which always Nietzsche takes his cue-has no altogether satisfactory answer to make to an attack along such lines as these. But evidently this is not an attitude to which the notion of sympathy is inextricably tied. The modern man knows a sympathy, and is tending to prefer it, which, far from losing sight of the ideal of human health and soundness in the enjoyment of an emotional dissipation, exalts this to the utmost. It is a sympathy which is summoned forth primarily not by a womanish pity for suffering, but by regret for lost opportunities, wasted strength, powers that have never been utilized, and which is satisfied not by merely wiping away tears, but by utilizing human resources of positive energy, a sympathy which therefore finds a place for impatience and disgust in its helpfulness, and can use the spur of pain itself, in the conviction that the true evil is not suffering. but the absence of an ability and a willingness to make head against it. True, we have not wholly obviated the objection that, even with so positive an aim, the task of lifting the fallen, strengthening the feeble knees, is a disheartening, a life-wasting one, which tends to dampen and overcloud active and joyous achievement. But the fault does not seem to lie in the attitude itself, but in the circumstance that, as it has often tried to work itself out, it has found the task so actually hopeless, the cure so impotent when applied to human failures. But here again there is another path which modern efforts are beginning to take; and here the atmosphere is less miasmatic, the activity which is called for freer, more positive, more energetic, and hopeful. When instead of going on forever with the endeavor to patch up individuals, we attempt to change the world, remove causes, set in motion vitalizing forces, the work of regeneration ceases to be a weak outlet for the feelings merely, and takes its place as a genuine, virile man's work. And sympathy, by subordinating itself as a necessary motive force to such a task, likewise gains a justification in which as mere feeling it is lacking.

Now-and this is the point to which I have been trying to lead up-herein lies the more obvious answer to the claims of Nietzsche that sympathy and the social virtues constitute a sickness. a lowering of human vitality. They may be this, but they need not be at their best. There is no obvious absurdity in supposing that they may even open up a new range of opportunities for the exercise of human powers. Of course, for the value of such activities, and whether they actually do appear from the inside as nothing but products of timidity and anemia, each one has to trust to his own appraisal. Personally, as I look about on men, I seem to see no lack of abounding vitality in those who represent its best embodiment; indeed, they would look upon the complacent, ease-loving, dead-and-alive opportunism of the average man with as much dislike as would Nietzsche. But also, one may set out to justify this faith more objectively. On the surface the chances would seem to be considerably in favor of the claim that cooperation, when based on sympathy and a mutual give and take, enlarges vastly the field of man's endeavor, and so increases his satisfaction in achievement. Compare the narrow range of positive interests of an aristocrat of the past, with what is open to the man of intelligence at the present day. Fighting, danger, physical activity, the crude joy of bullying inferiors of this there was plenty; but of a sort so monotonous, so stupid, that its inevitable gaps had to be filled with hard drinking, boisterous horse play, the unintelligent pleasures of the senses. Life today, in spite of its loss in certain directions, may be on the whole vastly fuller and more entertaining; and the main reason is that we have enlarged our scope, by a sympathetic identification of ourselves with the world of nature and of man. Why should this have to be interpreted as a loss in vigor, rather than as a gain in intellect and interest which comes from maturity and not decay? The normal youth is all for sports and exhibitions of physical prowess; his heroes are made of the crude stuff of prize fighters and Indian hunters; he despises a weak pity, and takes a naive delight in impressing himself upon others to the point of cruelty. We do not greatly blame him because we know that all this is natural to the stage which he has reached.

But if the same narrowness of interests persists too long, we do not exult in it as a sign of vigor, but set it down to an arrest of intelligence. Achievement, once again, is so far from being identified with cruelty and lack of sympathy, that these may quite as well be argued to limit it fatally. However it may have been in the past, nowadays the social power that counts is not the sheer brute force of despotism, but *influence*; and influence has its roots always in sympathy. What comparison is there between the complexity, the difficulty, the interest coming from a heavy draft on all the resources of brain and will, of a task that aims at putting all men on the level of the noble life, what comparison between this and the comparatively simple ideal of the physical domination of a conqueror?

It is not to be denied that along with the greater mildness of modern life some risk does attend. Its comparative freedom from danger leaves a place for better activities, which must have been set back by an atmosphere of constant war and alarms; but also it runs the chance of ministering to the growth of a spirit effeminate, timid, calculating, ready to sacrifice anything for peace and security. The warning against such a danger is no new thing, but seldom has it been made more incisively than in Nietzsche's doctrine of the "last man." To Nietszche, the outcome of all modernity is away from the grand life which 'one renounces when he has renounced war'; it is toward that "contemptible species of well-being dreamt of by shop-keepers, Christians, cows, women and other democrats," the ideal of nothing left to fear, of the "universal green-meadow happiness of the herd." The answer to this is to agree with Nietzsche in condemning such an ideal, to admit that there are tendencies which lead to it, but to refuse to admit that these tendencies are inherent in a democratic society, and cannot be avoided. Life may readily be made too easy for our moral health. to maintain the necessary toughness of nature, is it going to be necessary to keep on fighting forever with our fellows, cultivating cruelty and hardness of the feelings? There is an alternative the alternative which has been pointed out in recent days by Professor James. In the organization of human labor to subdue

external nature for man's use, there is present not only an enormous extension of human interest and zest of achievement, but also a safeguard against that tendency to softness that attaches to modern living, if only men, recognizing the danger, will take the trouble intelligently to utilize its possibilities as an effective social tool. And incidentally it may be pointed out that this warfare with nature, by its demand for a close knit coöperation of intelligent interest, as well as of mere manual effort, is out of harmony with an aristocratic, exclusive aloofness of attitude, which thus in this further direction contracts the possibilities of human life.

Put in a word, the criticism I have been trying to suggest comes to this: Nietzsche is right when he decries a satisfaction with mediocrity, and demands that we aim at excellence, superiority to the vulgar standard; he is wrong in holding that this involves a permanent feeling of caste, a lower order as a necessary outlet for the exercise of our instincts of dominance. The true objects upon which we are called upon to expend our lust for 'cruelty' and power are not men, but circumstances. On the contrary, the moment we make of men mere tools, we are setting our own standard lower. The height of our excellence depends not on the subjugation of inferiors, but on the utmost stimulation of the powers of every possible competitor, that he may act as pacemaker to our own exertions. When we acquiesce in the existence of a class from whom nothing is expected, we are making conditions easier for ourselves, and so are letting down in the strenuousness of our activity.

And this leads me to note that there is another and a very important angle from which Nietzsche might be approached. From Nietzsche the immoralist, to Nietzsche the prophet of a new race, it may seem on the surface no long road; and yet there are points of difficulty in the transition. Nietzsche's philosophy is here no longer the mere supercilious contempt of the patrician for the plebeian. It is a social indictment of mankind, because for its ease and pleasure it is sacrificing the hopes of the future; a half mystical enthusiasm for a new and better race, to become a bridge to which is the highest felicity of present

man. To justify the physiological functions as the outcome of the evolutionary process, and as alone æsthetically admirable, is one thing. To set up this ideal as an ethical end, to assert the claims of the future upon the present, to place the hope of humanity in a new philosophy which shall create new values in the place merely of recording them—this is quite definitely something different.

And to begin with, I may point out that in the setting up of an ideal for the race, Nietzsche is influenced by a motive which marks him off rather sharply from the object of his admiration. Nietszche's inspiration is throughout æsthetic. His ideal is an ideal set up by taste, the appeal to his admiration of a conception of life which is not being realized, and which he sets up as an aim and a philosophy just because it is not realized even in himself. The 'ought' of immoralism is an æsthetic ought; it is the call upon us to create artistically, in order to take the place of the ugliness of the present, that nobler life which good taste demands. Whatever the significance of such an attitude, whether or not Nietszche is justified in taking his own preference in character as sufficient to subordinate all reality to its future achievement, after cutting loose so vociferously from every 'ought' and every limitation, at least the æsthetic emphasis is not the attitude of the natural and unspoiled patrician himself. What Nietzsche has been pointing to is a type of life frankly egoistic, concerned only for fulness of experience, simple, immediate, unreflective. A philosophy of the Super-man, on the contrary, calls upon present imperfect man to center his thoughts on the future, to substitute the claims of an æsthetic preference for an absorption in the joy of existence; it is the philosophy of a man who admires what he does not find in himself. We cannot very well help raising the question, then, whether, as setting up an end to be achieved, it does not reveal serious difficulties in the way of its own possible realization. Unless such an end comes by nature and without effort, does it have any prospect at all of success? Is not the very fact that it is no longer a life to be accepted and lived, but an ideal to be admired and worked for, a proof of the loss of that physiological power whose absence is fatal? Why should here and nowhere else ideals be motive forces, and not as usual mere signs of physiological conditions?

And in connection with the problem which this raises, there comes in the third point to which the philosophy of Nietzsche appeals, to back its rejection of the sympathetic virtues. This is the support which apparently is given to it by a certain aspect of modern science. It is undoubtedly a matter of real difficulty with the thinker of the present day to reconcile the scientific dogma of natural selection as the source of all that the animal world has come to be, with the apparent subordination of this law in civilized human life, and more particularly with its seeming contradiction to the ideals that are called Christian, and the social practices professing to embody these. On the whole, this is the most powerful ally that Nietzsche has to back his theory of human degeneration. For is not this precisely the outcome that science would predict of the practices fostered by modern doctrines of charity and brotherly love, and the attempts to save from destruction those who are clearly unfit to hold their place in the world? I have not left myself space to deal with this adequately. I wish merely to suggest very briefly certain doubts which may be raised about the right of Nietzsche, in his character as prophet of the Super-man, to claim any support here that the special prestige of science may afford.

And first the query arises to what extent Nietzsche really does after all put himself in line with the supposed demands of natural selection. The extermination of the unfit on scientific grounds is no doubt the plea of some of his disciples. But before attributing this to Nietzsche, it is at least worth remarking that it seems to introduce some measure of inner inconsistency into his doctrine. Thus interpreted, his millennial era would seem to have left behind certain of the most characteristic features of the aristocratic ideal. There is no longer any word of caste, of cruelty, of necessary degradation to give to strength the means for its expression. The abject race of man has been eradicated; instead of the justification of aristocracy as a caste system, there is the transformation of the entire race to incarnate aristocratic values. 'Cruelty' is no longer a necessity to the noble life; it

becomes only a temporary means toward the elimination of the weak in the interests of a better and stronger generation.

If this apparent inconsistency is not to be attributed to Nietzsche, the alternative would be that he conceives the new race, not as a result of the destruction of the weak, but as brought about by a rigid separation of classes. This allows the more powerful to breed a higher caste, which shall keep its blood pure by artificial restrictions, and thus shall be enabled still to maintain in existence the lower race of man as an impotent slave population. Nietzsche's critical attitude toward Darwinism, the substitution of the will to power for the will to live, of exuberance of vitality for the negative process of death and elimination, would seem to fall in with this interpretation. I confess I am not fully clear in my own mind about his settled opinion. But this is of less importance, as my point will apply in a fashion to either alternative. In any case, that is, the backing he has seemed to get from scientific doctrines is more apparent than real. This is more obvious if he is taken as expressly repudiating the accepted theories. But also on the other showing there is a difficulty to be met. The argument overlooks one consideration, and in so doing runs the risk of leaving the solid ground of an appeal to nature and fact, and of falling back again upon a mere personal preference. For when one has elected to make nature the final judge, it is well to be quite sure that one has interpreted nature in no arbitrary way. And by what right does one pick out any actual outcome to exclude from nature's province? not social man as much a product of nature as animal man? And if certain qualities are the actual outcome of the world process, by what justification do we hark back to an earlier stage, and exalt it over another and later one? Either let us accept whatever emerges without question, and be consistently positive and scientific in our attitude; or, if we prefer to praise and blame, let us put this on its proper basis, and not pretend that we are resting on a scientific acceptance of fact. If natural selection has really the power we have attributed to it, then the features of a moralistic society must themselves be one of its products. And as a later product, why does not the complaint that in getting away from the earlier and cruder methods of selection we are culpably false to our Mother Nature, really turn against the objector himself? In setting up an ideal, Nietzsche is turning from what we find in nature, to what we demand of nature, from natural selection to artificial. He is no longer buttressed by accepted results of science; he must instead defend, against ideals equally possible a particular outcome which he happens to admire, but which is so far from being a necessity of nature, that he has to summon mankind to battle to save it from impending disaster. And in particular he is called upon to show that it is practicable. How is this ideal of beyond-man to pass from a dream, an aspiration, into a reality? How become more than a point of æsthetic taste, or the scorn of the present-day aristocrat for the rising tide of mob spirit? I am convinced that by the very terms in which he has put the problem he is precluded from ever reaching practically the desired end; but into this I need not at present go.

A. K. Rogers.

University of Missouri.

THE CONSISTENCY OF IDEALISM WITH REALISM.

IT is an old familiar truth, that conservation and organized combination are, other things being equal, more effective than destruction. And it would seem that the same spirit which led idealism to unite rationalism with empiricism, and which is gradually substituting arbitration for war, might well be brought to bear upon the present strife between idealism and realism. Can we not combine and preserve the positive motives of both, and set free philosophy's energies, now consumed in internal friction, for the objective investigations in which men are really most interested? As a preliminary step to this combination I have in a former paper tried to reduce to lowest terms. the claims of idealists and realists. The conclusion I reached was that the issue between them is not one of empirical evidence or of a priori demonstration, but depends upon an ultimate difference in point of view; a difference so thorough-going as to pervade the whole field of philosophy and much of life. It arises from the fact that man is constrained by, and unconsciously chooses between, two axioms or ideals of thought-so called because they are incapable of proof or refutation, yet are believed to give perfect criteria of correct results in metaphysics. These axioms are (1) that everything must be grounded, i. e., must in the last analysis depend on everything else, all together forming a rational whole or system,² and (2) that whatever is present here and now—whether a 'proposition' or an immediate fluent experience—has a finality wholly its own, independent of any connection it may have with other things. Idealists are those philosophers to whom the former appears self-evident; realists rest upon the latter. These axioms are, no doubt, so far-reaching in their consequences for philosophy, religion, morals, and life

¹ Ideals of Philosophic Thought, PHILOS. REVIEW, May, 1911.

² Other logical principles included in my former statement of the first axiom now appear to me to underlie an extreme 'intellectualism' rather than idealism, and are therefore here omitted.

generally, that it is difficult to define them fully; the above statement does not claim to be exhaustive. They correspond roughly to the two temperaments called by Professor James "tenderminded" and "tough-minded," although I believe his interpretation of "tender-minded" to be more extreme than the first axiom would justify. Perhaps the most useful brief designation of the two axioms for our purposes will be, the axiom of system and that of independence. The former implies the ultimate reality of the whole system; the latter, that of the limited, finite, or as idealists would call it, 'abstract' part.

It is important to see at the outset that neither of these axioms is more empirical than the other. Both are interpretations of the given which their owners feel compelled to make, and the world as it comes in experience lends itself equally to both. All parts are through and through connected, but do not necessarily offer themselves as dynamically or logically connected. Many things seem to disappear, and their disappearance to have little if any result. But idealism postulates such a result always, while the realist postulates indifference in some cases, as a demand of truth. Even if some unchanging elements were discovered, idealism would claim that their final description must consider them as parts of the whole. Idealism insists upon recasting isolated empirical results in view of the total system of things, while realism would not thus recast, but would, in many cases at least, rest content with the isolated results. Idealism is just as much interested in getting those results as realism; but its axiom makes them partial while realism's axiom makes them final. So the latter regards objects, or limited groups of objects, as ultimately real by themselves. We must then not consider idealism as following out a formal a priori rationalism, while realism simply records the directly given. The line of demarcation is not between a priori and a posteriori methods, but between two indemonstrable or ideal axioms.

And the two certainly look opposed. What is ultimately isolated is not, it appears, ultimately part of a whole. If absolute truth is attainable by the isolation of problems, then it is not true, one would think, that all reality *must* form a single

system. Unless we are prepared to subordinate one axiom to the other it is difficult to see how we may accept both. Yet, objectively considered, one is as good as the other, and a broad and tolerant mind would not wish to degrade either. We seem therefore to be forced to ask, May it not be the case that there is really no contradiction between ultimate independence and ultimate system or dependence?

Many pairs of attributes have been considered mutually contradictory until a finer analysis, or a broader experience, has taught us better. The recent work of M. Paulhan¹ and others has proved how little right we have to say that any two entities are logically opposed; and it was no less a thinker than Hegel who showed that a wider point of view enables us to comprehend the truth of seemingly incompatible doctrines. I now propose to apply this lesson to the case in hand. My object is to show that the idealist, while retaining his doctrine of the ultimate reality of the whole system, may without contradiction admit that of the parts as abstract, isolated, independent of the rest; and that the realist, mutatis mutandis, may do likewise. The result will be an ultimate dualism, which should no more contradict monism than system contradicts independence.

It is no superficial inspection of the words 'dependent' and 'independent' which has led to the belief that they are ultimately opposed. Idealists, at least, have subjected these terms to the severest analysis. They have argued, in a most acute and sincere dialectic, that abstractions when exhaustively studied by the light of the axiom of system, are found self-contradictory. This is indeed the *only* well thought-out accusation of the abstract, so far as I know; but it is quite enough to deal with. Our attention must then be centered upon this idealistic argument, and our task becomes the laborious one of examining the dialectial contradictions which have been alleged of the abstract part, to see if we may not solve those contradictions. Yet at the same time we must retain the axiom of system; and herein our attempt will differ from previous

¹ La logique de la contradiction, Paris, 1911.

attempts at such solution. For all former attempts have, to the best of my knowledge, proceeded from denial of that axiom.¹ If the subtleties into which we must plunge seem too minute to be significant in so momentous an issue as this, let us recall the saying of Professor Royce, that no distinction is too subtle when it occurs to you to make it for yourself.

The contradiction fixed upon the isolated part would naturally be of two sorts. (We may consider an isolated part of the objective world, or we may consider thought itself in isolation from experience.) When we select out of the continuum of experience-contents a single thing (or group of them) with qualities, and treat it as complete by itself, needing nothing for its ground but just what appears in it, we are taking an abstraction of the former kind. When we consider the demands of pure logic, the laws of identity and contradiction, as valid quite independently of the nature of fact, and giving us absolute criteria of reality without regard to the given nature of things, we have the abstraction of the second class. These seem to be the two chief abstractions which idealism would find self-contradictory. And such appears to have been actually the case. If we read over the pages of Messrs. Bradley, Taylor, Joachim and others, we find that the conflicts they point out in the finite, partial, or abstract, are of these two classes. A third type of contradiction I have not found. First, there is the conflict residing in the abstracted object, regarded as complete in itself apart from other objects. Any such object, interpreted by the axiom of system, contains relations which must be grounded. and which demand new facts indefinitely for such grounding, thus taking us beyond the thing we started with, to an endless series of implications. Yet we began by considering the thing as complete by itself. But as this completeness contradicts the infinity (i. e., endlessness) of the real nature of the thing, we must give up the notion of completeness and say that nothing is complete by itself. For of course we cannot drop the axiom of system and the consequent endlessness. This constitutes

¹ Except that of Professor Royce, which will be considered later. A partial list of the others is given in James's A Pluralistic Universe, p. 360, notes.

the 'completed infinite' contradiction; it has many forms, according as we deal with things, qualities, relations, space, time, etc. Secondly, there is the contradiction inherent in abstract thought. If we take the law of contradiction by itself, not waiting to interpret it in its working with facts, we are led to believe that one term or object cannot be or become another. It must remain forever just barely itself. Of any two things, bare identity denying their duality, or absolute difference, are the only alternatives for such a law; the combinations of the two which constantly occur in our formal judgments (of the type A is B) are therefore for abstract thought contradictory. Accordingly such thought would be ultimately no more valid than abstract things are. And the contradiction would seem to lie in the abstractness of the thought which treats sameness and difference as mutually independent; whereas if we regard thought's concepts as dependent upon experience we can see that sameness and difference are really interdependent-for so they are in experience. In both cases the cure would be, to deny of thought, or of objects, the axiom of independence. If then we are to keep both axioms, our problem is to free the 'completed infinite' from contradiction without sacrificing its completeness, and to show that even for the abstract law of contradiction sameness-in-difference is quite consistent.

I shall begin with the problem of thought. The axiom of independence authorizes us to set up a principle, ultimately valid in its own right, which the formal nature of judgment seems to contradict.¹ That principle we may fairly take to be, that no fact, term, or object (using these words most generally) can be identical with, or the same as, any other fact, etc. Mr. Bradley has formulated it thus: "The simple identification of the diverse is precisely that which one means by contradiction."² I shall understand sameness and identity to mean perfect identity, numerical and qualitative; and difference to mean diversity, distinctness, numerical or qualitative or both. My argument

¹ This realism of thought probably few modern realists would accept, but it is a perfectly good consequence of their axiom, and deserves fair treatment.

² Mind, 1909, p. 496.

will be that thought is justified in setting up a principle which fact must obey, but that it has in this case set up the wrong principle. It is not true to the nature of thought, considered even by itself and apart from experience, to assert that sameness and difference contradict each other. And we need not resort to concrete experience to see that thought has no right to such an assertion. The whole question may be discussed in the realm of pure thought.

What could be the authority for that dictum about contradiction? If one thing cannot for thought be identical with another, it must be because their difference logically ought to prevent or annihilate their sameness. Of course in fact it does not-sometimes-but let us constantly remember to keep to the plane of logical ideals. There would be contradiction in the judgment A is B only if the sameness and difference exclude each other. For contradiction means, in the sphere of thought, exclusion or destruction of an assertion. Its sting lies, not in the simple negation it uses, but in the interpretation of that negation to mean destruction (i. e., falsity) of that original assertion. Negation in the sense of otherness is not, on the face of it, the same concept as contradiction. Some demonstration at least is needed to show that the one implies the other. If we have A is B, and A is other than B, a special principle in addition is required, to show that the latter contradicts the former. And this is not because in fact two such judgments may often be valid, but because as concepts otherness and opposition are distinct. But perhaps there is, for pure thought, a special principle which would get the latter from the former. That principle must assert the identity of the two: i. e., must say that otherness = opposition. This is in fact the original dictum again, that difference destroys sameness (and conversely). It does not, so far, appear to be derived conceptually from the nature of negation by itself. But perhaps it has other logical credentials. I can think of only two ways of justifying it in the region of pure thought: self-evidence and proof. Proof should be based on the axioms of thought; but there seems no material available here except the axiom of system itself. Does that axiom, then, when applied within the realm of

pure thought, imply that sameness ought to destroy difference, and conversely? Let us begin with this, putting off for the present the question of self-evidence.

Explicit demonstrations I have not been able to find. We must take our chances of error and construct them ourselves. Perhaps the argument would run as follows. Suppose any two things, and let them be the same in a certain respect, and otherwise different. Then the differing parts of them must affect the identical elements, so that they are no longer quite identical in both. They will be tainted by difference, i. e., the identity will be partly destroyed. For if the identity were not destroyed it would have remained unaffected by the other and diverse aspects; which is contrary to the axiom that every fact depends upon every other. If we may illustrate this concretely without thereby arguing from the concrete: imagine two pieces of paper A and B, of different shape, but of one and the same shade of red. Then from a logical point of view the red in A is not the same as the red in B, because it is red-of-the-figure-A-has, not of-the-figure-B-has. The color as abstract quality may be unchanged,1 but the color as really present in A, a concrete whole, includes something which the color in B has not.

This supposititious proof rests, we must admit, on a sound principle, viz., the axiom of system. But it adds something to that principle. It adds the assumption that when differences affect sameness they must so far destroy it. There is however another alternative. They might add to it instead of destroying it. red of A might be logically affected by the shape of A, just in that the red becomes red + a certain shape. This would obey the principle of ground, but the red of A would thereby lose none of its identity with that of B. It would simply take on, in addition to what it was before, a new quality. I expect that the dialectician is ready with powerful objections to this interpretation, and I shall soon try to meet them. But now I wish to point out that for the present at any rate the supposed proof seems to have assumed the very point at issue. It has assumed that to affect = to change in the sense of, at least partially, to destroy. That is just what needs proof.

¹ Mr. Bradley admits this, Appearance and Reality, 3d ed., note B, p. 578.

But perhaps the objector will reply as follows. If the shape of A logically affects the color of A in the additive manner, that color is made into red + some quality of shape not found in B. Then, logically, this quality must affect and infect the original red, and must therefore add to it another quality. What this latter quality might be, I do not exactly know; but let us grant such a quality for argument's sake. Perhaps it would be, that the red color, having a particular shape, is thereby made more pleasing than the red of B. Now this new quality must have its effect in turn upon the red color, and give rise to still another: and so on, ad infinitum. Thus the additive way of affecting the sameness makes the qualities to be taken on infinitely numerous, while the destructive way avoids this difficulty, removing rather than multiplying the original material. It is the familiar infinite regress; a reductio ad absurdum. As this is the first of the contradictions mentioned at the outset, which we shall consider later, we may dismiss it for the present. Our result so far is that from the point of view of pure thought there seems no inconsistency in admitting sameness-in-difference; and that too even though each modifies and qualifies the other.

But the upholder of the dialectical conflict might now ask: "Do you really mean that adding new qualities to the original quality is affecting that quality? If you add something new to the original material, over and above what was there, How is that material itself qualified? It is not affected at all, but remains just exactly what it was." For instance, suppose the red paper A is affected by its shape and position so that it produces a charming æsthetic effect which the red paper B does not have. Is the quality charming in any sense to be regarded as the way in which the red is affected? I answer, precisely so; the quality red may be identified with charming in point of time and place. I ask in turn, is there in the laws of pure thought any reason why any two concepts you please may not be identical in some point or other? Or any two things, or facts, or terms, or relations? I do not see that there is any logical objection unless you assume that the diversity of the things in other respects must destroy the asserted identity. But that again is the very point

at issue. In short, this objection derives its force from assuming the point it desires to prove. The added qualities due to the effect of the diversity upon the sameness, may logically be predicated of the original sameness—that is, identified with it. The only thing to forbid it, is that diversity is assumed to prevent such identification or predication.

One thing or quality, I now suggest, can logically be identified in some respect with a very different thing or quality. Red may be identical with sweet in respect to time or place or the momentary purpose of some human being. Heavy may be, in one way or another, absolutely the same as three-cornered, muddy, or ridiculous. I am now speaking, of course, of the logic of the matter. It would be irrelevant to attempt to prove the consistency of these statements by reference to observed facts. urge merely that unless you assume the point we have not yet seen proved, these assertions are perfectly consistent and intelligible. Some qualities do as matter of fact appear to exclude others; in these cases we have destruction of one quality by another. Water destroys fire, straight precludes crooked (in planes), and so forth. There is however no certainty that different qualities must always be logically so interpreted. Those mutual destructions are inductive results. We have as yet no empirical point of view from which to think of a wet fire or a straight circle, but we surely know today that the impossibility of these combinations is by no means unconditional. It turns upon certain postulates restricting our universe of discourse, and far from absolute in themselves. But pure thought deals with no such restricted universes.

The next objection is more subtle. It says, "But why, if your differences do not destroy your sameness, do you remove them in your thinking to different aspects of the thing having them? You would not say that two things, A and B, could have the same shape and also different shapes; if the same in shape they may differ only in some other aspect, and if they differ in color they cannot also have the same color. You have to put the two apart lest they collide and destroy each other and this shows that you really regard them as mutually contradictory."

In reply let us see what is meant by the phrase 'different aspects of a thing.' If anything is red and also blue, we refer the colors to different parts or aspects of it. So do we if it is red and wet. The phrase seems to be a way of saying that two qualities are not mutually destructive, but compatible. It is not a mysterious category with which to conjure up a consistency not otherwise present. As Mr. Bradley and others have shown in many places, no contradictions are lessened by it. Its usefulness lies in furthering the process of abstraction, in signifying that we fix attention on one quality of a thing at a time and forget the rest. It has a pragmatic justification, but, for thought, no ultimate metaphysical validity. And so when I say that two pieces of paper may be the same in color and different in some other aspect, this only means that the sameness and difference are compatible yet distinct, and may be considered separately. If the paper could be red and blue in the same place and time, which is for aught we know possible enough for a vision differing from ours, there would be for thought no more or less contradiction in it than there is now. And the same holds on the plane of abstract thought with the two concepts of sameness and difference.

But a deeper objection arises. After all, how can two different entities be the same? We may speak so, but is it any more than a form of words necessary for predication, but at bottom unintelligible? In so far as, for example, 'white' and 'sweet' are different qualities, so far at least they remain eternally diverse, notwithstanding their identity in place and time in the lump of sugar. Now I do not in the least deny this eternal diversity. What I do deny is that it logically rules out as much sameness as you please. They may be diverse and also identical. 'In different aspects,' you may say if you like, but the phrase, as we have just seen, is irrelevant; I insist that it is no paradox to unite the sameness and the diversity, unless you covertly assume the principle that they must destroy each other. But that is just what needs proof. You may retort "but the intellect cannot understand how they can be identical and also diverse. We must not simply see that they are so, we must understand their

being so. We 'cannot receive differences [or even sameness] from the outside and ready-made. Thought demands to go with a ground and a reason." I ask in turn, what is it to 'understand how'? For thought it is to see the logical necessity of something while at the same time seeing no contradiction. And we do see the necessity of identifying the diverse, for we have to identify things in order mutually to ground them. This is due to the axiom of system as applied within the realm of pure thought. The only reason why this should seem hard to understand is that the diverse elements are believed to remain unreduced 'foreign others.' But on my hypothesis the diverse element is reduced, for no whit of sameness is excluded from it; yet at the same time it retains its diversity. Do you say "this is sheer absurdity and self-contradiction; a thing cannot be reduced and unreduced"? I say this is not self-contradiction unless sameness-in-difference is such. It all turns upon that. "Well, then," you reply, "a thing can on your principle be round and not-round or square, at once." Yes, I answer, in general this is for pure thought quite possible. In universes of discourse restricted by qualifying facts, it may be self-contradictory. So may sameness and difference, reduced and unreduced. But in general and a priori, as a demand of thought, this need not be the case.

Suppose, however, we admit that there is no difficulty in understanding how two diverse facts may be identical. Can we on the other hand make it intelligible that identity may come to take on diversity, i.e., can we admit without contradiction the novelties and uniquenesses in any thought-system? This objection looks graver; for the intellect can account for and ground things only by identifying them with the already known. All explanation is identification. But the novel aspect remains outstanding. Whence come the novelties? Now let us remember that the axiom of system itself demands diversities. It needs them just as much as it needs identity. Sameness is meaningless, even for pure thought, without differences, and there can be no system without internal distinctions. Thought therefore does not merely receive the novelties passively 'from the outside and

¹ Appearance and Reality, 3d ed., p. 562.

ready-made.' It demands them by the inner necessity of its That there are novelties then seems intelligible enough. own ideal. But there remains an apparently ungrounded aspect. novelties will be appears inexplicable and irrational, even contingent. And vet, I urge, it is not untrue to say that even the particular character of each novelty is, in a sufficient sense, accounted for. For we have just seen, if I am correct, that the outstanding element of diversity can be reduced and at the same time remain outstanding. The novel elements may be identified with the older ones and at the same time keep their difference: thus they may be grounded and at the same time be contingent. The shocking paradox this looks like is, I insist, a delusion due to the quite unwarranted assumption that difference destroys sameness-an assumption not belonging to pure thought. Accordingly, I believe we may say that the particular novel characters, as well as novelty in general, are quite grounded and intelligible, while nevertheless each particular fact retains a real contingency.

We are now, I think, at the pivot of our problem. It is very difficult, of course, to be certain in this region; but the greatest obstacle to the view here defended is, in my belief, not difficulty of demonstration, but a certain very natural prejudice. Man is in many ways prone to exclusion. He has learned it through ages of fighting with his fellows for life's goods. He unconsciously transfers it to his logic—forgetting that that logic expresses an ideal, not a custom derived from a more or less brutish past. We tend strongly to believe that categories like individuality or personality confer uniqueness on their objects only by shutting out other objects. Certainly it is not always so in experience: for we may delight in the presence of one individual without thereby ceasing to enjoy that of another. But even if it were so in fact, thought has no ground for such a dictum. simply taken over the old logic of competition. The apparent absurdity of one individual being the same individual as another, even while they are also distinct, is, I submit, due to the inveterate custom of exclusiveness.

Let us see how far we have gone. Although we have not yet asked whether in an ideal logic sameness-in-difference is self-

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evidently contradictory or not, it will be useful to pause and take our bearings lest we overlook the general drift of a complicated argument. We seem to have attained a point of view which will enable us to accept both the axiom of system and that of independence. Abstract thought may accept sameness-in-difference without contradiction. But more than this: the contradiction is excluded by the nature of thought. Thought expressly demands both sameness and difference; to the most formal possible thought each is meaningless without the other. Accordingly thought refuses to allow sameness and difference to exclude each other. Their mutual exclusion, i. e., contradiction, is itself excluded, i. e., contradicted. And we have seen further that thought points beyond mere thought. For the difference, the uniqueness, the novelty, of each object of thought, while implied by the very demands of thinking, is yet an outstanding element whose nature as it is in itself thought cannot ascertain. As a matter of fact, observation alone can do this. But even if observation does not, there is no contradiction present. Though thought points beyond itself, we are not driven out to observation by the goad of a contradiction. Thought is consistent enough internally even while it implies that there is more beyond. The only contradiction which could enter here would be that thought does not depend on observation for its filling-out. It can ignore observation without inconsistency, but it cannot deny the truth of observation. Viewed as independent, it has no fault in itself; viewed as dependent on experience, it becomes enriched. The latter gives a larger, but no truer result. The axiom of system here comes in to claim its rights and to give us a wider knowledge by combining thought and observation; but it cannot convict the independence-axiom of falsity. Nor can the latter axiom exclude the former. Both may be accepted as telling what they tell, neither denying the other. Herein our result differs from the Hegelian doctrine, as I understand it. The abstract is not as such vicious. It does not tell us as much as full concrete experience tells, but it tells the truth. We must not confuse quantity of information with the quality of truthfulness.

But at present much of this is anticipation, for we have by no

means done with our problem. Further attempts to prove that difference and sameness ought to be mutually destructive I am unable to give. Accordingly, we pass to the claim of selfevidence. Although it has seemed that the principle in question is excluded by the nature of thought, and so cannot be selfevident, it is better to examine that claim on its own merits. My answer is that it is not evident merely by itself, because it is a negative judgment, and must rest on a positive judgment; whereas no positive judgment is forthcoming. Destruction, as here used, means denial of an assertion. If difference destroys sameness, that means that sameness does not or cannot exist where there is difference. This negation must be based on the positive knowledge that sameness does not exist because something incompatible with sameness exists. But 'incompatible' is only a word for the phrase 'cannot exist with.' We are then still left with a negative judgment. Incompatibility can be positive only in a case of observation, which of course is outside of pure thought. Therefore I believe we should conclude that the principle in question is not a self-evident one. And with this we may, if the argument is correct, leave the alleged contradiction of abstract thought.

The second great objection to the ultimacy of the isolated object, or group of objects, lies in the 'completed infinite' contradiction. This difficulty can hardly be avoided by appeal to the modern exact and consistent definition of the infinite series. That definition is valid for the science of mathematics, but for the idealistic philosopher it is subject to the axiom of system, which gives the doctrine of internal relations. By that doctrine the infinite series is within the thing from which it is generated, even though it leads out indefinitely beyond the thing; the thing therefore remains one, and at the same time incomplete. The way to solve the contradiction without denying the axiom of independence would seem to be, to show that the infinite regress may consistently be in a sense complete. Professor Royce, building upon the mathematical definition, shows that the series

¹ The distinction of Mr. B. A. Russell between regresses involved in a proposition's meaning, and others, would therefore not erase the deeper identity of the two for the idealist. Cf. *Principles of Mathematics*, Vol. I, p. 51.

is in its primary meaning not negative or unfinished but positive and determinate; a "self-representative system." "The true infinite," he says, ". . . although in one sense endless, and so incapable in that sense of being completely grouped, is in another and precise sense something perfectly determinate."

The sense in which it is determinate and complete is, he then shows, that it is the expression of a single definite purpose; the purpose (I suppose) to construct a self-representative object. Applying this to our present infinite regress, we may say that it forms a complete, determinate whole when regarded as the expression of the purposive unity of the thing. Hence it has a clear unity even while it is unfinished. Now as regards matter of fact, I do not see how we can fail to agree. The regress is the process of fulfilment of the plan to state the grounds of the thing in accordance with the axiom of system. And it is much gain to know this. But we are seeking to vindicate the consistency of this fact. How can the thing be complete, yet really contain all its infinite grounds, as Professor Taylor objects?² The single purpose appears to be a contradictory one because it involves its own defeat; it can logically never be fulfilled. We may call the endlessness of the series a secondary characteristic if we please, but it is a true characteristic. And how can the unfinished be identified with the complete? For both aspects must unite in one and the same thing.

As in the first contradiction the trouble was due to the unwarranted assumption that difference and sameness must conflict, so here we may trace our difficulty to that root-error. Deny the assumption and the contradiction will, I believe, vanish. For every step in the infinite regress is in one sense the same as the preceding step. This appears when we reflect that the series is a self-repeater; but let us see it specifically. In a thing with two qualities A and B, B's coexistence with A is gounded by something other than A (call it A_B) and this A_B is joined to A because of another property A_{AB} and so ad infinitum. Each suc-

¹ World and Individual, Vol. I, p. 568.

² Elements of Metaphys., pp. 148-153. Professor Royce's positive contribution, that the series is still in some sense one, seems to me overlooked by Professor Taylor.

cessive property here is A just as truly as A is itself. For a fact is grounded on another in so far as it is reduced to identity with that other. So at the very beginning we have every succeeding step really present, because every step is identical with A. No matter how many steps there are, this is equally true; the endlessness of the series makes no difference to its truth. And since we have always the first term over again, the series is complete, and the first term is the last term. Viewed in this light, the completeness of the series appears to be not merely an experienced unity of purpose (though it is that) but a logically implied identity throughout. Is it objected that this reduction of all to identity has killed the infinity, because the novelty and the advance have gone? I answer, as to a kindred objection discussed in the first contradiction, that the novelty is there, but that each novel step is in one aspect1 identical with the first term, in another different. Or do you ask, "What of that aspect of each term in which it is novel? Is not the series on that side incomplete? And does not the contradiction between completeness and incompleteness remain?" I answer, the incompleteness does remain, but if identity and difference may logically coexist it no longer offers a contradiction. For each novel step may be reduced to an identity with the first step and yet at the same time keep its novelty. That this is intelligible I have tried to show in discussing the first contradiction. The endlessness then holds of the novel and diverse parts of the series, but these may even while keeping their novelty and endlessness be really identified with the first term, and so be really one and complete. When we remember that every novel step is but the first step, the series is seen to be all present in that first step; when also we recall that every novel step can be at the same time unique and unreduced, we may see how that which is complete may be identical with that which is endless. The contradiction of the completed infinite should then disappear.

It would follow that any finite thing or group of things may be one and complete, even while implying an endless series of

 $^{^{\}rm 1}$ The dialectical objection that 'aspects' neither offer nor solve contradictions has been discussed above, p. 60.

grounds within and beyond itself. Just as above we tried to show that abstract thought has no internal contradictions, so here we have endeavored to prove the same in regard to abstract (i. e., complete) things. Everything does indeed, in accord with the axiom of system, imply an endless wealth of other things, even in its own internal make-up. But it does not contradict that implication to fix attention on the other side, the completeness by itself of the thing; for completeness does not exclude dependence, though it is other than dependence. What properties are revealed in the study of the thing regarded as complete by itself, will therefore be absolutely and finally valid of that thingbecause its completeness is an absolute and ultimate attribute of it. Hence when a philosopher investigates the meaning of any important object, such as a category, he should investigate it in two ways: (1) as part of a total system, bound up with other categories, deduced from and implying others, and (2) as restricted to its own field, independent of other categories but revealed by the nature of the objects alone to which it applies. The former is the idealistic, the latter the realistic method; and both should be equally final. And there are other consequences of the ultimate dualism at which we seem to have arrived. But I must now confine myself to a more specific, though brief, statement of the proposed reconciliation of idealism and realism.

Idealism, I assume, follows from the internality of relations, realism from their externality. The former asserts that every object is dependent on mind for its existence and character, the latter that real external objects are independent thereof. Now on our principles both may be true without contradiction. The events of the earth's past history, or the other side of the moon, would not be what they were and are, unless they had respectively led up to, or been accompanied by, my present consciousness—not to mention a universal consciousness. Nevertheless as unique verifiable facts they are also quite other than any consciousness. They are identical with my present conscious states in so far as they ground, and are grounded by, those states (for all grounding is by identity) and they are therefore 'psychical matter of fact'; but since any two things may be the same yet

different, they are also other than and 'outside of' those states really and absolutely. The one statement is just as final as the other. And, moreover, they are independent of mind as well as dependent upon it. Their independence means that their unique characters, considered abstractly, are eternally the same, no matter what I or any one may do or think. And this abstract aspect of things is just the things as unreduced, ungrounded, contingent, pluralistic. It is, as we have seen, not contradictory by itself, for there is nothing about it to prevent, in addition to its abstract self-sufficiency, its absorption into a total rational system. Thus the 'real external object' may be considered in its abstraction as ultimately valid. And it is also part of the system which mind helps to constitute. The abstract element is by itself as real as the whole, for it is both inside and outside of that whole. Realists then have been right in asserting the reality of abstracted unreduced facts, wrong in denying that they may also be reduced to terms of mind. Idealists have been right in asserting the finality of that reduction, wrong in denying the equal finality of the abstract. The error of each view, if I am correct, would lie in its exclusiveness.

If any realist or idealist thinks this proffered solution a mere stringing together of contradictory assertions, I would remind him that it seems to be nothing but the extension of the principle that two things may without contradiction be to some extent the same while yet remaining two. And this is a principle which I suppose most realists and idealists *do* accept, and which is demanded even by the nature of abstract thought.

W. H. SHELDON.

DARTMOUTH COLLEGE.

DISCUSSION.

A REPLY TO PROFESSOR ROYCE'S CRITIQUE OF INSTRUMENTALISM.

The republication by Professor Royce of his important address at the International Congress of Philosophy at Heidelberg, upon the Problem of Truth,¹ will set many persons to reviewing the problem, and some, perhaps to considering it for the first time. Its criticisms of the instrumentalist position are so searching and its statements of that position so eminently fair—that is to say, intelligent—that, as one of those expounded and criticized, I should feel at once professionally stupid and personally unappreciative if I made no effort at response. I shall not attempt, however, to traverse the entire field but shall, in the main, confine myself to one point which Professor Royce has made peculiarly his own: The indispensableness to the instrumentalist theories of truth, even as working empirical theories, of a recognition of the social implications of ideas and beliefs. This indispensableness appears, to Professor Royce, fatal to the instrumental conception; to me it seems its essence.

In gist, Mr. Royce contends that if one admits the instrumental conception to be sound "as far as it goes," one is thereby bound to go a good deal farther—all the way to absolutism. Or, in his own words: "Instrumentalism, consequently, expresses no motive which by itself alone is adequate to constitute any theory of truth. And yet, as I have pointed out, I doubt not that instrumentalism gives such a substantially true account of man's natural functions as a truth seeker. Only the sense in which instrumentalism is a true account of human life is opposed to the adequacy of its own definition of truth." There is a sense in which—so Professor Royce repeatedly states—instrumentalism is (or better, "contains") a correct "report of the truth about our actual human life, and about the sense in which we all seek and test and strive for truth, precisely in so far as truth-seeking is indeed a part of our present organic activities."

It is obvious (is it not?) that when a criticism is made from the standpoint of the acceptance of a certain conception, and when the critical

William James, and Other Essays, Essay IV. New York, 1911.

² P. 222.

⁸ P. 218.

procedure tries to show that acceptance in logical good faith is quite incompatible with the version of the conception bruited abroad by those most actively engaged in circulating it, it is then obvious, I say, that everything depends upon what meaning is attributed to the conception that one accepts, upon how one conceives the conception that he announces himself as accepting. If the conception of instrumentalism that is 'accepted' is after all one's own conception rather than that of those who hold the definition of truth in question, what one has demonstrated at the end is that one's own conception of instrumentalism is logically compatible only with absolutism—a conclusion not entirely surprising at the hands of such an accomplished dialectian as Professor Royce.

My first task, accordingly, is a churlish one. I have to show that the logical success of Professor Royce consists in attributing to the instrumentalist certain ideas which are indeed Mr. Royce's own presuppositions, but which are quite foreign—in fact and in logic—to the instrumentalist's position. In short, Professor Royce has not, after all, adequately 'accepted' the instrumentalist account even as an empirical account of truth-seeking and truth-testing, for in accepting it he has read into it things so obvious, so self-evident to him that it has not occurred to him that the instrumentalist makes his way, for better or worse, precisely and only because he has rejected and eliminated them. I call this task churlish. And so it is. When one considers how often the pragmatist and instrumentalist have been refuted by denying to them any vestige of sense, to say nothing of truth, how often they have been refuted by attributing to them wilful perversity of facts evident to any sane apprehension, it would be a grateful task to acknowledge the sympathetic and just versionin every point save one only-of instrumentalism rendered by Professor Royce. But alas for one's natural piety; for present purposes it is just this one point that enters into the reckoning.

Ι.

Let me quote at length a statement which an instrumentalist at once recognizes to be a sympathetic and just (if not complete) version of his own intention. "Human opinions, judgments, ideas, are part of the effort of a live creature to adapt himself to his natural world. Ideas and beliefs are, in a word, organic functions. And truth . . . is a certain value belonging to such ideas. But this value itself is

¹ The omitted words are, "in so far as we men can recognize truth at all." The phrase thrown into an exposition made professedly from the standpoint of the

simply like the value which any natural organic function possesses. Ideas and opinions are instruments whose use lies in the fact that, if they are the right ones, they preserve life and render life stable. Their existence is due to the same natural causes that are represented in our whole organic evolution. Accordingly, assertions or ideas are true in proportion as they accomplish this biological and psychological function. This value of truth is itself a biological and psychological value. The true ideas are the ones which adapt us for life as human beings."²

Alas, for that little-or big-word 'psychological.' How great, indeed, are the oaks that little acorns start; what a cataract the little crack in the dam finally lets through—and like samples of proverbial philosophy! Surely the unprejudiced reader would infer from the above statement that, though the term psychological is undefined, the criterion for its definition lies in the conceptions of "life," of "organic functions," of "adaptation to [better in] a natural world." And the inference would correctly represent the point of view of the instrumentalist. But, as Professor Royce proceeds, "psychological" is employed to designate the merely private, the merely personal, and, at times, even the internal, transient "states of consciousness." Then the "psychological" swells and swells, till it swallows up the "live creature," the "natural world" and "biological functions." And if the instrumentalist wants them back (and he must get them back if he is to carry on his business) he must go to the Absolute to take out a license.

The instrumentalist "account of human organic and psychological functions may be-yes, is-as far as it goes true. But if it is true at all, then it is true as an account of the characters actually common to the experience of a vast number of men. It is true, if at all, as a report of the objective totality of facts which we call human experience. It is true, then, in a sense which no man can ever test by the empirical success of his own ideas as his means of controlling his own experiences. . . . If instrumentalism is true, it is true as a report of facts about the general course of history, of evolution, and of human experiencefacts which transcend every individual man's experience, verifications and successes." The logic of this passage gives a narrow and exinstrumentalist is significant. Even Mr. Royce cannot wholly free himself from the notion that instrumentalism's account of truth is a statement of what truth is "for us" as distinct from some absolute truth or truth for itself. Of course, from its own standpoint, it is a statement about truth, about the sole intelligible meaning of the term truth.

¹ Pp. 193-4.

¹ Pp. 221-2.

clusive sense to "individual man's experience," "his own ideas, his own experiences," a sense so narrow and exclusive as to throw between personal experience and "objective human experience" or the historic experience of the race, a gulf so deep and wide that only the Absolute ex machina will bridge it and bring the objective human experience and the individual's experience together.

The contrast is explicit in such a passage as the following: "For no man experiences the success of any man but himself, or of any instruments but his own; and the truth, say, of Newton's theory consists, by hypothesis, in the perfectly objective fact that generations of men have really succeeded in guiding their experience by this theory. But that this is a fact no man, as an individual man, ever has experienced or will experience under human conditions." Here we have the logic exposed. Men are individuals; therefore whatever is experienced is one's own individual experience; or, individuals experience only themselves, and their exclusive possessions, which are, in fact, parts of themselves. The ground I plow is my own ground; I plow it with my own instrument, my own plow; the harvest—the success—is my own. Therefore the ground was never anybody else's; it is impossible for me even to see from it any other person's land (unless I secure a transcendental telescope); it is impossible for my plow to plow other persons' land; and the harvest, being mine, must be mine only? and therefore unsharable by others.

To my mind there is just one interesting question about such a view as this of the "individual" and of "his own"—the historic question. What ever led intelligent human beings to such a conception of human individuality and of its acts and states? What led to the identification of the individual with the private, and of the private with the merely private, with the absolutely exclusive and isolated? We are not now concerned however with a question of fact, but with a question of logic. Only as he assumes that the instrumentalist does and must presuppose this monopolistic, all-swallowing octopus of an individual and "his own," does Professor Royce "accept" the instrumentalist account, and argue to its necessary implication of the Absolute. Speaking for myself, I may say that if I had any such nihilistic, anarchistically egoistic notion of the individual man, of his doings, states, tools and results, I should probably be willing to resort to an absolute to escape my "own" awful isolation and selfishness. selfishness is agreeable only when it involves others. But even so,

¹ Pp. 220-1. Yet Professor Royce, an individual man, knows this objective fact!

such atrophied logical sense as may be supposed to survive even in an instrumentalist would haunt me with a suspicion that this Absolute was but another of my purely personal belongings, the most precious of my private possessions in appearance, and, in fact, a huge joke that some peculiarly private part of my private being was working off on my more accessible private properties. For, to consider the matter logically, it is passing strange that the private nature of my experience makes it impossible for me to be aware of such a prosaically limited matter as the existence of Sir Isaac Newton while it absolutely warrants the absolute truth of my belief in something which includes Sir Isaac Newton along with everything else past, present and future. Surely the proverb concerning straining at a gnat and swallowing a camel should be brought down to date.

But we are getting too far away from the instrumentalist's position as he himself "accepts" or conceives it. Let us try, with a more unbiased sympathy, to take that point of view from which "human opinions, judgments, ideas, are part of the effort of a live creature to adapt himself to his natural world," where beliefs are organic functions, and experiences are organic adaptations involving such functions; and where the issue—the success or failure—of these adaptations constitutes the value of the beliefs in question. Is there any conceivable way in which a person who had adopted (with however moderate an understanding of what he was about) such a position could still hold that the natural world was merely his own idea; that a live creature was just one of his own private entertainments or conceits, and that organic functions in their tools and results were confined to his own insides?

It is not necessary to enter into a definition of "psychological" upon the basis of the instrumental conception. But it must be conceived in accordance with the fundamental position of the live creature adapting itself to a natural world. And one of the most rudimentary traits of a live creature is its continuity with a racial organic life, just as that of an environment is its spatial diversity and its temporal perdurance. Without these features, adaptation and organic function are the most empty sort of term. Follow out the implications of such conceptions instead of the conception which Mr. Royce holds (and with great and fatal generosity lends to the instrumentalist) and the gulf between the objective human experience and the supposedly purely subjective individual experience disappears. Life individuates itself, and particular individuations appear and disappear. But the individuation is a trait of life; it is not the mystery

of a private, isolated somewhat which destroys all the natural traits of life to replace them with its own quite opposite traits. We are not to interpret "life" in accord with some psychological preconception of the merely personal; we are to interpret the personal in accord with the functions of life.

A particular passage may serve to bring out the difference of conception. After stating what the truth of the Newtonian conception would consist in from the instrumental point of view, Professor Royce goes on to ask about the sense in which the statement of the historic episode of the formation and success of Newton's theory is itself true. Unless the instrumentalist is quite stupid, he will, I take it, apply his own criterion. It is true by the same token; it enables predictions, it gives control, it facilitates intercourse, it clears the path of obscurities, it guides (instead of obstructing) new observations and reflections, it brings men together instead of dividing them—so far as it is acted upon and thus genuinely asserted. But this path seems to Professor Royce to be quite closed to the instrumentalist. "Newton is dead. As mortal man he succeeds no longer. His ideas, as psychological functions, died with him. His earthly experiences ceased when death shut his eyes. Wherein consists to-day, then, the historical truth that Newton ever existed at all, or that the countless other men whom his theories are said to have guided ever lived, or experienced, or succeeded?"

Such statements followed by such a question are well calculated to inspire one with a feeling of despair regarding the possibility of arriving at any philosophic understanding. Newton is dead; therefore how can I assert as truth that he ever lived? The obvious answer is so obvious and so easy that it cannot be relevant to what Mr. Royce has in mind: the answer, namely, that Newton cannot be dead unless he once lived, and that, organic life being what it is, if he lived in the seventeenth century, he is surely dead by this time. I cannot imagine any beliefs operating and succeeding as organic functions in the development of life unless such simple and ordinary beliefs as these are capable of working, and working with a reasonable degree of success. If the propositions were that Newton is dead, though he never lived; or that because he was living in the seventeenth century, he must be living now, I can see how the propositions would offer difficulties to a pragmatic theory; I confess I do not see how they could "work." Seriously, and not in levity, this seems to me the inevitable answer and the only answer that instrumental theory can make to the question just cited.

But equally I have no doubt this reply is quite irrelevant to what Professor Royce had in mind. And, accordingly, I shall have to make a guess as to what presuppositions underlie the question and address a reply also to them. There are a number of phrases in the discussion which lead me to infer that Professor Royce identifies truth with existence. Now if the truth about Sir Isaac Newton's existence is the same thing as that existence itself, it is quite sure that no possible present experience will yield truth. For the working in experience of a belief or conception for its control, guidance, clarification, for social intimacy and emancipation, will not operate to raise Sir Isaac Newton in propia persona from the grave; it will not in short constitute (or reconstitute) his existence. But instrumentalism never pretended to encroach on the idealistic privilege of creating natural existences by formulating truths about them. It is content with the humbler task of describing how men do as matter of fact recreate, transform, some natural existence by intellectual formulations about some other existence. (The successful transformation of some things by use of intellectual formulations about other things being what instrumentalism calls the truth of these formulations.)

I know of no a priori compulsion to formulate conceptions or beliefs regarding Sir Isaac Newton; it is a safe guess for instance, that many an Oriental potentate has gone to his grave about whom no belief will ever be entertained, just as the vast majority of natural happenings go by without being reflected upon. But when there is a specific need for thinking, and a specific hypothesis emerges in response to the need, it is needful that we should have some way of testing its value, of developing it to the point of being true or false. And acting upon the hypothesis to select and collate data, to predict, to guide new observations and reflections, to organize the seemingly discrepant and to illuminate the hitherto obscure is the way. The success of the hypothesis upon and along this way is its truth.

If, however, the death of Sir Isaac Newton, and the cessation of his experiences, carried with them the absolute interruption of organic life, of all experience, if his experience, in other words, operated in absolute discontinuity in matter and method from mine and mine from yours, I can well see that the instrumentalist would be put to it to frame any idea about Newton, to say nothing of verifying it. But the difficulty would not be confined to the instrumentalist. Even the absolutist would, in such a situation, be unhelped by the Absolute. And if instrumentalist and absolutist alike do make judgments about Newton and, within certain degrees of approximation, arrive at suc-

cessful outcomes, it is because life, experience, has its own continuities and sociable relationships.

And this brings me to my second guess about the difficulty which Professor Royce feels his question to involve. He presupposes, again, the completely egoistic, exclusive nature of Newton's experience—his life, his acts—on one side, and of mine on the other. "His ideas, as psychological functions, died with him." But did they? And if they did, what are we going to do about it, even with the help of the conception of the Absolute? For so far as they "died with him," the problem is not that of some eventual verification of our ideas about his ideas, but of our having any idea about his ideas.

In short, we come again to our basic statements; one about the instrumentalist, the other about Professor Royce's position. (a) By calling Newton's idea, his theory, a function, instrumentalism means to emphasize precisely that it was a function—to insist upon the need of reinterpreting the adjective "psychological" from the standpoint of function—an organizing and organized act, public, objective, impersonal just as surely as private, individual, personal. Certain images, a certain emotional tone of inward landscape, may be said to have "died" when Newton died. But to say that his idea of gravitation, as a vital function, died with him is to traverse the facts. Newton acted through it, lived it out, so adequately, that it became an integral part of the activities of educated men and scientific inquirers throughout the civilized world. Since this transmissive operation is just one of the things that is included in the conception of "success" of a vital function, one is not accepting the standpoint of instrumentalism when one conceives the vital function as something which renders impossible this transmissive operation. That the idea was made true means precisely that as a function it did not die.

(b) As to the logic of Professor Royce's own conception. Professor Royce says of certain statements about Newton: "No doubt all these historical and socially significant statements of mine are indeed substantially true" (p. 219). Professor Royce would doubtless also hold that there is a countless multitude of doings and sufferings of Newton about which we cannot now make any intelligible statements. So far as the "substantially true statements" are concerned, does not Professor Royce (and everybody else) fall back upon the procedure of which instrumentalism is simply a generalized description? And as far as the other to us non-existent "truths" are concerned, does the conception (or the Being) of the Absolute

¹ Not "truths," but events, on any except a preordained idealistic basis.

help us one bit? Upon the Absolutist theory, what explanation can account for this partiality on the part of the Absolute? Why has it rendered certain events so opaque and silent and others so transparent and communicative? Is there any explanation that does not take us back to the instrumentalist terms-terms of vital doing under conditions of natural and social need, adaptation and success? And so far as our belief in the existence of the Absolute is concerned, why should we adopt a different logical procedure from that which has brought us to believe certain things about Newton? If the continuities, the transmissive bearings of life, of experience, suffice in the case of Newton to enable certain intellectual formulations—reflections—to prosper while dooming others to defeat, why, if the Absolute exists, should we not, a fortiori, wait till conditions have made the conception of its existence one that works out under tests? And, lacking these instrumental tests, what right have we to assert the truth of what, by Mr. Royce's own hypothesis, is a purely private, personal idea?1

H.

As respects certain truths, some instrumentalists—Professor James particularly—have made much of the significance of vicarious social verification. In Mr. Royce's words: "Since we are social beings, and beings with countless and varied needs, we constantly define and accept as valid very numerous ideas and opinions whose truth we do not hope personally to verify. . . . If we personally do not verify a given idea, we can still accept it then upon its credit value. We can accept it precisely as paper, which cannot now be cashed, is accepted by one who regards that paper as, for a given purpose, or to a given extent equivalent to cash."2 This procedure Professor Royce accepts as an actual procedure, while he holds that reliance upon it is inconsistent with the instrumental conception of truth,-that, consistently, instrumentalism must identify the act of giving credit with truth itself, that is to say, anything is true to which we find it expedient to give credence at a given moment. Mr. Royce disclaims being an intellectualist of the rationalistic type, but he employs the good old rationalistic device of rigid alternatives. Either the assertion which I accept on credit is already true (truth belongs to the assertion anyway) or else by its truth I mean simply that I give credit to it. The former alternative surrenders instrumentalism; the latter puts

^{1&}quot; Instrumentalism in so far correctly defines the nature which truth possesses in so far as we ever actually verify truth," p. 224 (italics mine).

¹ Pp. 224-5.

it in the position of making truths offhand, while you wait—the sanctioning of caprice, whim, etc.

For reasons which I hope will appear presently, I am particularly interested in the implications of the "credit" notion with respect to its content. Before dealing with this phase of the matter, it seems necessary, however, to devote space to the formal dilemma. Upon close inspection it will be found, I think, to resemble most cases of formal alternatives in philosophic discussion. Two extremes are set up as exhaustive, while as matter of fact multitudes of other alternatives glide freely through wide-open intervening meshes. What should it mean upon the instrumental theory to accept some view or idea as true upon social credit? Clearly that such an acceptance itself works. And if the environment, the medium of action, be social could any other method save that of accrediting the results of experience in others be expected to work? There is nothing so licentious about the matter as Professor Royce's abstract logic would make out; the acceptance upon credit is subject to precisely the same sort of testsof working under conditions—as acceptance on the basis of more direct personal verifications. What is indicated is that the social medium of life is as continuous as we have seen life itself to be. One has verified in innumerable cases that under certain conditions one can trust to the experience and the reports of others; one has found out that the limits between one's own experience and that of another are quite arbitrary and elusive. Besides this general verificational background, there is the specific verification, through working, of acceptance of this particular belief upon the credit and authority of some particular group of persons. And besides, there is frequent verification through the experiences of others who have given credit to these assertions a method which could be made to appear vicious by the logic of abstractionism, but which, in inductive logic, is independently cumulative and hence confirming. In short, one doesn't, as an instrumentalist, accept arbitrarily on credit; he accepts on probation, hypothetically, just as one accepts his own hypotheses when they first occur to him. As this acceptance is confirmed by his works, the acceptance becomes a genuine accrediting; it has received the kind of trying by experimental tests in life that the conditions permit. That this is the way in which sensible men proceed can be shown by an argument ad hominem, indicating that even an absolutist must actually so proceed. Let us admit with Professor Royce that to the assertion in question truth or falsity already inherently belongs. Now, being unable to verify the matter directly, what shall be my attitude?

I cannot, by hypothesis (Professor Royce's own hypothesis), be sure whether it is true or false, although I am sure it is already either one or the other. According to Professor Royce the only recourse possible is to accept or reject, just arbitrarily, by whim, by what seems agreeable at the moment. In short, the dilemma is one which applies only to those who hold Mr. Royce's view, and for them it takes the form of a choice of the two alternatives: Complete scepticism as to what is the truth or falsity of most things in history and nature, or else the loosest go-as-you-please most wayward opinionatedness. Other people employ the cautious testing of the kind and amount of credit to be given to others' ideas and reports that is described in the instrumentalist account.

As I have already stated, I find my significant interest attaching to the conception of social credit, and to the implied analogy of belief with credit in business, for this suggests that my personal experience is itself social in origin, matter and outlook. In good business, it is intimated, there is some value behind the credit; namely, in the philosophic analogy, truth. In purely speculative business, on the contrary, there is nothing but credit behind the credit: the instrumental theory of truth in the philosophic analogy. Now that business, modern business, is done so largely on credit seems to me a significant fact, and one which is peculiarly important for the instrumental theory. For so far as modern business proceeds upon a credit basis, it does not rely upon equating credits to values preëxisting; modern manufacturing and commerce would go into wholesale bankruptcy were such its basis. It proceeds upon the basis of the potentialities of what already exists, upon the future operation of industry, good faith and consumption to realize these potentialities. Only in times of panic is there a falling back upon the past, upon the already existent store. And the immediate effect of the insistence upon backing from behind of already extant values is to restrict business. There must. indeed, be something behind-fields, woods, mines, human labor, human intercourse, mutual trust, desires, etc. But the credit is not measured by them—not by them just as back there, behind. It is measured by an anticipated future use of them. It is not a matter of their being there in a finished state; it is a matter of their expected consequences, when something is done to them and with them. operates for the more effective and varied use of what is there; not to reduplicate it in some parallel series. And it is the outcome, the actual consequence, that confirms or condemns any particular giving of credit.

I have no wish to base conclusions or theories on a possible analogy. I do wish, however, to secure its full suggestive force. Credit exhibits a possible future outcome operating as present factor to guide and enrich the conditions whose possibilities it relies upon. So does intelligence. Both involve a risk, an uncertain speculative element; both involve, therefore, the need of check and test, of responsibility to the achievement of ends, the production of consequences. Both involve something "behind" them, prior existences; but neither of them is a reiteration or reinstatement of the prior; both are concerned with the potentialities of things, and take effect in endeavor to make potentialities real. And as credit is distinctly a social phenomenon, so is the accrediting which marks the life of thought. Social verification is not, taken by and large, a pis aller, in default of "personal" verification. It, and it alone, is verification; personal verification is but a step on this social road—an encouragement, an authorization to go ahead. Experience, life—just as is that phase of experience called business—is social, and it exhibits this sociability nowhere more than in the continuity, the interpenetration, the reciprocal reinforcement of meanings and beliefs. Instead of an Absolute being required to substantiate this social phase of the life of intelligence it is much more probable that the Absolute is a somewhat barren and dry isolation and hypostatizing of the everyday sociality of experience. The accrediting of others' experience is the fact that our personal experience is so much other and more than the narrow personal private matter upon whose "acceptance" Mr. Royce founds his dilemma.

If then, I were to try to gather together the significant strands of instrumentalism in opposition to Professor Royce's welcome of it as a convenient road to absolutism, I should say that as method for philosophy it indicated a more severe intellectual conscience; less free and easy use of the concept of Truth in general and more careful use of truths in particular to designate such conceptions and propositions as have emerged successfully from the test conditions that are practically appropriate. In substance, as distinct from form or method, I should say it meant recognition of intelligence as the way in which future possible consequences became effective in the present —the recognition of real time and real potentiality—and a recognition of the utterly false character of the prevailing notion of the sheer privacy, the egotistic isolation, of experience, of conscious life. case is immensely understated when we restrict ourselves to the possibility of pragmatic verification of acceptance of beliefs on credit from others—adequate as is the noting of this possibility for the purpose of securing exemption from Professor Royce's dilemma. The fact is that the life, the experience (including the organic acts of ideas, opinions, judgments, etc.) of "individual man" is already saturated, thoroughly interpenetrated, with social inheritances and references. Education, language and other means of communication are infinitely more important categories of knowledge than any of those exploited by absolutists. And as soon as the methodological battle of instrumentalism is won—as it will be, not by instrumentalists, but by the constantly increasing influence of scientific method upon the imagination of the philosopher—the two services that will stand to the credit of instrumentalism will be calling attention first, to the connection of intelligence with a genuine future, and, second, to the social constitution of personal, even of private, experience, above all of any experience that has assumed the knowledge-form.

JOHN DEWEY.

COLUMBIA UNIVERSITY.

REVIEWS OF BOOKS.

Philosophy and Religion, Six Lectures delivered at Cambridge. By HASTINGS RASHDALL. New York, Charles Scribner's Sons, 1910.—pp. xvi, 189.

The first four chapters of this little book give a brief and elementary presentation of the author's system of "personal idealism;" the fifth and sixth discuss the more specifically religious themes of the nature of "revelation" and the claims of Christianity to recognition as a final and universal religion. tures were not intended for a philosophical audience nor does their present publication in Dr. Fairbairn's series of "Studies in Theology" expressly invite the attention of readers primarily interested, professionally or otherwise, in the problems of technical philosophy. They are, says Dr. Rashdall, avowedly incomplete and elementary; and so cannot fairly be criticized in much detail without reference to his other writings. These limitations of plan and execution were doubtless necessary in view of the purpose for which the lectures were originally prepared, but Dr. Rashdall seems not to have found them unduly restrictive, and has succeeded admirably in his task of combining simplicity with coherence and precision. And the lectures have in full measure the vivacity of style, the aptness of illustration, and the decisiveness of movement that readers of Dr. Rashdall's larger and more technical writings have learned to expect from him.

It is as an account of "personal idealism" that the lectures will be most interesting to the philosophical reader. I feel bound to say that as such they seem to me to come short altogether of clearing up the difficulties inherent in that present-day variant of the older faith. Dr. Rashdall's exposition serves only to confirm the impression left by other able and important statements given in recent years, that personal idealism is an attempt to combine elements and motives that are radically repugnant and must remain to the end as stubbornly separate and opposed as they are at the outset. The formulas given to express their unification are verbal only, and it seems clear that there must be a more critical analysis of the issues at stake (with which undoubtedly personal idealism is very genuinely in earnest) before a more stable and satisfying result can be hoped for.

"The view of the Universe which I have . . . set before you," writes Dr. Rashdall, "is a form of Idealism. Inasmuch as it recognizes the existence—though not the separate and independent existence -of many persons; inasmuch as it regards both God and man as persons, without attempting to merge the existence of either in one all-including, comprehensive consciousness, it may further be described as a form of 'personal idealism'" (Lecture IV, pp. 120-121). God indeed, is a person "in a far truer, higher, more complete sense than that in which any human being can be a person." He alone "fully realizes the ideal of Personality." But this difference in degree, as compared with human persons, does not amount to a difference in kind. We may if we choose "speak of God as 'super-personal," but this must not mean that we think of God "after the analogy of some kind of existence lower than that of persons—as a force, an unconscious substance or merely a name for the totality of things." Nor need we think of God as of a higher kind than ourselves. For the root of the matter is simply this. "If we are justified (as Dr. Rashdall has argued in the pages which precede) in thinking of God after the analogy of the human soul-if we are justified in thinking of Him as a selfconscious Being who thinks, feels, and wills, and who is, moreover . . . in relation with, capable of loving and being loved by, other such beings-then it seems most natural to speak of God's existence as personal" (p. 55). That is to say, nothing in the nature of God or in the conditions of His existence in any way endangers the analogy to human personality—neither (1) God's omnipotence (which means (p. 83) "that He can do all things which are in their own nature possible"), nor (2) His being the Mind "in which and for which all so-called material things exist and always have existed" (p. 19), nor (3) his "perfect righteousness" (p. 75).

We may take the above as fairly indicating wherein Dr. Rashdall conceives his idealism to differ from the prevailing type. Barring the two salient points of difference, his argument proceeds throughout the first four lectures along the familiar lines, with, however, a somewhat closer adherence to Berkeley's manner of approach to the central principles than most contemporary idealists care to avow. Dr. Rashdall takes no notice of contemporary realism—nor of the many-sided difficulty involved in the conception of thoughts or cognitions in a divine consciousness which are at the same time to constitute the objective reality to which the thoughts or cognitions of human individuals refer. Nor does he find more suggestive than idealists of the more orthodox pantheistic type are wont to find it, the strong

family resemblance between the Universal Mind and the Spencerian Unknowable. "Thought, Will and Feeling emancipated from the limitations which are obviously due to human conditions and are inapplicable to a Universal Mind" (p. 47)—these are the terms of Dr. Rashdall's description. Their purely negative character is but thinly disguised by the form of statement, and it is not made good by the mere declaration that the Essence of Personality is "something positive" (p. 55) and "rational" (pp. 62 ff.)—nor, I think, by citing as an analogy (p. 47) the genuine knowledge we can have of "what it would feel like to be a Shakespeare, a Mozart or a Plato" in spite of the gulf which divides us from any full and intimate knowledge of the inner life of such a man. The criticism is of course in these days sufficiently familiar to all, and it should be sufficiently obvious by this time to idealists; it seems worth while to mention it here only because the personal idealist by his very profession clearly assumes the obligation of stating in some sort of genuinely positive terms that "something positive" which, as Dr. Rashdall rightly says, unquestionably is the essential character of genuine personality. In point of fact Dr. Rashdall's idealism remains throughout much more orthodox and true to type than his use of a distinguishing term might lead one to suppose. The motives that urge him as a personal idealist to diverge do not avail to make the divergence decisive, and in the end one sees that the backward drawing was all along too strong.

Like every other philosophy, idealism is, in the last analysis concerned with the perennial problem of discovering and validating norms for the guidance of men in their different directions of interest and action. But idealism comes to this problem in a conservative spirit. In every age it has been the congenial and prevailing philosophy among those who have known and appreciated the attained forms and values of religion, law and culture, and have been apprehensive of their destruction by new forces from without or from below. As a philosophy it has perforce professed a method of discovery and definition, now one and now another, but in point of fact its standards have been borrowed from tradition, custom, common-sense and constituted authority of whatever sort. Its ostensible methods of discovery or deduction have never been so articulate and convincing as the logic by which it has sought to justify the authority of the standards it has professed to have discovered. And the elaboration and the impressiveness of the latter have served largely to divert attention from the ineffectiveness-often the perfunctoriness-of the former. In principle idealism's justification or validation of its norms has consisted in the proof

that they were nothing less than inherent principles or characters of Absolute Reality itself. Accordingly, the problem of philosophy has been for idealism not one perennial by very nature, but one that might conceivably be answered once for all; it has been perennial only (if I may use such an expression) as a mere matter of historical fact. Only shortness of vision and the hardness of their hearts have kept men from the perfect truth and law. "Limitations obviously due to human conditions," as Dr. Rashdall puts it, not to mention in particular the vanity of false teachers, ambitious of a paltry originality, prevent our "seeing life steadily and seeing it whole."

It is thus for pragmatic reasons, rather than from any interest in the proposition merely on its own account, that idealism comes to defend the doctrine from which it takes its name. If reality is experience, it can be maintained that reality is purposive, cognitive, volitional, rational, or whatever else may serve to endow it with the possibility of normative significance of any sort for men. Reality must be experience therefore—but on the other hand it must be experience of a sort exempt from human 'limitations.' If it were not so, then the super-human experience would in its way be under the same liability to shortsightedness, error, and evil as are the experiences of men, and its inherent and distinctive normative authority would be non-existent. There would be no absolute authority, but only the influence which interdependent members in a genuine society can receive from each other and exercise upon each other through example, constraint, persuasion, appeals to sympathy, or otherwise. The society of persons of which personal idealism speaks would then be a democratic society in which the members are all equals before the law-"finite" and "limited," not primarily in the sense of a generic and wholesale incapacity, but as having differing concrete interests, needs and tendencies which enable them to evoke in concrete ways each other's coöperation. And it seems clear that in no other terms can the freedom and genuine personality of human individuals be understood. Dr. Rashdall, however, makes the matter turn upon the relation of part and whole. Although (p. 119) we owe our beginning and continuance to the divine will, although our ultimate moral ends or goods are a communication to us, a reproduction in us, of the divine 'Reason,' although truth for us, must be the objects of God's cognition as He knows them, still, Dr. Rashdall says, we are not "parts of the divine Consciousness," and with this narrow standing-ground his personal idealism is content. It might seem that, on such terms as these, just not to be a part is at best an empty dignity. Like the autonomy of San Marino it carries with it no guarantees of a substantial and effective sovereignty. This sort of vindication of the genuineness of human personality is the more puzzling because idealism has always regarded the relation of part and whole, not as a formula for the closest sort of intimacy, but as almost ignominiously superficial, inorganic and loose.

It would be both interesting and profitable, if the limits of a brief notice permitted, to discuss a number of other matters touched upon in Dr. Rashdall's book-for example, his ethical theory and his theory of knowledge (particularly as illustrated in the treatment of "revelation," which is the theme of the fifth lecture). But this I must forego. And barring the injustice inevitably done by singling out for exclusive comment one part or phase of an author's argument, it may be as well to do this, for in all parts of Dr. Rashdal!'s argument the same fundamental problem is presented. Certain general affinities of personal idealism with such contemporary movements as humanism, pragmatism, pluralism and what may be called metaphysical temporalism, or radical evolutionism, are obvious. But if it is to be aligned with these individualizing and empiricist tendencies, personal idealism must have its place on the extreme right wing. For Dr. Rashdall is not alone among personal idealists in believing in the finality and fixity of truth and goodness; and for him, as for other personal idealists, the society of which all personalities are members has nevertheless one perfect and redeeming member. So, likewise, for Dr. Rashdall, although the evil in the Universe is no illusion, no goodness in disguise or seen at too close range, but a hateful reality, nevertheless the "rationality" of God, whose Universe this is, is guarantee that with our help the evil can be overcome and victory won (pp. 85-86).

So that when all is said, the criterion of truth for Dr. Rashdall is Absolute Truth, because the meaning of every judgment is some partial adumbration of this absolute truth, and not a hypothetical forecast of some concrete and specific temporal event or condition or relation in which the individual as an individual has an interest. And so for goodness. The individual at most can "help" in the warfare on Evil—though it is indeed hard to see just why or how, since God "is limited by nothing outside His own nature except what He has Himself caused," and "A rational being does not will evil except as a means to a greater good" (pp. 84-85). The individual may not as an individual, as concretely sympathetic and impulsive, that is to say, construct his own ideal of goodness or contribute in his

way to the fashioning of an inclusive social ideal-not any more, obviously, than he can as an individual have aught to do with the standards by which the truth of his own factual judgments is to be measured. The problem presented by personal idealism is then just the problem of combining with idealism a conception of personality which has genuinely positive meaning. For in a society with one "perfect" member there can be no personality-not in the perfect member because his perfection consists in a fatal "emancipation" from those so-called "limitations" which give any genuine personality its life and meaning; and not in the others because, measured by the supposed perfections of the preëminent One, they must dwindle to nothingness. Until personal idealism has learned to define human personality in the empirical and human terms of impulse, feeling, sympathy, and purposive rationality, instead of in terms which are the negation of a negation of what personality actually is, it will, I think, contribute little to the clarification of present issues in philosophy. But when it has done this it will have ceased to be idealism in any current meaning of the term.

H. W. STUART.

STANFORD UNIVERSITY.

Principia Mathematica. By Alfred North Whitehead and Bert-RAND RUSSELL. Vol. I. Cambridge University Press, 1910.—pp. xiv, 666.

This is the first volume of a book which students of mathematical logic have—not without some trepidation—been expecting since the publication of Russell's *Principles of Mathematics* in 1903. In the preface to the last named book Mr. Russell promised to give us, with the coöperation of the ingenious author of the *Universal Algebra*, a second volume wherein all the theses of the first volume would be demonstrated "with all the certainty and precision of which mathematical demonstrations are capable." The earlier book, however, left Mr. Russell involved in several hopeless contradictions as to the nature of classes; and as the authors believe that they are now able, by means of the theory of types, to avoid all self-contradiction, they have deemed it preferable to make the present work entirely independent of the *Principles of Mathematics*.

In this, and in the two volumes which are to follow, the authors aim to give us, in strictly mathematical form, a complete systematic deduction of all the fundamental principles of mathematics from a number of primitive propositions which are clearly logical in their character, *i. e.*, propositions which are simply rules of inference. To

facilitate this work they have adopted an elaborate system of symbolism, based mainly on the work of Peano, and the body of the book is written exclusively in this symbolic language (excepting two primitive propositions which cannot be symbolically expressed). As a concession to the general or non-mathematical reader, we have, besides an introduction of 88 pages, summaries at the beginning of each part, section, and chapter; and even in the body of the text there is an occasional interpolation in English. This policy of concession, however, involving as it does the occasional 'sacrifice of correctness to lucidity,' seems to be of doubtful wisdom. The repetition of explanations in different forms is bound to cause some confusion. Indeed. the careful reader might do well to omit the introduction altogether. The explanation of the symbolism can perhaps be more clearly gathered from the body of the book, i. e., from the explanation of the symbols as the need for their use arises. The elaborate explanation of the theory of types¹ in the introduction seems needlessly complex. At any rate it is put far more clearly and with equal accuracy in Mr. Russell's article in the American Journal of Mathematics of July, 1908.

Part I (pp. 91-342) is devoted to the development of mathematical logic, and the first section of it is naturally devoted to the theory of deduction. The theory of propositions is taken as primary, and by means of it and the theory of apparent variables, the theory of classes, as well as the logic of relations, is deduced. The logic of relations, being of the greatest importance for mathematics, receives the largest share of attention. A good deal is also made of the logic of descriptive phrases such as the 'author of Waverly.' It is pointed out that while that phrase and the word 'Scott' denote the same object they are not equivalent in meaning and hence the statement 'Scott is the author of Waverly' is significant. While the authors do not refer to the general problem of predication in the form in which it disturbed the Megarians and Plato, their theory of predicative functions will be

¹ I have refrained from examining here this theory of types because the subject is of considerable importance and I could not, with the limited space at my disposal, deal adequately with it. Besides, there is an admirable account of this logical theory by Dr. H. C. Brown in the *Journal of Philosophy*, etc., Vol. VIII, p. 85 f. It is to be noted, however, that the whole theory is not in the strictest sense necessary for the main thesis of this work. Its office is simply negative. "It forbids certain inferences which would otherwise be valid, but does not permit any which would otherwise be invalid." Hence the authors can say: "Hardly anything in our book would be changed by the adoption of a different doctrine of types." Any theory which accomplishes what this does, viz., enables us to construct a mathematical logic which does not lead to contradiction, would serve the purpose equally well.

found highly suggestive by those who have dealt with the problem in its traditional form.

Part II (pp. 345-688) is entitled Prolegomena to Cardinal Arithmetic, but is essentially a continuation of Part I. The numbers I and 2 are introduced in the first section, not, however, as cardinal numbers, but as unit classes and couples. Other sections are devoted respectively to (B) sub-classes, sub-relations and relative types, (C) onemany, many-one, and one-one relations, (D) selections, and (E) inductive relations. The last section deals with certain general ideas of which mathematical induction is a particular instance.

Having thus laid the basis for the theory of finite and infinite series, we are prepared for the definition of cardinal numbers with which Vol. II is to open.

The printing of this volume, involving so much unusual symbolism, is highly creditable to the resources of the Cambridge University Press and to the patience and care of those who read the proofs. There are relatively few misprints and those of a kind which can readily be corrected by the reader. A few slips in the introduction might perhaps cause some confusion. Thus on p. 19, third line from the bottom, $\phi \hat{z}$ should be printed $\phi \hat{x}$. On p. 22, ll. 18 and 20, the implication signs are omitted. On p. 34, l. 20, yRx should be xRy. On p. 32, l. 10, ϕx would be more in consonance with the subsequent interpretation than ϕc .

Apart from the general interest of its main thesis, and the questions aroused by the new logical theory of types, the present volume seems to touch philosophic interests in fewer points than did the Principles of Mathematics. The authors have in large measure succeeded in "avoiding both controversy and general philosophy." The intellectual realism which made the reading of the Principles of Mathematics so exhilirating is here considerably softened down. Propositions, for instance, are no longer spoken of as entities, but as incomplete symbols having a meaning in use but not in isolation (pp. 46 and 169). Chapter 20 ventures no opinion as to whether a class has in any sense an existence as one object. In the symbolic form of exposition such apparently wild assertions as "false propositions imply all propositions," or "any proposition implies itself," lose their startling character and appear as quite natural and tame. There is also, in this maturer book, less attempt at any tour de force. Thus, instead of attempting to define negation and disjunction in terms of implication, as is done in the Principles of Mathematics, negation and disjunction are here assumed as primitive, and implication is defined in terms of these two.

On the whole one misses the exuberance and suggestiveness of the earlier book, but the loss seems offset by the feeling that the results of the present work are more mature and reliable.

There are some objections, or rather misapprehensions as to the nature of logistics, which the present book will probably help to remove. In the first place there is the objection of Pesloüan and others that in it simple ideas are defined in terms of very complex ones. Thus Poincaré does not refrain from criticizing Burali-Forti's definition of I because it is not calculated to give an idea of that number to one who has not heard of it before (Revue de Métaphysique et de Morale, Vol. 13, p. 823). The answer which a careful reading of this volume suggests is that the more familiar is not necessarily the simpler. At any rate there is no question in this volume as to the absolute simplicity of ideas. All that is considered is the question how the whole system of ideas called mathematics can be built up with the smallest number of undefined elements. Our authors succeed in doing so with a very small number, but make no claim that that number might not possibly be reduced.

A second objection has been urged by Kerry, Hilbert, Natorp, and others, to the effect that the simple logical ideas from which the ordinary mathematical concepts are developed, already presuppose those very mathematical concepts. This objection presupposes something like an absolute order of priority or presupposition in ideas, a conception of doubtful validity. Our authors, however, are at pains to indicate that they make no claim to any absolute priority for their primitive ideas, or to any absolute certainty for their primitive propositions. All that they claim—and this they amply prove—is that these ideas and propositions are *sufficient* to build up the whole realm of pure mathematics.

As a result of the rigidly demonstrative form of this volume, the main thesis, viz., that pure mathematics is symbolic logic, i. e., that mathematical propositions are essentially rules of inference, emerges here even more cogently than it did in the *Principles of Mathematics*. This thesis seems to the reviewer of the utmost importance for the theory of logic and metaphysics. If taken seriously, it must lead to a revision of the inadequate dogma that in demonstrative reasoning there is nothing in the conclusion which is not already contained in the premises. Any modification or revision of this dogma will necessarily lead to a new questioning of hearts concerning the easily repeated but essentially obscure doctrine that all truth is derived from experience.

It is to be hoped that the completion of this monumental work will

help to dignify a subject which it has been the fashion of philosophers since Lotze to treat with more or less derision. Whatever objections we may have to symbolic logic, we must admit that here it becomes a powerful instrument for the analysis of actual mathematical procedures. It enables us to generalize such notions as addition and multiplication, and makes such concepts as continuity and infinity subjects of investigation and determination, instead of objects of helpless awe or the recurrent occasions for intellectual violence. On the whole the authors of this work seem to have shown "that with the aid of symbolism deductive reasoning can be extended to regions of thought not usually supposed amenable to mathematical treatment."

Doubtless there will be mathematicians and logicians who will point out diverse errors in the various demonstrations, and philosophers who will find fault with the presuppositions and general methods of this work. To all those, however, who value exactness of thought for its own sake, this volume and the stupendous labor which it expresses, will appeal as a monument of devotion to pure thinking. To those who are inclined to belittle the value of such work it may not be amiss to repeat the words of Novalis; "Das Leben der Götter ist Mathematik. . . . Reine Mathematik ist Religion. Die Mathematiker sind die einzig Glücklichen." This sounds like romanticism but it is essentially the sober doctrine of that Hellenic philosopher who is generally known as the founder of logic and scientific method (Met., Book λ, Ch. 7, and Eth. Nik., Ch. 8).

MORRIS R. COHEN.

COLLEGE OF THE CITY OF NEW YORK.

Le Conflit de la Morale et de la Sociologie. Par SIMON DEPLOIGE. Louvain, Institut Supérieur de Philosophie, 1911.—pp. 424.

Durkheim and Lévy-Bruhl, representing the dominant French school of scientific sociology, declare that moral philosophy is a discredited study. "All that counts in ethics for genuine knowledge," says Lévy-Bruhl, "is investigation by sociological methods." This statement furnishes M. Deploige with the starting-point for a critical and historical review of scientific sociology, in particular that of Durkheim and his school. His object is to show, (1) that the conflict of ethics and sociology is an ancient conflict of ideas, long antedating the sociologists; (2) that the special criticism of ethics made by Durkheim and Lévy-Bruhl applies only to their predecessors in France, Rousseau and Cousin; (3) that the "scientific method" is by no means a modern discovery in ethics, since, not to speak of others, its essentials were long ago clearly outlined by Thomas Aquinas.

It is a case, then, of Neo-Scholasticism vs. "modern science." Yet nothing "scholastic," in the popular acceptation, will be found in the author's handling of the subject. The book is evidence of an unusually liberal range of interests and of an extensive scholarship. It is true that the conclusion is centered rather too exclusively upon Saint Thomas, but this part of the work, though instructive, is perhaps not even for the author himself its most important feature. What he really offers us is, first, a very neat statement of the logic of sociology as an impersonal science and, secondly, an extremely lucid and interesting review of the course of social philosophy in France (and also in Germany) from Montesquieu to the Durkheim school. The last feature is alone sufficient to make the work one of substantial value.

The sociologist's complaint is that moral philosophy undertakes to prescribe rules of conduct a priori, on the basis of an abstract "human nature," whereas in fact morality is the expression of traditional tendencies whose determination must be a matter of positive science. Really, however, the objection lies deeper; not so much in the a priori pretensions of ethics as in its assumption that conscious valuation determines human conduct. Here is the real point of conflict between ethics and sociology, and here, too, the conflict is ancient. According to Durkheim scientific sociology affirms that social relations are a matter of law; and this means that society is an object sui generis, with laws of its own, which are neither biological nor psychological-in other words, that society is a real entity, which not only is over and above the sum or the mutual relations of the individuals contained in it, but is prior to the individuals and absolutely determines them. Human conduct, in short, is an impersonal fact, determined by social forces and unaffected by personal valuation. The science of conduct is therefore sociology, an impersonal and positive science.

This presupposition (for such it seems to be) is shown by M. Deploige, in numerous citations, to be not only the fundamental principle of the Durkheim school, but also a harmonizing principle, which makes of their social philosophy a fairly coherent body of doctrine. "Social Realism" (le réalisme social) is its proper metaphysical name, i. e., society is an independent real. Why not leave them, then, to the enjoyment of their position? Unfortunately they are not wholly content. Durkheim in particular is dismayed at the decline of solidarity in modern society, whose condition he calls "pathological"; and he is emphatic in holding that sociology

is a practical science whose mission is social reform. But here, of course, he presupposes the efficiency of just those factors of personal valuation and individual choice which his science has rejected.

According to Durkheim, sociology was born in France, and French it has remained. Comte was its founder, Espinas its restorer, Durkheim its present representative. But though Durkheim has inherited the language and traditions of Comte, according to M. Deploige his social realism was not born in France, but "made in Germany." As a matter of fact, Comte had no followers in France. French economic thought remained, as ever, thoroughly individualistic. French law continued to proclaim the doctrine of natural rights. Nor, indeed, did Comte himself reach the conception of the reality of society, in the modern concrete sense. His philosophy was based rather upon an abstract "humanity." When, therefore, the social realism was first broached in France, it aroused universal opposition. Yet in Germany the organic conception of the state, or of the nation or folk, may be traced through a long line of thinkers, from Wagner, Schmoller, Schäffle, and Bluntschli, through Lazarus and Steinthal, Roscher, Knies and List, back to Adam Müller, in 1809. Its later representatives are Wundt, from whom Durkheim has obtained the idea of the impersonality of social forces, and Simmel, to whom he owes the conception of the divinity of society. His preference for the corporate rather than the political form of organization is due to Schäffle.

M. Deploige betrays a greater respect for social realism in Germany than for the same idea in France. Possibly because, as he suggests, it there represents a fruitful result won through painful effort and experience. The idea of "the rights of man," expressed in the French Revolution, was at first nowhere more cordially received than in Germany. At the hands of Napoleon, however, the German thinkers suffered a painful disillusionment. And after Jena it became clear that the loyalty of Germans was due first of all, not to "humanity," but to Germany. Under this stimulus was developed the idea of the Volk, i. e., of a definite social personality, whose aims and needs are to be determined from concrete experience. In the meantime French social philosophy has continued to deal with abstract "man"; this feature is common to the individualism of Rousseau, the humanitarianism of Comte, and the eclecticism of Cousin; and the vagueness of the idea has had its parallel in the disorganization of French political life. This is the philosophy that Durkheim has before him in his rejection of ethics as a purely a priori study. The accusation is false when applied to ethics generally, and especially if it is applied to Thomas Aquinas.

Yet, as the author admits, the conflict of ethics and sociology is not thus finally disposed of. It represents also the ancient difficulty of adjusting the claims of subjective valuation and objective fact. This difficulty, however, he is content to point out without attempting any further analysis.

WARNER FITE.

INDIANA UNIVERSITY.

Varia Socratica: First Series. (St. Andrew's University Publications, No. IX.) By A. E. TAYLOR. Oxford, James Parker & Co., 1911.

—pp. xii, 269.

During the centuries that have elapsed since Plato gave us the Socratic Dialogues there have been many influences at work to prevent a clear realization of what Socrates actually taught. Every portrait of a great man is to some extent colored by the imagination: Socrates has appealed to the imaginations of men, and tradition has in consequence evolved a figure of uncertain outlines. The quest of the real Socrates is an undertaking surrounded by difficulties, most of them created by hereditary prejudices as to the value of the material at our disposal. Professor Taylor has taken up the problem of Socrates in this collection of essays, of which he says, "what I hope from the complete realization of the whole . . . is the dissipation of the clouds of mystery which . . . veils (sic) from us what is admittedly the most striking personality in the history of Greek thought." Thus the Epilogue (p. 268), in a strain fortunately suppressed in the preceding essays. In the words "complete realization" the author refers to the fact that this is only the first series: more will follow in due course. In a sense therefore this book is a fragment: our Socrates is partially reconstructed but not finished; and we shall await the remainder with interest. For this first series contains work that is best described as thorough; the broad lines of treatment usually adopted by those who discourse on Socrates here appear no more; page after page is filled with the minutiæ that call for effort and close attention. But it is still true that students "ardua dum metuunt amittunt vera viai," and the reader of these essays will probably end with the conviction that some truths have been missed by other writers for want of this same laborious treatment.

A word, first, on the method. It is clear that a reconstruction must be made piecemeal; the sources of our knowledge must be critically treated so that we may know what has actually been said about Socrates as well as what has been added by succeeding quoters and copyists. Nothing serves this purpose so well as essays on different points; if the reader feels, as he probably will, that he is being presented with nothing but materials for a work on Socrates or preliminary studies for a complete picture, he will at the same time admit that the case justifies the treatment. The essays achieve unity in their diversity by their common relation to Socrates: to be more exact the unity is produced by a common thesis, namely "that the portrait drawn in the Platonic dialogues of the personal and philosophical individuality of Socrates is in all its main points strictly historical and capable of being shown to be so" (p. ix). To demonstrate this the author discusses (I) the impiety of Socrates, (2) the alleged distinction in Aristotle between $\Sigma \omega x \rho \acute{a} \tau \eta s$, (3) Socrates and the $\delta \iota \sigma \sigma o \lambda \acute{o} \gamma o \iota$, (4) the $\phi \rho \sigma \iota \tau \tau \acute{b} \rho \iota \sigma \tau \acute{b} \sigma \sigma \iota$ (5) the words $\iota \delta \delta s$, $\iota \delta \delta \epsilon a$ in pre-Platonic literature.

As to the impiety, the conclusion is that Socrates was impious not "as an atheist or a disbeliever in Hesiod or a person with an odd private oracle but as an adherent of a religio non licita." In other words, Socrates was a Pythagorean, his Orphism made him neglectful if not scornful of the established worship and its ritual: the Athenian was suspicious of such nonconformity and made it a criminal offence. This is corroborated by the Apology, for Socrates at his trial answered the charge of "atheism" in the sense of a denial of all gods, but never attempted to prove that he was innocent of "unlicensed innovations" (p. 9). The impiety was thus, at bottom, a political offence and sentence was passed on Socrates as a probable conspirator against democracy, a mischievous promoter of secret societies. The data for this view are interesting and the points are well defined, though the tradition assailed in this essay must be accounted dead already. The further purpose of the essay, namely to justify Plato's statements, leads to an interesting discussion of Xenophon's treatment of Socrates and Orphism.

The second essay begins with a study of passages in Aristotle from which the author concludes that the distinction between Σωκράτης and ὁ Σωκράτης is a fiction: it follows that Aristotle does not distinguish between "Socrates in Plato" and another original Socrates. If Aristotle had made such a distinction he must have had some source of information other than the academic traditions based on Plato. This our author denies, and the linguistic study introduces an interesting examination of Aristotle's statements about Socrates. Of these a "ridiculously small" number cannot be traced directly to Platonic

writings: all the rest can be found in Plato, either verbally or substantially. For a supporter of this thesis the crucial passage is Metaphysics, M 1078, b. 30, where Aristotle, as usually read, says that "Socrates did not ascribe an independent reality to universals; this was done first by Plato who also gave them the name of Ideas" (p. 69, where "Plato" is inserted for the oi de of Aristotle). Every student of Plato will see at once that this is no mean problem. maintains in the first place that the term ἐπακτικοὶ λόγοι does not denote any peculiarly Socratic method and adduces examples to show the current uses of the term and their significance. We may therefore abandon the idea that Socrates invented the inductive method, along with the notion that Plato first separated the ideas. The separatists are the είδων φίλοι of the Sophistes; so that Aristotle does not make a distinction between Plato (i. e., δ Σωκράτης) and Socrates, but refers to a distinction between Socrates and certain other teachers. the distinction being taken by Aristotle from the works of Plato. This completes the proof of the original thesis, viz., that Aristotle draws solely from academic writings and that Plato's account of Socrates is "thoroughly historical."

The third essay deals with the δισσοί λόγοι and argues that it was probably written before the death of Socrates and seems to show that "the beginnings of the doctrine of $\epsilon i \delta \eta$ are pre-Platonic and presumably therefore due to Socrates and his circle." The fourth essay is on the relation between the Socrates of the Clouds and the Platonic Socrates. The first point established is that Aristophanes was dealing with a public character, not a person comparatively unknown; consequently the comedy must reproduce actual traits of the historical Socrates, burlesqued of course but not fabricated. This leads first to the presupposition that the caricature reproduces the historical Socrates and, secondly, to the conclusion that if Aristophanes agrees with Plato, Plato's delineation must also be historical. Now Aristophancs represents Socrates as both a "well-known figure in the streets" and as head of a small circle of ascetics; this is in agreement with the Phædo. So too Chærephon is typical of those who practice the art of dying, a lean-looked person; the metaphor employed by the μαθητής who speaks of the "miscarriage of a notion" is akin to the language of the Theætetus; the "notion" referred to is a comic problem in science, recalling the fact that Socrates in the Phædo is said to have been an enthusiastic student of "nature" in his early days. Socrates, when brought on the stage, is represented as a man of science and a heretic; for this our author finds justification in the Phædo and explains that the statements in the *Apology* do not prevent us from believing that Socrates was a student of "nature" in the Greek sense. Further detailed evidence serves to show that Plato and Aristophanes coincide in exhibiting Socrates as a man with both a mystical and a scientific side to his character, and thus the Platonic account receives independent support.

The last essay, on the pre-Platonic uses of the words cibos and ίδέα can only be mentioned here; it is a protest against the usual idea that "¿los began by meaning a "kind" or "class," and is intended to show that the meaning "real essence" is the primary, the meaning "logical class" the secondary and derivative; and that this is so certain that it is worth while to raise the question whether, in Plato, eloos ever really means class at all (p. 181). The eighty pages of citations from writers of all classes which form the data for these conclusions must be commended to the student without further comment; considerations of space make it impossible to attempt more than an indication of the principal ideas put forward in these essays. Enough has been said to show that they will repay study and be fruitful in suggestion. The difficulty of following the arguments is considerably increased by the cumbrous construction of the periods and the use of footnotes for matter that should be in the text, to say nothing of digressions which impede the development of the main topic. In themselves these digressions are frequently of interest and one deserves special mention. At pages 35-6 there is a suggestion of the way in which textual criticism would benefit if the philologist were better acquainted with the state of science in the age of the Greek dramatists. Some improvement in this direction will perhaps follow the increasing interest in the so-called Hippocratic writings.

The author's attitude toward the Socratic problem has been fully shown in the preceding statement of his topics. The outcome of this genuine contribution to the subject is primarily a consolidation of our knowledge; the ground of belief is made more clearly apparent and we feel that the "clouds" have been "dissipated." In detail these essays contain many points that are fresh and subversive of established notions; they will assist in making the conventional phrases of the textbooks a little less possible in the future. But after all we are reminded that Socrates is not the real objective: neither in matter nor in manner does the author conceal the fact that these essays are planks in the scaffold of another monument. Yet they have value in their own right and leave us anxious for the promised completion.

G. S. BRETT.

NOTICES OF NEW BOOKS.

Thought and Reality in Hegel's System. By Gustavus Watts Cunningham. New York, Longmans, Green & Co., 1910.—pp. 151.

This is an admirable study of a very difficult problem in Hegel's philosophy. So far as I know the pamphlet forms Mr. Cunningham's first contribution to the philosophical literature of his country; if so, it is very gratifying to be able to expect from the promise of these pages that the metaphysical tradition of Royce may be sustained and carried forward with distinction by at least one of his fellow countrymen.

The essay is divided into two parts, one headed Thought, the other, Reality. But the relation between the two topics is the central theme throughout. The distinctive feature of the discussion is the continuous appeal to the actual statements of Hegel, which the author makes in expounding Hegel's views, or defending him against his critics. The numerous quotations are always to the point and in general very effectively introduced. The author is interested primarily in making Hegel's conceptions of thought and reality clear to the reader; but it may be inferred from the absence of criticism of his own and the attempt to meet the criticisms of others, that the author in the main agrees with Hegel's views. As an exposition the essay will, I think, be pronounced successful, as a defence it is successful to a large extent. There are frequent defects of statement, and it seems to me that at some critical points in the discussion the author shows that he has not yet realized the difficulties lurking in Hegel's position, no matter how clearly and sympathetically it may be expounded. But these are qualifications of the value of the essay which do not seriously detract from its worth for all students of the subject.

The first chapter deals with "Thought as objective and universal." This is taken to mean for Hegel that thought in a sense transcends the individual mind, and expresses the essence of things (p. 9). Both features involve one another, and both find their justification in the position that all thought in the end draws its life from "absolute knowledge" or absolute thought, which is implicit in and the final outcome of experience which is reality (pp. 16, 21, 24). In support of this, appeal is primarily made to the statements and purpose of the *Phenomenology of Mind*.

The author's argument here is not quite convincing, partly because he merely accepts the *ipsissima verba* of Hegel, which certainly require interpretation, and partly because he does not seem to have faced the difficulties involved in such a view, a discipline which is necessary if the view is to be made plausible. What is to be explained is the "sense" in which thought "transcends" the individual, and the relation between the thought which is or

involves individual consciousness to that which is beyond it. We are no nearer the solution when we say, as the author does (p. 11), that, generally, objective thought is the "thought activity in which as rational creatures A and B participate." Does "participate" mean "agree in common," or "share in"? If the first, where is the "transcendence"? If the second, where and what is the common fund from which each derives his allowance? and what is the relation of each to this stock? Doubtless these questions may be answered; I think Hegel does offer an answer. The author however throws no clear light on them directly in his essay, important as they are for the problem he is discussing; and he rejects (p. 5, note) inconsistently, as it seems to me, one way in which the answer can be stated.

Similarly he insists, rightly enough, on the "concreteness" and "objectivity" of the "notion"; but this is merely serving us with Hegel's own terms. What we want to have is a fuller interpretation of these terms. If the "notion" is not the abstract identification of "thought and being," if Hegel maintains that there is a distinction between thought and reality, as the author insists on pp. 21 ff., we are entitled to expect that an exposition of Hegel's views should clear up the obvious difficulties suggested by these statements. The mere repetition of Hegel's phrases is not enough for this purpose. In the same way we wish the author to being out more completely the real bearings of the important position (pp. 18, 19) that for Hegel thought is not a faculty of mind but a function "including" the other functions of feeling and will. Surely he cannot take such a view to be self-evident, and in need of no further interpretation.

The second chapter, on "The process of thought: mediation and negation," deals with an important consequence of Hegel's conception of thought. It follows at once from that doctrine that thought has hold of the real at all stages of its appearance, or is continuous with itself throughout the process of revealing the nature of reality. The distinction between immediate and mediate knowledge is a distinction within the one life of thought; and these two essential functions are inseparable. On this the author insists with success, and supports his position by ample references to the text. He is mainly occupied in trying to explain the meaning of "negation" in Hegel's view of thought; but it would have been well had he also dealt with the conception of "immediacy," a conception no less important and demanding no less attention than "negation." On the whole I do not think the author has sufficiently brought into harmony the statements of Hegel's doctrine of negation mentioned in this chapter. Negation is of course both "positive" and "negative." But the two main points are that negation is negative of immediacy in the sense of the particular, the sensuous immediate, and that negation is negative of difference, of the finite, whatever the finite may be, whether sensuous or conceptual. The author maintains both these points in his arguments, but lays chief emphasis on the first, especially in his defence of Hegel against his critics. The second, however, is the more important, because more general and because including the first as a special case. We cannot settle the question

of the proper relation of negative mediation to immediacy if we confine attention, as the author seems to do (p. 36 ff.), to the relation of thinking to sense-experience. One concept is "negative" of another, just as much as a concept is "negative" of sense. The whole of the *Logic* is constructed on this principle; it is the nerve of the "dialectic movement" in the *Logic*. A concept may be "immediate" relatively to another, just as much as "sense" is immediate relatively to "thinking." When Hegel says that we must 'think contradictory concepts together if we are to think truly' he is merely expressing the same principle as when he insists that sense is nothing apart from thought.

The third chapter on "Ontology and Epistemology" is written to justify Hegel's identification of Logic and Metaphysics. The justification is merely a particular application of the doctrine of thought. The author makes an attempt in the course of the chapter to explain and interpret the connection between the *Logic* and the *Philosophy of Nature*. I do not think his explanation sufficient; and I do not now think the question so perplexing as it has been taken to be.

Part II of the essay consists of two chapters, one on "Reality as Individual," the other on the "Personality of the Absolute." These two chapters seem to me the best in the essay. The latter is not altogether relevant to the general problem discussed in the essay; but it is a very able statement and explanatory defence of the view that Hegel's Absolute can be and was by Hegel held to be a personality. I do not agree with the author's argument, partly because as he himself admits on pp. 138 and 144 the argument rests on an analysis of finite consciousness, or partly for another reason based on analogy. It does not follow, for example, because all bodies are spatially separate individuals in the ultimate matter of the physical universe, that this ultimate matter is itself an individual body: so it does not in the least follow because finite consciousnesses are in their highest human form separate "persons" that absolute consciousness must necessarily be conceived of as a person. Nor in my view is Hegel's Absolute less spiritual because not "personal."

The chapter on "Reality as Individual" is excellent both as an exposition and as a defence of Hegel. It is, I think, in this chapter that the author has concentrated the main lines of his discussion. There are one or two loose expressions here and there; but the main trend of the argument is well sustained, and clearly worked out. The author gives much space in this chapter to criticisms of Hegel's view of the notion. Perhaps some of this space would have been better used to develop more fully the significance of what the author takes Hegel's view to involve, instead of refuting those whom he considers to have misunderstood it. Critics are proverbially difficult to satisfy; they object to Hegel's "notion" because it does not grip reality, and at the same time insist that thought could not grasp reality if it tried. Nevertheless, I do not think that the author has quite appreciated the point on which Hegel's critics do lay stress, a point which still remains for consideration even if they have overemphasized its importance or perhaps stated

it onesidedly. I do not myself now attach so much importance as formerly to the difficulty regarding the relation of Hegel's "concrete notions" to "individual reality," and with much of the author's criticism of my former views I am disposed to agree. If the difficulty is properly stated, it is not so great nor the solution so hard as the critics have maintained. The author hints at the solution on p. 109, and it is to be wished he had followed up the clue. Whether the other critics whom he deals with will accept the author's strictures of their views need not be considered here. I think in any case he has made his own interpretation good, that for Hegel the real is the individual, the union of universal and particular, and that the notion is adequate to the real in this sense. The main thing however is the development of what this doctrine involves both for Hegel and as a general principle. Perhaps the author may attempt such a theme at another time.

J. B. BAILLIE.

ABERDEEN.

The Fundamental Problems of Metaphysic. By JAMES LINDSAY. Edinburgh and London, William Blackwood and Sons, 1910.—pp. xii, 135.

If this little work be designed to furnish a fairly complete register of Who's Who in the history of philosophy, it must be admitted that the book achieves its end. And still the wonder grows in the reviewer's mind that so much matter could be compressed within its covers. In the third, and concluding, chapter on "The Metaphysics of Cause, First Cause, and World-Ground" (pp. 47-124), for example, some fifty philosophers are accorded space varying from three lines, in the case of Bruno, to four pages, in that of Hume, while nearly as many more are touched by a phrase of panegyric or waved aside by a stroke of pen. A nimble wit is required to keep pace with the author in this rapid flight through Substance and Causality, and systems brush by the blurred landscape like poles before a car window. A second reading confirms the impression of general correctness and justice in the historical survey, and does much to render perspicuous the background purpose of the author's thought. For the book is not a mere catalogue of ships, but a work whose purport is to show forth the functions of Substance and Causality in a view which, by a partial reinstatement of the latter concept as of ultimate functional significance, presents the Absolute, or God, as "the true, abiding First Cause . . . the self-existent Cause of the ever-present world and its phenomena" (italics mine).

The first chapter, on "Metaphysics as Science," is very short, compressing nevertheless much tersely expressed matter in its seventeen pages. Few words are wasted and, indeed, the style seems a little too concise, occasioning a dogmatic statement when some discussion is needed, and accounting here and there for a certain lack of lucidity. The thought comes tossed on a sea of short and choppy sentences: "Experience marks the limits of scientific knowledge. Scientific inquiry is, before all things, inquiry which is conformable with fact, and not only the origin, but also the application of all con-

ceptions is limited to experience. Metaphysics grasps the inner essence of reality, the last ground of being. For metaphysics is the philosophy of the Real. It therefore keeps close to palpitating reality. The real is experience. The materials or data of reality are experience. Experience is not only real but is of reality, the reality experienced. The reality of experience must be carefully distinguished from the reality of the Absolute."

From these and the like expressions one gathers that a certain modern confidence in 'experience' is to provide the basis for a metaphysic which is to be reared by means of the concepts of substance and cause. Metaphysics is a science, "holds the office of censor in the kingdom of the sciences" (p. 3) and "examines the transcendent terms in the data of science . . ." (p. 7). It follows the method of science, "is critical of all the special sciences" in agreement, for example, with Paulsen, and, like science, is limited to experience, claiming "no credence that has not the support of science" (p. 4). But "the metaphysical completion of experience arises out of the problem of the unity of the world" (p. 8). The Whole is the object sought, and the world-ground is determined as Absolute Spirit. This "is not a merely abstract monistic principle," but a Whole, "whose sole essence is reason, and whose sole substance is energy" (p. 17).

As regards the question (p. 11) of the extent to which metaphysics may emulate successfully the methods of exact science there is some lack of definiteness. Thus metaphysical rigidity is apparently disparaged owing to the concomitant loss of range and vision, but the author, quoting with approval Dühring's opinion that "true exactness, or, in general, accuracy is attainable everywhere if only we candidly distinguish between what we know and what we do not know, clearly determine how we know it, and accurately set forth the sources of this knowledge," maintains that "metaphysics does not sit more loosely to exact proof than mathematics" (ibid.).

The metaphysical quest for reality must proceed from the conception of Substance, the first of "those Grundgedanken of metaphysics with which scientific construction has more particularly to do." The central problem of metaphysics is, then, "to determine the principles of substance" (p. 20). The conception of substance, however, implies that of causality, and the first part of the second chapter discusses their relation. A cause is a substance, or being, in energy, and it may likewise be said that there is no substantiality without causality. Both categories "take their rise, as logical conditions of experience, from the one severe and lofty principle of the unity and persistence of consciousness," which, in view of the discontinuous nature of perceptual experience, is the basic assumption of all science and experience (p. 22). To the one, substance, correspond the concepts of being and unity; to the other, cause, the ideas of becoming and multiplicity. Substance, such is the purport of the chapter, is an objective implication of experience or a principle of objectification, an "absolute form-concept-foundational in importance for metaphysic" (p. 44), and not a superseded category. It is "psychological, that is to say, volitional in its origin" (p. 23), in which sense, however, cause "is genetically prior to it" (loc. cit.).

The third chapter, starting with the assumed homogeneity of God and the world, cause and effect, elaborates by means of copious historical citations the notion of a transcendental First Cause. The latter is, in the author's form, "not an inference from effect to cause-since this would never take us beyond the really finite—but from effect to Ground" (p. 53). The First Cause is spiritual in its nature, the substance category, in which we abstract from the active First Cause, having gradually yielded in the preceding chapter to the conception of subject. Thus the First Cause, as Spirit, is not a mere correlative of the effect. The attempts to prove its existence only brought it into the temporal series and were absurd. Because the effect measures the cause, "the universe as an effect cannot in its finitude yield us the First Cause." Hence the chief defect in the presentation of the First Cause argument, especially in the hands of British and American philosophers and theologians, has been the ". . . tendency to rest in what could be inferred from the law of causation as applied to the phenomena of the universe, and the failure to pass . . . to the postulation of an Absolute Ground" (p. 51). So understood, "as an argument from the contingent character of the world to the necessity of a World-ground," the First Cause argument "retains validity and worth" (p. 123).

The argument throughout moves toward the conception of transcendence. "For transcendence in Deity is just what the First Cause argument, in its true form, gives" (p. 103). Pantheism, which fails to separate the First Cause from the caused world; deism, which assigns to the world a beginning in time, bringing the First Cause into the series; empiricism, which eviscerates entirely the conception of cause, all are to be avoided. Professor Royce, because of his view that "the wholeness or totality of the temporal constitutes the eternal" (p. 40), making, also, the First Cause 'identical with His products'" (p. 58), and, in general, the Neo-Hegelian group, receive on the whole the more severe criticisms. But "from our point of view," says Professor Royce (The World and the Individual, II, p. 418), "God is a Person," and it would seem somewhat difficult to read pantheism into such a statement. Any self must be in a sense identical with its objects and products. The criticisms of Descartes, Spinoza, Leibniz, Hume and Kant are, in the reviewer's opinion, particularly good, considering their necessary brevity. It is doubtful, however, if even the tolerably well informed reader will be greatly advanced toward an appreciation of the author's conclusions by the knowledge that Bruno's "causal treatment is marked by speculative force and freshness," that Campanella dealt with the First Cause conception "in a finely independent manner," that Suarez "subtly dealt with cause and effect, taking a strong view of the efficient causality of God as First Cause," etc. Such lightning calculation abounds, and though page after page of this progress furnishes interesting insight into the author's estimate of historical systems, such readyreference commentary somewhat obscures main issues. A consensus philosophorum does as little to establish the existence of a First Cause as a consensus gentium. Thus, as before hinted, the content of the book, which in the main pleases, seems to have been more thoroughly considered than the form of presentation, but the treatment of substance and causality will be found suggestive.

CARL VERNON TOWER.

SOUTH HINGHAM, MASS.

The Mediæval Mind: A History of the Development of Thought and Emotion in the Middle Ages. By Henry Osborn Taylor. In two volumes. New York, The Macmillan Company, 1911.—pp. xv, 613; viii, 589.

The purpose of these two volumes devoted to an exposition of the mediæval mind is to trace through the mediæval centuries the unfolding of intellectual activity and the development of emotion; or, in other words, to apprehend and duly to estimate the spiritual endowment of the time. All the development of the mediæval era, so the author finds, was the result of two great forces, Latin culture and Latin Christianity, the pagan force and the patristic force, which had incorporated remnants of antecedent civilizations and faiths, which everywhere were operative, and which everywhere, in the hands of mediæval men, tended to produce a similar result. Such was the inheritance of the mediæval world. Such were the constituents of its growth into its spiritual temperament and dialectical power. At the time of the barbarian invasions the two factors of mediæval development came into contact with the Teutonic peoples, and the essential characteristics of the Middle Ages resulted from the fusing of those two factors effected by the invaders.

With this endowment the Middle Ages did not extend the horizon of knowledge, nor did they create anything new and important, either in the realm of intellect or emotion. Rather was their energy expended in presenting through new forms the knowledge and emotion which they had inherited from the past. They appropriated the material that had come down to them from the two sources, made it "dynamically their own," and then, transmuted in the alembic of their hearts and their minds, surcharged with their own spirit, they gave it a new expression. Each successive division of the mediæval era, being more mature than its predecessors, displays in its turn a more complete assimilation of the old material and gives to it "a more organic restatement" until in the thirteenth century the final mediæval restatement is at-In this process of transmutation both the intellectual and the emotional powers of the period were employed. The operation of the two powers are clearly distinguishable, but usually they worked together for the accomplishment of the common purpose. The intellectual recasting of the ancient material received its culminating expression at the hands of Thomas Aquinas. The emotional transformation, "more moving and possibly more creative" than the intellectual change, effected by pondering upon the patristic inheritance, the foundation of mediæval emotional development, "by loving it, living it, imagining it, and making it into poetry and art," eventually resulted in "forms never to be outdone for appropriateness and power"—in the life of Francis of Assisi, in the Dies Ira, the Stabat Mater, the mass, the Gothic cathedrals, the Divina Comedia. In these impassioned utterances,

in this emotionalizing of the patristic Christianity, in its saturation with human feeling, "lay the chief religious office of the Middle Ages."

Throughout the mediæval era religious faith subjugated to its motives every intellectual interest, every line of human inquiry, and therefore philosophy, the search for ultimate knowledge, lacked that fundamental requisite, an independent existence. All intellectual effort, all philosophic thought revolved around 'salvation,' the absorbing interest of the time. The focus of patristic and mediæval philosophic thought was, therefore, fundamentally different from that of either the antique or the modern world. So great was the intellectual decadence that all desire of knowledge independent of theology was lost. Mediæval men desired to know God and the soul. In the confines of this circle all their mental habits and temperament became so perfectly adjusted that no intellectual inclinations or desires reached beyond it. On the other side of the delimiting line lay nothing but the dark and cold abyss of unoccupied space. Yet within this circle there was little human knowledge that might not be included. Knowledge of the physical world might well be comprehended, for it helped one to understand the biblical narrative of the creation of the world; so, too, there might be comprised knowledge of man, his physical as well as his spiritual nature. Theology, "the saving contents of Scripture as understood and interpreted by Gregory and Augustine," might well summon "the better part of pagan philosophy for illustration and rational corroboration, so far as that did corroborate. When it did not, it was pernicious falsity."

Such were the limitations of the theological philosophy of the Middle Ages that we call scholasticism. Its methods have become outworn; its interests, if not actually superseded and discarded, have at least been augmented. But its exponents "were men and so are we. Our humanity is one with theirs... our highest nature is one with theirs in the intellectual fellowship of human endeavor to think out and present that which shall appease the mind." Heart speaketh unto heart. Because of the identity of their struggle with ours the scholastics have still for us "the immortal interest of the eternal human." It is in this deeply sympathetic attitude that the approach is made to mediæval philosophic thought.

The vast and interwoven pagan and patristic inheritance furnished almost the entire substance of scholasticism and determined its modes of thought. From the former, for example, came directly the great problem of universals. Scholasticism may then be described as "primarily an appropriation of transmitted propositions." It was therefore not creative, as Greek philosophy had been, but relied upon authority. And the fact that it revolved around the idea of salvation, a divinely mediated salvation not attained by any knowledge that a man may himself acquire but resting upon the dictum of the Church, compelled it to lean all the more heavily upon authority. The thought of every scholastic philosopher, even that of the rationalizing Abelard and the masterful Aquinas, was conditioned and limited by this dependence. Yet it was not an absolute dependence upon authority, for "midway between a

mere acceptance of authority and the endeavor of dialectic for a conclusion of its own, there is the reasoning process which perceives divergence among authorities, compares, discriminates, interprets, and at last acts as umpire. This was the combined and catholic scholastic method "—a duality of method that began feebly with Rabanus in the Carolingian time and became explicit with Abelard.

Having thus "considered the spirit, the field, and the dual method of mediæval thought," the author passes on to its work of re-expressing the pagan and patristic inheritance which after enormous labor the Middle Ages had at last assimilated and made their own. In dealing with their inheritance the Middle Ages passed through three stages, learning, organically appropriating, and re-expressing. Grammar represented the first stage, logic the second, and metaphysics the third. Out of this attempt to re-express the inheritance of the past arose the problem of universals, cardinal to the Middle Ages but empty of significance to the modern world. The range and character of the attempt are studied in the writings of four men, Bonaventura, Albertus Magnus, Thomas Aquinas, and Roger Bacon. Bonaventura "reflects many twelfth-century ways of thinking." Albertus "finally put within reach of his contemporaries the sum of philosophy and science contained in the works of Aristotle, and his ancient, as well as Arabian, commentators." Aquinas "may be regarded as the final exponent of scholasticism." Bacon "stands for much, the exceeding import of which was not to be recognized until long after he was forgotten." Upon the scholastic method Bacon made a premature attack, and a fatal breach was made by Duns Scotus and Occam. Because of internal and external causes "scholasticism was losing its grasp on life." The Rennaisance (a word our author accuses of being a sign-post to error; and rightly so, for the era was far more one of birth than re-birth) was at hand, and "life and power no longer pulsed and wrought within the old forms; but had gone out of them, and disdainfully were flouting the emptied husks."

The book closes with a study of Dante as the mediæval synthesis in which the lines of mediæval power are drawn together. The secular and the carnal are no longer in open hostility to the eternal and spiritual. Between them, by regarding the former as being the symbols of the latter, Dante, who is "the end of the mediæval development and the proper issue of the mediæval genius," effected a reconciliation.

I have endeavored to indicate the value of this book to readers whose work lies chiefly in the field of philosophy by giving a brief outline of the author's treatment of mediæval thought, and have left but small space in which to speak directly of the achievement. The work of producing such a book as this must have been particularly difficult and delicate. Difficult, because it entailed a vast range of reading in many tongues. Delicate, because of the incessant demands it made to enter into sympathetic appreciation of a period, long in unfolding, with many varying yet characteristic personalities, remote and alien from our own. Yet the success of the undertaking is beyond all question. The present writer can find no flaw with the things that are in-

cluded; and his only regret is that the art of the Middle Ages should not have received a treatment in accordance with its vital and acknowledged importance Why, for instance, should the mass be treated not as the stately, solemn, and thrilling ceremony that it is, but only as a series of symbols, which it was to the erudite scholar, but which it certainly was not to the mass of mediæval men? And why, again, should the Gothic architecture, touched upon here and there, not be shown to be a matchless revelation of the impassioned emotion which more than all else made up the life of the time? But, so far as it is known to me, one shall look elsewhere in vain for so sure and fine a portrayal of the process by which the purely philosophical problem of the pagan past gradually became changed into one that was intensely practical, personal, and poignant. The author of this masterly work is evidently not only an eager, untiring, and exact student, but also a thinker and a poet. Only a scholar-poet could have given us so true and sympathetic a study. So clear is the medium of his personality that through it, as through a transparent window, there streams the vari-colored light of those far-off centuries without diminution or distortion.

> "C'est vers le Moyen Age énorme et délicat, Qu'il faudrait que mon cœur en panne naviguât."

> > EDWARD MASLIN HULME.

UNIVERSITY OF IDAHO.

Introduction to Philosophy by William Jerusalem. Authorized translation from the fourth edition by Charles F. Sanders. New York, The Macmillan Co., 1910.—pp. 319.

It is to be expected that a pragmatist's introduction to philosophy would be seductive. Militant with such popular shibboleths as science, evolution and empirical psychology; endowed with the historical sense and erudite in the history of systems, the author has succeeded in writing a book genuinely and rarely stimulating. It has been welcomed in Germany—the present translation by Professor Sanders is from the fourth edition—and the author's close sympathy with the chief trends of English and American thinking ought to make it popular in this country.

Judged by the author's chief aim, which is the inducing of independent thinking through the presentation of the typical problems in an objective, perspicuous and brief manner, the book has few serious shortcomings. If one finds a challenge at all, it is in the author's constructive handling of these problems, the issuance of a pragmatism independently won, which strongly colors the interpretation of problems and systems.

Believing that the first demand of philosophy is that it shall be both empirical and scientific, the author further announces himself committed to "the genetic method and the biological and social method of interpreting the human mind." With the author, this means, in the last resort, that his introduction is really to the genetic psychology of epistemology, metaphysics, esthetics and ethics, which topics form the chief divisions of the book. The

present work is thus an extension into the realm of philosophic concepts of the author's very suggestive text-book on psychology, also written from the biological and genetic viewpoint. Even the definition and eternal justification of philosophy is to be found in a psychological impulse toward the search for unity. This coveted Weltanschauung is thought of as a gathering together of the results of common experience and science, upon which philosophy must ever patiently wait. Yet philosophy is more than science, it is not merely to be regarded as an aggregate of results, but as a fundamental criticism of science's presuppositions,—that is, a psychological, biological and sociological account of basic concepts.

With such a standpoint, it is easy to see why the first part of the book is taken up with psychology in general and with the psychology of logic in particular, as propædeutic disciplines. Indeed it would be well, and it seems to be consonant with the author's plan, that the present introduction should come after courses in logic and psychology. Otherwise, the introductory section on the problem of logic would be a trifle abstruse for a beginner and the division devoted to epistemology, for instance the sections devoted to a striking theory of the import of judgment, would be hardly intelligible, despite the clear and direct style. Furthermore, the psychology involved is one that lays stress upon feeling and volition as genetically primary states of consciousness. In our metaphysics we must reckon with the "feeling of reality" as well as with the logic of reality; sometimes, indeed, the problem of philosophy is to conciliate contradictions of feeling and of thought—a conciliation in terms of the pragmatic test.

The book is to be praised chiefly as a psychology of philosophic concepts and to be criticized chiefly for seeming to pretend to be anything else. Of course, to such as consider genetic psychology and philosophy identical, this criticism has no meaning. At any rate, even with this limitation, and perhaps because of it, the book is an excellent introduction to philosophy and for many reasons one of the very best. The author is always temperate, surprisingly catholic in his range and sympathies and much more reflective and circumspect than most of those philosophers obsessed with the scientific point of view. And certainly the approach to philosophy through scientific problems and results has especial justification in this age when, to the layman, science is coextensive with human knowledge. In some places there is a regrettable dogmatism in hurling results at one where one wants only the careful definition of problems, and sometimes the reasoning is loose (e. g., p. 80, disproof of solipsism), but these defects are rare enough to be forgiven in a book professedly elementary. A more serious defect is the departure from tradition in the use of certain terms, which is likely to mislead the beginner (e. g., Dogmatism, p. 58; Idealism, p. 68).

The translator tells us that he was led to his undertaking by the excellence of the author's method of presentation. The subject-matter is indeed admirably arranged and its emphases just. The historical material is especially apt; there is just enough of it and it is well selected with the view of throwing

light upon the meaning of important problems. There is constant reference to contemporary thinkers, which lends the book desirable reality and renders it unique among introductions. Especially commendable too from a logical and pedagogical standpoint is the stress upon the epistemological problem as primary. Here the author's own viewpoint most appears, a viewpoint which depends upon a skillful and original pragmatic criticism of apriorism of the Kantian sort, and which comes upon a functional view of truth, whose test is, finally, verification by prediction and derivatively intuitive acquiescence and social consent due to past experience of fulfilled predictions. In the author's final view there is an attempted sublation of the world-old concepts, such as God, who, conceived as dynamic and the final principle of unity, fulfils man's search for totality and conciliates scientific philosophy and religion.

When we regard the book primarily as an introduction to philosophy, as we ought to do, it is not the author's own view as such with which we are concerned; but with the question whether that view is presented in a manner that vitiates the book as an introduction. To the reviewer's mind, an introduction gains in virility and efficiency by the presence of constructive results, if these results are not foisted to the endangering of a fair exposition of problems and typical solutions. For, after all, the beginner wants and needs results. It can safely be said that the author has managed very well in this regard. His view is not, as a rule, obtruded unduly, but usually is put by itself in independent sections at the close of the major divisions of the book.

The translator has made the author speak attractively forcible English. There is a good bibliography, although it is to be regretted that the translator did not add even more works in English. The book as a whole performs exceptionally well that task which it is so hard to perform through a mere book—the task of persuading the student that, as the author says, "the most important thing in philosophy is philosophizing."

JAY WILLIAM HUDSON.

UNIVERSITY OF MISSOURI.

Principles of Education. By FREDERICK ELMER BOLTON. New York, Charles Scribner's Sons, 1910.—pp. xii, 790.

Teachers of the principles of education have long been seeking for their classes a text-book which offers to the beginning student, not an outline of educational philosophy abounding in logical distinctions and classifications, but a simple clear exposition of a few fundamental principles with a wealth of concrete illustration and practical application. Such a book Professor Bolton undertakes to provide, with no small measure of success. Despite the size of the work, which covers nearly eight hundred pages, the author limits his field to the consideration of but two aspects of education, the biological and psychological, with only incidental reference to the sociological and institutional problems. Moreover the extensiveness of the book is due less to exhaustiveness than to mode of treatment, for the plan is, in the discussion of each topic, to quote widely and often at length from the literature bearing upon that topic. In this way the text-book assumes in a measure the

function of a source book as well, thus rendering available for the student much material otherwise usually inaccessible to students.

Taken as a whole, Professor Bolton's book is in most respects a fine piece of work. The thought is always clear, the style interesting, the terminology no more technical than scientific accuracy demands, and the content so well chosen and so attractively presented that the reader is loath to lay the book down. Within the chapters, the treatment of the topics is well ordered, both logically and pedagogically, with a proper balance and connection between concrete and abstract, so that the immature student does not fail to see the significance of the concrete in the interpretation of the abstract, as might easily happen where so much illustrative material is included. The quotations in which the book abounds are well chosen, and are so aptly incorporated in the text as not to interrupt the continuity of the thought, but rather serve to illuminate and enrich its content.

However, one is prompted to question whether the plan of combining text and source book is, everything considered, a wise policy. True, it brings to the student whose library facilities are limited material from a number of books of reference which would otherwise be inaccessible to him. However, the number of works which are extensively quoted and without which the thought would be incomplete is comparatively small, while in the case of large classes a smaller number of books, those which are deemed essential, could in a carefully administered library be kept accessible for the student. objection to the plan adopted by Professor Bolton is that it tends to discourage the habit of research on the part of the student by bringing to him, carefully assorted and trimmed, the material for which he should be taught to search. The principles of education should, of all courses in education, familiarize the student with educational literature, and teach where and how to find, as well as to know. The very exercise of searching through a book tends to acquaint the searcher with the general character of the book, an acquaintance which may later be of value, as well as attract to further acquaintance. the text under review discourages by rendering it unnecessary.

A second point of possible criticism, yet one which applies as well to most books in this field, is the inclusion of much psychological material, a knowledge of which a course in the principles of education, presumably pursued by the most advanced of the undergraduates, might well presuppose. Much space is devoted to exposition of topics which every student qualified to take up the study of the principles of education should have met in a course on elementary psychology. As such topics might be mentioned the nature of memory, imagination, association of ideas, and the James-Lange theory of Emotion.

As to the philosophical standpoint, much depends on the personal attitude of the reader. The Hegelian will doubtless object, perhaps justly, that too much emphasis is laid upon the educational function of environment, too little on the self activity of the child. To the Herbartian, the attention given to Apperception and Interest will probably seem insufficient. The author

has obviously preferred to keep all philosophical implications well in the background. His attitude is that the undergraduate student needs, not a system of education, but principles of education. However, this attitude seems to be only partially correct. It is true that the beginner needs more of facts than of theory; however, the thoughtful student needs somewhat of theory, of system, for the interpretation of the facts. It is the common complaint of students that in nearly all lines of college study, and more especially in the field of education, they have merely heaped up facts, but that these facts are often almost meaningless and the whole science lacking in perspective for want of a system of organization. The student who is sufficiently advanced to study the principles of education is able and eager to study the science of education as a science, not merely as an art. In the failure to meet this demand lies, we think, the chief defect in what is, despite its defects, undoubtedly the most inspiring and useful book in the field which it occupies.

H. H. FOSTER.

OTTAWA UNIVERSITY.

La nouvelle psychologie animale. Par Georges Bohn. Bibliothèque de philosophie contemporaine, Paris, Félix Alcan, 1911.—pp. 200.

"This book," the author tells us, "is the sequel and complement of my work on 'La Naissance de l'Intelligence.' In the latter, I investigated the appearance of psychism in the lower animals; in the present work I show its expansion, on the one hand in the arthropods, on the other hand in the vertebrates." Bohn is well known as an ardent disciple of Loeb, if he is not, indeed, more royalist than the king himself. That all behavior will be ultimately explicable in terms of physical chemistry is the hope cherished, it is safe to say, by the majority of psychologists and biologists; but when we recall the fact that so far the physico-chemical explanation has been demonstrated, or rather made probable, only in the case of the light reactions of a few organisms, we realize that it is well to distinguish between hope and accomplishment. In discussing the behavior of the lower invertebrates, Bohn reduces it to the tropism, which is the result of a difference in the speed of chemical reactions occurring in symmetrically situated parts of the body; to differential sensibility, which manifests itself as a checking or reversal of motion in consequence of a sudden change in the intensity of stimulation; and to the rudiments of associative memory. In the higher invertebrates, the arthropods, associative memory undergoes considerably more development. In the instincts of an arthropod all the factors in behavior, tropism, differential sensibility, and associative memory, come into play. The instinct of death-feigning is largely an affair of differential sensibility, that is, of the suspension of movement in response to a sudden change in the environment. The homing instinct involves all three factors, and so do the food-seeking, mimicking, and sccial instincts. Bohn insists upon the part played by individual learning in the performance of instinctive actions, and it is not quite clear what he means by 'intelligence' when he says that intelligence is the special possession of vertebrates. The difference between intelligence and associative memory seems

to be one of complexity merely. "In insects, despite the multiplicity of sensations, associations between sensations remain comparatively few and simple. On the other hand, the cerebral cortex of the higher vertebrates allows of the formation of numerous and complex associations, often composed of elements which are not themselves simple. . . . Intelligence results from the interactions among these associations." In the third part of the book there are brief discussions of the various experimental methods for investigating the intelligence of vertebrates, the largest amount of space being devoted to the method of Pawlow, which is based on the power of stimuli associated with food to evoke a flow of saliva.

In this book, as in his earlier writings, Bohn is guilty of the inconsistency which is characteristic of his school: he uses terms that have always carried a subjective implication, such as sensation, association, and psychism, while insisting that he means by them merely certain objective facts of behavior. If one holds to the view, quite erroneous in the reviewer's opinion, that we can know nothing about the inner aspect of behavior in animals, one should use in describing this behavior words that do not suggest the existence of such knowledge.

MARGARET FLOY WASHBURN.

VASSAR COLLEGE.

Riddles of the Sphinx, A Study in the Philosophy of Humanism. By F. C. S. SCHILLER. New and Revised Edition. London, Swan Sonnenschein & Co., Lim., 1910.—pp. xxvii, 478.

This book was originally published anonymously in 1891; and a second edition was published under the author's name in 1894. Since the latter date the author has been engaged in defending and propagating his "humanistic" version of pragmatism. The speculative metaphysics of the Riddles, has thus stood outside the main current of his thought, and is now re-published with some misgivings. "The discovery in philosophic method, which is generally called Pragmatism, but more truly and significantly Humanism, has rendered more or less out of date every earlier work in metaphysics." Hence the author is "bound to confess that if he were now free to handle the whole subject afresh, the result would not be identical with the contents of this book" (Preface, pp. v, x). A sentence in the original edition to the effect that "a philosophical system . . . will be ratified by the way it works and stands the test of experience," nevertheless "sufficiently attests the continuity of his original views with his present Humanism" (p. 169).

The principal changes in the present edition are as follows: (1) the addition of occasional notes bringing the illustrations of scientific procedure up to date; (2) the addition to Chapter III, on Scepticism, of two new sections, dealing with current theories of truth; (3) the revision of Chapter V, on "Reconstruction," to harmonize with the Humanist theory; the addition, as an appendix, of a discussion of "Free Will and Necessity"; the re-printing as appendices of an article on "Choice," and an address on "Science and Religion"; the addition of an index; the alteration of the sub-title, from "A

Study in the Philosophy of Evolution," to "A Study in the Philosophy of Humanism."

The present volume emphasizes two general characteristics of Schiller's philosophy. In the first place, he writes himself down among the apostles of a metaphysical spiritualism or activism. He belongs, in other words, to the school of Bergson, Eucken, Dilthey, Lipps, LeRoy and Papini, rather than to the school of James and Dewey. Both of the last writers show a pronounced trend toward realism, or toward a limited epistemological application of pragmatism. The continental movement, on the other hand, tends to mingle with the tide of voluntaristic and romantic idealism. Schiller is flatly at variance with James's logical realism, in his contention that "every 'logical process' is really a psychological one" (p. 225); his opposition to the positivistic or naturalistic temper of Dewey's mind is illustrated by his declaration that "no apology should be needed for the romance of philosophy in an age which has learned rightly to appreciate 'the fairy tales of science,'" the latter being "superstitions none the less fictitious for being poetical" (p. ix); his metaphysical voluntarism is revealed in his reduction of matter to force, his identification of force with will or conscious effort, and his contention that a "Divine Force," so construed, is the underlying ground of nature (Chapter IX, §§ 17 sq.).

In the second place, the present edition shows an inclination to adopt that syncretistic version of metaphysics that is so popular with contemporary German idealists of romantic proclivities. He now accepts his earlier metaphysics in a somewhat detached and impersonal manner. He 'admires the enterprise,' and 'marvels at its audacity.' He 'now wholly disbelieves in the possibility of framing a system that can convince, or even please, everybody, or lay claim to absolute truth and certainty.' "Practically, . . . a system of metaphysics with whatever pretensions to pure thought and absolute rationality it may start, is always in the end one man's personal vision about the universe, and the 'metaphysical craving,' often so strong in the young, is nothing but the desire to tell the universe what one thinks about it" (p. vii). This sounds very much like disillusionment. And it may not be out of place to remark that the discrediting of philosophical faith reflects the bias of middle-age, as truly as that faith itself reflects the bias of youth. Furthermore, it is only through a youthful faith in the possibility of a philosophy that shall convince everybody, that philosophy lives at all. Were all philosophers to yield to this mood of genial cynicism, and admit the relativity and equal validity of all systems, there would be no systems with which even to regale the promiscuous and sympathetic historical imagination.

RALPH BARTON PERRY.

HARVARD UNIVERSITY.

Logik. Von Christoph Sigwart. Vierte, durchgesehene Auflage besorgt von Heinrich Maier. Zwei Bände. Tübingen, J. C. B. Mohr, 1911.—pp. xxiv, 506; viii, 812.

This fourth edition of the notable Logic of Sigwart appears as the post-

humous work of the author under the editorial superivision of Professor Heinrich Maier, of the University of Tübingen. The text remains substantially the same as that of the third edition of 1904. The editor, however, has added here and there a few footnotes of his own, being for the most part references to the more recent philosophical literature upon the various topics corresponding to those treated by Sigwart in the main body of his work. Professor Maier has also presented in this edition a very appreciative estimate of Sigwart's contribution to the philosophical thought of his day, together with a complete biography of the author's works. It is exceedingly appropriate that, in this last edition of his magnum opus, the conspicuous labors of the great logician of Germany should be thus particularly emphasized by his intimate friend and colleague.

In the rapidly accumulating mass of logical literature at the present time, the fact should not be overlooked that Sigwart was the early pioneer in the field of modern logic. The first volume of his Logic was published in 1873, antedating the appearance of Lotze's Logic and the many other works which followed in Germany and in England of the new school of thought. Sigwart's task, which he early set for himself, and which he pursued with unvarying consistency and signal success, was the study of the fundamental relations which obtain between logic and the methods of the exact sciences. The traditional formal logic never appealed to him as an adequate organon in dealing with the modern methods of investigation and research. He endeavored to give some rational account of a material logic which would embrace the processes of hypothesis and inductive procedure. Upon this problem he brought to bear his rare powers of psychological analysis. He sought to disclose the machinery of reason, and at the same time he illuminated this undertaking by a mind richly versed in the results of scientific achievement and thoroughly imbued with the scientific spirit of his age. He was abundantly equipped for the study of the modern methods of scientific experiment and research, for in his university career he had specialized in the fields of mathematics, astronomy and physics, and at one time he seriously contemplated the life work of a physicist. With his finely balanced and sane judgment he appreciated, however, the natural limits of the methods of the natural sciences, and he was keenly alive to the serious danger of a resulting confusion of thought, and of the misleading and often barren results when such procedure is applied indiscriminately to the sciences of the mind. He has given the world a critical logic, a grammar of science and a comprehensive methodology in this one great work; and in this suggestive contribution to progressive thought, he has laid both science and philosophy under a debt of lasting obligation.

JOHN GRIER HIBBEN.

PRINCETON UNIVERSITY.

Hegels Ästhetik im Verhältnis zu Schiller. Von A. LEWKOWITZ. Leipzig, Verlag der Dürr'schen Buchhandlung, 1910.—pp. 77.

The name of this book is somewhat misleading. The titles and length of the seven chapters, Introduction (3 pp.), The Notion and Method of Criticism

(11 pp.), The Æsthetics of Kant (6 pp.), The Æsthetics of Schiller (5 pp.), The Relation of Schiller to Absolute Idealism (6 pp.), The Æsthetics of Hegel (36 pp.), Conclusion (3 pp.), themselves suggest a treatment both sketchy and merely descriptive in character. Indeed, if one looks for any penetrating, comparative study of the æsthetical views of Schiller and Hegel he will be disappointed, though the summaries indicate a sympathetic assimilation of these views. Both Schiller and Hegel, according to the author, find in the notion of organic unity an explanatory principle of the first order. But while this principle is applied only to the sphere of personality by Schiller, it is extended to reality as a whole by Hegel. What is for Schiller a mere æstheticoethical ideal becomes for Hegel an ontological principle contemporary in its operation and universal in its scope. The same point is discussed by the present writer in a recent paper (Journal of English and Germanic Philology, Vol. IX, 1).

EMIL CARL WILM.

HARVARD UNIVERSITY.

The following books also have been received:

The Significance of Existence. By I. HARRIS. London, New York, Bombay, and Calcutta, Longmans, Green, and Co., 1911.—pp. 324.

Kant's Critique of Æsthetic Judgment. By James Creed Meredith. Oxford, The Clarendon Press, 1911.—pp. clxx, 333.

The Mind of Primitive Man. By Franz Boas. New York, The Macmillan Company, 1911.—pp. x, 294. \$1.50.

Life, Love and Light. By Z. London, Macmillan and Co., 1911.—pp. viii, 177. \$1.10.

William James, and Other Essays on the Philosophy of Life. By Josiah Royce. New York, The Macmillan Co., 1911.—pp. xi, 301. \$1.50.

Truth and Reality. By John Elof Boodin. New York, The Macmillan Co., 1911.—pp. ix, 334.

The Superstition Called Socialism. By G. W. DE TUNZELMANN. Philadelphia, J. B. Lippincott Co., 1911.—pp. xxvi, 394. \$1.50.

God in Evolution. By Francis Howe Johnson. New York, London, Bombay, and Calcutta, Longmans, Green, and Co., 1911.—pp. xii, 354. \$1.60.

The Authority of Might and Right. By A. v. C. P. Huizinga. Boston, Sherman, French, and Co., 1911.—pp. 40. \$.50.

Laughter; An Essay on the Meaning of the Comic. By Henri Bergson. Authorized translation by Cloudesley Brereton and Fred Rothwell. New York, The Macmillan Co., 1911.—pp. vii, 200. \$1.25.

The Desire for Qualities. By STANLEY M. BLIGH. London, Edinburgh, Glasgow, New York, Toronto, and Melbourne, Oxford University Press.—pp. xii, 322.

Eugenio Rignano upon the Inheritance of Acquired Characters. Authorized English translation by Basil C. H. Harvey. Chicago, The Open Court Publishing Co., 1911.—pp. 413.

- Conduct and its Disorders. By Charles Arthur Mercier. London, Macmillan and Co., 1911.—pp. xxiii, 377. \$3.25.
- Some Types of Attention. By H. C. McComas, Jr. The Psychological Monographs, Vol. XIII, No. 3. Lancaster, Pa., and Baltimore, The Review Publishing Co.—pp. 55.
- The Treatment of Personality by Locke, Berkeley and Hume. By JAY WILLIAM HUDSON. The University of Missouri Studies, Philosophy and Education, Vol. I, No. 1. Columbia, Mo., University of Missouri, 1911.—pp. xvi, 100.
- Experiments in Educational Psychology. By DANIEL STARCH. New York, The Macmillan Co., 1911.—pp. vii, 183. \$.90.
- Scientific Mental Healing. By Addington Bruce. Boston, Little, Brown, and Company, 1911.—pp. viii, 258. \$1.50.
- Critique of Pure Kant. By CHARLES KIRKLAND WHEELER. Boston, The Arakelyan Press, 1911.—pp. 298.
- The Reason of Life. By WILLIAM PORCHER DU BOSE. New York, London, Bombay, and Calcutta, Longmans, Green, and Co., 1911.—pp. v, 274. \$1.50.
- Mental Fatigue. By MAX OFFNER. Translated by GUY MONTROSE WHIPPLE. Baltimore, Warwick and York, Inc., 1911.—pp. viii, 133. \$1.25.
- Psychology and Pedagogy of Writing. By Mary E. Thompson. Baltimore, Warwick and York, Inc., 1911.—pp. 128. \$1.25.
- John Locke and Formal Discipline. By Frederick Arthur Hodge. Lynchburg, Va., J. P. Bell Co., Inc., 1911.—pp. 31.
- The Moral Life and Moral Worth. By W. R. SORLEY. Cambridge, The University Press, 1911.—pp. vii, 147.
- Science and Religion in Contemporary Philosophy. By ÉMILE BOUTROUX. Translated by JONATHAN NIELD. New York, The Macmillan Co., 1911.—pp. xi, 400. \$2.00.
- Spiritism and Psychology. By Theodore Flournoy. Translated by Here-WARD CARRINGTON. New York and London, Harper & Brothers, 1911. —pp. ix, 353.
- The Philosophy of the Future. By S. S. Hebberd. New York, Maspeth Publishing House, 1911.—pp. 210.
- The Function of Suspense in the Catharsis. By W. D. MORIARTY. Ann Arbor, George Wahr, 1911.—pp. 61.
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- In Cambridge Backs. By MARY TAYLOR BLAUVELT. Boston, Sherman, French and Co., 1911.—pp. 186. \$1.20.
- Zur Geschichte des Terminismus. Von Alfred Kühtmann. Leipzig, Verlag von Quelle & Meyer, 1911.—pp. viii, 127. M. 4.20.
- · Perzeptionalismus und Modalismus, Eine Erkenntnistheorie von Edward John Hamilton. Übersetzt von Martin Klose. Leipzig, Verlag von Dr. Werner Klinkhardt, 1911.—pp. vi, 115.
 - Die Abhängigkeitsbeziehungen zwischen den beiden philosophischen Vermächtnis-

- schriften des Freiherrn G. W. Leibniz. Von Christian Edzard Kreipe. Leipzig, Verlag von Quelle & Meyer, 1911.—pp. 71. M. 2.25.
- Über Wahrnehmung. Von Jos. KLEM. KREIBIG. Wien, Alfred Hölder, 1911.—pp. 37.
- Schellings Metaphysik der Persönlichkeit. Von Ernst Schertel. Leipzig, Verlag von Quelle & Meyer, 1911.—pp. 85. M. 2.80.
- Die Platonische Ideen-Lehre in Ihren Motiven. Von Siegfried Marck. München, C. H. Beck'sche Verlagsbuchhandlung, 1912.—pp. viii, 180.
- Die Methode der Erkenntnis bei Descartes und Leibniz. Von Heinz Heimsoeth. Erste Hälfte: Historische Einleitung. Descartes Methode der klaren und deutlichen Erkenntnis. Gieszen, Verlag von Alfred Töpelmann, 1912.—pp. 192. M. 5.50.
- Das Erkenntnisproblem. Von Ernst Cassirer. Zweiter Band, zweite durchgesehene Auflage. Berlin, Verlag Bruno Cassirer, 1911.—pp. xv, 832.
- Theodor Lipps zu seinem sechzigsten Geburtstag gewidmet, von fürheren Schülern. Herausgegeben von Alexander Pfänder. Leipzig, Verlag von Johann Ambrosius Barth, 1911.—pp. iv, 316. M. 8.
- Études de Morale. Par F. RAUH. Paris, Félix Alcan, 1911.—pp. xxv, 505. La Destinée de L'Homme. Par C. PIAT. Deuxième édition, revue, Paris, Félix Alcan, 1912.—pp. vii, 248.
- L'Education du Caractère. Par L. Dugas. Paris, Félix Alcan, 1912.—pp. xi, 258.
- L'Analyse Universelle. Par Pierre de Coubertin. Paris, Félix Alcan.—pp. 155.
- Le Problème Religieux dans la Philosophie de L'Action. Par Th. CREMER. Paris, Félix Alcan, 1912.—pp. xiii, 112.
- Sull' Idea di una Scienza del Diritto Universale Comparato. Da GIORGIO DEL VECCHIO. Torino, Fratelli Bocca Editori, 1909.—pp. 34.
- Il Fenomeno della Guerra e L'Idea della Pace. Giorgio del Vecchio. Torino, Fratella Bocca Editori, 1911.—pp. 99.

SUMMARIES OF ARTICLES.

[Ahbreviations.—Am. J. Ps. = The American Journal of Psychology; Ar. de Ps. = Archives de Psychologie; Ar. f. G. Ph. = Archiv für Geschichte der Philosophie; Ar. f. sys. Ph. = Archiv für systematische Philosophie; Br. J. Ps. = The British Journal of Psychology; Int. J. E. = International Journal of Ethics; J. of Ph., Psy., and Sci. Meth. = The Journal of Philosophy, Psychology, and Scientific Methods; J. de Psych. = Journal de Psychologie; Psych. Bul. = Psychological Bulletin; Psych. Rev. = Psychological Review; Rev. de Mêt. = Revue de Métaphysique et de Morale; Kev. Néo-Sc. = Kevue Néo-Scolastique; Kev. I'h. = Revue Philosophique; Rev. de Ph. = Revue de Philosophie; R. d. Fil. = Rivista di Filosofia e Scienze Affini; V. f. w. Ph. = Vierteljahrsschrift für wissenschaftliche Philosophie; Z. f. Ph. u. ph. Kr. = Zeitschrift für Philosophie und philosophische Kritik; Z. f. Psych. = Zeitschrift für Psychologie und Physiologie der Sinnesorgane, I. Abtl.: Zeitschrift für Psychologie. — Other titles are self-explanatory.]

Du rapport de la philosophie aux sciences. EMILE BOUTROUX. Rev. de Mét., XIX, 4, pp. 418-435.

Up to the time of the Rennaissance, the question of this relation did not exist, as there was no autonomous science; at that time, however, science and philosophy became coördinate mental disciplines. Next, Descartes's theory of the "point of view" destroyed this relation, and science now left no place for philosophy except as a coördinate science or as the knowledge of immediate experience. When philosophy tried to be a distinct science it split up into several sciences, psychology, æsthetics, ethics. On the other hand, when philosophy tried to deal with immediate experience, it discovered that it ceased to be knowledge, for by mere unmediated intuition nothing can be known. So philosophy as the unity of human experience disappears. Now the human mind seems to be provided with two organs of knowledge; the scientific categories and the reason, so in working from science to justify philosophy, we need not predetermine the result by using solely the scientific ideal of knowledge. On the contrary, science itself requires the use of the reason as it needs a basis of assumptions for its work. Even in mathematics this is true, for here we have to assume the infinite. In life and action too, we have certain postulates which turn out to be the same as those of science; the idea of infinite possibilities of action, of changes qualitative and quantitative, of adaption, combination and duty. So it is possible to see in reason the common root of life and science, which can only be separated by an artificial distinction. Thus philosophy reinstates itself with a method, combined of dialectic and intuition, and a function of seeking the connections of life and science in three ways: (1) Analysis of scientific method, (2) the showing of the relations between reality and the fields of art, morality, and religion, (3) the study of truth and existence. This, however, leaves it difficult to state

the exact relation of philosophy and science. Each of them seeks connections, and in the development of thought these vary; philosophy, however, remains as reason realizing itself in science and life. And this connection is in harmony, not perhaps with the definite systems of particular philosophers, but with the general spirit of philosophy in its development.

F. R. PROUT.

Is there One Science of Nature? J. A. THOMSON. Hibbert Jour., X, 1, pp. 110-129.

Though an excellent instrument of research, the mechanistic hypothesis has not been able to formulate the biological facts, Organisms manifest purpose; they tend to respond effectively; they profit by experience. Not a single every-day function such as digestion, respiration, or the irritation of nerves, has as yet received a description in physico-chemical terms. When physical and chemical processes take place in the organism, the living cells make a difference which we cannot explain but have to accept as a fact. Bunge, Haldane, and Driesch show that the processes disclosed by physicochemical analysis, are means made use of by the organism, but that they do not themselves constitute life. Physical laws do not account for the specific. Organic growth differs from inorganic change in that the organism assimilates, and in that it maintains its specific structure throughout all cell-division. Physico-chemical descriptions of all the activities of all the different parts of the organism would not show the harmonious coördination of the parts nor their capacity for adjustment to changeful external conditions. Adaptation or purposiveness requires a historical explanation; it is a supra-mechanical concept. Similarly, when we pass to animal behavior and observe such facts as the organic preparation of many creatures for one particular but absolutely indispensable stimulus. Furthermore, if we take the various items in a complex process such as that of migration and reduce it hence as far as possible to physical and chemical common denominators, we do not make any clearer the interconnection of all these items into the single act of migration. We must begin with the concept of an organism, a specific individuality, an historical being, a being which contains within itself the history, not merely of its own existence, but of all its ancestors. The necessities of biological method thus prevent the possibility of there being erected a single science of nature on a physico-chemical basis.

J. R. TUTTLE.

Le Pragmatisme et le Réalisme du sens commun. L. Dauriac. Rev. Ph., XXXVI, 10, pp. 337-368.

The attitude of Pragmatism is much older than the specific doctrine by that name. It finds expression, for example, in the common-sense school, in the Scottish school, in the Empiricism represented by Thomas Reid, and in Positivism. The realism of Pragmatism is the simple affirmation of common sense that the existence of the world is immediately known through the senses. The test of amount of existence in a given object is for Pragmatism, as for

common sense, amount of resistance. That man most exists who is most to be reckoned with, and that object most exists whose presence is most an obstacle to our free movements. Resistance is also the test by which we distinguish our waking from our dream life. Because Idealism deals with a knowledge of ideas instead of with a knowledge of things in their essential nature of resisting bodies, it may be called a philosophy of dream. Thomas Reid affirmed the power of the mind to know reality, but he inconsistently clung to the notion of an underlying substance. He should have seen that the primary quality of resistance is the substance, and that the secondary qualities are modes in which resistance manifests itself. The empiricism of Pragmatism is best designated as a philosophy of experience, for it must be distinguished from the traditional empiricism as well as from the traditional rationalism. Philosophers of both of these traditional types sought to reduce the internal life to a mechanical play of simple elements, but the Pragmatist simply observes the facts of knowledge. His philosophy grows gradually according to the exigencies of action. What had been merely psychology becomes, in Pragmatism, a philosophy.

KATHERINE EVERETT.

Brief Studies in Realism. John Dewey. J. of Ph., Psy., and Sci. Meth., VII, 15, pp. 393-400; 20, pp. 546-554.

Such cases as seen light, doubled imagery, etc., suggest the problem of the many in one, i. e., the problem of the maintenance of a continuity of process throughout differences. For naïve realism, such 'perceptions' are natural events; for presentative realism, they have an inherent cognitive status, they are cases of knowledge. The latter view leaves the way open to the idealistic interpretation. But in many cases the 'real object' does not become known by perception but by a logical process, by inference; hence logical assertions are cases of knowledge, and are more valid than knowledge by perception-With relation to the inferential knowledge, perceptions as natural events occupy a unique status. (1) They are the sole ultimate data or media of inference to all natural objects and processes, and as data acquire a knowledge status. The value of knowing thus depends upon perception. (2) For practical purposes, many perceptions become through habit cases of knowledge. For this naïve realism the 'problem of knowledge' becomes: Control of the conditions of inference so as to guide it toward the better. The second paper deals with the result of making perception a case of knowing. This result is the absolute ubiquity of the knowledge relation, and the inevitableness of epistemology. Supposing the ubiquity of the relation, realism and idealism exhaust the alternatives; if the relationship is a myth both doctrines are unreal. If the knowledge relation of things to a self is the exhaustive relation, idealism and realism have a common premise. We may disregard the relation as a mere attendant circumstance of discussion, thus leaving the issue one of subject-matter. The relation of knower to known is not an intelligible question if the knowledge relation is ubiquitous, as is evidenced by the interminable controversy between the idealist and the realist. The idealistic assertion rests upon the presupposition of the ubiquity of the knowledge relation, and has force only against the epistemological realist. The whole question of the relation of knower to known is misconceived in epistemology because of an unexamined assumption, one which, when examined, makes the controversy absurd. There are relations other than the knower-known, which as matter of fact are capable of matter-of-fact inquiry. For the pragmatic realists, knowing is something that happens to things in the natural course of their career, and, in this natural continuity, things in becoming known undergo a qualitative change. The problem of the relation of existence in the way of knowing to other existences or events is a natural problem to be attacked by natural methods.

E. JORDAN.

Neovitalism. VICTOR WEIZSÄCKER. Logos, II, 1, pp. 113-124.

Vitalism is the theory that maintains that life did not arise out of the Mechanism of Nature; and that it requires a special principle of explanation. Driesch, a modern representative of the vitalists, calls that factor Entelechy, a term adopted from Aristotle. The Entelechy is not a form of energy or mechanical force. It has definite relations to material phenomena. It works in harmony with certain material laws and in apparent opposition to others. But the Entelechy is subject to law. Life can be explained either mechanically or by a special principle. If the former is impossible the existence of the latter follows, though its exact nature need not be known in order to prove vitalism. Driesch has shown the impossibility of mechanistic explanation for organic life. The incorrect use of material and ideal concepts is what caused difficulties in reference to vitalism. Organic life is a concept involving both in a single unity. The opposition between Vitalism and Mechanism may be compared with that between teleology and mechanism, with the same Kantian refutation of Mechanism. Biology looks at its phenomena from the standpoint of purpose as if biological phenomena showed the implication of an idea, but it may make use of Mechanism as one of the means of securing an understanding of the organism.

HENRY MAYER.

Le catégorie de relation. A. CHIDE. Rev. Ph., XXXVI, 9, pp. 358-377.

To institute a relation between things is the chief work of the mind. According to rationalism the mind discovers a relation between the elements offered it by experience. According to empiricism the mind is passive, and receives from outside simply the reflection of things, so that all relation is the result of coexistence, whether in us or outside of us. Relation or system (ratio) takes the forms of analysis and synthesis. Analysis, by induction and deduction, infers the existence of concepts not only in our thought but outside of it in the cosmos. Synthesis arrives at cosmic relations by an a priori construction. From Heraclitus to Hegel the genesis of categories has been metaphysical and dialectical. Relation was the initial category from which

all the others were deduced. Opposed to this, empiricism maintains that the chain of categories is not a matter of logic, that they do not constitute a system but a disparate grouping, and that they are only so many psychological facts, posited by experience. Consciousness appeared originally by necessity. In rudimentary organisms mechanical reflexes took its place. As the organism became more complex the response to excitation was less automatic. Indecision manifested itself. Problems arose. The problem engendered the thought that was to solve it. At first it was a phosphorescence vaguely illuminating the data; gradually it fitted the response to the excitation, until the response was registered in the organism, so that it finally appeared with the same surety as the reflex. The pragmatic character of the origin of thought is indisputably attested. To extend the history of this evolution, to show how gradually the categories that eventually constitute intelligence have been established, would be to make over Hegel's *Phenomenology of Mind*, but it would be from the pragmatic point of view, not from the dialectic.

ALMA R. THORNE.

De l'objet réel de métaphysique. H. DE KEYSERLING. Rev. de Mét., XIX, 4, pp. 467-479.

Up to the present time, we have not completely defined reality in an unanimous way; but we have at least cleared the ground by doing away with the confusion of being and thought shown in Plato's abstract universal, by distinguishing, as did Kant, between objective and subjective reality, and by showing that the intelligible need not be real. Now, in the examination of phenomenal reality we can find one unique entity which surpasses the limits of pure reason in three ways; and this entity is life. (1) Life has a capacity of creation; there is more in the effect than in the cause. (2) Life has an overindividual character; the bodily life is but a transition from ancestor to descendant. (3) Life goes beyond immediate experience; it forms the bond between the child, the mature man, and the dotard. Life then seems to be the true metaphysical reality, and this is, in fact, the subject of the thought of the most profound thinkers of all time. If it be objected that this identifies metaphysics with biology and that the traditional metaphysics had as its object something different, the answer is that such a metaphysics is unreal, as there is no other possible object for it; and that biology itself recognizes the transcendent nature of life but can not deal with it. This point of view may be applied to the questions of ethics and æsthetics; then the good and the beautiful become, not transcendent nor derived from experience, but true characteristics of life itself.

F. R. PROUT.

Creative Evolution and Philosophic Doubt. A. J. Balfour. Hibbert Jour., X, I, pp. 1-23.

Freedom is the very corner-stone of Bergson's system. Life is free, spontaneous, and incalculable. Matter modifies the course of the stream of life, but does not make it flow. All plant and animal life proceeds from super-

consciousness, above and beyond matter, and no life quite loses its original freedom and spontaneity. Bergson denies that life, will, or consciousness are mere functions of the material organism, holding, on the contrary, that they make use of it, releasing at will in a quasi-explosive manner the energy which the organism has obtained from the sun, directly in the case of plants, indirectly in the case of animals. Balfour holds that the manner rather than the fact of this release should have been emphasized, since the latter is not distinguishable from the mechanism of the inorganic world. In fact, Bergson does regard the element of contingency in living organisms both as a consequence and as a sign of the effort on the part of creative will to reduce mechanism to the control of freedom. Consciousness in general is the prius of all that exists, whether physical or mental. This prius is not an absolute of which time is a mere aspect, but the absolute is almost resolved into time. While time is of the essence of the primordial activity, matter is but a by-product of the evolutionary process, and space, as its limiting term, is of decidedly subordinate importance. Among the general criticisms which he raises, Balfour asks how, if creative evolution be essentially planless and contingent, can Bergson give such a confident account of the process after it has occurred. Again, on the side of the theory of knowledge, if instinct is the true guide to the apprehension of free reality, why should ants and bees, whose freedom is so limited, have such strong instincts, and why should man, the freest being, especially pursue reason, the function of which is to deal with matter and necessity. Balfour maintains that Bergson makes an unwarranted use of the conception of the super-conscious, and that he frequently brings in metaphysical hypotheses to fill up particular gaps in scientific explanations. The strongest elements in Bergson's system are held to be the rejection of naturalism with its mechanistic explanation of knowledge, and the recognition of values, such as freedom, creative will, the joy of creation, etc. But though consciousness has replaced matter and mechanism in the system, values are not carried far enough, for if consciousness, freedom, and will have no other purpose than their own self-augmentation, the haphazard character of the result is far from satisfying.

J. R. TUTTLE.

Vie végétative et vie intellectuelle. F. LE DANTEC. Rev. Ph., XXXVI, 9, pp. 225-257.

In order to define life it is necessary to find some function that is common to animals and vegetables, and to them alone. An organism in which assimilation appears may be called a living organism. A body cannot assimilate aliments from another unless the latter contains the constituent atoms of the assimilating body. If the assimilation were perfect, there would be left no trace of the nature of the aliments in the body nourished by them, but this rarely happens in nature, because of the coexistence of destructive phenomena in the *milieu*. When the activity of the assimilating body includes an assimilation of the destructive elements there is said to be a functional assimilation. The victorious organism is afterward more or less immune from the destructive

influence. This law of assimilation is verified in pathology, and is used in the production of anti-toxins. Traces of the struggle are left in the structure of the organism, and may be transmitted, if they are acquired in the same manner during several generations. Among the acquired characteristics that may be transmitted must be mentioned the instincts and the 'logic' that synthesizes everything. Vegetation also has its 'logic,' and uses it as we use ours. The idea of intelligence cannot be separated from the idea of life. The part of ancestral experience that is transmitted is the part which has been necessary to preserve life. When the young of the species are educated by their parents. some parts of ancestral experience are handed down by tradition, and acquired by imitation. Imitation may be defined as the revenge of the milieu upon the living organism, for it betrays the inability of the latter to assimilate all the necessary elements of the milieu. Imitation takes place when we hear a sound, or when our digestive system struggles with a toxin. In both cases we may say that a rhythmic activity is set up, and by means of a functional assimilation, a new structural organ is created having the properties of the exterior rhythm. The imitative organs, being gradually fixed in our heredity (as acquired characteristics), make possible the rapid education of the young. It is all a matter of functional assimilation. What we call imperfections, are the souvenirs of an absolute assimilation, and what we designate as our superior faculties, are the failures in our assimilation. That is to say, our ancestral 'logic,' the resumé of our ancestral experience, is composed of souvenirs from a partial assimilation of the milieu, and if there is any distinction here between βlos and $\zeta \omega \eta$, it lies in the more complete assimilation of the milieu by the latter.

ALMA R. THORNE.

Méthode de la science pédagogique. L. CELLÉRIER. Rev. Ph., XXXVI, 10, pp. 400-422.

The facts of education, although now mere isolated observations, are susceptible of scientific treatment. Such a treatment would generalize and systematize to the extent which the facts warrant, but would never pass over into a priori constructions. In conformity to this principle, education may be defined as the preparation of the child to realize an ideal, the content of which is determined by the particular conditions of his life. The data of education are: the pupil, who is at once a child and a future man; the educator, who is a real person and not an ideal being; and the medium in which the child must develop and to which he must be adapted. All facts which deal with the control of action by reason are subject-matter for pedagogy. These facts should fall into one of two general classes: (I) they may be centrifugal, that is, they may relate to the training of the child's mind and character for expression in a certain ideal; (2) they may be centripetal, that is, they may relate to the acquisition of elements of knowledge and reasoning. While this classification presents abstractions, it abstracts from real facts, and is therefore relevant to actual educational processes.

KATHERINE EVERETT.

Les tendances actuelles de la psychologie anglaise. G. CANTECOR. Rev. Ph., XXXVI, 10, pp. 368-400.

The present tendencies of English psychology may be gathered from the works of three representative psychologists, Messrs. Sully, Ward, and Stout. Mr. Sully's work exhibits a thorough working out of detail and penetrative analysis, but lacks fundamental theories and principles. He is not systematic. Mr. Ward is more systematic in that he tries to define the nature and limits of his science. Psychology deals, not with subjective facts, but with the real world from its own point of view. It is the most concrete of sciences in that it shows how subject and objects, by interaction, produce and constitute a real world. The process of experience is the infinite repetition of a certain cycle of mental operations; the action of the object upon the subject who then directs his attention to the object, the accentuating of certain elements in the subject's reaction by a pleasant or painful feeling, and the resulting transformation of the object. Mr. Ward's explanation of the method of organizing experience is a modification of Kant in that, for Mr. Ward, the categories are not given, but arise in response to the exigencies of concrete life. Mr. Stout discovers by analysis three elementary mental forms or reactions,-thought, feeling, and action. These, however, he finally reduces to a single, absolutely simple type, the matter of thought in the form of action. But Mr. Ward gives no adequate explanation of mental action or the order of its development. What is common doctrine to these three psychologists is, in certain respects, in agreement with, and in certain respects, a departure from, the traditional English empiricism. With tradition, they preserve the static and independent character of psychology as over against the dynamic and genetic tendencies of Spencer, and the physiological tendency of Maudsley. But on three points they break away from tradition. (1) They define mental processes as vital functions rather than as a mechanical interplay of ideas. (2) They reject psychological atomism, and present consciousness as a continuum, and interpret relations as constitutive of the nature of presentations. (3) Organization and invention of mental material are substituted for automatic combination. The general emphasis among them all is upon attention or the reaction of the subject as the essential factor in mental development. mental life is described as a true synthesis.

KATHERINE EVERETT.

Life and Consciousness. HENRI BERGSON. Hibbert Jour., X, 1, pp. 24-44. Viewed from one angle, the function of consciousness is to retain the past and anticipate the future; from another, its function is to express the amount of choice at the disposal of the organism. Consciousness is most probably present in all living matter, dormant or atrophied where its original spontaneity is lost, but becoming more intense, complex, and complete where living matter tends toward activity and movement. While inert matter is subject to rigid necessity, living beings become reservoirs of indeterminism, choice, conscious-

ness. That which unites these realms of fatality and liberty is life, which

is nothing but consciousness using matter for its purposes. This appears in two ways. On the side of movement, consciousness sets free in an explosive flash energy drawn from matter through great periods of time and directs this energy through choice. On the side of sensation, consciousness, by an effort of concentration, grasps innumerable events and enables us to control them. In the diverse lines which the evolutionary consciousness takes in its effort to subdue matter, it is only with difficulty that the creative force escapes being ensnared in automatization. Man alone can oppose every contracted habit by another habit and through this struggle achieve liberty. The creative force or vital impulse ever seeks to transcend itself and extract from itself more than is there—that is, to create. Matter does not merely oppose the struggle for freedom and higher consciousness, but helps to separate and distinguish elements that were formerly confused. It further serves to provoke effort, which, though painful, is more precious to us than the finished work in which it results. The sign of successful effort is the joy of creative activity. J. R. TUTTLE.

Die Psychologischen Grundlagen der Kantschen Erkenntnistheorie. JOSEF REINHOLD. Ar. f. sys. Ph., XVII, 2, pp. 183–242.

The first and most important presupposition of epistemology in general, and of the Kantian in particular, is the distinction between subject and object. This distinction, as Herbart has correctly shown, is of a purely psychological character; and, since epistemology rests upon this distinction, and sets itself the task of explaining subjective phenomena in their relation to external objects, it is put, necessarily, upon a psychological basis. Kant admits this in the Anthropology, but the admission stands in direct opposition to his claim that epistemology, as an a priori science, is in no way grounded in empirical-psychological cognition. The position taken in the Anthropology, however, is sustained by the characterization of the concepts 'Understanding' and 'Sensibility' in the first Critique. This in no way transcends the limits of a psychological description, and is in perfect agreement with what is said about these functions of cognition in Kant's psychological works. Moreover, the distinction between synthetic and analytic judgments, due, in turn, to the distinction between thought faculty and sense faculty, is of a psychological nature. The latter distinction, again, furnishes the basis for the concept of the a priori, which is derived from the principle of contradiction, in so far as this is the principle of analytic judgments, and which can have ascribed to it only a psychological reality. Kant also attempted to base the apodictic certainty of the synthetic judgment upon the concept of the a priori, but the attempt was no new one. It was the fundamental thought of all the idealisticdogmatic philosophical systems from Plato to Leibniz. For the latter, a priori meant innateness only, and was limited to the understanding, while Kant attempted to explain the validity of the concept for objective reality. Hence, the synthetic judgment also must be said to depend upon psychology. But, in addition to the logical use of the a priori, Kant insisted on applying

the concept to the forms of the sensibility. The transition from the former to the latter is effected by the distinction between outer and inner sense, and, since Kant took this, along with his whole doctrine of sensation, from Locke, proof for its psychological character is superfluous. The distinction, however, involved Kant, not only in psychological, but also in insoluble epistemological difficulties: (1) In what way can the ideas furnished by external objects be experienced as inner states of consciousness? (2) What is the relation of the appearance of the object in inner sense to the object as it really is? Hence, the assumption of a sensible a priori must be regarded as a psychological theory. The procedure by which this is established runs through three stages: (1) We must penetrate into the psychological nature of the cognition, the apodictic certainty of which is to be explained. (2) It must be shown that the assumption of a sensible a priori offers first a general explanation, and then, that it offers the only possible explanation. (3) It must be made clear in what way the sensible a priori can be included in the structure of the act of cognition in a psychical process. Kant asserted that the principles which underlie the transcendental deduction of the categories are universality and necessity. But the validity of the former in this respect is established only by the latter, and thus the two may be reduced to one-necessity-which turns out, upon examination, to be the expresison of a psychological law. If it be objected that this princple would not explain the number of the categories which Kant adopted, it may be replied that the principle of the possibility of the deduction of a priori concepts from the table of judgments in no way invalidates the criterion of necessity, nor rules it out as a methodological principle. United with Kant's doctrine of the judgment, it forms the broad psychological basis of that procedure which led him to establish the complete table of the categories. The psychological analysis, which thus stands at the basis of the categories as principles for epistemology, furnishes also the ground of their objectivity. Epistemology as an independent science has quite different problems from psychology, but it is no "pollution of science" to apply to the method of epistemology the fruits of psychological investigation.

MARK E. PENNEY.

Imageless Thought. James R. Angell. Psych. Rev., XVIII, 5, pp. 295-323.

Professor Angell takes the position that in the controversy over the doctrine of imageless thought the burden of proof lies on the upholders of the doctrine and that they have not as yet established their case. The following are the main points on which he finds the doctrine "open to suspicion." (1) The method of its experimental investigation is at least not wholly satisfactory in meeting the demands of ordinary experimental procedure. This is true, both as regards the problem of reflective consciousness, and that of voluntary muscular control. (2) Imageless thought seems with many observers to be a sporadic and occasional phenomenon. Its appearance is not in their cases invariably connected with any special kind of situation. (3) Unless the purely functional and logical terms be used it seems almost impossible to describe it, save in

negative terms. (4) There are many well-recognized conscious states which may obviously be readily confused with imageless thought. This suggests either that the analysis is not yet complete, or that the thing analyzed is not really a content of consciousness.

JAMES S. JOHNSTON.

The Elements of Experience and Their Integration: or Modalism. Henry J. Watt. Br. J. Ps., IV, 2, pp. 128-204.

For the progress of psychology its independence must be secured. The first step along this line must be the freeing of the province of sensation from the domination of physiology. A comprehensive science of psychophysics can be built up better by the independent development of physiology and psychology than by "their narrow companionship." Psychology in the past has been content to show "upon what conditions our complex experiences and their modifications rested," and has not attempted to "show how the elements of our experience combined to give complex experiences." As a method, introspection is insufficient to meet all cases; another method must be devised by which the properties of the elements of experience can be determined. "We must follow the example of the sister sciences of nature and converge the efforts of all pure mental science upon the problems of the constitution of experience and its fundamental laws," and it is in terms of these problems that the author gives an account of certain phases of experience. The author deals with the typical characteristics of sensation, the measurement of experience, secondary modifications of experience, feeling, and recognition. He summarizes the result of his treatment as the probability "that sensations are the only elements of experience and that all apparently different states of mind are modifications which result from the integration of these sensations in relation to some common attribute." However it is the method of his treatment rather than his results to which Mr. Watt would call attention.

James S. Johnston.

The System of Habits and the System of Ideas. ROBERT MACDOUGALL. Psych. Rev., XVIII, 5, pp. 324-335.

The two constituents of mental development, the general character of which may be described as adaptation, are systems of ideas and systems of habits. The relation of these two factors may be stated thus: "The system of habits gives to ideal activity its point of origin and its direction; the system of ideas gives to habit a telic value, and maintains its commensurability with an enlarging environment. Without habit experience would be an irrational chaos; without ideas it would have no existence."

James S. Johnston.

The Relation of the Moral Ideal to Reality. Felix Adler. Int. J. E., XXII, 1, pp. 1-18.

In an article in the *International Journal of Ethics* for July, 1910, the moral ideal is characterized by the writer as a parity of the elements of plurality and

unity. The problem now concerns the relation of this ideal to reality. 'Moral ideal' and 'rational ideal' are synonymous, comprehending an organic, inclusive totality; embracing, in idea, all that is, and possibly can be. It arises in the field of ethics, in response to ethical demands, and is directed, primarily, to the satisfaction of ethical needs, but is not, on that account, dissociated from the work and operation of the reason in other fields. The organic nature of the ideal is constituted by mutual indispensableness, or mutual sustenance of its members, in the sense of reciprocal dependence. Each member is dependent on all the others, as they on it, with a view to the completing of the totality. It is thus a spiritual idea, which originates in the rational ideal, and is found only in a perfect, infinite universe. How can this idea be squared with reality? It validates the notion of worth to be ascribed to every man. This is a very different conception from that of value. The latter is relative to the satisfaction rendered by one individual to the needs of another. The former is absolute. Hence the rule: So act as to evoke in the other the efficient idea of himself as a member of the infinite organism, and thereby corroborate in thyself the same efficient idea with respect to thyself. The distinctions of egoism and altruism are transcended, and new theories of marriage, of social reform, and of the state emerge. The purpose of these various institutions should be to enhance individual worth by developing personality as a constituent of the organic ideal. Thus, the ideal itself is reality, as furnishing the basis of organization, the conception of worth, and the motor force for the development of distinctive personality.

MARK E. PENNEY.

Jugements de valeur et jugements de réalité. E. DURKHEIM. Rev. de Mét., XIX, 4, pp. 437-453.

When we make statements that strive to express given facts or connections between given facts, we form judgments of reality; but when we attribute to things an objective character which expresses the connection of the thing with a subject, we form judgments of value. The question then is to make clear the objectivity of the latter class and the difference between the two. One attitude is that the difference is only apparent; values depend on the relation to the self-preservation of the subject. But this subject, if individual, will not sufice to explain the unity of opinion about values, the common acknowledgment of them. If the subject be stated as a mean type, the values become lower than the highest possibilities of human nature; they are mediocre. If we state society as the subject, we overturn all our ideas of what is valuable, for our highest values are the most useless for preservation. These ideas hold that the values are in the things; we may then, perhaps, overcome the difficulty by removing the value to a world beyond, which shall transcend the given experience. We have then a world of realities and a world of ideals absolutely distinct from each other; but this separation removes the possibility of any explanation of the ideal. In addition to this the ideals should be permanent and eternal, but we find in experience that they differ very greatly for different times and peoples, and this is especially true of economic values which, in addition, lose all their life if taken from the field of experience. Now if we consider ideals in their origin, we see that they seem to arise as a social product in times of great social feeling and unity. May we not then say that values have their origin in the social whole at times when its possibilities surpass those of any individual member of society? At such times, ideals arise as facts in the immediately given and the judgment of value has as its object in reality, these ideals. So the faculty of judgment is not divided into two different functions, for the judgment of reality acts upon concepts and these may be looked upon as forms of the ideal; so ultimately all judgments become value judgments. Thus we can see that sociology, instead of being an unidealistic science, has as its subject, ideals themselves, and can be of great service in the solution of philosophical problems.

F. R. Prout.

Pragmatisme et esthétique. J. Pérès. Rev. Ph., XXXVI, 9, pp. 278-284.

The doctrines of pragmatism have as their conception of truth a lived truth. Experience, in the pragmatic sense, is a lived experience, and would require, outside of the fusion of the 'ego' and the 'non-ego,' a continuity from the standpoint of duration, in which the distinct states of consciousness would constitute rather a reflection upon thought than thought itself. Such a doctrine is in perfect harmony with the tendencies of art. Literary art is most in harmony with pragmatic psychology. Psychology is, in effect, the truth in literature as color is in painting. The true theme of the novel is not so much an arrangement of pathetic incidents, nor even a portrayal of society, as it is life itself. With artistic romancers the written work is only a mosaic of states of mind. This is less true of the plastic arts, and is more true of former painters than of modern ones.

ALMA R. THORNE.

Der Begriff und die Tragödie der Kultur. GEORG SIMMEL. Logos, II, 1, pp. 1-25.

Man, unlike other creatures, is not a mere objective plaything of nature. He also has a subjective, inquiring, active and reacting side; and in this is involved the endless process of the great dualism of subject and object. Within consciousness itself man finds his second problem. Consciousness presents to him fixed creations of the mind, in the form of institutions, custom, science, religion, etc., whose relatively permanent objectivity opposes itself to the changing and developing subjective mind. This opposition is the cause of countless tragedies. The concept of culture is to be found within this dualism having a real existence, but difficult of definition. In the rough, the concept of culture may be defined as "the way of the soul to itself," or more clearly, as "the way of the soul through a many-sided development to a developed unity within itself." Culture involves the utilization of the objective creations of the mind. There is a constant antagonism between the creating process of the subjective mind and its objective creations. Indeed, it often seems as though the creating mind passes away after giving birth to its ob-

jective products. The cultural process is a double one. On the one hand, it consists in objectifying the subjective soul, *i. e.*, in giving it expression in art, literature, etc., and on the other hand, in subjectivizing objective phenomena, *i. e.*, in humanizing nature, institutions, etc. A beautiful sunset has no cultural value unless interpreted through human eyes. There are no cultural values as values in themselves; they are at the same time both subjective and objective. Empty refinements of an over-ripe civilization are not culture. On the other hand, over-specialization lacks cultural value for it does not minister to a complete personality. The various elements of life unite in the cultural ideal and are of value only in so far as they are motivated by this ideal. The great tragedy of culture is that in the process of developing to its ideal, the soul is constantly carried away on a tangent to its path of development by the weight of its own objective creations.

HENRY MAYER.

NOTES.

Geh. Regierungsrat Dr. Wilhelm Dilthey, professor of philosophy at the University of Berlin, died on the third of October in the 78th year of his age. He was born in 1833 at Biebrich on the Rhine, and studied theology, history, and philosophy in Heidelberg and Berlin. He habilitated as dozent at Berlin, and afterwards held chairs successively in the universities of Basel, Kiel, and Breslau. In 1882 he was called as professor of philosophy to Berlin and was soon made a member of the Academy of Sciences, in whose affairs he always took an active interest. Among his more important writings are: Leben Schliermachers I, 1870; Einleitung in die Geisteswissenschaften, 1883; Dichterische Einbildungskraft und Wahnsinn, 1886; Das Schaffen des Dichters, 1887; Beiträge zur Lösung der Frage vom Ursprung des Glaubens an die Realität der Aussenwelt, 1890; Ideen uber eine beschreibende und zergliedernde Psychologie, 1894. Dilthey was also one of the leaders in the work of collecting and editing the writings of Kant for the new edition which was published under the auspices of the Berlin Academy of Sciences.

Professor Bernard Bosanquet has just delivered his first course of Gifford Lectures in the University of Edinburgh, under the title of "The Principles of Individuality and Value." Another course of lectures will be delivered shortly and the whole is to appear as a book entitled "Individuality and Destiny."

The eleventh annual meeting of the American Philosophical Association was held at Harvard University Dec. 27–29, Professor Woodbridge in the chair as president. An interesting discussion in which the leaders were Professors Thilly, Lovejoy, Miller, and Montague was held on the subject "The Relation of Consciousness, Organ, and Object in Sense Perception." A full report of the meeting will be published in our next issue.

Professor Warner Fite, of the University of Indiana, will lecture at Harvard during the second term of the present year. During his absence his work at Indiana University will be in charge of Dr. William K. Wright, of the University of Wisconsin.

We give below a list of the articles, etc., in the current philosophical periodicals:

THE HIBBERT JOURNAL, X, 1: Arthur J. Balfour, Creative Evolution and Philosophic Doubt; Henri Bergson, Life and Consciousness; Alfred Loisy, The Christian Mystery; Adolf Harnack, Greek and Christian Piety at the End of the Third Century; William Sanday, The Apocalyptic Element in the Gospels; J. Arthur Thomson, Is There One Science of Nature?; L. P. Jacks, A Psychologist Among the Saints; Henry Jones, The Corruption of the Citizenship of the Working Man; W. C. D. and Catherine D. Whetham, Decadence

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and Civilization; J. Estlin Carpenter, The Sikh Religion; James Bisset Pratt, The Religious Philosophy of William James; P. T. Forsyth, Revelation and the Bible; Frank Thilly, The Characteristics of the Present Age; Bishop of London, Social Service, No. 1. Another Appeal to English Gentlemen.

THE BRITISH JOURNAL OF PSYCHOLOGY, IV, 2: Henry J. Watt, The Elements of Experience and Their Integration: or Modalism; W. Mulder, The Fusion of Sensations of Rotation (One Figure); Francis Aveling, The Relation of Thought-process and Percept in Perception; Charles S. Myers, A Case of Synæsthesia.

THE PSYCHOLOGICAL REVIEW, XVIII, 5: James R. Angell, Imageless Thought; Robert MacDougall, The System of Habits and the System of Ideas; From the University of California Psychological Laboratory: Warner Brown, Temporal and Accentual Rhythm, XVI; M. I. Stockton, Some Preferences of Boys and Girls as Shown in their Choice of Words, XV.

XVIII, 6: Grace Helen Kent, Experiments on Habit Formation in Dementia Præcox; H. S. Langfeld, Suppression with Negative Instruction; E. C. Rowe, The Hygiene of Sleep.

MIND, No. 80: E. H. Strange, Mr. Bradley's Doctrine of Knowledge; J. S. Mackenzie, Mind and Body; R. Petrie, Aristophanes and Socrates; Augusta Klein, Negation considered as a Statement of Difference in Identity; Discussions: G. W. Cunningham, Self-Consciousness and Consciousness of Self; J. E. Russell, Truth as Value and the Value of Truth; T. B. Muller, A Point in Formal Logic; Critical Notices; New Books; Philosophical Periodicals; Note.

THE MONIST, XXI, 4: Philip E. B. Jourdain, The Philosophy of Mr. B*rtr*nd R*ss*ll; Richard Garbe, Contributions of Buddhism to Christianity; Philip E. B. Jourdain, Some Modern Advances in Logic; Ephraim M. Epstein, The Construction of the Tabernacle; Criticism and Discussions: Herbert S. Langfeld, Titchener's System of Psychology; Paul Carus, The New Logic and the New Mathematics; Paul Carus, Dr. Epstein on the Tabernacle; Book Reviews and Notes.

THE PSYCHOLOGICAL BULLETIN, VIII, 9: General Reviews and Summaries; Special Reviews; Discussion: R. M. Ogden, The Unconscious Bias of Laboratories; Books Received; Notes and News; Editorial Note.

VIII, 10: General Reviews and Summaries; Special Reviews; Books Received; Notes and News.

VIII, 11: General Reviews and Summaries; Special Reviews; Discussion: *Knight Dunlap*, Dr. Yerkes' View of Psychical Causation; A Communication; Books Received; Notes and News.

THE JOURNAL OF PHILOSOPHY, PSYCHOLOGY, AND SCIENTIFIC METHODS, VIII, 19: H. T. Costello, External Relations and the "Argument from Missouri"; Discussion: Evander Bradley McGilvary, Experience as Pure and Consciousness as Meaning; Reviews and Abstracts of Literature; Journals and New Books; Notes and News.

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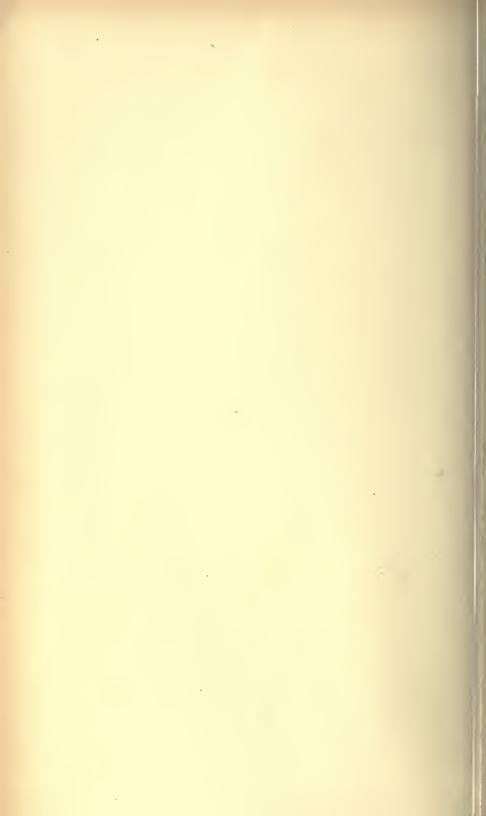
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PHILOSOPHICAL REVIEW.

Succession

EVOLUTION.1

THE subject to which I ask your attention requires a preliminary statement if it is not to appear at the outset too vast and vague. My purpose is to express the opinion that evolution is history; that antecedents and causes should consequently be historically construed; that evolution is pluralistic, implying many histories, but not a single history of the world; that man writes the history only of his own world; that, however, since he discovers his world to be a history, he may have a science of history or evolution which is universal, and that this science indicates that evolution is progressive. Because I am expressing an opinion and not trying to prove a thesis I have indulged in many assertions.

I take it that the term 'evolution' in so far as it indicates any natural fact, indicates initially no more than the fact that things have a past, that they have a history. It would indeed be but another name for history if we were willing to extend our conception of history to denote all discovered and discoverable changes. As indicating a rational enterprise the term appears to express the attempt to recover the history of things by generalizing for the past the conditions, types, factors, and rates of change which are discoverable. If this is so, it would seem clear that the only point where the doctrine of evolution in general is questionable, is in its method of procedure. If we are not justified in extending to the past the discoverable principles of change, the attempt to do so might be interesting, but it would deserve no special commendation. It is, however, unprofitable

¹ Delivered as the presidential address before the Eleventh Annual Meeting of the American Philosophical Association at Harvard University, December 28, 1911.

to question this method of evolution, because it is the only method which can be checked and controlled. No alternative method is open to us except the arbitrary method of making what suppositions we choose about the past, and in that case all suppositions can be made equally good because none of them can be tested. The evolutionary attitude needs, therefore, neither apology nor justification. It may need advocacy because it is easier and often more congenial to make mythologies than to write history.

The acceptance of the evolutionary point of view is, however, no guarantee that mythology has been abandoned. Speculations about energy and force, about the origins of variation, about heredity, about nature and nurture, as well as such controversies as often mark the engagements between vitalists and the supporters of mechanism, or between the adherents of epigenesis and of preformation, seem frequently to indicate that mythology still finds a place among the general doctrines of evolution. I do not mean to imply that these speculations and controversies point to no problems in need of solution. I mean only that they too frequently display a tendency to turn the characteristic operations of things into causes why things so operate; to assign a superior efficiency to the past than to the present; to make evolution a substitute for a creator; and, in general, to suppose that the causes rather than the history of the world have been discovered.

When, for instance, we ask, Why does a hen sit on eggs? we are often forbidden to give the natural and obvious answers, Because she wants to, or, In order that chicks may be hatched; and are urged rather to give the mythological answers, Because she has an instinct to sit, or, Because her ancestors sat. Now the first of these latter answers is the attempt to turn the characteristic behavior of the hen into a cause why she so behaves, and the second is the attempt to regard her past as more efficient than her present. One might as rationally say that a clock goes because it has an instinct to go or because its antecedents went. It seems, however, that when we ask such a question as has been proposed about the hen, we desire an answer which will make

clear to us the result to be attained by her behavior, whether that result be a bodily satisfaction or future offspring, or we desire one which will disclose what it is that induces the hen so to behave. We do not desire, or rationally ought not to desire, an answer which will disclose why the hen sits irrespective of the end to be attained by her behavior or of the stimulus which excites her. In other words, unless we are mythologists, we do not expect to be told why in a world like ours it is characteristic of hens to sit. To be sure, we do want to discover what that characteristic behavior is, what stimulates it, what the hen's structure is, how that structure has come about, and what results from her activity, and there our rational interest stops. To suppose that the answers to any one or to all of these questions will give us an explanation of the fact or possibility of sitting hens in a world like ours is totally to misconceive their import. There are hens, they do sit, they thus perpetuate their kind, and they have had a history which is measurably ascertainable; but hens must be given first, if there is to be any investigation of them or any discovery of their evolution. If there were no hens, or never had been any, all our science and all our philosophy would be irrelevant to their consideration. Evolution, that is, discloses and isthe history of what exists or what has existed, but it is always with the existent that it begins. To suppose, therefore, that any state of the universe, however remote or distant, has a metaphysical superiority to any other, or a greater right to ontological eulogy, or is possessed of a more potent efficiency, is, to my mind, radically irrational.

The opposite opinion is not unfamiliar. Although it may not be as widely held as formerly, it is still current, clouding our intelligence, depressing our energies, and weakening our responsibilities. We have been frequently told that if we knew completely the state of the cosmos before hens existed, we should then be able to set the date for the first hen that would eventually appear, we should be able to tell, that is, whether there would ever be such things as hens in this world of ours because we should have become cognizant of all the causes of its evolution. Perhaps such a statement cannot be refuted. Every attempted refuta-

tion may be met with the rejoinder that our knowledge is as yet too incomplete to make the prediction successful. It may be asked, Do you really mean to affirm that if we knew the cosmos through and through we should not then know its possibilities and its eventualities? Does the fact that we must wait for events to happen before we can discover their causes give us the slightest warrant for supposing that those causes, even before we discovered their effects, were not competent to produce them, would not, in fact, produce them? And if so, is it not simply nonsense to affirm that we could not have predicted what those causes would produce if we had really known what those causes were? Is not such an affirmation one more instance of the stupid failure to distinguish between the ratio cognoscendi of things and their ratio essendi or fiendi?

Ouestions like these may impose upon the mind, but they do not clarify it. To be sure, if we knew the full competency of things and how and when that competency would be exercised, there would be nothing left to discover. This we do not know and we may confidently say that we never shall know it. That we shall not does not indicate a defect in our faculties, some limitation which we vainly try to leap over. It indicates rather that our knowing is itself an event, one of nature's happenings, an item of history. The ratio fiendi and the ratio cognoscendi look strange, do they not, when applied to the fact of knowledge itself; if they force us to affirm that if we knew—let us say, the primeval condition of all things—we should then be in a position to state what our knowledge of it would eventually be and whether that knowledge would be correct or not. We owe idealism a profound debt for that piece of dialectic, even if we charge idealism with the failure to profit by it. It, too, imposes upon the mind even if it does not clarify it. What intelligible meaning can be attached to the statement that if I knew the antecedents of my present knowledge, I should then be able to tell from those antecedents what my present knowledge is? The antecedents of my present knowledge are not my knowledge, and the antecedents of the hen are not the hen. And I have not been able to discover any wisdom or profit in putting my present knowledge

into its antecedents in order to explain how that knowledge originated, nor in putting the hen into her antecedents in order to explain her.

Our researches acquaint us with the natural history of the things into which we inquire and they acquaint us with nothing else. Knowing their natural history we may be led to entertain certain expectations about their future, but it is important to remember the conditions of such expectations. Now, I take it, that while the fact that we expect anything has its antecedents, these antecedents are not themselves expectations or anything like expectations. Because the sun has risen so invariably, I may expect it to continue invariably to rise; but its performance does not account for the fact that I expect it to do anything at all. That performance may lead me to expect a rising and not a setting sun, but it does not lead me to expect that the sun will do anything. In other words what our expectations about things concretely are may be due entirely to the things, but it is not/ due to them that we meet them in the attitude of expectation. Expectant beings must first exist before anything is expected of things. To be sure, expectant beings have a history, but what can it possibly mean to affirm that any knowledge of that history short of their existence would lead us who are expectant beings to expect that such beings would one day exist? I am not trying to say that the origin of consciousness is one of the riddles of the universe. I doubt that it is. To suppose that its origin may one day be discovered appears to me to be neither visionary nor absurd. I am trying to say, however, that the origin of consciousness, its evolution, is a matter of history only. We expect things to do what they are in the habit of doing. Because plants grow from seeds, we expect them so to grow. If they dropped from the clouds like rain, we should expect that of them. If they behaved in a way to baffle all expectation, we should expect them so to behave. If, therefore, we discovered that matter produced thought, we should expect it to produce thought. This does not mean, however, that if we knew the constitution of matter, we should expect matter to produce thought. It means rather that we can not construe matter without taking

thought as an item in its history. To say, therefore, that if we completely knew the past condition of all things we should then see that the present is its fulfillment, can mean only that we are construing the present historically. It cannot mean that we have discovered a condition of affairs which, irrespective of the present, would, by a kind of unfolding, produce the present, because irrespective of the present that condition is not only not discoverable, but it does not even exist. Antecedents are only antecedents and evolution is history.

But antecedents are antecedents. That means, naturally, that they cannot be isolated or defined out of relation to the historical movement in which they occur. The past is undoubtedly dead. It is unalterable because it is dead and exists no longer. But this does not allow us to construe the past independent of the continuing processes of things. When we say that the past cannot be changed, all we can profitably mean is that prior to a given date the events that have occurred are not altered by the events that occur subsequently. We cannot mean that our appreciation of what the past was is fixed or that the significance and efficacy of the past as an item in the world's history is completed. In other words, it is only what the past was that is unalterable. What it is, undergoes constant change. What it was, is impotent. What it is, has efficacy. Or, to speak epigramatically, there always was a past, but never is one. This means, I take it, that antecedents are definable only in view of the history to which they belong and as items in that history; they are, neither from the point of view of our knowledge of them nor from the point of view of their own efficacy, fixed and finished things. Even the principle of inertia must be expressed in terms of a continuance in a state if it is to be comprehensible and a principle of things. It should, therefore, be apparent that what the antecedents of anything are, not what they were, is never fully ascertainable nor fully existent except as we arbitrarily fix a date and refuse to pass beyond it. A world which has had a past is a world which will have a future. Undoubtedly its past was what it was and its future will be what it will be, but in so far as it is an evolution which has continuously a past and

a future, its past is alterable and its future therefore indeterminate. Evolution as history is thus not simply the record of accomplished events with all their principles and laws; it is rather, let us say, history as an object, a continuing process whose past is recoverable and whose future is conjecturable, but which, as a process, cannot be construed as the result or eventuation of anything.

In a certain sense, then, there is no evolution. If we conceive of the simple unfolding of potentialities once resident and determined in some primitive condition, there is no evolution. As a substitute for a creator, there is no evolution. As a set of laws or principles which, somehow controlling the stuff of things, causes that stuff to produce a world, there is no evolution. As the growth of a cosmic seed, there is no evolution. Nature defies and gives the lie to all these conceptions. She proclaims again and again that everything that happens has had a history, but that nothing happens because it has had a history. Clocks do not go because they have had a history. Hens do not sit because they have had a history. Matter does not perform its manifold functions because it has had a history. To say that the world is what it is because it has had a history is to say something meaningless. It is meaningless for two reasons: first, because the history of a thing is never the cause of it, and secondly, because the world has no history at all.

These statements may be more irritating than convincing. I am sensible that they appear to obscure an issue. It may be readily admitted that the history of anything is never its cause, since so to affirm is to confuse facts with their record. But the thing has causes and its history reveals what those causes are. The history of a house may not be the cause of a house, but its history does reveal the men who built it. Assuredly; but this is to construe causation as well as evolution historically. It is evident that builders do not build houses in a world where houses are not built. Causes do not operate where they do not produce effects. In other words, no effect points to its causes as isolated antecedents of that effect. If there is no effect without a cause, there is also no cause without an effect. Only existent things

have causes. To impute causation, therefore, to anything irrespective of its effect, is to impute an entirely meaningless conception. We may say, that is, that whatever conception of causation we entertain, it should be historically construed to be made intelligible. To make evolution the cause of anything is, therefore, meaningless, for evolution as a cause can not be historically construed. It has no effects over against which it can be indicated as a cause. To say that it causes the history of things is unintelligible, for that is to say that it causes itself. So, I repeat, causes are never causes absolutely and in isolation. They are causes only in an historical series. Their nature and efficacy are never given except in their eventualities, and when these occur, the causes as causes have ceased to be. A spark may cause an explosion, and there may be no explosion without a spark; but where there are no explosions, sparks, even if they exist, are not their causes.

And the world has no history. I appeal to the philosopher of Königsberg. The world is a collective idea which we can frame because we can group things and because things are grouped in nature. To extend the act of grouping, however, until we have the idea of a group from which no fact remains uncollected, and then to suppose that there corresponds to this idea an object of which we may ask, Has it a beginning in time, an extent in space, a history or an evolution? is to enter the realm of illusion. No: the world as a useful concept must be used distributively. It must mean, Take any item you like, but not, Take all items together. It must be regulative and not constitutive. Evolution as history is always the history of items. Yet no limit can be set to the extent of any such history. A flower in a crannied wall may carry other than, a poet far, leading to the construction of every discoverable event as significant in the light of its career. But no one of such histories, however comprehensive, may claim cosmic preëminence over any other. The world is no more matter's world than it is the spirit's, and no less; no more man's world than the microbe's, and no less. Individuals may compete for their lives, but cosmic histories are free from rivalry. No one of them exists as a history to the

prejudice of any other. The history of the stars is not the history of man. So to conceive it is to make the history of man contributory and incidental to astronomy, and this man as the writer of histories cannot succeed in doing. He can write other histories only as he is willing to become an observer of the world but not a factor in it. He can regard himself as something incidental to another's history only through a kind of forgetfulness of his personality, or by substituting for it a kind of dummy which behaves as he would, but without his reasons.

Xenophanes, we know, sought to disparage man by saying that if lions had hands and could paint they would paint their gods as lions; and this truthful remark has many times since been taken in that same sense of disparagement. Maeterlinck, on the other hand, has represented a dog as calling a boy his god. He thereby made the dog as stupid an animal as the men who call dogs their gods. We may say, consequently, that Xenophanes had the finer poetic feeling, but he appears to have missed altogether the profundity of his remark. Man can construe the world eventually only as his own history. His doing so is saved from egotism, however, so long as he knows what he is doing and why he does it. That knowledge is inconvenient at times. It often disturbs man's mind with thoughts of the rights of other histories. Consequently, he may often attempt to quell this disturbance by trying to write a history of the world which will be totally impersonal and inhuman. Then he becomes a materialist. Or he may convert the fact that he can write only a human history into an epistemology. Then he becomes an idealist. Or he may call upon evolution to explain it all. he becomes superstitious. Yet through all his blundering he has sounded the depths of his philosophy. He has discovered the world because he has discovered his history. That means that he has discovered the world to be a history and that any discovery of the world would be the discovery of a history.

Evolution is, therefore, pluralistic, and man tries to write many histories even if eventually he succeeds in writing only his own; but no history of evolution can be written. Every attempt to write one always gives us something other than a history and something other than an evolution. It converts the world into a product or into an effect of causes, and must at last confess its inability to find the producer of that product or the causes of that effect. Its failure does not indicate a lack of intellectual power, but a misdirection of intellectual effort. It proves that evolution is pluralistic, not that monism is necessary. Yet the attempt to write many histories with a clear consciousness that histories are the theme, may disclose the fact that all histories have common categories. That is the discovery of metaphysics. In other words, the attempt to tell what history is, or what evolution is, may not be inept or futile. That is, since we discover the world to be an evolution, it ought not to be impossible for us to analyze that discovery and state what it is to be an evolution. Whatever success we may attain in such an enterprise, it is not necessarily vitiated by any human limitation. It is universal. Only, I repeat, it is not universal history. It is not the portrayal of an evolution. It is the science of evolution. So while there can be no history of evolution, a science of it may be attempted and projected. In no other sense may we venture to claim that evolution is monistic. As a history it is many; as a science it is one.

It should be apparent that the science of evolution, just because it is not a history, will not deal in origins. It will disclose no genesis of the world and discover no causes of its existence. It will disclose, however, or we should expect it to disclose, principles, laws, types, groupings, connections, characteristic efficiencies. Briefly, we should expect it to disclose the factors and method of evolution, but nothing more. We should expect, too, that such a science would not only be universal, but might also be restricted to as narrow a field as we might choose. is, we may have not only a science of evolution, but also a science of any particular evolution. If it is legitimate to inquire into the nature of history, it is also legitimate to inquire into the nature of matter, or of life, or of consciousness, or of anything that can be denoted as subject-matter for analysis and study. Only we should remember that its science discloses its nature and not its history; and that its evolution discloses its history, the record of its existence, and not its nature.

The contrast thus stated is stated, perhaps, with too great simplicity. The science of any history is a science of a history, that is, it is a science of natures which may themselves have a history. This fact cannot be disregarded. It is evident, therefore, that when we say that the evolution of anything discloses its history, but not its nature, we should not prejudge the possibility that there may be things the nature of which is only historically definable, the nature of which is, we may say, just their concrete history. A grain of wheat in its chemical and physical composition is a thing quite different from what we call a seed, the grain of wheat which implies what only its history can make apparent at the time of harvest. It is conceivably possible that we might know the chemical and physical composition of all seeds without any nook or corner left unexplored; that we might then be able to detect differences in their composition which would allow us to classify them with accuracy, so that one kind of seed could be distinguished without error from any other kind; and yet that we might find nothing which would indicate what the nature of those seeds is as displayed in their growth. It is considerations like this that give to vitalistic theories their recurring interest. Yet we should emphasize two things: first, that under the supposition we have made, vitalism is scientifically unnecessary; and, secondly, that vitalism would be scientifically necessary only if after fully ascertaining the composition of all seeds we were unable to distinguish between them or to classify them as of different kinds. It may well be that every living thing in its germ has a mechanical constitution as specifically and individually distinct as the specific form and individuality which its maturity reveals. The evidence points that way, and as long as it so points, vitalistic theories are naturally viewed with suspicion. No; the supposition I have ventured to make, has not been made in order that we may entertain once more a theory which retreats defeated again and again after every fresh appearance, but to emphasize the fact that the nature of a thing may be progressive. Time may enter into its substance. Our problem then becomes to discover and trace that progress, not to look for causes of it. Why should we

look for them? The argument against so doing is old. If progress has causes we must invoke time to delay their operation, to keep the world from being finished at a single stroke. But then what causes can we invoke for time's delay? It avails us not. We shall end by affirming that causes are progressive, and then, perhaps, delude ourselves into supposing that we have discovered the cause of progress itself. That some natures are progressive seems certain; that all are seems doubtful. And that, I suspect, is why we find the distinction between the organic and the inorganic so natural and so helpful. I venture to suggest that the triumph of mechanism would involve, not the reduction of the organic to the inorganic, but the removal of the distinction or the restatement of it in terms of a time function.

Evolution is thus discovered to be progressive. All our attempts to explain why this is so, all our appeals to energy, force, will, design, vitality, appear to be but the obscure recognition of that discovery. Or they are introduced to help out an initial misconception, the conception, namely, that the nature and efficacy of all causes are fixed and determined irrespective of the time it takes for those causes to operate. Such a conception implies to my mind a world where nothing could occur without the intervention of some new power to make it occur. But we have the best of evidence that it is not some such mysterious power which operates, but rather simply the continuing in operation of the concrete factors with which we deal.

If evolution as a natural fact is thus progressive, it is apparent that evolution as a rational enterprise, as the attempt to recover the history of things by generalizing for the past the conditions, types, factors, and rates of change which are discoverable, is itself an instance of progress. That the past is thus recoverable can be no less a natural fact and no less significant for evolution than the existence of the past itself. If it is unprofitable to construe evolution otherwise than as history, it is also unprofitable to construe it irrespective of intelligence, to suppose that the mind has had no history or that it is irrelevant to the world it contemplates. We should not say that it creates that world or serves as the ground of its character or existence. Yet we

should say that it makes that world discoverable and prospective so that in intelligent beings we find a discovered and a prospective evolution. We find the contrast between what might be and what was and is. We find the progress of history alterable in the interest of what is desired, hoped for, and imagined. We find nature submitting to be idealized and evoking the spiritual enterprises which enlarge the happiness of men.

In the light of evolution, intelligence is seen thus to have the kind of operation which does more than excuse the vagaries of intelligent beings. Their attempts to construe the world as itself a rational process and to read the mind into its substance and into its every operation; their making of mythologies even; their superstitions, their blunders, their faiths, their hopes, their ambitions; their irrationalities also; their sciences, their philosophies, their poetry, and their art; their morality and their religion; their likes and dislikes; their loves and their hates; their cults and their ceremonies: their societies and their utopias: their nationalities and their politics; their laws and their institutions; their comedies and their tragedies; their impotence and their strength; -all these things are no less ontological than nebulæ and ions. They are as much factors in evolution as anything that can be named. They have to be reckoned with as much as climate and soil. They are as dignified as electricity or gravitation. That the world should have become the home of the imagination is no less cosmically important than that it should have become the home of stellar systems. If man was destined to be an instance of physics and chemistry, he was also destined to be an instance of the "life of reason."

That intelligent beings should recover their history is no reason why they should repudiate it, even if they find many things of which to be ashamed; for they are examples of the recovery of the past with the prospect of a future. In reading their own history, they may find that they may smile at that which once they reverenced and laugh at that which once they feared. They may have to unlearn many established lessons and renounce many cherished hopes. They may have to emancipate themselves continually from their past; but note that it is from their

past that they would be emancipated and that it is freedom that they seek. It is not a new form of slavery. Into what greater slavery could they fall than into that implied by the squandering of their inheritance or by blaming their ancestors for preceding them? They will be ancestors themselves one day and others will ask what they have bequeathed. These others may not ask for Greece again or for Rome or for Christianity, but they will ask for the like of these, things which can live perennially in the imagination, even if as institutions they are past and dead. He is not freed from the past who has lost it or who regards himself simply as its product. In the one case he would have no experience to guide him and no memories to cherish. In the other he would have no enthusiasm. To be emancipated is to have recovered the past untrammeled in an enlightened pursuit of that enterprise of the mind which first begot it. It is not to renounce imagination, but to exercise it illumined and refreshed.

It would appear, therefore, an error to consider intelligence solely as the instrument of truth or the rule by which propositions are proved and disproved. It is such an instrument and such a rule, but it is more. It is an instrument for the recovery of the past in such wise that the past is doubly effective, effective in view of its own continued nature and effective in view of what intelligence conceives and imagines. To that double effectiveness knowledge is subsidiary. It is a means to an end, not an end in itself. How the whole of philosophy witnesses to that conclusion! We call ourselves by differing party names. We rush to different colors to contend under them for the truth of propositions. It is a battle for the strong, and it is good to engage in it. Let the hosts be drilled and the conflict test our strategy, for truth is worth fighting for. Yet it is worth fighting for because there is one truth which none of us can successfully assail, the truth that intelligence provides "a technique for generating a chosen future out of a given present." 1

I made my summary at the beginning. I there stated that it was my purpose to express the opinion that evolution is

¹ W. T. Bush, "The Emancipation of Intelligence," The Journal of Philosophy, Psychology, and Scientific Methods, Vol. VIII, p. 178.

history; that antecedents and causes should consequently be historically construed; that evolution is pluralistic, implying many histories but no single history of the world; that man writes the history only of his own world; that, however, since he discovers his world to be a history, he may have a science of history or evolution which is universal; and that this science indicates that evolution is progressive. Such an opinion is, I believe, liberalizing. It frees intelligence for its own progressive operation untrammeled by any suspicion of its rights. It suggests that the discovery of the world is not principally or essentially the discovery of what it has been, and not at all the discovery of causes which, irrespective of its history, have produced it, but the discovery of its implied possibilities, a discovery which is the surest foundation for the ideals of men and which allows them to look upon their present and their future as something far richer than an illustration of their past.

Frederick J. E. Woodbridge.

COLUMBIA UNIVERSITY.

THE RELATION OF CONSCIOUSNESS AND OBJECT IN SENSE-PERCEPTION.¹

IN the paper I purpose to discuss both the 'connected but discriminable questions' which our Committee on Definitions has proposed.² The answer that I shall give to the first question is the one which the Committee has formulated as follows: "That perceived objects are sometimes real and sometimes not real. and real objects are sometimes perceived and sometimes not perceived (which here signifies 'not given in any actual perception'). This means that the real object and the perceived object are at the moment of perception numerically one, and that the real object may exist at other moments apart from any perception." The view thus formulated the Committee calls 'Epistemological Monism and Realism.' The answer I shall give to the second question is that \"consciousness is a unique and not further analyzable relation of 'togetherness' which obtains among all the objects given in the momentary, individuated, and limited field of any particular perception."/Both of these answers I have defended elsewhere,3 and I will take this occasion to show more fully than I have yet done how the answer given to the second question is logically related to the answer given to the first, but in doing this I wish also to develop further both the connected views. All this can perhaps best be done by making constant reference to criticisms that have appeared in the papers mentioned in the Committee's Bibliography.

It would have saved time if I could have accepted the Committee's formulation of epistemologically monistic realism without qualification or comment; but, as I cannot do this, I shall ask the

¹An abstract of this paper was read at the Eleventh Annual Meeting of the American Philosophical Association, in Cambridge, December 27, 1911.

² The Report of the Committee has been published in the *Journal of Philosophy*, Psychology and Scientific Methods, VIII, pp. 701 ff.

⁸ In the Journal of Philosophy, Psychology, and Scientific Methods, Vol. IV, pp. 449 ff., 589 ff., 683 ff.; Vol. VI, pp. 225 ff., and Vol. VIII, pp. 511 ff.

indulgence of being allowed to qualify and comment. In the first place, I should like to soften down the dogmatism of the Committee's formulation. I should be loth to say that idealism in each and all of its forms is false. There appear to be serious flaws in all the arguments advanced for idealism, but of course a flaw in an argument is not a proof of the falsity of the conclusion. Idealism is not demonstrably false; its chief offense is that it claims to be the only tenable theory of the universe and the only theory that can give the business of morality a genuine enablement. Both claims seem to be unfounded. the other hand the difficulties of realism are not slight. advocacy of realism here is not to be attributed to any belief that realism is demonstrably true, but to the fact that many of the difficulties, alleged to be insuperable on any realistic theory, have seemed to yield in face of more searching analysis, and many others do not appear now quite so hopelessly formidable as they did at first. All this gives to realism the character of a promising working hypothesis. My position here is frankly that of an advocate who undertakes to defend a client, whose case he has taken up because, having had occasion to look into it, he has found that many counts in the indictment against the defendant are supported by infamously weak testimony. The case is now up for a hearing, and all I ask is the Scotch verdict. If the jury will render that, his friends will do the rest.

In the second place, the term 'object' has been defined by the Committee as "any complex of physical qualities, whether perceived or unperceived and whether real or unreal." I wish to ask leave of you to suggest another definition and make this the basis of interpretation for what I shall have to say. By object is meant any quality or any relation, however abstractly taken. Suppose the case under consideration to be the perception of an orange. Now what is the perceived object here? The orange color, the hemisphericity, the continuity of surface—is each one of these things a perceived object? Or is there only one perceived object constituted by the named qualities and relations together with such others as may characterize the perceived orange? Now a realist, using the term object abstractly, may

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be disposed to say that some specified perceived object is numerically one with the real object, and that some other specified perceived object is not numerically one with the real object. Such a realist must say, when both these abstractly taken perceived objects are regarded as entering into the constitution of a concrete perceived object, that this concrete perceived object is not numerically one with the concrete real object. There are numerically two objects, each with its complement of qualities and relations, although each shares with the other some identical qualities and relations. If then by perceived object be meant the concrete perceived object, and by real object be meant the concrete real object, I should have to class myself with the epistemological dualists, and yet in that class I find myself in as strange company and as ill at ease therein as a bald-headed goose in the company of bald-headed men. If however by perceived object be meant any quality or any relation that is perceived, then I can class myself in the congenial company of epistemological monists; the atoning 'consciousness of kind' is a complacency that fortifies me against the charge of common silliness. Let us now proceed to the specifications in that charge.

I. The first argument I shall consider has been urged against epistemologically monistic realism by those with whom I am in agreement as to the nature of consciousness. Mr. Miller and Mr. Drake,¹ while regarding consciousness as being a unique kind of 'togetherness' of objects, maintain that just because consciousness is exactly this kind of thing the real object can never be perceived. If they are correct on this point, then my view is logically untenable, and there is no need of trying to develop it further. "Try to suppose," says Mr. Miller, "a content X [the real object] in two minds or fields one of which contains also the private content A, and the second of which contains also the private content B. Joint presentation or empirical conjunction, that which constitutes a field, is a relation between contents. Now in field No. 1 X [the real object] stands in a relation of conjunction with A, while in field No. 2 it does not

1"The Inadequacy of 'Natural' Realism," Journal of Phil., Vol. VIII, pp. 365 ff.

stand in that relation, A being left outside. So the result is that the same content [the real object], at the same time, does and does not stand in a certain relation to another." 1 Put this way realism does seem to have made a mess of it. It ought to have followed Mr. Miller's logical recipe, and the result would have been a delicious pudding. But the best proof of a pudding is the eating of it; let us see how one of these puddings tastes. In the 'field' of the American Philosophical Association Mr. Miller stands in a relation of conjunction with me, while in that of the Western Philosophical Association he does not stand in that relation, being left outside by his own choice. So the result is that the same content at the same time does and does not stand in a certain relation to another, the relation being of course that of fellow-membership in philosophical associations. Being a contradiction in terms, the alleged fact stated above cannot be true, and our published membership-lists are egregiously illogical. Here then is a sample of Mr. Miller's logical puddings. If you like it you are welcome to my share.

2. Mr. Miller and Mr. Drake find another difficulty in the combination of epistemological monism with realism. "The desk as a light-brown total or unit," says Mr. Miller, "the desk as a complex combination of drawers and compartments to the right and left, the desk as a wilderness of woody fiber, the desk, if you will, as a host of ordered molecules or atoms, are different desks, and will in no wise go together . . . if we could bring in all sides and features of the object we should not have a desk, but a monstrous medley. . . . The incompatibility is logical. A continuous polished brown surface is not a fibrous or a granulated surface. A marshalling of what we scientifically mean by molecules is not what we familiarly mean by a desk." 2 I have found it hard to locate the logical difficulty which Mr. Miller is trying to point out to me. For a long time I took it to be in the fact that so many qualities and parts must be considered by realism as uniting to form one desk. But the more I reflect on this interpretation of Mr. Miller's polemic, the more

¹ Essays Philosophical and Psychological in Honor of William James, p. 250.

² Op. cit., pp. 256-7.

reluctant am I to believe that this is what he can have meant. It would be too inconsistent of such a logician to mean it. For he himself has said that "One looks across the room, and at a

single moment of one's looking certain portions of the wall, the rug, the table, the sofa, are conjoined. They are, as the phrase is, 'in one consciousness.'" This whole empirical complex of any moment, as I understand Mr. Miller, is a "single state or field of consciousness." 2 Now if such different things as portions of wall, room, rug, and sofa, can actually combine into a "single state of consciousness" without logical transgression, I do not see how Mr. Miller could have had the unfairness to assert that drawers and compartments to right and left, woody fiber, and, if you will, a host of molecules and atoms cannot in their own way unite to form a single desk. Is a desk bound to be more purely logical in its unity than a state of consciousness? I have not found anywhere else in Mr. Miller's writings any indication of his holding that while the material world is obliged at all hazards to obey the laws of such a rigid logic, the world of consciousness may disregard the laws of logic in its formation and yet be without sin. This is Bergson's view, but then in Bergson it is combined with a depreciation of logic as a speculative instrument. Again. Mr. Miller cannot have wished to emphasize the connotation of the word 'mean' in the sentence, "A marshalling of what we scientifically mean by molecules is not what we familiarly mean by a desk," so as to find the contradiction of realism in the confusion of two entirely different conceptions. This would be parallel to saying that what we mean by color is not what we mean by shape, and therefore the same thing cannot be both yellow and round. Surely such a refutation of realism would be too utterly trifling to have been possibly Mr. Miller's argument. . So far as I can see then, there is only one sentence in the whole passage from which the quotation about the desk is taken in which any appearance of logical inconsistency is pointed out: "A continuous polished brown surface is not a fibrous or a granu-

lated surface." And even here the brownness of the surface

^{1 &}quot;Is Consciousness 'a Type of Behavior'?" Journal of Philosophy, VIII, p. 323.

² Essays Philosophical and Psychological, p. 255.

does not seem to be in contradiction to anything, unless we are to suppose that the fibers or the grains are not brown while the surface as a whole is brown. Now it is quite true that when the grains are taken small enough, as science does take them (calling them molecules and atoms and alpha particles), realism may follow the scientists in supposing that these particles are uncolored; but then realism is not committed to such a taking. But even if it were, what logic is there to rule out the possibility that parts of real things do not have qualities that wholes do have? Such a possibility seems to be realized in many æsthetic objects, as for example in a melody or a harmony. Why may not physical wholes share the privilege that certain experienced wholes possess? If they may, then the brownness of a group of uncolored atoms is not anti-logical, unless the melodic quality of a series of notes, not one of which by itself is melodic, is antilogical. It must not be considered as an objection to this suggestion that the color of the combination varies from time to time. There is nothing in the type of realism here advocated that commits it to the maintenance of the immutability of real qualities. The physical universe may, on the realistic theory, be conceived as varying in every respect in which it can be shown with any plausibility that it does vary, and as constant in every respect in which it can be shown to be constant. The predilection of 'critical' realism for an alliance with a qualitatively unchanging physical universe must not be imputed to all realisms.)

But what about the polish and continuity of a surface which is also fibrous or granulated? Here we have many real difficulties, but the formal difficulty insisted on by Mr. Miller can be easily surmounted by any realist who admits that some perceived S. A. T. characteristics are not real. He can simply say that the perceived continuity is unreal, and exists only in consciousness, not in the material world. This is the way in which common sense, both naive and systematized, meets the difficulty. The perceived continuity of red in the blood is thus said to be only a way in which we, with our macroscopic vision, see what is really the discontinuous redness of discrete corpuscles. But I am not

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sure that this is the only way or even the best way out of the difficulty. The subject of continuity is very intricate, and needs much more analysis than has as yet been given to it. In this case it is complicated with many other questions, such as that of the nature of impenetrability, and that of qualities which certain wholes may have but parts do not. Further, any definitive conclusion cannot be reached till questions as to the atomic constitution of the material world have been settled, if they ever be settled. In short, realism as a philosophy leaves open all the questions of fact that science in any of its special branches is now busied with. It is neither compelled nor disposed to deny any fact that is made out about the material world; it simply is more generous in its ascriptions of quality and relation to the real world.

3. But suppose that for the time, pending many conclusions, a realist were to say that the perceived continuity of colored surfaces is a continuity in space and in real space, though it is a continuity that exists only in consciousness, not in the material world. He is now met by Mr. Lovejoy with a logical veto. fact, formal logic exercises very freely these days its constitutional privilege of the veto against insurgent realism; its wisdom in so doing remains to be seen. More than once in the past its indiscretions have served only to bring it into disrepute. "In hallucinations, illusions, or even mere errors, then," says Mr. Lovejov, "we have instances in which the meaning of an object's being in consciousness' can not be expressed in terms congruous with the relational theory." 1 Mr. Lovejov seems to think that if anything is denied a place in the material world, it must be taken out of real space. The major premise which he employs to reach this conclusion is that "the same portion of real space" cannot "be at once both empty and filled." 2 I shall now attempt to show that this premise contains a most insidious equivocation. "Empty" space may be space which is void of material objects or space which is void of immaterial objects or space void of both. A space may be void of material objects and filled with

¹ "Reflections of a Temporalist on the New Realism," *Journal of Philosophy*, VIII, p. 596.

² Ibid.

some immaterial object or even many of them, or vice versa; or a space may even be filled with both a material and an immaterial object. This of course sounds hopelessly scholastic to many of you, but many scholastic insights have been discarded, not because they were false in principle but because they were wrongly applied under the dominance of the scholastic conception of a soul substance. Philosophical conceptions as well as their human hosts may have their good manners corrupted by evil communications. If you will only indulge me for a few moments, meanwhile keeping your antischolastic prejudices in abeyance long enough to give me a fair hearing, I will undertake to make good this particular scholastic principle, whose reputation has been deservedly besmirched by its previous bad behavior. will try to show that the immediate facts of experience support this principle, and that logic is not against it. Let us take just one case. Look into a hand-mirror which you are holding to your face. You see an 'image' in the space behind the mirror. Reach one hand behind the mirror and you feel the wall in the place where you see the image. So far as the immediate facts of that experience go, the image is seen to be just where the wall is felt to be. Each is in space, in the same space, and in the same place in that space. But you retort that the one is in visual space and the other in tactual space. I can only reply that, if your experience is like mine under the conditions named, what you say is not a statement of immediately experienced fact, but of a certain theory which you have accepted about these facts. That theory may be true or false; but I cannot see how it can be shown to be true unless the facts as immediately experienced can be shown to be self-contradictory. Your theory forces you to recognize two spaces when there is only one space actually experienced. As a theory it has many other difficulties besides. I do not say that these difficulties cannot be successfully met; but is it not wise to decline to meet difficulties that you can more easily avoid than meet? Into these difficulties I cannot go here; they are at least as great as most of the difficulties that are found in realism, and many of the difficulties that have been found in realism have first been imported into it on the back of this theory of yours. But let us return to the immediately experienced facts, and try to see whether we may not state these facts in realistic fashion without making ourselves justly liable to the charge of logical inconsistency.

In the first place, our realism does not try to classify the facts under the traditional rubrics 'real' and 'apparent,' mutually opposed and exclusive. In the second place, it does classify them under two very different rubrics 'material' and 'immaterial,' or, if you prefer the Committee's terminology, 'real' and 'unreal.' But it must be remembered that 'real' or 'material' and 'unreal' or 'immaterial' do not have obvious significations, incapable of being misunderstood. To define the 'real' as the 'material,' and then to define the 'material' as the 'space-occupying,' leads nowhere if space-occupancy be itself ambiguous.1 In the third place, in dealing with the facts experienced or perceived when looking into the mirror, I merely try to discover what are actually the relations perceived as obtaining between image, hand, and wall, and I distinguish what I find to be different relations. Upon the basis of these distinctions I construct my realistic statement; and my holding fast to the distinctions saves me, I think, from logical inconsistency.

Now let us see what are the relations we can thus distinguish. There are several that are pertinent to our present inquiry. First, there is the relation of spatial externality that obtains between my hand and the wall. But I do not find that my hand is spatially external to the image: the image is seen to be where my hand is felt to be. If I move my head backward from the mirror the image recedes into the place where the wall is felt by my hand to be. The second relation I discover on analysis is that of spatial monopolization obtaining between hand and wall. I cannot put my hand 'into the wall,' i. e., into the place where the wall is, whereas I can put the image into either place

¹ I will suggest a definition of 'material' and 'immaterial' before I have done with this problem, and it is in accordance with this definition that I shall ask you to interpret the terms 'real' and 'unreal' in this paper, these latter terms having by the Committee been made practically synonymous with the terms 'material' and 'immaterial.'

by the proper movement of my head. Then there is the relation of movement, or, if you prefer to put it in another way, the change of relation involved in movement, the consideration of which would take us into the question of time. Then over and above all these relations there is the fact of space-occupancy or spatial position, upon the purely relational character of which I should not wish here to commit myself. It is a difficult problem which would take too much time now to discuss.

Now if spatial monopolization be a relation that obtains among certain objects perceived, and not among certain other objects perceived, although all these objects are perceived as spatially located, why not accept this as a fact, instead of doubling our space, and calling one of the resultant spaces consciousness? There is no logical incompatibility in the fact that some objects exclude some other objects from the place where they are, while they do not exclude all other objects. If we thus take the facts as they present themselves in experience, without reëditing them, we need not consider impenetrability as a universal characteristic of space-occupying objects, any more than commercial monopolization need be accepted as a universal characteristic of business corporations. The dogma of the impenetrability of all objects in space is a generalization from a part of our experiences, and is made in defiance of other experienced facts; and it is only after you have accepted this dogma, that logic forces you to go further and regard the facts that contradict your dogma as not being in real space.

Logic does not force any one to admit that, if any space is filled by something, nothing else except this occupant can be in that space at the same time. We must first define what is meant by 'filled,' before the law of contradiction can be applied to any statement in which this term occurs. For instance, when we say that we have filled a glass full of water, the law of contradiction does not tell us that we cannot put any sugar into it; for 'a glass full of water' may mean a glass that holds all the water that can be put into it under given conditions. Not logic but observation and experiment can determine whether something else than water can be put into a glass full of water.

So again a 'dinner pail' may be declared to be empty without danger that a logic that knows its business will step in and draw from this statement the conclusion that there is no air in the pail. Now in like manner the realist does not think that he is fairly treated when his admission that a space is filled with a material object is used as a premise to force upon him the conclusion that that space cannot contain or receive along with this material object some immaterial object or any number of such objects, because forsooth 'the same portion of real space cannot be at once both filled and empty.' The realist may try as hard as any one else not to contradict himself and like other persons he may fail, but he should not be held responsible for illogicalities of which he is not guilty.

Mr. Lovejoy's criticism is thus shown to be based upon a misunderstanding of the realistic position. This misunderstanding is natural enough in view of the fact that realism has not gone very much into the detail of exposition. In order to remove Mr. Lovejoy's misunderstanding, I will here attempt to give a very brief sketch of my realistic Weltanschauung, so far as it concerns the spatial relation of the material world to immaterial things,—a sketch very brief partly because I have no time for anything else here, and partly because I should not be able to fill in the sketch at more than a few points even if I had the time. The space that is given in any perception is only a portion of one space which extends out in three dimensions, presumably without limits. In this space there are some objects which are impenetrable; but this impenetrability is relative only to certain other objects in this space. So far from being a universal characteristic of space-occupying objects, impenetrability is not only a characteristic of only some space-occupying objects, but it is also a characteristic of these objects only in relation to some other spaceoccupying objects, not in relation to all other space-occupying objects. Those objects that stand in this mutual relation of impenetrability I call 'material' objects; all other objects are 'immaterial.' In thus calling an object immaterial I am merely

¹ According to this definition the problematic ether is 'immaterial,' if its nature as continuous is correctly conceived by physical science. Its continuity involves

recognizing the fact that it is not a space-monopolizer. The term material thus does not connote any distinctive quality, but only the distinctive relation of space-monopolization in which the material object stands to other material objects.¹ Though material and immaterial objects are not mutually impenetrable, they stand to each other in various other relations, such as priority, likeness, difference, causality, and so on. Among these relations obtaining between material and immaterial objects is the consciousness relation.

Let us now pause awhile to examine this relation more closely before continuing the sketch of the realistic *Weltanschauung* as far as the contents of space are concerned. Like every other relation, consciousness, when it obtains among objects, constitutes them into a unitary group or complex. Any consciousness complex is an 'experience.' Like many other relational complexes, e. g., a circle, every experience seems to have a unique center of reference.² The center of reference of an experience is a material body, or rather such parts of that body as enter into

its sharing with material objects and immaterial objects such portions of space as they occupy. I should however call it a 'physical' object, because if it does exist it shares with 'material' objects the common characteristic of not having to be a term of a consciousness relation. It may, in other words, exist 'outside of consciousness'; it succeeds very well in keeping outside all the time. To 'exist outside of consciousness' is to be in space and time and yet not to be a term of some consciousness relation.—Since writing what precedes, Mr. Morris R. Cohen has kindly brought to my attention the following passage from an article by Lord Kelvin: "It has occurred to me that, without contravening anything we know from observation of nature, we may simply deny the scholastic axiom that two portions of matter cannot jointly occupy the same space, and may assert, as an admissible hypothesis, that ether does occupy the same space as ponderable matter, and that ether is not displaced by ponderable bodies moving through space occupied by ether." Philosophical Magazine and Journal of Science, Vol. II, Sixth Series, 1907, p. 3.

¹ On this point, as on so many others, it will be seen that I am indebted to William James for the general principle I employ; see the concluding pages of his article, "Does Consciousness Exist?" Journal of Philosophy, Psychology, and Scientific Methods, Vol. I, pp. 488 f.

² Many relational complexes do not have such a single and exclusive center of reference. For instance the distance between Cambridge and Madison is not centered exclusively in either Cambridge or Madison. On the other hand the relationship which constitutes a patriarchal family or an absolute monarchy is centered in the patriarch or monarch, so that the sovereign could with much truth say L'état c'est moi.

that experience, together with such immaterial things as penetrate that body and are likewise included in that experience, e. g., organic sensations, emotions, etc. Two or more experiences may have the same body as center, as in the case of double personality, although even here it is probable that a precise identification of the center in either case would not show exact coincidence.

In every distinct type of centered relation the kind of centrality enjoyed by some one or more of its terms is unique. The respective centralities of the center of a circle, of the foci of an ellipse, of the keystone of an arch, of the patriach of a clan, of the boss of a political machine, of the hero of a story, of the Idea of the Good in Plato's world of Ideas, is each the peculiar kind of centrality which the peculiar kind of relation in question carries with it. If the relation is a spatial relation the centrality is spatial; if the relation is social, the centrality is social; if the relation is of the æsthetic type, the centrality is æsthetic. the relation is consciousness, the centrality is just that unique kind of centrality which we find belonging to those various terms of the consciousness relation, which we call collectively and synthetically the self. As consciousness is a relation between objects in space, we find in experience a spatial perspective which centers in that portion of space the body occupies.¹ As consciousness is a relation between objects in time, we find a temporal perspective centering in that portion of time which the body and its organic sensations occupy. And yet the spatial and temporal centers of experience are not merely spatial and temporal centers; they are spatial and temporal centers of a relational complex which has a distinctive character given to it by the fact that it is a conscious relational complex; and the spatial and temporal centers of experience get a coloring all their own from the fact that the relation of consciousness constitutes out of the spatial and temporal terms it organizes a unique conscious whole. In short, the center of experience is a conscious center.

¹ A more detailed consideration of the centrality of consciousness in its spatial aspect would, I think, show that objections against realism based on the fact that the same object varies in size with variation of distance from the body, and on similar facts, are not unanswerable.

Again, consciousness, like any other relation, and like any quality, exists in individualized instances, and yet each instance is an instance of a kind. Identity of kind is not incompatible with discreteness of instance. Just as the equality of 4 to 2 + 2is generically identical with the equality of 9 to 3×3 , and yet the first equality is just that particular equality which obtains between the quantities in the first equation, and the second is just that particular equality which obtains between the quantities in the second equation, so consciousness is generically one and individually many. Any consciousness is an individualized consciousness. When I say this, I mean not only an individualized consciousness, but also an individualized consciousness. The uniqueness of the consciousness relation in general enters into its individualized instances, so that we have in any individualized consciousness an individuality generically different from that of any other individualized relation. The individuality of consciousness is to be taken just as it is, and not to be washed out till it is indistinguishable from an equally washed-out individuality of some other relation.

I have dwelt on the centered character of the consciousness relation and the unique individuality of any individualized consciousness, partly because some of the advocates of the relational theory of consciousness have as yet failed to do so, and partly because the opponents of this theory have, as a result, very naturally supposed that this theory involves consequences which it does not involve, consequences which are at variance with facts. To say that consciousness is a relation is not to say much that is worth saying, unless it be followed by saying that consciousness is not a relation überhaupt, but a relation which relates in just the specific way that brings about the specific things that we call our experiences. As I understand the advocates of this theory, they have never meant to stop on the insistence that consciousness is a relation. But the novelty of their contention has brought about a situation in which attention is directed to the general relational character of consciousness and to some extent diverted from the specific differentiæ of the consciousness relation.

Let us now return to the consideration of the one space in which are located material and immaterial objects. In this space are experiences, each experience constituted by the fact that an individualized and centered consciousness relation obtains among certain of these objects, material and immaterial. An experience as a uniquely integrated whole of spatial objects has a spatial extension, or, if you prefer it, a spatial span. But this whole as a conscious whole does not monopolize the space where it is. An experience may be spatially penetrated by some other experience. Your perceptual experiences at this moment of my reading this paper may be in part in the same place in which is my perceptual experience, each experience differently centered. but all partially overlapping in space. In this respect any consciousness complex is analogous to many other complexes. For instance I may have on my shelf twenty-four books, the sixteen books to the right being bound in red, the eight to the left in green; while the eight to the right are octavos and the sixteen to the left are duodecimos. The duodecimo group in this case overlaps the red group. Neither group forfeits its integrity as a group by reason of the fact that part of the space the group occupies is also occupied by the other group. Even so our experiences spatially penetrate each other. No experience is compelled to contract its spatial bulk because some other experience is going to elbow its way into it. There is no crowding as of angels on a needle's point. Each experience has all the room it takes, and shares as much room with its fellows as they need.1

Thus we have in the one space one actual world of a vastness and complexity incomprehensible in detail; of this one world the material world is a part, every immaterial object is a part, and every experience is a part. There are worlds within worlds, each with a unity of its own, each with some interconnection

¹ But this spatial interpenetration is not to be used as a premise for a telepathic conclusion. Whether telepathy is a fact or not may or may not be open to discussion. Only facts can decide. But the logic that would deduce telepathy from the statements made in the paragraph above could also as well infer that when a number of men stroll through a thicket, the bushes intervening between their legs become parties to the human fellowship. With Walt Whitman in the party the bushes probably would, but that would be because Whitman was Whitman, not merely because the bushes happen to be there.

with some other world. The different worlds in space are different, not because each is in a space all its own, but because each is constituted after its own kind by the relations that obtain among its members; and the same members in some cases enter into the different worlds, the material world, your world, my world, and the worlds of your cat and my dog.

4. Let us now pass to the time problem, so far as it can be treated here, and before taking up the special difficulty which has so often been thrown down as a gauntlet to realism, let me make one or two general remarks on the subject of time. Just as the realist declines to accept impenetrability as a universal characteristic of space-occupying objects, so would he reject one interpretation of the old truism, ex nihilo nihil fit. So far as this principle is intended to exclude novelty it is repudiated. New things are constantly occurring, and among these new things the realist would include new qualities of material objects. Some constancies obtain, and some novelties arise; just how much of either is not to be determined a priori. The realist is willing to accept just as much permanance as can be established, and is willing even to assume more, but he is not willing to generalize to the sweeping conclusion that matter in all its qualities is unchangeable. Immaterial things likewise, such as pain, come and go; they come nowhence and go nowhither. They have their antecedents, but they are not their antecedents. And so with consciousness. It supervenes, but when it does it comes as a novelty, just as, when two objects come to resemble each other by changes they undergo, the similarity that arises is not an eternal similarity that has migrated from eternity into time to take up a temporary sojourn; it was not; it is; and it will not be. We may discover its causes, but we do not find it in its causes; we find its causes. On such a view, the appearance of an hallucinatory object "evidently is not properly describable as the momentary entrance of a real and perduring spatial thing,"1 unless it can be shown that it had existed before it entered. But its lack of perdurance is no more evidence of its not being where it is when it is perceived, than its penetrability is evidence that

¹ Lovejoy, op. cit., p. 596.

it is not there. That object was not before it was perceived, although its causes were; it ceases, it is annihilated, when it ceases to be perceived; but its effects endure, 1 changing as they go.

Let us now address ourselves to the special time problem which is so acutely felt by many when the question arises: How can we now perceive a star that for aught we know may have been extinct for a thousand years? But I should first like to ask another question: "How can I here in this part of space perceive something out yonder?" To this question Mr. Miller gives what seems to me the true answer. He says that we "recognize that the object is external to ourselves . . . but 'external to ourselves' does not mean external to our consciousness . . . but external to our bodies, primarily, and secondarily, distinct from our feelings and ideas."2 Now why not give the same kind of answer to the question how we now can know a star which existed a thousand years ago? Such an answer would run: The star is indeed prior to ourselves, but 'prior to ourselves' does not mean prior to our consciousness, but prior to our bodies, primarily, and secondarily, to our feelings and ideas.3

So far as I can see there are two obstacles to the acceptance of this answer. The one is intellectualistic, the other empirical. The intellectualistic objection holds as well against the generally accepted solution of the space problem of perception just referred to. But I will not discuss this objection, till it is pressed. The empirical objection is based on the fact that the star is not experienced as prior to my body and its feelings in the same way in which the object out there in space is experienced as external to my body. This is indeed at first sight a most serious objection, and unless it can be met realism will be in a precarious position; it will be in just as precarious a position in face of this problem as any other theory which recognizes the facts that constitute the problem. Now before I suggest a solution of this problem from a realistic point of view, let me call attention to the fact

¹ See "Huxley's Epiphenomenalism," Journal of Philosophy, Vol. VII, pp. 449 ff.

² Essays Philosophical and Psychological, p. 239.

³ This solution of the time problem differs at least in form from that which I proposed some years ago. In substance also it differs somewhat, but not so much as may appear at first sight. See *Journal of Philosophy*, Vol. IV, pp. 595 ff.

that this time difficulty is only one of a type. Two flashes may be perceived as synchronous, although we may have good reason to suppose that if we had experienced them in all their time relations we should have experienced them as successive. So in space we may not experience the two points of a compass pricking our back as spatially external to each other, although if we had experienced them in their full complement of space relations we should have experienced them as mutually external. I bring in these additional difficulties, not because I wish to make an inexplicability seem less an inexplicability because it is only one of many, but because the accumulation of similar perplexities may suggest some means of removing them all. The comparison of all such cases as these suggests that something of the complexity of the temporal and spatial relations in which real objects stand to each other has been left out when they enter into experience. Now what theory of consciousness could better be adapted to deal with this kind of difficulty than the very theory that consciousness is a way certain objects have of being together, and that when objects come together in this way some of the qualities and relations of these objects are not taken into the union constituted by consciousness? "When it comes to the making of experience, some things are taken and others are left." 1 Why should not just those relations be left out, whose function it is to distance their terms from one another in time and space? The relational view of consciousness thus seems to enable us to deal with our specific problem in a very simple way, and this way is at bottom the old naively realistic way which the 'plain man' and the scientist take when they say, "Things are really thus and so, but we do not see them as they are." So say I as a plain man, and when I become a plain philosopher I do not take it back. I merely go on to say that the reason I do not see them as they fully are is that I see them only in part, as through (not in) a glass darkly. An omission from consciousness is not an utterance of consciousness.

^{1 &}quot;Experience and its Inner Duplicity," Journal of Philosophy, Vol. VI, p. 226, As printed the text referred to reads 'reality' instead of 'experience'; but this was a slip, which leaves the sentence meaningless or irrelevant to the context.

Now if this were all that need be said on this matter, the solution proposed would be easy enough; many would say too easy to be taken seriously. But it is not all; for talk away as much as we please, experience does present us with the star as contemporary with the body. The suppressio veri is a suggestio falsi then, is it not? And again, if my consciousness spans the time from date of star to date of body, must it not itself be dated as of the millennium 911-1911? If I could not see this joke, others at any rate would be quick enough to see it. I cannot discuss these points thoroughly here in a paper much too long already. I will merely say that body and star are contemporary but not simultaneous. Contemporaneity is synchronousness within the same durational unit, whatever that unit may be, e. g., within the same day, or year, or century. Contemporary philosophy, for instance, is not confined to the present instant. Simultaneity, on the other hand, is synchronousness of events whose relative direction inter se runs as it were at right angles to the direction of the temporal current.² Contemporaneity is longitudinal synchronousness; simultaneity is transverse synchronousness. Applying this distinction to our problem I would suggest that experience gives us the star as contemporary; in our confusion resulting from lack of analysis we mistake this contemporaneity for simultaneity.

And now as to the date of consciousness. If consciousness were not a uniquely centered relation, there would be no more justification for dating a consciousness which spans a thousand years at the end of that period than at the beginning. It would

¹ I once attended lectures given by President McCosh on "Contemporary Philosophy," in which modern thought was traced down as far as Plato.

² Time has three directions, two of which lie in one dimension; the third direction in non-dimensional. Duration with its two directions is dimensional because it can be measured; and position in duration is ordered. In the direction of simultaneity there is no order, and no intervalled position giving distance that can be measured. It would be more correct to say that the third direction in time is the system of directions in the three dimensions of space, and that the order and position in the third direction of time is the spatial order and position. Most correct of all would it be to say that time and space are distinct systems of relations within a unitary and comprehensive system of relations, the spatio-temporal system. We do not have time plus space, but spaced-time-and-timed-space. The full recognition of this fact would guard us from the errors into which Bergson has fallen.

be as correct to say that a thousand years ago I saw that bothersome star, as to say that I see it now. But consciousness is centered, and being entered in what is now, it is now and not then that I perceive. Consciousness enjoys a limited transcendence of the date which is central to consciousness; but this transcendence radiates from the present,1 and is commensurate with the durational span of its objects; just as consciousness has a limited ubiquity likewise radiating from the body's position. The date-transcendence of consciousness here maintained is thus not only quantitatively different from the eternity of the Absolute Consciousness but also qualitatively different. The Absolute Consciousness hovers over the infinite stretch of duration, but like Noah's dove it finds no rest for the sole of its foot. The reason for its failure is not that there is no resting place: there are altogether too many of them. Its plight therefore is rather, to compare great things with small, and ineffable things with inaffable, that of Mr. Kipling's cat who walks by himself, all places being alike to him.

- 5. There are still two further questions that I wish to touch upon here, indicating the answers that I should be disposed to give. The first concerns color blindness. Suppose we should say, what many psychologists say, that color and brightness are different 'attributes' of sensation; why then might they not be different real qualities of real things? And why might not, under certain organic conditions, the selective relation of consciousness pick out for one of its terms the brightness and omit the greenness or the redness, just as under other organic conditions it omits them both? If consciousness were a selective relation, and if it did select brightness and omit redness, the result would be just like what we find. The theory of consciousness as a unique selective relation then seems to work pretty well here as an hypothesis. The empirical fact that consciousness is a unique way of togetherness seems thus to become a scientific principle for the solution of a most vexed problem.
- 6. The other question just referred to is that of the "consciousness of consciousness." I discussed this question some

¹ Cf. my article, "The 'Eternal Consciousness," Mind, N. S., 40 (1901), p. 496.

years ago, and then I gave what I now admit to be an erroneous statement of what I am still convinced is an actual fact. You might as well try to persuade me that I do not see red when I do see it, as persuade me that at times in perception there is nothing more than just perception of objects. In my former discussion I connected the failure to recognize this something more with non-attention to it. I did not go far enough. I should have said that the fact not attended to is the fact of attention itself. Attention is, in one of its aspects, a certain prominence that any constituent of experience has as compared with some other constituent. It is thus itself a certain unique relation, which, when it obtains among factors of experience, gives a peculiar outstandingness to some factor. When it does so obtain, this attentional prominence is not the fact that something is out of gear; it is the fact it seems to be, namely the fact that some constituent of experience has an unanalyzable eminence over its mates. Its relation to the objective gearing of things would take us into the question of the relation of consciousness to organ. Now among the things that may thus stand out prominent in an attentional way in any experience are relations. For instance I may be attentive to the similarity of objects rather than to the objects themselves. But if in an experience the relations between objects may and do have attentional prominence, why may not consciousness, which is a relation among objects, also have like attentional prominence? As a matter of fact at times in my experience it does. For instance "when I am forced to contrast the relation of the objects conjoined to each other with the opposing relation between objects not conjoined"2 in this conscious way, it may be the present conjunction of objects in my present experience which I contrast with the fact that this sort of conjunction does not now obtain between this sheet of paper and a house boat on the MaaNam. I cannot but think that it is because all of us have been looking for a thing wrongly described as a 'consciousness of consciousness' that

¹ Another characteristic of an attentive experience is the presence in such experience of kinæsthetic sensations. There are still other characteristics.

² Miller, "Is Consciousness 'a Type of Behavior'?" *Journ. of Phil.*, Vol. VIII, p. 324.

we have not found what is actually there at times in our perception. We have tried to find a consciousness which is related to itself in the same way in which objects are related to each other by consciousness. If instead of doing this we look for a way in which consciousness is related to its objects, the way of attentional prominence, similar to the way in which these objects are related to each other not by consciousness but by attention, I am sanguine enough to hope that others may find what I believe to be there. What will be found will not be the alleged fact that consciousness is simultaneously its own object, but the actual fact that simultaneous with the obtaining of the consciousness relation among objects there is an attentional relation of this consciousness to its objects, with the result that consciousness has the same distinctive superiority over its objects, which any of these objects may at some other time have over its fellows. When this fact is found, the questions asked of realists by Mr. Lovejoy¹ will answer themselves.

EVANDER BRADLEY McGILVARY.

THE UNIVERSITY OF WISCONSIN.

¹ Journal of Philosophy, Vol. VIII., pp. 594-5.

MORAL EXPERIENCE.

THICS with its twofold aim, of intellectual mastery and practical control, runs danger of being doubly incompetent. To follow differences to the vanishing point and to construe theoretically such concepts as the good, personality, freedom, virtue, etc., is one problem; to turn to practical issues and implications and to make ethics persuasive and effective in the actual shaping of conduct and character, is quite another. The relation between these two problems was conceived rather naively by moralists of the seventeenth and eighteenth centuries. Hobbes offered his ethics as a practical antidote to the impending dangers of civil war and social anarchy; Henry More defines the aim of ethics as follows: "By means of the reading and thinking over of its precepts the human mind is to be set afire with the love of virtue, that it may breathlessly pursue virtue, and at last gain virtue and with it a true, substantial happiness." We think of the relation in quite a different manner. We hold it unfair to judge the worth of an ethical system in terms of an increase in the output of moral excellence. That problem is laid aside for the educator and the social reformer. And yet we demand something that is not reducible to strictly intellectual terms of consistency or ingenuity; that something is maturity of insight, vitality of conceptions, closeness to life in the living. A threefold test must be passed: the assumptions must be sound, the principles must be worked consistently and harmoniously, and there must be that peculiar intentness and richness of treatment by means of which a problem yields all its implications. This test will be most severe whenever a subject has its roots alike in theoretical and practical interests. Not only that, but the danger of a lapse is doubled. In ethics there is double danger of either subjectivism or a metaphysical occultism that is pretentious and overreaching. Subjectivism with its irreverent denial of one absolute truth and one absolute value seems to

destroy at one blow our intellectual solace and our practical comfort. Metaphysical occultism with its shadow play and its lack of vital practical touch seems quite as profitless.

Small wonder then that in this difficulty moralists use the term 'moral experience' as the saving clause. It must be admitted that to interpret ethics as a system of certain values of experience and to inquire into the general phases and laws which underlie that experience might result in avoiding subjectivism in its worst form. Again there seems to be a distinct gain in an intellectual retrenchment whereby values are limited to the circle of experience, construed as the conditioning factors of experience and given full sway within that circle.

Still, the gain will be only apparent unless the term 'moral experience' is clearly defined and skilfully handled. It is my purpose to show that as it appears in current interpretations of ethics it is too vague or too shallow or too plastic to be of any real service, and that it at best disguises helplessness. I ought to add by way of caution that I leave untouched the more general problem of the ultimate justification of empiricism in ethics. My task is the more modest one of looking into the meaning of a single concept, moral experience, and of attempting whatever criticism and reconstruction of it the ambitious and difficult program of ethics seems to demand.

Moral experience is usually marked off from the rest of experience in one of three ways: in terms of either (I) a peculiar psychical complication or (2) peculiar biological bearings or (3) peculiar teleological connections. These three methods of interpreting moral experience we shall now briefly consider; discussing for the sake of convenient grouping the biological method before the others, although it is neither the most direct nor the most natural of the three.

The biological method, with genuine distrust of the subjective, is aimed at an objective test. The criterion of life is driven deep into the problem of moral values. It is the wedge that splits moral experience from non-moral experience. Moral experience is meant to comprise all biologically vital activities: that is, whatever has a bearing on the existence and persistence of life.

Circumscribed objectively in this fashion many of our daily actions are to be classed as non-moral; life does not seem to gain or to lose by our fingering this object rather than that, by our turning up one street rather than another. On the other hand, whenever life-consequences are present the conduct whether of mollusc or man is to be classed as moral experience. Such biologically important consequences I shall henceforth allude to as the *life projection-values* of an act. After this initial separation of the moral from the non-moral, the biological method solves the further problem of the separation of the moral from the immoral by calling whatever ministers to life good, whatever thwarts life evil. Sentimentalizing discussion of the immorality of, say, drunkenness or social vice is to be replaced by a rational discussion of their life projection-values.

The services the biological method has rendered ethics are many. It has done much for the development of anthropological ethics. Enlisting the services of the physical and natural sciences, it has put the whole question of immorality on a sounder basis. In a more subjective method the distinctions often run, like cheap colors; here they seem firmly set. The problem of defining moral experience in a satisfactory manner seems solved. But the assurance may be hasty, and the biological method may contain difficulties and implications of no slight proportions. In the first place the distinction between vital and non-vital activities demands incessant reconstruction with every step of lessening ignorance of remote effects and intricate relations. Logically carried out, this would lead to the disappearance of the whole sphere of the non-moral. Omniscience would cause its collapse. In the second place, the centralizing concept of life, if it is to stand the strain to which the constructive moralist puts it, must be built on the assumption of an inherent purposiveness of the evolutional process. In one sense purpose and inherent design are quite as characteristic of the Spencerian system of nature as they are of the Stoic. Define life as the wild, irrational seething of a will to live with no purposive side to its mass of straining forces, and there is little scope for the construction of ethical values. At best, and then only at the cost

of a commendable inconsistency, the good may be defined in terms of a rational negation of this irrational will to live or in terms of 'playing the game.' Life, either the richest or poorest of concepts, must for a biological system of ethics be the richest, else there is not a sufficient intake in value. But such richness comes only with a well or ill applied notion of purposiveness and the recognition of purposes as factors in evolution. seems necessary to extend the theory of natural selection to the more complex and more subjective ranges of experience and to ideals that have little or nothing to do with mere living and continuing to live. The earlier evolutionists—Huxley, notably saw the difficulties of such an extension, and refused to make it; recent writers have sought to make headway by taking simple, concise terms such as natural selection, adjustment, life, widening them and packing them beyond the sustaining power of the method used. Much of dynamic sociology, much of the theory of moral ideals, is nothing but a mass of generalities masked by a barbaric terminology; or if of value, part-product at least of other methods than a purely biological one. The charge to be made against the biological interpretation of moral experience then seems to be this: we are offered an objective method; this method, works well as long as the terms are concise, the problems simple and subject to experimental tests; the general point of view from which the method sprang itself demands an extension of it to social and moral problems; at least for the present such an extension has meant little else than an alarming vaporization of terms and a lapse to the subjective, from which we had been promised escape.

The psychological method of interpreting moral experience affords a sharp contrast to the biological. It frankly starts with introspective material, and is therefore the natural and most direct method. It fixes on certain not unusual complications within the consciousness of the individual; certain feelings, impulses, tensions. The concept 'moral experience' in this sense serves to bind together such experiences as: the sense of obligation, the consciousness of certain final values in conduct, the sense of guilt, the emotional backsweep of a halted conscience,

the tension of a divided duty and a blocked will. For introspective psychological analysis they would present themselves as experiences marked by poignancy, incisiveness and carrying power; for objective analysis they are compounds of simpler emotional and intellectual elements and elementary relations; for functional analysis they are psychic forces of tremendous influence in the shaping of conduct and the directing of judgment. With a veering emphasis on one or the other of these types of method we may get the crudeness of an experience meeting, the dissecting mania of presentational psychology, or the unlooked-for shifts of functional psychology.

In criticizing the psychological interpretation of moral experience it seems best to take presentational psychology as the representative type. That is what the method itself would consistently demand, and its adherents would look with distrust on any merger with the third, the teleological, method. What the relation is between the purity of their scientific ideal and the meagreness of their resources in dealing with complex appreciative processes even on the descriptive side, it is not for us to say; this much, however, is certain that ethics has little to gain by aristocratic penury. The presentational psychologist never gets the full import of a moral experience, for he is everywhere working away from the concrete synthetic meaning side. Ethics when in the grip of such a method is in danger of being reduced to a descriptive science. Objectively, this may or may not be a calamity; subjectively, from the point of view of ethics itself, it is nothing short of disaster. If ethics means to be normative, its psychology must be schematic, and its method not exclusively the psychological. As a matter of fact, ethics ignores many interesting complications. For example, it ignores the results of psychiatry, such facts as dissociation of personality, congenital aberrations of moral sensibility found among criminals. It ignores the results of individual and variational psychology. To what extent such an attitude is defensible, it is hard to say, but it is impossible to deny all force to the following lines of defense. The first is this. Ethics is in aim and spirit normative and constructive, and constructive in quite a distinct sense. A

psychological interpretation of moral experience with its endless study of descriptive complications does not favor such a constructive program; its only logical role would be one of caution against hasty or excessive construction. If by this is meant the practical caution and sound judgment of a careful investor, nothing could be said against it; but it is something else: a logical impulse working itself loose, running wild and more often than not changing to an insistently idle curiosity. The second proposed defense is this. The study of individual variations beyond a certain point yields no scientific results. This is true of any scientific investigation. Of course, the point recedes as the assimilative power of the science increases, but it may be defined as not lying beyond the line at which further recognition of analytic and variational factors would mean the surrender of the point of view of the science.

The third interpretation of moral experience I shall take the liberty of calling the auto-teleological interpretation. Historically it has appeared in many different forms, and its relations to the other methods are by no means constant. In one sense biological ethics is teleological: life is read as a purposive process aimed at its own maintenance and diversification, and this aim of selfpreservation is used as a control or standard by means of which the term moral is set over against the terms non-moral and immoral. Again, psychology deals to some extent with teleological connections-in its analysis of will, for example-and in its explanation of conative processes draws on the purposiveness of physiology and biology. But in neither the first nor the second method of interpreting moral experience is the method auto-teleological. The end or purpose is read into moral experience in the interests of the constructive ideal of biology or the descriptive ideal of psychology. Morality is not regarded as a self-revelational process.

The auto-teleological method of interpreting moral experience aims to penetrate sympathetically to the meaning of the moral process by dwelling on the intent and the purposive implications of this peculiar type of value-setting. From this point of view immorality would be interpreted as failure, ineffectiveness, but failure not with reference to some external relational system but with reference to the inherent meaning of moral experience itself. Moral failure then is self-failure. A book is more than so much wood-pulp, printer's ink and binding; to judge its worth in terms of how successfully its bulk might prop a defective table leg or its paper stuff a crack in the wall is to test it in terms of an extraneous system of purposes, and to leave out of account an immanent purposiveness to which its most characteristic quality serves as a clue. There is an analogue of the auto-teleological method in many of our æsthetic judgments—for instance, when within the confines of the art form chosen we distinguish the question of the meaning of a play or picture from questions of technique and execution and critical comparison with other works of art.

So much for a rather general characterization of the autoteleological method. On the surface it seems strong where the biological and psychological methods are weak. It suggests a sympathetic and exhaustive reading of the meaning of moral experience, and offers an incisive, not a glancing, study of the moral consciousness. On closer inspection, however, these are found to be advantages of promise rather than of solid achievement. The term 'meaning' turns out to be ambiguous, and other confusions and difficulties result.

For purposes of further exposition and criticism I shall discuss two types of the auto-teleological method. They are (I) the Kantian type, and (2) the type current in personal idealism and pragmatism.

(1) It is not my purpose to attempt a criticism of Kantian ethics: I am concerned simply with Kant's interpretation and use of the term 'moral experience.' In the *Grundlegung* Kant begins with what he calls die gemeine sittliche Vernunfter-kenntniss—a term roughly identical with our term commonsense morality. In the preface he distinctly disclaims the psychological and empirical points of view His point of departure is, of course, a psychological datum, but his analysis is professedly as little a psychological one of will relations as his doctrine of space is an empirical analysis of the facts of space-perception. He

offers as the differentiæ of moral experience, not the psychological ones of assertiveness, intentness, singlemindedness, incisiveness, but the logical ones of unconditionalness, universality, necessity. Analyzing practical experience from the point of view of import, he defines it in terms of end-setting, i. e., a purposive process aiming at a good. Pure practical experience, or moral experience in its true sense, aims unconditionally at the only end of which universality and necessity can be predicated, i. e., reason as revealed in the recognition of, and obedience to the moral law. Here then is the answer to the question: As what does moral experience give itself? What point of view does it logically imply? Moral experience is teleological in so far as it partakes of the purposive character of all practical experience; it is "auto-teleological" in as much as its only end is complete self-expression of its own meaning, the complete unfolding of its own rationality. That such expression of practical reason as self-end is the burden, or meaning of moral experience, Kant persistently maintains.

No doubt what Kant gives is the logical equivalent of the sense of duty; but is it that of the moral consciousness as well? And can the whole structure of moral experience be balanced on this point? With characteristic distrust of the empirical Kant has cast aside all empirical purposes and concrete will-affirmations and thus achieved a teleology whose object is none other than its own purposiveness. The result is a theory exhilarating because of the force and earnestness back of it, affecting in its simplicity, but often distressing in its naiveté. Whenever Kant is a rationalist-his theories of a kingdom of ends and of personality as self-end give more than a hint of another, the idealistic, point of view—he slips into that circular and barren reasoning so prevalent in ethics and so destructive of a really fruitful discussion of moral problems. Stoicism with its emphasis on the reasonableness of living according to nature and its definition of nature as a system of reason is the classic example. How many points of contact there are between Stoic and Kantian ethics has perhaps never been fully realized.

Another serious objection to the Kantian interpretation of moral experience remains. It has not done full justice to the

logical, or functional complexity of moral experience. Morality is thought of as the one white strand in a riotous tangle of color or as the one unimpassioned demand amid a tumult of heated pleas and contentious desires. Its convincingness and its simplicity are dwelt on. Kant in giving too simple a reading to the meaning of moral experience shares the failing of most constructive moralists—an excessive use of simplifying devices. Of psychological complexity moral experience is cleared far beyond the legitimate point. Much as ethics has at times suffered from that wastrel of good material, the psychologizing moralist, it has on the whole suffered more from that admirer of beggared meanings, the ultra-formal moralist. Of functional complexity moral experience is not even suspected. It might be objected that all sciences aim at the simplification of their subject-matter; that it is impossible to carry the concrete moral life bodily over into ethics. It is true that science is much too sober-minded for the motley of experience, and that the concreteness of things disappears as thought washes the color out of existence. To this loss in sense-value we willingly submit on condition that there is a gain in thought-value, that the complexity of the sense-world is replaced by a complex but orderly system of relations. The customary functional simplification of moral experience yields no such gain. Formulas like the Kantian do not admit of a system of principles corresponding to the intricate network of relations in a science like physics. They do not get full value out of the concept 'moral experience.' Morality is defined as a constructive, purposive process with a meaning of its own, but that meaning is misread. Kant's reading is too simple and too formal. In its simplicity there is something of the vigor but also of the unloveliness of a devotee of the sense of duty; in its formalism there is an excessive concern about the problem of legitimacy, prompted by dread of the bar sinister of everything empirical. The result is an ethical system all the poorer for its mistaken intellectual economy, facing the problem of a sound investment in values with no resources of its own and no outlook on help.

A third objection might be urged against the Kantian variety

of the auto-teleological method, but inasmuch as it hits the other varieties as well I shall postpone urging it, and merely state that it concerns difficulties connected with the concept 'meaning.'

(2) Personal idealism and pragmatism are the other varieties. As ethical theories they mark a reaction from the formalistic and ultra-simple interpretation of moral experience. Beyond that they need have little in common, but they often do—in Dewey, for instance, and Schiller.

There is, perhaps no more instructive problem in the history of ethical thought than the tracing of the relations of Kantian rationalism, Hegelian idealism, and personal idealism. Critics of Kant's ethics generally overlook his second formula of the categorical imperative. We are to respect humanity in ourselves and in others. Personality is self-end; it ought never to be exploited like a thing. Here Kant seems to be within promise of idealism, but when it comes to defining personality he lapses to rationalism, for he defines personality in terms of self and self in terms of the abstract quality of rationality. Hegelian idealism with its method of an interpretative analysis of self-consciousness on its dynamic side and of rejecting the Kantian thing-in-itself sought and found a more satisfactory theory of self. Rationality is still the central conception, but by it is meant, not something abstract, but a system of concrete meanings, self-developing and self-articulated by means of an immanent dialectic. In such a system the teleological interpretation of moral experience has substantial, and not merely nominal, rights. That it has yielded much of value to ethics, Hegel, Bradley, and Green have shown. But what seemed to be the strength of Hegelianismits unity and economy-made for its ultimate downfall as a system. To decide the question of the meaning of a single class of experiences by its place in a complex system, and to apply to every fact a rather cumbrous and often distorting dialectic of relations seemed to some critics a decided slurring of the unique and the individual. Ethics was interpreted rightly as a theory of self and of self-realization; the method was rightly autoteleological; but something seemed wrong: Geist, mind, worldreason seemed to swallow up the individual selves, those unique centres of unique meanings. Such objections are most forcibly urged in Seth's *Hegelianism and Personality*, and they mark the transition from absolute idealism to personal idealism in the work of Schiller, Sturt, Gibson, and others.

Personal idealism in so far as it concerns itself with ethical problems generally emphasizes three things: (I) the uniqueness and impermeability of moral experience, (2) the relation of moral experience to a self expressing itself therein, (3) the interpretation of that self as a system of meanings. Starting with the uniqueness of the individual moral experience, personal idealism seeks to define moral worth in terms of an aim at perfection moulding and 'informing' each of these several purposive systems. It introduces the notion of a dynamic, or functional, or creative self, and contrasts it as the purposive core with the wider empirical self and its teleologically indifferent accretions. Thus might a portrait painter disregard certain malformations of the skin as interfering with, rather than contributing to the characteristic. What with Kant was epistemology and with Hegel metaphysics now openly and avowedly becomes psychology, but a psychology that operates from the standpoint of the agent and employs the teleological method. Self is not regarded as so much content of consciousness to be explained as a complex of ideas; it is defined as a complex of meanings all of which reflect the creative activity of a personality. Seth and Boyce Gibson among others have contrasted this type of psychology with presentational psychology. Into the merits of that question it is not my purpose to enter, but I wish to point to what seems to me to be one weakness in personal idealism. No doubt that it avoids excessive simplification. It represents a wholesome reaction against monism and its suave blanketing of a lot of squirming differences. It insists on the functional complexity of moral experience. Whether it handles that complexity successfully, however, admits of grave doubt. If simplification is relative to the needs of a science, complexity is it no less. Personal idealism must therefore either give itself as an extreme and scientifically barren individualism or it must offer some theory of the general conditions of selfhood and thus bind together the unique monadic centres of purpose under one general functional type of moral experience.

At this point pragmatism shows to advantage. It has developed a unifying theory; the theory that experience is a reconstructive teleological process with series after series of movement, and with each movement exhibiting three moments: crisis, experimentation, adjustment. The element of newness in every problem that comes up is held to account for the drive of the process. Old formulas are stretched to the breaking point, old intellectual harness becomes useless, something new, strong and serviceable in the way of equipment is demanded. Thus are thought and will set afoot. The process is essentially the same in the theoretical and practical spheres. Within the practical sphere æsthetic, economic, and moral values are distinguished. Everywhere the cue to explanation is a "situation," which on the inner, the psychological, side is a purpose or scheme of meanings, and on the outer, the sociological, side a group of objective conditions provocative of new and reconstructed purposes and meanings. With reference to the three types of value, situation and mode of adjustment are markedly different. Until that difference has been adequately explained—and Dewey's theory that moral experience exhibits a conflict of incompatible ends is hardly a satisfactory explanation—the peculiarity of moral experience as a process of teleological experimentation remains undefined. No such theory has been forthcoming, and as a result pragmatism, whose general ethical motif is unmistakable, has been less successful with ethical problems than with others. As yet it has failed of its promise. It promised experience in the round; it has yielded little more than a painted thinness.

One serious criticism hits all varieties of the auto-teleological method alike. They all regard moral experience as a self-revelational process and seek to penetrate sympathetically to its meaning. But what if the concept 'meaning' turns out to be ambiguous? We certainly use it in several distinct senses. Three of these uses are the following: (1) The psychological.

When I say to a person who is addressing me, "I don't quite catch your meaning," I mean to refer to that person's state of mind and to what is at that time uppermost in his mind, the conscious purpose of conveying something to me. (2) The relational.—Suppose I hear an explosion and ask myself, "What is the meaning of this?" In what sense do I use the term 'meaning'? I seek to place a fact in a relational system—not any relational system, however, but one that seems most suitable and promising. Suppose in consulting a physician and in dilating on how you feel you put at his disposal such and such a symptom. He might relate that sympton to the system of your feeling states. To that system good physicians are startlingly inattentive. That system, they hold, offers little in the way of sound and fruitful causal connection. They seek more objective symptoms-temperature, pulse-beat, rate of respiration, etc.-and a more objective relational system. The 'meaning' of a disease then is definable in terms other than a psychological resumé of what the patient experiences. There is one important peculiarity about this relational use of the concept 'meaning.' The meaning of a fact is often not definable until other facts put in an appearance. A rise in temperature may mark the incipient stages of any one of a number of diseases. The physician is at a loss until other, differentiating symptoms are traceable. He would not contend that he had discovered the meaning of any rise in temperature until he could place that fact correctly; and he cannot place it correctly without the assistance of certain other facts. (3) The amplificatory. Here we ask ourselves, "If such and such is the fact in promise, what is the fact fullblown?" Moving within the fact we seek to ascertain, largely by analysis and an effort of the interpretative imagination, all there is in the fact, its ampler meaning. This use, at its best and at its worst, figures largely in appreciative literary criticism; in fact in every attempt to define a work of art in terms of ideal content, inner coherence, and structural purposiveness. example, in the Shakespearean criticism of Gervinus with its almost total disregard of historical and textual criticism and its touch of interpretative romancing it appears in extreme form,

an extreme form quite as destructive in its way to sound criticism as the other extreme, the economic, or groceries view of literature.

Returning to the *auto-teleological* method of interpreting moral experience, it becomes evident that on the whole it means to employ the *amplificatory* use of the concept 'meaning,' but often uses it in a confusing combination with the relational and psychological uses. Hegelian motifs, psychological and epistemological problems and methods, a teleology that carries you into the single moral experience and a teleology that carries you beyond and into a general process of experimentation; all this represents a perplexing mixture.

The results of this study of moral experience seem discouraging. Three methods, the biological, the psychological, and the autoteleological, have failed to provide a definite and satisfactory interpretation of the meaning of moral experience. A mistaken use of the objective and a resultant failure to catch the full implications of the moral as opposed to both the non-moral and the immoral; a descriptive frittering away of the whole problem; excessive simplicity of reading or laxity of method and ambiguous definitions: such are the leading causes of this lack of success. Does this mean ultimate failure? I think not. Of course, ethics may surrender its whole constructive program and devote itself exclusively to descriptive problems of psychology and anthropology. This would be the natural result of too narrow an emphasis on the psychological method, for such a method does not favor constructive ethics. But a success that is due to lack of ambition ought not to be highly prized. Turning to the other two methods, the biological and the auto-teleological, they at least have the courage of the attempt. They have certain valuable moments in common. They both emphasize (1) the relation of moral experience to life as a process of development, (2) the plasticity of moral content, (3) efficiency as a test of moral worth. This is true, of course, only of personal idealism and pragmatism, and not of the Kantian type of the autoteleological method. The two modern types of the autoteleological method, however, possess certain distinct advantages over the biological method. They make more of the dynamic of

moral experience and they read moral experience more sympathetically. They talk less glibly of "adjustment" and "fitness to survive," but still too glibly of "self," "experimentation," and the like. So far they have achieved little beyond valuable suggestions, but they at least look promising, and ethics can afford to give them a chance. But only after a rigid reform of their own methods and a more persistent and discriminating treatment of special ethical problems can they become efficient reformers.

Louis W. Flaccus.

University of Pennsylvania.

PROCEEDINGS OF THE AMERICAN PHILOSOPHICAL ASSOCIATION; THE ELEVENTH ANNUAL MEETING, HARVARD UNIVERSITY, DECEMBER 27-29, 1911.

REPORT OF THE SECRETARY.

THE eleventh annual meeting of the American Philosophical Association was held at Harvard University, Cambridge, Mass., on December 27, 28, and 29, 1911. The Treasurer's Report for the year ending December 31, 1911, was read and accepted, and referred to Professors Gardiner and Thilly as auditors.

EDWARD G. SPAULDING, SECRETARY AND TREASURER, IN ACCOUNT WITH THE AMERICAN PHILOSOPHICAL ASSOCIATION.

Receipts.

Balance on hand January 1, 1911	\$438.72
Dues and sale of Proceedings	167.95
Interest to January 1, 1912	11.07
	\$617.74
Expenses.	
Princeton Smoker	\$ 39.75
I. W. Riley, Committee on American Philosophers	13.75
Clerical Assistance	56.07
Stamps	24.14
Stationery	2.55
Telegrams and Telephone	85
Travelling Expenses	18.85
Printing, Proceedings, Reports, etc	52.05
	\$208.01
Balance on hand December 31, 1911	409.73
	\$617.74

Examined and found correct.

FRANK THILLY, H. N. GARDINER.

The following officers were elected for the ensuing year: President, Professor Frank Thilly, of Cornell University; Vice-President, Professor Norman Kemp Smith, of Princeton University; Secretary-Treasurer, Professor Edward G. Spaulding, of Princeton University; Members of the Executive Committee (for two years); Professor W. B. Pitkin, of Columbia University, and Professor Edgar A. Singer, Jr., of the University of Pennsylvania.

Upon recommendation of the Executive Committee fifteen new members were elected: Professor J. E. Boodin, of the University of Kansas; Dr. George C. Cox, of Dartmouth College; Dr. Durant Drake, of the University of Illinois; Professor E. N. Henderson, of Adelphi College; Dr. Grace A. de Laguna, of Bryn Mawr College; Professor Horace C. Longwell, of Northwestern University; Professor D. C. Macintosh, of Yale University; Dr. J. S. Moore, of Western Reserve University; Professor G. T. W. Patrick, of the University of Iowa; Dr. Joseph Perrier, of the New York Public School System; Professor Elmer E. Powell, of Miami University; Mr. William Mcintire Salter, of Cambridge, Mass.; Dr. C. V. Tower, formerly of the University of Vermont; Dr. J. P. Turner, of the College of the City of New York; Professor Edward M. Weyer, of Washington and Jefferson College.

The Executive Committee reported that two invitations had been extended to the Association for its next meeting, and presented a number of suggestions concerning future meetings. The decision as to the place and arrangements for the next meeting was referred to the Executive Committee with power, but with instructions to consider the feasibility of meeting with certain other Associations, notably the Economic and Political Science Associations and the Society of American Naturalists in order to hold joint sessions with them.

The report of the Committee on Early American Philosophers was read by Professor Gardiner and accepted, and the Committee was continued. The thanks of the Association were extended to the Committee for its generous services. The report of the Committee is given in full below.

The report of the Committee consisting of Professors Ormond, Dewey, and Perry, appointed to prepare a Memorial to the late Professor William James, was read by Professor Dewey and was adopted by a rising vote. The report is given in full below.

The Executive Committee reported that in accordance with Article V of the Constitution it proposed the following two amendments to the Constitution, these amendments to be voted upon at the next meeting of the Association:

To replace, as Section 2, the present Section 2 of Article 2: There shall be two classes of members, regular members and associate members. Regular members shall be entitled to all the privileges of the Association. Associate members shall be entitled to all the privileges of the Association except voice and vote in its meetings. Election to active membership shall be limited to persons professionally engaged

in the teaching or study of Philosophy whose academic rank is above that of assistant, and to such other persons as in the opinion of the Executive Committee shall have published contributions of substantial value to Philosophy. All who are members of the Association prior to January 1st, 1913, shall be active members.

As Section 3 of Article 2: The annual dues of active members shall be one dollar, of associate members three dollars, failure in payment of which for three consecutive years shall *ipso facto* cause membership to cease.

On recommendation of the Executive Committee it was voted to continue the present committee on the general discussion, this committee to have power to determine the subject of discussion for the next meeting, to arrange for the discussion, and to formulate a report prior to the next meeting, involving general points to be discussed.

It was voted, further, that the expenses of this committee be defrayed by the Association in an amount not to exceed \$50.00.

The thanks of the Association were extended to the Harvard Colleagues and various friends for their generous hospitality in entertaining the members of the Association at this meeting.

Respectfully submitted,

EDWARD G. SPAULDING,

Secretary.

REPORT OF THE COMMITTEE ON EARLY AMERICAN PHILOSOPHERS.

Professor Gardiner reported for the Committee on Early American Philosophers that the first volume of the projected series of publications was now in press, namely, Witherspoon's Lectures on Moral Philosophy, edited by Professor V. Lansing Collins, of Princeton University, and published by the Princeton University Press under the auspices of the Association; that Johnson's Elements of Philosophy, to be published by the Columbia University Press, was being edited by Professor Woodbridge; and that efforts were being made, with some prospect of success, to secure the publication of some other works, of a similarly representative character. Also, that the card catalogue of Early American Philosophy (down to 1876), prepared by Professor Riley, now included over a thousand titles and would probably be completed by the next meeting. Of the \$75 appropriated by the Association the Committee has expended \$51.50, chiefly in the preparation of the catalogue, leaving a balance of \$23.50.

WILLIAM JAMES.

A Minute Prepared for the American Philosophical Association.

The position of William James in the realm of letters, science and philosophy was unique. By his articles in the eighties and his book in the nineties, he won a place as one among the few founders of distinctively modern psychology. So far as the English speaking world was concerned he was easily its leader. Certain aspects of that science, such as the theory of the emotions, the stream of consciousness, space perception, the importance of motor factors in mental life, the psychology of relations, will, doubtless be permanently associated with his name. Twelve years after, the publication of his lectures on the Varieties of Religious Experience revealed him as a pioneer in the psychological treatment of religious phenomena. Five years after this time, his lectures on Pragmatism brought one of the most vital and most discussed movements in contemporary philosophy into the focus of attention. To few men and probably to no other American has it been given to be a leader in three distinctive directions. That his reputation was at least as great in Europe and Spanish America as in his own country is attested by the translations of his works into French, German, Italian, Russian, Danish and Polish, and by the multitude of academic honors that flowed to him from foreign sources. Probably among contemporary American men of science only Simon Newcomb was as well known, while in general intellectual fame he ranked with Emerson. The uniqueness of his position and career makes it unnecessary as, indeed, it renders it impossible for your Committee to do more than present the obvious external facts of his life.

William James was born in New York City on January 11, 1842. He was the oldest son of the well-known interpreter of the theology and morals of Swedenborg, Henry James. He studied with tutors in London and Paris, and afterwards attended the collège of Boulogne in 1857–58, and the University of Geneva in 1859–60. The winter of 1860–61 was devoted mainly to the study of painting with William M. Hunt, at Newport, Rhode Island. But his scientific interests, which had been strong from boyhood, finally asserted themselves, and in 1861 he entered the Lawrence Scientific School at Harvard. Here he spent two years in the study of chemistry and anatomy. In the year 1863–64 he entered the Harvard Medical School, where he received the M.D. degree in 1869. But his medical studies were

frequently interrupted. In April, 1865, he went to Brazil with Louis Agassiz as a member of the Thayer Expedition, and remained for over a year. The winter of 1867–68 was spent abroad, mainly in the study of physiology at Berlin University; and shortly after, he studied with Agassiz at the Harvard Museum of Comparative Zoölogy.

It is not too much to suppose that the irregularity of Mr. James's education—irregularity from the conventional point of view—accorded with his temperament and was favorable to the development of his genius. Conceivably his freedom had something to do with his lifelong distrust of over-regimentation, his aversion to certain tendencies in current American university administration, and with his devotion to his university, Harvard, as upon the whole less inimical to individuality of intellect than other American institutions of learning, a sentiment to which he gave forcible expression when he said: "As a nursery for independent and lonely thinkers I do believe that Harvard is in the van. . . . Our undisciplinables are our proudest product." We also have the word of Mr. James that the influence of Agassiz upon him was deep and permanent. In his address upon the latter he says: "We cannot all escape from being abstractionists. I myself, for instance, have never been able to escape; but the hours I spent with Agassiz so taught me the difference between all possible abstractionists and all livers in the light of the world's concrete fulness. that I have never been able to forget it. Both kinds of minds have their place in the infinite design, but there can be no question as to which kind lies the nearer to the divine type of thinking."

In 1872, his father having meanwhile removed to Cambridge, he began his academic career as Instructor in Physiology in Harvard College. During the years 1873-76 he was Instructor in Anatomy and Physiology, and from 1876 to 1880 Assistant Professor of Physiology. As early as 1875 he offered graduate instruction on "The Relation between Physiology and Psychology," and conducted experiments in a room in the Lawrence Scientific School that may fairly be called the first psychological laboratory in America. In the year 1877-78 he added an undergraduate course on Psychology, and delivered a series of lectures on this subject at Johns Hopkins University. At the same time he began to publish articles in The Journal of Speculative Philosophy, in Mind, and in La Critique Philosophique. These articles contain the substance of many of his later views. In the year 1879-80 he gave his first philosophical course, on "The Philosophy of Evolution," and permanently abandoned the teaching of anatomy and physiology.

He became Assistant Professor of Philosophy in 1880, Professor of Philosophy in 1885, and of Psychology in 1889. In 1885 he edited the "Literary Remains" of his distinguished father, prefixing a characteristic introduction. This decade, however, was notable for the series of original articles on psychological topics, contributed for the most part to the English review *Mind*, in this field. Some of his most famous philosophical essays were also published during the same period, and then, as later, he recognized no sharp division of these two interests. The "Principles of Psychology" appeared in 1890. His "Briefer Psychology" was published in 1892, and soon was almost universally used as a text-book in American colleges.

He retired from the Directorship of the psychological laboratory in 1892. In 1894-95, be was President of the original British Society for Psychical Research, having in 1884 taken part in founding the American Society of that name. In 1897 his academic title was changed from Professor of Psychology to Professor of Philosophy. The same year he gathered together a variety of philosophical essays and addresses, to which he affixed the title of "The Will to Believe," from an address which he had given the year before. In its preface he definitely announced his philosophic position as that of Pluralism and Radical Empiricism. In 1898 was delivered and published his Ingersoll Lecture on "Human Immortality," while the following year he published his "Talks to Teachers," based on lectures he had given to various educational gatherings. In 1898 he delivered before the Philosophical Union of the University of California a lecture entitled "Philosophical Conceptions and Practical Results"—an address to become famous as the introduction of Pragmatism under that name, Mr. C. S. Pierce, its originator, having used the term only in conversation.

In 1899 Professor James's health was seriously impaired. A weakness of the heart due probably to over-exertion in the Adirondack Mountains, made it necessary for him to secure leave of absence from Harvard during the years 1899–1901. He was never able, after this time, to give more than a single course at Harvard, nor to work without a sense of physical inability. Yet the following years were the years of his philosophic fruition. He was obliged to postpone the delivery of the Gifford Lectures on Natural Theology from 1899 to 1901–2. They were published the latter year, with the title "Varieties of Religious Experience." In 1905 he made a memorable visit to Italy, where from the very first recognition of his psychological and philosophical work had been generous and widespread. In 1896 he was

Acting Professor of Philosophy in Leland Stanford Jr. University. In the same year, he gave at the Lowell Institute in Boston his lectures on "Pragmatism, a New Name for some Old Ways of Thinking," which he published the next year after having repeated them at Columbia University. In 1907 he gave up his active teaching connection with Harvard. In 1908 he was Hibbert Lecturer on Philosophy at Manchester College, Oxford, and gave in the spring of the year (repeating them in the autumn at Harvard University) a course of lectures, published in 1909 as "The Pluralistic Universe." The same year, he gathered together and published his replies to various critics of pragmatism under the title "The Meaning of Truth." He was engaged in the preparation of a text-book introduction to philosophy, a work upon which he continued to work during his final illness which became acute in Europe during the summer of 1910. He died at his summer home, Chocorua, New Hampshire, soon after his return, on August 26, 1910. In 1911 appeared his unfinished text-book, edited by Dr. H. N. Kallen and Mr. Henry James, Jr., with the title "Some Problems of Philosophy." During the same year, Mr. Henry James, Jr., collected and edited a series of his more personal addresses and articles, together with some of his educational addresses and his popular articles, under the caption "Memories and Studies." His contributions to philosophy upon a World of Pure Experience, not already reprinted, will appear shortly in a volume.

The recognition of Mr. James's eminence was as authoritative and honorable as it was widespread. He was the recipient of the following honorary degrees: Ph.D. and Litt.D. (Padua) 1893; LL.D. (Princeton) 1896, (Edinburgh) 1902, (Harvard) 1903; Litt.D. (Durham) 1908; Sc.D. (Oxford) 1908; Sc.Nat.D. (Geneva) 1909. He was a member of the National Academy of Sciences, an honorary member of the New York Academy of Science, and a Fellow of the American Academy of Arts and Sciences. He was a corresponding member of the Königliche Akademie der Wissenschaften (Berlin), and of the British Academy. He was a foreign or honorary member of the Kongelige Danske Videnskabernes Selskab (Copenhagen), of the Psychological Society of the University of Moscow, of the Reale Instituto Lombardo di Scienze e Lettere (Milan), and of the Reale Accademia dei Lincei (Rome); and in the winter before he died he was elected to the Institute of France as a foreign member of the Académie des Sciences Morales et Politiques. He was president of the Society for Psychical Research in 1894 and 1895, of the American Psychological Association in 1894 and 1904, of the American Naturalists and of the American Philosophical Association in 1906, and was at the time of his death president of the International Psychological Congress.

The personality of William James was as unique as his intellectual career. He conveyed the sense of himself with extraordinary verve and truthfulness to all with whom he came in contact. To begin to convey to those who did not know him any intimation of that fullness of being which overflowed at every point of his life would require that combination of powers of insight and of artistic portrayal which were Mr. James's own possession. Fortunately no attempt of that nature is required in the presence of this Association. We all knew him and we all loved him. We can but record our sense of what we, as a guild of philosophers, owe to him. As has been noted over and over again, all the world esteems philosophy more highly because William James practised it. The number of individuals to whom as individuals he addressed words of cheer and encouraging recognition is almost as extensive as those who attempted anything in this field. If our relations to one another as teachers and writers is marked by a reasonable degree of sweetness and light, and if our controversies are upon the whole carried on without acrimony and pettiness, who shall say how much of this we owe to the silent constant influence of the generosity and candor of Mr. James.

In his address on Agassiz, Mr. James remarks: "The truth of things is after all their living fullness." The concrete import of such a remark, summarizing, as it does, all that is most native to Mr. James's thinking, depends upon him who himself lives the fullness of things. Few have lived the fullness of things as fully, as veraciously, as courageously as he whose association with this Society will endure chief among its honors and inspirations.

What Kind of Realism. DURANT DRAKE.

An epistemologically monistic realism can not give us a single homogeneous order of objects. Different people's perceived-objects have incompatible qualities; on this theory they are all telescoped into the one place where the real object is. Worse yet, in some cases the real-object has disappeared and its place been filled by some other real object, which thus occupies at the same moment of time the same spot with these alien perceived-objects. This superposition of objects, whereby no one has exclusive right to the place it occupies is avoided by an epistemologically dualistic realism, which considers cases of perception as cases of concomitant variation, wherein the perceived-object varies with, acts as a functional substitute for, and so may be said to represent, the real-object.

No. 2.1

Perceived-objects are, upon this theory, as real as real-objects; but they are not those particular real objects which they represent. They exist in the brain; that is, as real objects, they are represented in their turn, by those perceived-objects which we call (certain) brain-events. In such a case of perceiving a brain-perception-event there would be a second case of concomitant variation. Thus the apparent difficulty of identifying perceived-object with (real) brain-event does not exist upon this theory.

Consciousness is then not a peculiar substance but a group of specially interconnected elements (similar in general to those making up the rest of the universe), existing wherever a mechanism of representation and reaction of the peculiar brain-type has been developed. A consciousness is that real object which corresponds to the perceived-object we call a brain; while the latter is also a real-object, a part of a second consciousness. The universe is a single homogeneous real-order, represented by our order of perceived and perceptible objects. In the former, consciousnesses exist at the points where, in the latter, brains exist.

The Determination of the Real. J. E. CREIGHTON.

Philosophy is not concerned to demonstrate the existence of a real world, or even to assign logical reasons for our belief in reality. Its genuine problem is to determine the nature of the real. In order to discover a fruitful point of departure for this undertaking, it is necessary to look to the development of problems in the history of philosophy. The logic of the modern systems seems to justify us in regarding experience as involving both a real world which is progressively being determined, and a mind through which these determinations become known. The mind, however, has its reality only in and through its relation to objects; while the order of nature has a reality that is independent of and in some sense prior to any finite knower. This does not, however, predetermine in any way the character of our metaphysical result, which must depend upon what final interpretation we are obliged to give of the nature of reality. At the outset and throughout our philosophizing, it is essential to hold fast both the subjective and objective aspects of experience, rejecting at once subjectivism and objectivism, two superficially opposed, but closely related views, which both refute themselves. In the knowing process, the relation of the mind to the world of real objects reveals itself as inner and essential. This does not mean, however, that things are 'reduced' to qualities in a mind or that the

difference between the two sides of experience disappears. The 'idea' is the true interpretation of the object, the revelation of its nature; but it is not abstractly or numerically identical with the object. Further, neither the real object nor the experience in which it is known can be regarded as an 'immediate,' which excludes mediation. Neither in the perceptions of ordinary experience nor in the results of the special sciences do we find any such 'immediate.' The special sciences of nature deal with 'objects,' abstracting from the knowing process. Philosophy must restore to experience as thus 'objectified' its concreteness and fluidity, by reinterpreting its results in the light of the critical development of the categories of consciousness.

Dogmatism vs. Criticism. WALTER T. MARVIN.

The purpose of this paper is to show that the fundamental tendency in the neo-realistic movement is a return to dogmatism, to dogmatism not in the specific sense of the 17th century rationalism, but in the generic sense of the contradictory of criticism (whether Kantian or not). That is, the issue between realism and idealism to-day is not chiefly regarding this or that epistemological doctrine, but regarding the logical position of epistemology among the sciences. For the idealist, epistemology is the fundamental science; for the realist, it is simply one of the special sciences and is not fundamental.

The philosophers whom I wish to convince that this is the fundamental tendency of realism are not only the pragmatists, neo-Kantians, Hegelians and other idealists, but also those fellow realists who hold an opposite opinion. My line of argument is as follows: If we take the prominent doctrines or, at least, tendencies of contemporary realists, they indicate a general prejudice which may be summed up in the statement: The most certain body of knowledge in our possession to-day is that of the exact and physical sciences and the most certain basis for metaphysics is the principles, postulates and all presuppositions of these sciences. In detail: There is first the tendency toward empiricism (the trial and error method as against absolutism or the a priori method). This indicates that we have no ultimate means of criticizing or prescribing the path which science must follow. In its line a science is ultimate. Secondly, there is a strong opposition against the substance-attribute notion as fundamental. Monistic idealism still holds to it. Science has been more and more widely rejecting it as time goes on, beginning with the days of Galileo. Here too realism seems to be following the leadership of science. Thirdly, modern realism defends analysis and is *pluralistically* inclined. This tendency too seems to be controlled by a conviction that the procedure of science is both correct and fundamental. Finally the realist regards logic as fundamental, as does science. He sees in formal logic one of the bases of all modern science and believes that the monistic idealist's attitude toward it would, if lived up to, be detrimental to science. Finally the realist's metaphysical procedure is taking on, more and more, the form of a logical analysis of science. This again shows a readiness to accept the metaphysics implicit in science.

DISCUSSION: The Relation of Consciousness and Object in Sense Perception. W. P. Montague.

The principal argument in support of the neo-realistic theory described in the report of the Committee as "epistemological monism and realism," is based on the familiar facts of common sense and of science, particularly of physiology. These facts collectively testify to the secondary or derived character of any individual consciousness and hence of all individual consciousnesses. The origin and continuance of a consciousness depend upon a peculiar interaction of a living organism with its environment. To deny that the organism and its environing objects exist prior to and subsequent to that intermittent relation between them which constitutes consciousness would make physiological psychology meaningless. Consciousness cannot be the condition for the existence of its objects (one of which is the organism) for the simple reason that it is itself demonstrably dependent upon a relation between those objects. The failure of idealists to accept this conclusion has been due in the first place to an equivocal use of such terms as idea and perception. These words are used to denote acts of perceiving or thinking and then by a kind of metonymy they are used also to denote the objects of those acts, the things that are perceived or thought of. An idea in the sense of an "act or process of thinking" is obviously incapable of existing apart from a thinker, but an idea in the second sense as the "thing thought of" is in no way dependent on the thinker, being in many cases an object or event that antedates the existence of him who thinks it. To overlook the equivocation and to argue from the dependence of 'ideas' as processes of thought to the dependence of 'ideas' as objects of thought is the surest and quickest way to get the idealistic paradox. The second cause for the failure of the idealist to accept the evidences of realism is based upon a misinterpretation of the relativity of knowledge. The idealist notes that 'which objects' are known varies with and depends

upon the condition of the knower, and argues from this that 'the objects' that are known depend upon the knower. To clear up this difficulty it is only necessary to remind ourselves that it is certainly true that 'which objects' are pointed at depends upon our pointing; but that this does not mean that 'the objects' that we point at depend upon our pointing. If consciousness is conceived as the power or capacity of the effects produced in the brain to point to or imply the objects which are their actual possible causes, then we shall be able to reconcile the 'relativity of knowledge' with the independent existence of the objects known. For consciousness conceived as the self-transcending implications of the brain-states will be indubitably selective of its contents without being in any sense constitutive of them.

D. S. MILLER.

- I. It conduces to a better understanding to those engaged in the discussion to agree in giving up certain traditional positions and arguments that may be given up. The following are well-known positions or arguments of idealism that must be dismissed:
- (a) That the world as it is to any individual is just his world-vision or world-conception, or the vision or conception of a pure ego. This as an argument bearing on the subject of our discussion must be rejected. If true it would have no bearing on the question of the sense in which unperceived real objects exist or their relation to the perceived objects.
- (b) It cannot be said that everything we know is known as experienced, and thus that nothing but what is experienced is thinkable by us. Experienced thing has no content or meaning beyond the word 'thing'unless it is contrasted with an opposite which is equally thinkable. This is in fact the case.
- (c) When it is said that the subject-object relation is universal the arguments used to prove this are without foundation.
- (d) When it is assumed that, if the color and other qualities of an object are content of consciousness and we perceive them they cannot be withdrawn from consciousness and continue to exist unchanged, a baseless principle is assumed. This principle was assumed by Berkeley and refuted by Hume.
- II. The doctrine that neo-realism in the main defends or with which neo-realism desires to connect itself as much as may be is presentative, immediate or *so-called* naive realism. (It is not real naive realism which is in fact a latent idealism.) But this species of presentative realism breaks down for three amongst other reasons, and much of its plausibility disappears for a fourth reason:

- (a) The time taken in perception proves that the perceived object is not identical with the real object.
- (b) The fact of illusion proves that the perceived object is not identical with the real object.
- (c) The theory would oblige us to hold that when two people side by side look at the same object much of the object is actually present in their two fields of consciousness at once. This involves a contradiction in terms.
- (d) An object cannot become a content of consciousness as an object, that is, its objectivity cannot be given in its presence as a content of perception. Objectivity is by its very nature a matter of properties in the object that cannot all be revealed in one instant nor even in a minute span of time. Objectivity means a potentiality of certain further manifestations. A perception is an impression plus a readiness to behave in a certain fashion. Thus an object cannot as such be a given or "perceived object."

A. O. LOVEJOY.

Four principal episodes may be distinguished in the process whereby the content of man's experience has come to be divided by thought into two classes of existence—the class of things conceived to have objective physical existence and the class of things conceived to have 'subjective' or 'mental' or 'psychic' existence only. The notion of subjective existence (which is not identical with the notion of a subject or self) seems when clarified, to signify a mode or medium of subsistence in which things or qualities may be existentially present merely as 'presentations,' as data in a given moment's perceptual or other experience of an individual percipient, without necessarily having any corresponding existence outside of that experience, in any other context, at any other moment, or in any 'real space.' The four chief stages in the development of this notion and in the gradual extension of its denotation consist, then, in the following (real or supposed) discoveries: (1) The discovery of the subjectivity of conations and (probably) pleasure-pain feelings. (2) The discovery of the subjectivity of hallucinations, illusions and dreams. (3) The discovery of the subjectivity of secondary qualities of matter. (4) The discovery of the subjectivity of all sensible qualities (subjective idealism). The historic significance of the new realism is that, more radical than most earlier realisms, it rejects not only the fourth of these discoveries. but also the third, and (in the more thorough and consistent forms of the doctrine) the second, and minimizes even the first, by calling conations mental or organic processes, in distinction from 'mental content,' which latter is held to be non-existent.

This paper is concerned solely with the question of the validity of the second discovery. While all typical new realists agree in denying that the objects and qualities presented in hallucination or illusory perception are 'subjective existences' merely, they differ as to whether those objects are 'real' or 'unreal' (in the sense suggested by the committee). Nunn, and apparently Alexander and other English realists, declare that, e. g., the "straight staff bent in a pool" does not "merely seem to be bent," but that it really "is bent." This view, which may be called absolute objectivism, appears to the writer the consistent one for this school to take. For the essence of the new realism is its conception of consciousness as an external and nonconstitutive relation. But this conception implies that all objects and qualities actually in consciousness are, in a univocal sense, real things in a real relation. But this consequence of the new realism requires us to assert contradictory predicates of the same object: to say that, e. g., the staff in the pool is at once both straight and notstraight. Unless absolute objectivism can give us a new theory of the logical relation of sensible 'attributes' to the objects possessing them, this seems a fatal objection to that doctrine, and therefore to the relational theory of consciousness, and therefore to the new realism (i. e., the combination of realism with epistemological monism).

Certain other contemporary realists—e. g., Montague and McGilvary—recognizing these difficulties in absolute objectivism, seek by various ingenious assumptions and distinctions to conceive of illusory and hallucinatory data as 'real,' without thereby abandoning epistemological monism. Detailed criticism of these devices may await the fuller presentation of them; but in general it may be contended that they fail to deliver their authors from dualism and from an admission of the subjective existence of the illusory—in the sense of 'subjective existence' herein defined.

FRANK THILLY.

Reflection upon such experiences as differences in what is taken to be the same object, mistakes, dreams, illusions, and hallucinations, has suggested the inference that the real objects are not always given in particular actual perceptions exactly as they are. Natural science seems to confirm this conclusion: the scientific conception of the universe does not agree with the naive perception of the universe. The neo-realistic theories of perception based upon modern physics and biology are inconsistent with the naive realistic starting-point. Besides, all theories of perception apart, the true parts of the material

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world are not presented in a particular momentary perception; our momentary perceptions are not complete and free from error: if they were, what would be the use of the whole apparatus of scientific observation?

The answer to the question of consciousness as a factor in the perceptual situation which is given by radical realists follows necessarily from their naive dogmatism: if the object perceived is the object unperceived, numerically identical with it, then there is no difference between the status of an object in a stream of perceptions and its status out of it. But, here again, the biological theories of these thinkers suggest conclusions inconsistent with their radical premises. Physically and physiologically speaking, perception is the entire organism in interaction or relation with its environment; we cannot single out any one particular element in the situation and call that the physical or physiological counterpart of the process of perception. No more can we, in speaking of perception as a mental event, abstract the so-called perceived object from the functions involved, in the hope that we may in this way get at the core of being, or discover the object exactly as it would be apart from any perceiver. We may say that in the perceptual situation an object is revealed, made manifest, but we must also say that much that appears belongs to the mental realm, is read into the object, sometimes truly, sometimes not. This does not mean that the mind alters the real object or that it creates an object out of nothing or that the object creates a picture of itself in the mind or that the object lies imbedded in the mind. All we can say is that a conscious organism perceives a real object in a certain way, according to the mental and physical factors involved.

EVANDER BRADLEY McGILVARY.

- I. The relational view of consciousness is compatible with the recognition that the same real object is in different consciousnesses.
- 2. (a) A real object may be a many-in-one with as much logical right as is conceded to any 'single field of experience.' (b) Continuity of perceived surface may be conceived by 'natural' realism as unreal, when the real surface is discontinuous; but such a conception is not necessitated until further analysis of the conception of continuity be made.
- 3. An hallucinatory object occupies real space, but does not monopolize it. In other words impenetrability is not a universal characteristic of space-occupying things.
- 4. When we now see a star which became extinct a thousand years ago, our consciousness spans the thousand years, just as when we see

an object a mile away our consciousness spans the mile. But while spanning time and space, any consciousness is centered in a definite time and place, the time and place of the body. Consciousness has a limited eternity and ubiquity, but its ubiquity and eternity radiate from the here and now.

- 5. Color-blindness is explicable on the relational theory of consciousness; it may be due to the fact that the real brightness of a real object is selected to be a term of a consciousness relation, while the color of the real object is left out of the consciousness complex.
- 6. 'Consciousness of consciousness' is a misnomer for an actual fact. The fact is the occasional attentional prominence of consciousness over its objects, a prominence of just the same kind as is enjoyed by any object of consciousness over some other object when we say that it is the object of attention. An object of attention need not be an object of consciousness; it may be consciousness itself.

 HENRY RUTGERS MARSHALL.

The ordinary man makes a natural distinction between the natural order and the mental order. For him the word consciousness means the sum total of all that exists in this mental order. It is thus that the writer uses the word consciousness.

In making this distinction between the natural and mental orders the ordinary man naively accepts a radical dualism. But, in many cases of what we call the appreciation of illusion, certain items in the natural order (objects in the outer world), as the result of quite indirect thought processes quite within the mental order, become images in the mental order; and this by the loss of an 'out-thereness' characteristic; which 'out-thereness' itself appears to be a mental order characteristic. This, and much else, indicates that the natural order is a special part of the mental order; a part which has this 'out-thereness' characteristic which the rest of the mental order has not. Such a view may be called introspective monism.

The writer suggests that some at least of our metaphysical problems may find their solution if they are stated in terms compatible with such a view as to the nature of the natural order. But it does not appear clear to him that any definite position in relation to the questions at issue between realism and idealism can be held to be taken by one who thus merely suggests a special mode of statement of these questions. The writer is therefore not convinced that his view implies epistemological monism and idealism, as is stated in the Committee's printed report. If, however, such can be shown to be the case, epistemological monism and idealism must, in his view, be accepted.

The Meaning of the Term Evolution. G. R. MONTGOMERY.

There are two distinct pictures which the term evolution is being used to symbolize: that of a sort of continuum which asserts the forms of life to be universally connected, without breaks, or gaps, or vacuums, so that when we have before us all the links there is no call for something out of the ordinary to lead up to the more widely divergent types; the other use, the older and more metaphysical one, asserts that in some way the present is an unfolding of the past, the new is rolled out of what has been.

The tendency of many recent writers is to limit the meaning of evolution to the former of these two pictures and to ask those to employ a different term, say preformationism, who have use for the idea that the new is unfolded out of the past. This tendency seems to be the exact opposite of the best policy; because many who think the new to be contained in the old, still would repudiate preformationism; moreover the term evolution is so definitely a picture of evolving, unfolding, that it would be impossible to keep out the idea of an unwrapping and to visualize merely a continuity of existence; again the term evolution is too snugly intermeshed with the category of cause-effect to serve as a symbol of mere continuity where the precedent has no influence upon the consequent, but allows us merely to anticipate the consequent; and finally the idea of mere continuity is important enough to warrant a new picture with a new symbol or term.

The meaning of the term evolution will become clearer if by way of contrast another picture is suggested indicating the signification to symbolize which these recent writers are using the term. A picture which fairly well represents their position is that of a fabric, say a magic carpet that is in the process of weaving. We do not say of being woven, for in the picture there would be no loom and no weaver; but existence may be illuminatingly visualized as a woven fabric that lies stretching out indefinitely in one direction and in the other terminating, though always growing, at an edge which makes up the changing present. At this edge the threads mysteriously interweave and mysteriously increase in length.

Such a textilic or fabrication theory of existence involves no cause-effect category. Those who visualize life thus would say merely that certain patterns are followed regularly by certain other patterns and certain events enable us to anticipate certain other events.

A weaving web theory of life, like this, is distinct from evolution, and is to be seriously urged as a corrective of the idea that development is an unfolding of what is latently contained.

The Progress of Evolution. A. C. Armstrong.

In this paper the progress of evolution is considered from the point of view of noëtics, with incidental references to the history of opinion concerning evolution and the epistemological questions which it involves:

- 1. Progress has been imperfect in regard to the origins of evolution. Darwinism has been held the primary, or even the sole source of the doctrine; whereas other forces were earlier at work, in some instances with important results.
- 2. Nevertheless, Darwinism precipitated the crisis of the mid-19th century. At first scientific evolution and transcendent evolution were not distinguished. Here great progress has been achieved, to the benefit of both types of thought.
- 3. Evolution and the sciences; in particular the logic or methodology of science. Evolution profoundly influenced the *Geisteswissenschaften* as well as the sciences of physical fact. Progress has been made in respect of the problems raised by the transfer of methods and principles from biology to the sciences of the mental group, but it may be doubted whether the progress is complete.
- 4. The presuppositions of evolution. Evolution unquestionably implies noëtical presuppositions. The concepts of genesis, nature, worth. Overlooked fifty years ago, these were forced on the notice of reflective thinkers by the exigencies of the discussion. In the consideration and elucidation of them there has been mingled advance and retreat. In sum, it can hardly be maintained that the progress made is adequate. But this conclusion does not imply agreement with interpretative essays of a venturesome type.

Early Evolution in America. I. WOODBRIDGE RILEY.

The three centuries of American thought present three phases of Pre-Darwinian evolution. To use the Comtean formula: in the seventeenth century the interest was theological; evolution—if such it may be called—was an unfolding of the divine plan according to the mere good pleasure of the Most High; in the eighteenth the interest was metaphysical: the divine plan became rationalized, evidences of design were diligently sought after, man's task was to discover God's ways of working in the world; in the nineteenth the interest became positive: only after theology and teleology had been left behind was it possible to fasten attention on evolution in the stricter modern sense of epigenesis, of the origin of species, of the descent of man. In brief, the history of evolution in America, as in Europe, has been from the cosmic to the organic, has passed through the logical phases from supernatural election to natural selection.

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The scheme of supernaturalism, derived largely from the Mosaic or Miltonic cosmogony, had three factors which were in turn opposed by three tenets of naturalism. Against special creation there was spontaneous generation; against permanence of species mutability, against cataclysmic destruction degradation through disuse. Spontaneous generation hindered rather than helped the cause. Upheld by the followers of Erasmus Darwin, opposed by Priestley and Cooper, accepted by Clark of Harvard but finally abandoned as untenable, recourse was had to the plurality of origins by Morton of Philadelphia and Nott of Mobile. Modified mutability was fostered by Wells of Charleston and Leidy of Philadelphia, although the permanence of species continued to be defended by Agassiz. Degradation through disuse was promulgated by Stanhope Smith of Princeton, but it was left to the geologists, rather than the Lamarckian zoölogists, to disprove cataclysmic destruction.

Now follow the geological, morphological, and embryological arguments for transformism. These were opposed by Hitchcock the preformationist and expounded by Asa Gray the protagonist of natural selection in America. After the publication of the *Origin of Species* the contestants over naturalism divide into opponents from Joseph Cook to Howison, and into adherents, from the lukewarm like Chauncy Wright and President McCosh, to the ardent like Edward Cope and John Fiske.

Mechanism and Causality in the Light of Recent Physics. M. R. COHEN.

The mechanical conception of nature, while frequently developed in the interest of physical monism, has been largely fashioned by idealistic philosophers (Descartes, Leibniz, Kant, etc.). It is generally supposed to be logically necessary for the physical realm. This supposed necessity is based on a number of misconceptions, more particularly (1) on a confusion between the mechanical and the physical, and (2) on the confusion between mechanism and determinism. The classic science of mechanics (i. e., the science of the motions of material bodies) is a deductive system of propositions all deducible from Newton's three Laws of Motion and D'Alembert's Principle. No valid a priori reason can be adduced why all physical phenomena should be deducible from these laws. The actual historical attempt to do this has resulted in the introduction of a number of additional hypotheses as to the occult properties of matter which are comparable to the epicycles of the Ptolemaic astronomy.

While physicists have for a long time been chafing under this increasing load of hypotheses (cf. Rankine's paper on Energetics, 1855), it is only the progress of experimental physics within the last two decades that has freed physics from the absolute sway of purely mechanical concepts: (1) The study of cathode rays and kindred phenomena has shown that Newton's laws of motion are valid only within definite limits, and that the traditional mechanics is not true for very large velocities nor for very small particles. (2) The mass of material particles has been shown to be probably of electrical origin so that mechanics must now be based on electricity rather than electricity on mechanics.

As a result, therefore, of recent progress in physics, the old mechanical view is giving way to what might be called the statistical view of nature. From this point of view the classic concept of absolutely uniform laws of nature becomes replaced by the statistical concept of correlation, and the notion of efficient causality by that of functional relation (in the mathematical sense). The traditional conception of physical causality is undoubtedly of anthropomorphic origin, and too indeterminate for a scientific physics. Its chief use has been the æsthetic or pedagogic one of vivifying our descriptions of inanimate nature.

Implication and Existence. CHRISTINE LADD FRANKLIN.

Modern logic has done a great service in inculcating, by precept and example, fresh habits of exact and clear thinking. But it has introduced (in the hands of Bertrand Russell) many vagaries which the philosopher who reads the awe-inspiring first chapter of his book will do well not to take too seriously. Thus to set up 'p implies q' as the type of the logic process, and to regard it as possessing some cabalistic significance—as capable of throwing light upon problems is an error in itself, and leads to error on the part of those who make use of the conception. The actual number of primary logic-relations between propositions (or terms)—that is, relations in is- implies is eight; for the logician, it is fatal to ignore seven of them. (a) Four of them are particular; in discussion, an opponent denies the validity of certain pretended logic-relations, the denial of a universal relation is a particular relation, hence to omit particular relations is to limit logic unjustifiably. (b) Four of these relations are symmetrical; in the symmetrical relations the logical distinction between antecedent and consequent has disappeared, transposition from one member to the other of the relation takes place with the utmost simplicity, the

danger of Wrong Conversion (the one danger that lies in wait for those who reason) is absolutely eliminated. Syllogism becomes the "Inconsistent Triad" (or the Antilogism), with one rule for all the modes and figures. Surely these good, symmetrical, forms of statement should not be ignored without consideration. (c) The main characteristic of reasoning is that it consists in putting This and That together, in eliminating unnecessary information, in evolving conclusions out of premises which did not seem to contain them. The type-form usually given for this process is $p_1p_2 \leftarrow c$, "the premises entail the conclusion." We have, indeed, a single premise in the case of the "immediate inference," but that is a minor part of logic. The reason which Bertrand Russell gives for representing the premises as one is that the relation looks more symmetrical in this way. But surely the appearance of symmetry where no symmetry is, is dangerous in the extreme. In this case, it has actually led to error,—to the error of supposing that p and q play like roles in the relation, and that when, for example, an hypothesis p has been shown to be a sufficient explanation of an actual state of things q, its truth is assured. This is the case only if it has been shown to be an 'indispensable' explanation, -a conditio sine qua non,-which is a very different relation. (d) In every statement, whether simple or compound (i. e., whether about terms or about propositions), there is always involved implicitly if not explicitly, an existence-term (truth-term, reality-term). Thus we have, as exactly equivalent to 'p implies q'' ∞ implies non-p or q,' or, 'what is possible is either non-p or else q.' There are many reasons for preferring, as the type-form of the logic-relation, one of those in which the existence-term (truth-term, reality-term) is explicit. term has many interesting characteristics. In it is made explicit the suppressed universe of discourse (domain of thought, range of significance) of the logician.

In conclusion it should be observed that Frege, Peano, and Bertrand Russell are writing on mathematics, and that they give a very garbled account of a non-special symbolic logic.

Chance. W. H. SHELDON.

The object is to show that chance is just as real as causation, space, quantity or other accredited scientific categories. Chance is at the outset taken to mean lack of causation for a perfect knowledge; but a fuller and positive definition will later appear. Many writers admit it in some sense, but few, if any, as an objective category, real in the sense in which the law of gravitation is real. Such reality

I shall claim for it. And I study not the mathematical but the empirical concept: not, what would chance mean in an ideal system of knowledge, but, what of the fortuitous is implied in present-day scientific methods and results? Chance in the sense of the independence between simultaneous causal series (Cournot, Palmer and others) seems hard to prove: I shall not study it. We consider rather chance within a series: events apparently not caused by anything past or present. These seem to be furnished us by the science of statistics. Variations about a type, which when plotted conform approximately to the probability-curve, are verified in many regions. And the probability-curve is just what would result, provided all possible events in a given field occurred an equal number of times.

We must now show, (1) that this can be explained *only* by the assumption, in addition to the recognized causal agencies at work, of a tendency in events to deviate with equal frequency in all directions from the exact resultant of those agencies, (2) that this deviation, while collectively law-abiding, is of such a nature as to imply chance in the individual case.

- I. The hypothesis of universal causation, determining each individual variation strictly as the effect of its special environment past and present, will not guarantee that the variations will be of equal frequency in all directions (approximately). To account for that, a special tendency so to vary must be begged.
- 2. This tendency implies chance in the individual deviations. For if they are determined by anything whatever besides the tendency itself, there is no guarantee that the tendency will be fulfilled. But it is fulfilled. And they cannot be determined by the tendency itself. For, it is indifferent to the order and particular appearance of each variation; therefore they cannot be determined beforehand at all, and are matters of chance.

We find then in Nature "a tendency to vary with equal frequency in all possible directions; the variation implying law for the group, chance for the individual members." Chance has thus a positive aspect—variation, spreading about a type—as well as a negative. It is a dual affair.

The Nature and Function of Definition in a Deductive System. KARL SCHMIDT.

The modern account admits only 'nominal' as opposed to 'real' definitions. The essential parts of this theory may be briefly stated as follows:

1. A

- I. A definition merely imposes a name upon things (Pascal); this is stated either in the form that a definition is an equation (Sigwart, Peano, et al.); or, more consistently, by declaring that the equation sign in a definition is to be taken together with the sign 'Df' as standing for 'means' (Whitehead-Russel, in *Principia Mathematica*).
- 2. There is a radical distinction between propositions and definitions: the former are always either true or false [or "meaningless," Whitehead-Russell], the latter are neither (Russell, Couturat, et al.).
- 3. Definitions have no essential function in a deductive system: they are mere typographical conveniences which could be dispensed with (Peano, Russell, et al.).

This account makes several acknowledged procedures in a deductive system 'paradoxical':

- I. If a definition merely imposes a name, why is it usually so difficult to make a good definition?
- 2. How is it possible that "they often convey more important information than is contained in the propositions in which they are used?" (*Principia Mathematica*.)
 - 3. Why are 'existence proofs' necessary?
- 4. How is it possible that 'definitions' and 'theorems' may be interchanged?
- 5. There are definitions possible and admitted which are not in the form of an "equation"; the "postulate definitions" are among them; the arguments advanced against them (Couturat) are not valid.
- 6. The (alleged) distinctions between definitions and postulates (Frege, Couturat) are not valid. This (now almost universally accepted) account confuses a definition with an explanation, in taking an accidental property of many definitions as the defining property of all definitions: many definitions can be put into the form of an equation

$$x = f(a, b, c, \cdots).$$

It is not necessary to investigate here whether every definition can be put into this form (the above account makes even this problem impossible): even if a definition is given in the form of an equation it is neither the 'x' (the 'name'), nor the "equation" which constitutes the definition, but the "f," i. e., the new relation between elements ('undefined,' or previously defined) of the system, by which a (new) logical entity is uniquely determined. It is this 'uniquely determining' which is the defining property of definition in a deductive system. Put differently: a definition is a system of conditions which is satisfied by

only one class of logical entities in a given system; this class is said to be 'defined' by the system of conditions; whether this latter is 'solved' with respect to x or not is unessential.

A definition in a deductive system need not be exhaustive in the sense that all properties of the "defined" logical entity are stated; but it must be "complete," i. e., all the properties of the defined logical entity must be deducible from it, provided the 'other' propositions (including the "postulates") of the system hold; but not otherwise. A definition is therefore an integral part of a given system. If the defined logical entity is conceived as a system of properties, symbolized by 'x,' then

$$x = f(a, b, c, \cdots)$$

may be conceived as an equivalence valid in the given system, but not otherwise.

Definitions are indispensable in a deductive system: they are one of the accepted methods of introducing into a deductive system the 'New,' which seems to have given mathematicians so much concern of late.

The possibility of defining every logical entity of a system in terms of a few indefinables, which the *Principia Mathematica* have thus far carried through so successfully, does not establish the contention that nothing 'New' enters the system: it hides the 'New' behind the typographical configuration which must be considered an essential (though somewhat neglected) part of the symbolism of the *Principia Mathematica*.

LIST OF MEMBERS.

Adler, Professor Felix, Columbia University, New York.
Aikins, Professor H. A., Western Reserve Univ., Cleveland, O.
Albee, Professor Ernest, Cornell University, Ithaca, N. Y.
Alexander, Dr. H. B., University of Nebraska, Lincoln, Neb.
Angier, Dr. R. P., Yale University, New Haven, Conn.
Armstrong, Professor A. C., Wesleyan Univ., Middletown, Conn.
Bakewell, Professor Charles M., Yale Univ., New Haven, Conn.
Baldwin, Professor J. Mark, Care N. W. Harris & Co., New York.
Bawden, Professor H. Heath, Box 691, San Diego, California.
van Becelaere, Rev. E. L., Convent of the Visitation, Georgetown, Ky.
Bigelow, Rev. Dr. F. H., 1625 Mass. Ave., Washington, D. C.
Bode, Professor B. H., University of Illinois, Urbana, Ill.
Boodin, Professor J. E., University of Kansas, Lawrence, Kans.

Brandt, Professor Francis B., Central High School, Philadelphia, Pa. Brett, Professor G. S., Toronto University, Toronto, Canada. Britan, Professor Halbert Hains, Bates College, Lewiston, Me. Brown, Dr. H. C., Columbia University, New York. Brown, Professor Wm. Adams, Union Theol. Seminary, New York. Bryan, President W. L., Indiana University, Bloomington, Ind. Buchner, Professor E. F., Johns Hopkins Univ., Baltimore, Md. Bush, Dr. Wendell T., Columbia University, New York. Butler, President N. M., Columbia University, New York. Caldwell, Professor W., McGill University, Montreal, Canada. Calkins, Professor Mary Whiton, 22 Bellevue St., Newton, Mass. Campbell, Professor Gabriel, Dartmouth College, Hanover, N. H. Carus, Dr. Paul, La Salle, Ill. Case, Professor Mary S., Wellesley College, Wellesley, Mass. Cattell, Professor J. McKeen, Columbia University, New York.

Case, Professor Mary S., Wellesley College, Wellesley, Mass.
Cattell, Professor J. McKeen, Columbia University, New York.
Chrysostom, Brother, Manhattan College, New York.
Coe, Professor George A., 606 W. 122d St., New York.
Cohen, Dr. M. R., College of the City of New York, New York.
Cox, Dr. George Clarke, Dartmouth College, Hanover, N. H.
Creighton, Professor J. E., Cornell University, Ithaca, N. Y.
Cunningham, Professor G. W., Middlebury College, Middlebury, Vt.
Curtis, Professor M. M., Western Reserve Univ., Cleveland, O.
Cushman, Professor H. E., Tufts College, Boston, Mass.
Cutler, Professor Anna A., Smith College, Northampton, Mass.
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Davies, Dr. Henry, Easton, Md.

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No. 2.]

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Wright, Professor H. W., Lake Forest College, Lake Forest, Ill.

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REVIEWS OF BOOKS.

Lebendiges und Totes in Hegel's Philosophie. Mit einer Hegel-Bibliographie. Von B. CROCE. Deutsche, vom Verfasser vermehrte Uebersetzung von K. BUCHLER. Heidelberg, Carl Winter's Universitäts-Buchandlung, 1909.—pp. xv, 228.

This is a lucid and refreshing German translation of Croce's admirable little book on Hegel's philosophy, enlarged for the German edition by the author himself. Few books are so well fitted to give one an insight into the essential truths and errors of the system as this. It is a pleasure to find a Hegelian whose loyalty to the master does not blind his vision to the teacher's faults, whose main purpose is to understand him and therefore to know his weakness as well as his strength. Dr. Croce voices the feelings of many an earnest student of the great German when he describes his own experiences in the study of the system. "How, for example, does it happen," he asks, "-if I may be permitted a personal reference, which, perhaps, after all, does not concern me alone,—that I who am writing these lines and who have just interpreted and explained, with such acquiescence, the Hegelian doctrine of the synthesis of opposites and the resulting notion of reality, as unity in diversity, should have felt a strong aversion to the Hegelian system during many years of my intellectual life—and how does it happen that even now, in re-reading these works, I should at times suddenly find the old Adam rising up in me, that is, the old aversion?" The answer to this question he thinks is to be sought in the fact that the system contains, besides much that is vital, a dead portion, "unburied bones that hinder its very life from living" (p. 65).

Croce regards as Hegel's basal error his failure to distinguish between the doctrine of opposites and the doctrine of differences; he identifies them and falsely applies the dialectical process, which is peculiar to the synthesis of opposites, in the union of differences. It is owing to this confusion, for example, that religion comes to be conceived as the antithesis or negation or non-being of art, and that religion and art are regarded as two abstractions which first receive their truth in the notion of philosophy. The application of the dialectics of opposites to the relation of differences necessarily gave rise to two great misconceptions: philosophical errors were raised to the

rank and dignity of partial notions or truths; and partial notions or truths, notions implying, not opposition, but difference or degree, were degraded to philosophical errors, to the rank of incomplete and imperfect truths. As a result of the first, errors were derived a priori as necessary stages of the truth, a procedure which is responsible for the forced and arbitrary arrangement of Hegel's Logic as well as for his treatment of it, now as a system of philosophy, now as a history of philosophy. The second misconception prevented him from recognizing the true nature of either the æsthetic or the historiographic or the natural-scientific functions, prevented him, in other words, from doing justice to art, history, or natural science. Art is a philosophical error, a bad philosophy, and must disappear with the perfection of philosophy. Hegel's conception of an a priori philosophy of history and his denial of the history of the historians follow necessarily from his logical presupposition. Before he looks up the facts, he already knows what they must be; he knows them in advance, as one knows the philosophical truths which the mind finds in its universal essence: he does not derive them from the facts as their synthesis, so to speak. It is true, statements may be adduced from the same author's writings to show his great respect for facts: we must take history as it is and proceed historically and empirically. The accidental is foreign to philosophy; and history—so he says elsewhere must conceal the universal in empirical particulars and in factual reality; but the appearance of the Idea is accidental and lies in the field of caprice. But, if the accidental and the particular are really alien to philosophy, if we can know them only empirically, we cannot make philosophy, but only history, out of history. A philosophy of history, conceived as Hegel conceives it, does not admit of real history by its side; this is not only a logical consequence, but may be gathered from various remarks of Hegel (pp. 117 f.). The many contradictions in which Hegel becomes involuntarily involved show that his thesis of a philosophy of (temporal) history is erroneous.

Similar contradictions meet us in the study of Hegel's conception of natural science. According to his logical presupposition, philosophy can give us an a priori construction of nature. If this is so, if the speculative method is the true one, then the scientific method is crude and contradictory, dealing with abstractions, with the accidental and non-essential. Adhering to this thought, he ought to have declared the empirical method to be wholly erroneous as a method of truth; he ought to have said: mathematics and natural science are wholly indifferent philosophically and independent of philosophy. He might

have pointed out the purely practical character of scientific conceptions, conceived them as working-hypotheses, having practical but not theoretical value. And we find traces of such a view in his writings, but he could never make up his mind to throw the scientific method overboard. He continued to regard the mathematical and natural-scientific conceptions as imperfect theoretical data, as philosophical errors, as half truths, to be corrected in the philosophy of nature; he recommended that physics and philosophy go hand in hand. But his attempt to reconcile the natural scientific and the speculative methods breaks down. By considering the exact sciences as a semi-philosophy, Hegel denied them completely and absorbed them in philosophy, which straightway assumed all their rights and duties. It therefore became the duty of philosophy, and not of empiricism, to prove the existence of this or that particular fact, to discover stars, physical forces, chemical substances, physiological elements, unknown plant and animal species. Despairing of the possibility of rationalizing the countless phenomena of reality, Hegel lays the blame on the impotence of nature to realize the rationality of the notion; whereas it is, according to Professor Croce, merely the impotence of the nature-philosophy of Schelling and Hegel faithfully to carry out their own program.

Hegel was compelled, in the philosophy of history and in the philosophy of nature, to treat the particular facts and empirical concepts as special philosophical concepts; and as he had already applied the dialectical method to the latter, he had to treat dialectically the particular facts and empirical concepts also. The history of philosophy is almost free from this false treatment; few examples of it are to be found in the philosophy of history; many occur in the logic, æsthetics, and philosophy of mind; and the philosophy of nature is simply teeming with them. Hegel's dialectics has frequently been caricatured, but no caricature can equal the author's own unconscious caricature when he attempted to think Africa, Asia, and Europe, or the hand, the nose, and the ear, or the wealth of the family, the patria potestas, and the testament, in the same thought-rhythms in which he had conceived being, nothing, and becoming.

Another consequence of the false application of the dialectical method is panlogism, which is really an excrescence in the system, according to Professor Croce. This panlogistic error, however, changes into its opposite, dualism, in the philosophy of nature. Attempts have been made to explain away this difficulty, but Professor Croce's analysis shows them all to be unsuccessful. In this

unreconciled dualism in which Hegel's absolute idealism finds itself enmeshed, lies the reason for the division of the school into a right, or theistic, wing and a left, or materialistic, wing.

In a final chapter on the "Criticism and Development of Hegel's Thought," the author presents what he considers to be the problem for the critics as well as the continuers of this philosophy. It is to preserve the vital part, that is, the new conception of the notion as the concrete universal, together with the dialectics of opposites and the theory of the gradations of reality. This would mean the repudiation of all panlogism and all speculative construction of the empirical particulars of nature and of history, and the recognition of the independence of the different forms of the mind, even in their necessary connection and unity; and finally, the resolution of all philosophy into a pure philosophy of mind. The Hegelian school, he thinks, has utterly failed in this task, and the critics have not measured up to their duty either. He does not expect the critical revision of Hegel's philosophy to come from Germany, which has not even reprinted his works and often pronounces judgments upon him," which astonish us in our remote Italian nook," but prefers the English studies on Hegelianism, which, he thinks, lucidly present the doctrine, faithfully interpret it, and criticize the master with respect and intellectual independence.

Professor Croce's book is, in my opinion, a fine example of the interpreter's art. It is the business of the interpreter to tell the truth, to reproduce his author's thought, not to force consistency into it or to make of it what, perhaps, the author himself might have made of it if he had seen it in the light of a future generation. It is one thing to give us an insight into a philosophy, another to develop it, to improve it, to build upon it. Both forms of procedure are valuable, both have their place, both will be welcomed by the student of philosophy, but they are not the same. Professor Croce frankly admits the errors, difficulties, and inconsistencies where he finds them, and in frankly admitting them, he helps us to distinguish between the living and the dead elements in a great system.

FRANK THILLY.

CORNELL UNIVERSITY.

Schopenhauer. Par Th. Ruyssen. Paris, Félix Alcan, 1911.—pp. xii, 396.

The series of philosophical classics which Professor Clodius Piat inaugurated so brilliantly with his treatises on Socrates, Plato, and Aristotle has shown a decided partiality for classic, scholastic, and,

naturally, French names. It is, therefore, a welcome sign to read this work on Schopenhauer by Professor Ruyssen, whose volume on Kant, in the same series, was crowned by the Institute. For in France, as in the English-speaking world, the presence of excellent translations of Schopenhauer's works has been accompanied by a curious absence, comparatively speaking, of adequate interpretation and criticism of the Sage of Frankfort's philosophy. As Professor Ruyssen says, "Schopenhauer has been read rather than studied" (p. viii). Leaving the littérateur and the essayist out of account, Professor Ruyssen concerns himself with Schopenhauer the philosopher, and his object is to present in systematic form, alongside of the life-directing currents of Schopenhauer's personality, the dominant principles, the historical significance, and the practical results of his thought.

In his introductory chapter, discussing "The Intellectualist Tradition and the Philosophy of Will," the author suggestively sums up the originality of Schopenhauer's philosophical attitude: "Voluntarism, intuitionism, pessimism, setting themselves in violent antagonism to the great Hellenic, scholastic, and Cartesian tradition" (p. 12). A study of the life of Schopenhauer discloses the rapid development and early crystallization of his philosophical thought. There are 'periods' in Schopenhauer's career as a philosophical writer: the years 1814 and 1820 serve as milestones indicating the end of the formative and the fertile periods respectively, and 1833 marks the retreat to Frankfort after the abandonment of academic ambitions, and, finally, the beginnings of public recognition. But there are no periods in the development of Schopenhauer's philosophy itself. It was suggested in the bold thesis of 1813, and, less than six years later, the thirtyyear-old philosopher had uttered, and knew that he had uttered, his life's message in The World as Will and Idea. The forty odd years following are spent in elaboration, elucidation, with tireless persistence in the face of an apathetic public.

Persistent also are the clashing factors inherent in the system: frank idealism, side by side with a voluntarism that frequently lapses into materialistic excesses; romanticism and cynical realism all at once. Many writers have sought a psychological, some even a pathological, explanation of the incoherent character of Schopenhauer's thought, in terms of the ill-organized personality of the man himself. Others have attempted to trace the diverse currents in Schopenhauer's philosophy to their respective sources—romantic, scientific, religious, Oriental, Platonic, Kantian, post-Kantian. Professor Ruyssen recognizes the influence of all these elements in the crystallization of

Schopenhauer's thought. By themselves, however, they provide no adequate explanation. Schopenhauer's philosophy is distinctly not a formulated statement of his individual traits and caprices; and his was a personality far too original to satisfy itself with the assimilation of borrowed thought, far less, to rest content with a discordant eclecticism. Professor Ruyssen sets himself to examine the philosophy itself and to seek there the fundamental significance and the adequate explanation of Schopenhauer's philosophical attitude.

The examination of Schopenhauer's World as Idea leads the author to regard his epistemology as "a Kantianism simplified in its method and more radical in its conclusions" (p. 187). Schopenhauer makes the line of cleavage between the ideal and the real sharp and clearly defined. Science deals with the laws of the world as idea, but that world itself lacks metaphysical reality: it is a subjective representation, an illusory appearance, the veil of Maïa. The pathway to Reality does not lead through epistemology; the kernel of the Real is irrational; its essence is will. The ultimate 'in-itself,' as we may say, is beyond the ken of the keenest intellect; the philosophy of Schopenhauer really concerns itself with the most intimate manifestation of that Reality (p. 203). We can see the indubitable manifestations of the unknowable Real all about us; penetratingly, persistently Schopenhauer brings all nature to bear witness to the fundamentally voluntaristic character of all being, organic and inorganic, animal and human. Yet, in spite of the apparently inexhaustible mass of empirical evidence, in spite of the appeal to the inmost nature of man himself, and the confidence with which Schopenhauer declares his theory to be a solution of the world-problem, there are grave fissures in the system. There is a wonder greater even than Schopenhauer's own "Wunder κατ' έξοχην"; it is this: "That the will, undetermined and solitary, should have willed anything in general, and that, having, before all representation, by an inexplicable accident, willed life, it should have continued to will it, should have attached itself to it, obstinately, that it should have doubled all effort to multiply it, as if it had judged it good . . ." (p. 275). This is the basic contradiction; Professor Ruyssen has put his finger on the heart of the matter. Other inconsistencies, as, for instance, that between the materialistic definition of the brain as a physiological function of the intellectual organism, and the idealistic assertion that the brain, along with all matter, is merely the subject's idea, are easily explained, once Schopenhauer's fundamental premise is granted, and his irrational willreality allowed without question to manifest itself rationally.

In Chapters IX, X, and XI, Professor Ruyssen discusses Schopenhauer's pessimism, his theory of art, and his ethics. "In a metaphysic of irrational will, evil, no less than good, can only be an accident" (p. 281). But pessimism need not be grounded theoretically; Schopenhauer masses together abundant empirical evidence to show the futility of living. To the illumined ones, however, there are two pathways to salvation. The first leads to the passionless contemplation of the Platonic Ideas: the grades of manifestation of the will-reality, finding their apex in music. But the artist-genius enjoys freedom only in the brief moments of esthetic exaltation. Only morality can yield complete deliverance.

The author believes that he has first pointed out the existence of three different types of ethics in Schopenhauer's system: an ethics of justice, an ethics of sympathy, and an ethics of abnegation. To these he adds a possible fourth: the ethics of Schopenhauer's own life, which did not merit his theoretic approval: a purely empirical ethics of prudence and common-sense. Justice and sympathy are the negative and the positive ethical expressions of a pessimistic Weltanschauung. Morality consists in not giving way to the normally selfish incentives of our natures, and in counteracting them by positive altruistic conduct. Neminem laede (= justice), immo omnes, quantum potes, juva (= sympathy).

Existence itself, however, is futile, and bettering the lot of others does not solve the problem. True salvation demands the abdication of the will. Professor Ruyssen believes that the doctrine of Nirvana rests undetermined with Schopenhauer. To his mind, the end of The World as Will and Idea indicates a Platonic, rather than a Buddhistic aspiration; as if a purified, exalted will could attain to a clearer vision of its own being. Such speculations, it seems to me, suggest the possibility of reinterpreting Schopenhauer's voluntarism in monistic terms, as a dynamic idealism with an immanently rational will as the essence of Reality. But the success of such a reinterpretation could be possible only by negating what is, after all, Schopenhauer's fundamental philosophical contention, namely that the epistemologist labors in a world of illusion. Von Hartmann's effort in a similar direction should not be forgotten.

In his Conclusion, Professor Ruyssen indicates several profound reasons for the permanent significance of Schopenhauer's doctrine. In spite of flagrant errors in his criticism of Kant, Professor Ruyssen believes that posterity has in the main admitted his line of argument. Professor Ruyssen also believes that Schopenhauer's philosophy repre-

sents a line of development more in conformity with the spirit of Kantianism than the Hegelian philosophy of development (p. 372)—a contention that seems rather sweeping. Professor Ruyssen discusses Schopenhauerianism as a connecting link between Kantianism and modern evolutionistic empiricism, and as a metaphysical basis for pragmatism; he draws a parallel between the will-to-live and the Bergsonian "élan vital," and puts Schopenhauer in the front rank of the modern philosophers of liberty, side by side with Secrétan, Renouvier, Wundt, Boutroux, and Bergson (p. 376).

Many specific problems arising from the study of Schopenhauer's philosophy the author touches upon only briefly, frankly considering them as outside the scope of his undertaking. For instance, the minutiæ of Schopenhauer's criticism of Kant, and his interpretation and use of the Platonic Ideas. Just as little does Professor Ruyssen discuss in any detail Schopenhauer's influence upon the philosophy and literature of the half-century following his death, an influence that connects the names of von Hartmann, Nietzsche, and Paul Deussen, Paulsen, Noiré, Wundt, and Volkelt, Hamerling and Wagner, Max Nordau, Sacher-Masoch, Ibsen, Sully-Prudhomme, Loti, Brunetière, Bernard Shaw, Tolstoy, and, we may certainly add, Thomas Hardy. Professor Ruyssen has kept himself from excursions into the by-paths so alluring to the usual writer on Schopenhauer, excursions for which the dilettante reader is only too eager, but which have sadly retarded the serious study of Schopenhauer's philosophy. He has devoted himself to the straightforward study of the personality and the philosophy of Schopenhauer, and his book is a clear proof of the consistency with which he has adhered to his aim.

The bibliographical Appendix will prove useful to the popular reader. The topically arranged Table of Contents can only partially compensate for the lack of an index.

RADOSLAV A. TSANOFF.

NEW YORK CITY.

A Philosophical Study of Christian Ethics. By G. F. BARBOUR, Edinburgh, 1911. William Blackwood & Sons.—pp. xii, 440.

The aim of this volume, as stated by the author, is "to show how certain of the persistent problems of ethics appear in the teaching of the New Testament, and to examine the specifically Christian answer to them." The results he hopes to attain are twofold: (1) to "give some added clearness to our understanding of the ethical teaching of the New Testament;" (2) to "show how that teaching forms the

completion and crown of the ethical thought both of Greece and of the modern world." To his task, thus broadly and deeply conceived, the author has brought sound scholarship, ample knowledge of the philosophical systems he discusses, an acquaintance with the New Testament whose critical discernment is inspired by sympathy and rever-For its adequate discharge, he required powers of synthesis, which would not be cultivated at the expense of analytic skill, and would not lead him to uninstructive comparisons, and unsound analogies; and it is not too much to say that his work is characterized in an eminent degree by precisely these intellectual requirements. Again and again he has brought together the thoughts of Plato, Spinoza, and Kant, on the one side, with those of the New Testament writers on the other, and has exhibited their mutual affinities and contrasts, in a manner that illumines and sets in high relief their varied interpretations of human life, and their appreciations, sometimes congruent and sometimes disparate, of moral values and of the possibilities of moral attainment. His philosophical standpoint is that of idealism, without, however, any express affiliation to, or any uncritical dependence upon, any one master or system. His intellectual attitude is, in fact, determined by his acceptance of the Christian Ethic, both in its practical teaching and in its fundamental principles, together with what might be described as its theoretic or philosophical implications. In this, indeed, lies the originality of the author, and the unique interest of his book. He is not an idealist philosopher, adorning with tags of Scripture a system formed in complete separation from the New Testament. He is not a theologian, framing out of Scripture a system which stands in entire exclusiveness, ignoring the labor of the human spirit as it seeks to discern the meaning and achieve the goal of life. He has taken his stand by the problems, which men in all ages have been compelled to face, concerning values and aims, endeavors and hopes, the compulsion of duty, the reward of virtue, the significance of the temporal discipline of life, and the permanence of its highest elements. He has considered the great typical answers to such questions which are presented in the philosophical systems of the Hellenic world, and in those of modern times, as well as those which are contained in the writings of the New Testament, which, without any philosophical method, and with no attempt at systematic completeness, have addressed themselves to all who are confronted by the titanic difficulties of life, and have conducted them into an experience in which these problems receive their solution, and the paralyzing doubts begotten of them are exchanged for the energy

of a present possession and the hope of final victory. No doubt, comparison and contrast between philosophical and Christian ethics has been frequently offered in works either of one type or the other. But rarely has the attempt been made in so thorough-going a fashion, with such entire sympathy with both types of thought. The value for both is great. The philosophical labor is redeemed from its apparent aloofness and inconclusiveness. It is shown, with something approaching dramatic vividness, to be the inevitable and continually renewed effort of man after clear self-knowledge, reacting upon and preceding the practical conduct of life. The Christian teaching is vindicated against the charges often brought against it of dogmatism, unreality,—emotionalism, negativity, impossibility, and inapplicability to the necessities and aspirations of actual human life. It is shown to be dealing with precisely the problems with which philosophical ethic wrestles, and to be giving solutions, which may be compared with those of philosophers, and estimated accordingly. Whether the superiority of its answers be accepted, or not, the New Testament gains, through such a treatment, its place in the great series of ethical studies, which have educated the conscience, and guided the destinies of nations and of the race. Those who have, in practice, been guided by its precepts, and have fed their spiritual life by its ideas, will find great gain in thus relating it to the intellectual achievements, in the department of morality, of the Hellenic and of the modern world. Its scope is seen to be larger, its teachings more definite. Its principles are recognized as having philosophical importance and universal validity; and that view of the world, which is implicit in it, becomes more impressive, and more cogent. Students of philosophy and of theology respectively will find much in this volume to rebuke their besetting sin of narrowness, by opening to them domains of thought, which they are prone to neglect, through preoccupation with their special points of view.

The plan of the book is as follows. In the first part, chapters I to VII, the problems dealt with are of a more general nature; in the second part, chapters VIII to XIII, the problems concern more especially the individual life.

The problems discussed in Part I may be indicated briefly.

I. The Definition of Virtue.—In Greek ethical theory, there is found expressed by Plato, not without partial recognition in Aristotle, the idea that virtue is "a synthesis or harmony of opposite qualities" (p. 10). This mind of moral excellence is exemplified in the character of Socrates, and "meets us," according to Professor Butcher, "at every turn in the distinguished personalities of the Hellenic race."

When we turn to the Christian conception of virtues, which is often charged with being "essentially negative, a matter of renunciation and escape from sin rather than a positive achievement of goodness and completeness of character" (p. 3), we find that, in point of fact, it is essentially positive, and comprehensive, and corresponds, in its own sphere, to the highest form of Greek thought and life. The author passes in brief and suggestive review severable notable combinations, almost paradoxes, which illustrate and prove the synthetic and positive character of the Christian view of moral excellence, e. g., courage, and gentleness, earnestness and equanimity, severity and mercy. He concludes this first and introductory discussion by pointing out the quality of infinitude which belongs to the Christian idea of virtue, as distinguished from the finality and fixity of virtue as conceived in the Aristotelian doctrine of the Mean. Moral life, in the Christian view, confronts the individual with "immeasurable possibilities and demands." An infinite task awaits him, which indeed cannot be completed in his life-time; which, in truth, he, as an individual, cannot complete; to which he, in conjunction with every member of the race, is called upon to make ceaseless contribution, receiving at the same time the assurance, verified in every fulfilment of duty, that in so doing he shall reach the development of his power and the liberty of his spirit.

II. The Value of the Individual.—Many tendencies, illustrated by the author, in organic evolution, in history, in religion, and in philosophic thought, have set the Individual and his complete realization as the goal of human development. It is true that there have been tendencies of another sort, which have endangered the independence and the value of the individual. (a) The vastness of the physical universe makes him an inconsiderable fragment in the sum of things. (b) Economic forces, impersonal and non-moral in their operation, likewise reduce the individual to helplessness and insignificance. To meet these influences and to indicate the value of the individual, is the task to which the greatest minds in philosophy have bent their most strenuous efforts. Two lines of argument are discernible. One is mainly intellectual, and maintains that the human spirit—"in its return upon itself, and its discovery that the meaning of life lies within, is emancipated from bondage to the categories of quantity and number, and enters the world of inner freedom" (p. 44 f.). The other is moral, and finds its chief exponent in Kant, who makes his ethic rest on "the absolute worth of the Good Will." As subjects to the law of duty, men are ends in themselves, and not mere

means to the ends of others. Here and under other heads in his discussion, the author has carefully discriminated the strength and the limitations of the Kantian ethic.

The value of the individual, thus defended by philosophic thought, is central in Christian ethic. The Gosepls, reproducing the teaching of Jesus, "proclaim the truth that for each man the secret of life lies within, and that, when the inward Good is subordinated to even the widest possible appropriation of the goods of the material world, the result must be the loss of all that gives human life its ultimate significance" (p. 91 f.). The Christian teaching, however, has aspects which are not met with in the philosophic defence of the individual. One of these is the manner in which the value of the individual is affirmed in connection with the Fatherhood of God. "If the idea of Fatherhood be the most adequate conception we can form of the Divine Nature, then the worth of the individual is grounded in the deepest of all realities (p. 96). Another is the "essentially dynamical" attitude of Christianity to the individual. The value of the individual "is asserted less as an accomplished and unalterable fact than as a great possibility" (p. 98). To make that possibility actual, Jesus gave His life. Christianity, accordingly, is a redemptive religion, and calls upon man not merely to recognize the truth of a proposition, but to realize a potentiality. The Christian doctrine of the worth of man, therefore, is not susceptible of theoretic demonstration. It presents itself as "a task and a challenge," and it is verified progressively and anew, as each generation and each individual takes up the challenge, and pursues the endeavor.

III. The Nature of the Good as Social, and Non-competitive.—The discussions under this head are the most copious and the most important in the book. The character of the true Good as "common to all who partake in it, and so non-competitive in nature" is established, from the philosophical point of view, in two lines of argument. The first turns upon the inwardness of virtue, and urges that "virtue is too entirely personal a concern to be subject to the law of competition, nor can its possession by one man ever interfere with its exercise by another" (p. 108). This position is fully illustrated by a chain of references from Plato to Kant (pp. 109–114). The second "emphasizes the fact that man can only exercise his higher activities in the society and through the coöperation of his fellows" (p. 108). This line of thought, which is very vividly depicted (pp. 114–122), is characteristically Greek. "It is perhaps the greatest achievement of Greek ethics to have made it clear for all time that no man can reach

the full development of his nature save in association with other men, and in the service of an ideal wider than his own private interests" (p. 122).

Against these arguments, it has been urged that: (a) if we take the Good in the Stoic or Kantian sense of the Good Will, it is non-competitive, but abstract, without content; (b) if we take it in the Greek sense as implying the exercise of the varied powers of human nature. it is concrete, but purely self regarding. Each of these objections, however, is founded on a misapprehension. The Good Will cannot be confined to a supposed inward sphere, but expresses itself in outward action, and has to do with external things in fulfilling its purposes; while activities, which are not consciously moral or religious, may contribute nobly to the common good. In fact, external things militate against social good, only when they are regarded as objects of acquisition. Regarded as "means to contribution," they become, in their possession and use, the instruments at once of self-realization and of the common good. The welfare of the community is best attained, when men, by a deed of voluntary surrender, dedicate themselves, their powers and their possessions, to its service; and in such service, and neither in bare self-sacrifice, nor in isolated self-realization, is the good of the individual himself, perfectly achieved.

When we turn to the ethical teaching of the New Testament, we find the same two points of view, with their apparent inconsistency, and their real synthesis. In the first place, the inwardness of virtue is amply asserted by Jesus and His aspotles; and the life of the primitive community is the practical realization of an experience, in which the highest good is within the reach of immediate individual appropriation, and cannot possibly be an object of competition. In the second place, Christianity, as conceived by its Founder and His representatives, is not ascetic, and does not consist in an unreal "otherworldliness." The healing ministry of Jesus, as well as many direct injunctions, fully recognize the place of external conditions in reference even. to the highest and most spiritual conceptions of human life. In this connection the author points out how profoundly concerned Christianity is with the physical conditions in which multitudes of men are living, conditions which make the beginning and development of moral and religious life enormously difficult, if not impossible. "This union of carelessness and care for the body, of contempt for and sympathy with suffering, which marked the ministry of Jesus descended also to His followers in the early Church" (p. 149); and, we may surely add, will characterize every revival of genuine Christianity. These two points of view, the inwardness of virtue, and the dependence of the moral life upon material conditions, form, however, no real dualism, but "only a dualism of contrasted aspects, and not of contradictory facts, of experience" (p. 153). They find their synthesis in "the principle of inwardness as Christianity conceives it. For this is no other than Love." And "the spirit of Love cannot remain subjective or merely spiritual. . . . It finds its expression and indeed its realization in Service. Now this is only the more direct and simple expression given by Christian Ethics to the principle of contribution to the Common Good, in which the philosopher seeks to find a solution of the double antithesis of the inward and outward, and the individual and social, aspects of the Good" (p. 155). The Christian ethic, accordingly, is intensely living and invites the humblest individual to a share in the noblest task; and is thoroughly comprehensive, drawing within its scope every aspect of human nature, and the infinitely diversified activities of man.

The essentially synthetic character of the Christian ethic, and its view of the Good as social, which have thus been stated in reference to corresponding aspects of philosophical theories, find, however, in the New Testament definite expression in a category or idea, which sums up the Christian conception of human life, with its tasks and possibilities, viz., the Kingdom of God, or of Heaven. Chapter VII on "The Kingdom of God as Present and as Future" is central in the author's presentation of Christianity, and is wrought out with intimate knowledge of the discussions which have gathered round this greatest of New Testament ideas.

He treats it under four aspects (p. 186): (1) as immanent—as a present, spiritual gift; (2) as an ethical task linking the present with the future; (3) as a completely realized and divinely instituted Kingdom, to be established at "the end of the age"; (4) as actually existing in a transcendent and superhuman sphere. More simply, the Kingdom is (1) a gift to be received, and at the same time (2) a task, demanding strenuous effort, which (3) is guaranteed of ultimate success, (4) through the will and the resources of God. The author concludes by pointing out (pp. 204–207) how this Christian idea of the Kingdom corresponds to the Greek conception of the perfect polity, which obtained its first and greatest expression in Plato's Republic, while transcending it in dynamic energy and confident hope.

The discussions, in Part II, of the problems of individual life, exhibit the same careful comparative study of philosophical and of Christian ethics. "The Place of Reward" is given in philosophy,

not as "an external addition to the good life," but "as the assurance of the possibility of further progress" (p. 220). Similarly, in Christianity, "the truest reward is the opportunity to continue and to advance in virtue," including "the development of powers for service" (p. 242). If, however, reward and punishment are thought of "as consisting in the free and inevitable development of the inner nature of good or evil action," there is danger of character being lost in a moral continuity that is indistinguishable from iron necessity. sophical and Christian ethics have, accordingly, both been forced to find room for new beginnings in the moral life. Lotze, Bergson, and Eucken are instances of the modern endeavor to conserve the freedom "For a philosophy which seeks to think forward rather than backward, and to express something of that sense of originative effort which is experienced in moments of strenuous endeavor, new beginnings are not only possible but are inwoven in the very warp of the moral life; and yet that continuity does hold sway, inasmuch as the past persists in the present, not indeed as an irresistibly determining power, but as providing the material and the conditions of vital and originative force" (p. 269). This idea of a new beginning, which philosophy labors to uphold, is the very core of Christianity, whose view of the value of the individual is crowned by its strong conviction of his redeemableness, without, however, infringing the truth contained in the law of moral continuity. It summons those who are living under that law, to enter upon a new life, which is made possible for them through the redemptive forces which have entered the world through the personality of Jesus. The strong assertion of redemption, and the introduction into a new life, raises the final problem of the relation, within Christian experience, of Law and Freedom. The solution is presented in the conception of Law (1) as Personal (ch. XI), (2) as Positive (ch. XII), and is summarized by stating "that the liberty of the Christian is determined and conditioned both by the example of Jesus, and by the needs of his fellow-men. Freedom from legal control and spontaneous flow of benevolent impulse are to be regarded as constituting the Christian ideal, only in so far as they bring a man's character into closer conformity to the character of Jesus, and adapt his action to the actual requirements of the social whole" (p. 338).

Through the discipline of life, and by that educative process which Christianity essentially is, the individual is led into the Kingdom of God, and becomes the subject and servant of the Moral Order, which is itself the highest Good for man, and the ultimate reality of the universe. In his closing chapter (ch. XIII) the author moves from ethics to philosophy, and even to theology; for "the Good which man is called upon to follow is indeed related to the deepest Reality, nay, it is itself that Reality (p. 398), and "the universe is at bottom a moral one" (p. 381). Man does not create the Spiritual Order. He has to realize and actualize it often, with trial and pain, in his own life and in the society in which he lives. He is enabled to do so, through the faith in which he apprehends it as an abiding reality, and is united with it as a victorious force.

From even so brief an outline as the foregoing, it will be seen that Mr. Barbour's book is an exposition of Christian ethics. Set forth as it is, in the light of the leading positions of philosophical ethics, the exposition gains immensely in clearness and in interest. So far as the actual treatment goes, Mr. Barbour has done no more than expound, with rare skill and sympathy, the teachings of the New Testament. In reality, however, his exposition is at the same time an apologetic of a peculiarly persuasive and attractive kind. The Christian ethic is surely the best Christian apologetic. If the exposition of this volume is accurate, Christianity is not properly defined (as by Loisy in a recent Hibbert) as a "highly realistic mysticism," and cannot rightly be classed with the myths of an Osiris, an Isis, a Mitheas. On one side, its relations and analogies are with the great efforts made in every age to present an interpretation of the manifold experiences of man; and of these, the volume before us is an original and luminous presentation. On another side its direct affiliation is with the religion of the Old Testament. Thence it derives its double character, as ethical and redemptive. Mr. Barbour has done well to bring these two features of Christian ethic close together. It is remarkable that the teachings of the New Testament, so sporadic and occasional, have yet dealt with the same problems as those to which the learned thinkers of every century have devoted their systematic labors, and have reached results, in which philosophic theory is at once justified, and illumined with fresh light, and made vital with new energy, so that Christian ethic has won a position of complete universality in the moral judgment of mankind. It is still more remarkable, however, and is profoundly significant, that the New Testament never presents its ethic, as possessing intellectual independence. Whatever be the problem under discussion, the nature of the Good, the idea of the Kingdom, the relation between Continuity and Freedom, the results, parallel though they may be to those attained by philosophic effort, and superior to them in truth and power, are never presented as the outcome of thought alone, but of thought emerging out of, and giving expression to, actual experience. The Christian ethic stands supreme in its adequacy to the facts of human nature, in its comprehensive grasp of the most diverse aspects of character, in the dynamic quality of its fundamental principles; but it owes this supremacy, confessedly and demonstrably, to its conception of a spiritual order, in which God and man are brought together in real historic relations. That idea has more than 'pragmatic' worth. It expresses the ultimate reality of the universe. Yet its demonstration is not a task for the intellect alone. As Christian ethic appeals to the whole of man's nature, so must the validity of its principles, and the spiritual realities which these imply, be vindicated by the whole labor of man, not by logic only, but by life, by endeavor and by aspiration, by duty and by pain; by the long slow toil which builds up a moral organism, domestic, municipal, national and international, to which men may give themselves in entire devotion, and in which, so doing, they shall find their full self-realization.

As an ethic, which implies a theology, Christianity confronts the modern world. The attempt to dissociate either element from the other would be fatal to both. Mr. Barbour writes as a student of ethical theory, and not as a theologian; but he has been led, as the issue of scholarly investigation, to present both in their mutual implications and their fundamental unity.

T. B. KILPATRICK.

KNOX COLLEGE, TORONTO.

Pragmatism and its Critics. By Addison Webster Moore. Chicago, The University of Chicago Press, 1910.—pp. xi, 283.

Of the twelve chapters which this little volume contains, the first five are based upon a series of popular lectures on *The Origin and Meaning of Pragmatism*, while the remainder are reprints of controversial articles. The book is distinctly a school production. Needless to say, it has the independence that belongs to thorough intellectual honesty. But the author writes always as a member of a group, with the consciousness that the whole group speaks through him.

The elementary part is noteworthy for its attempt to 'place' pragmatism with reference to the historical systems of philosophy, as well as present-day absolute idealism and realism, and also with reference to functional psychology and to evolutionary science in general. No student is likely to read these chapters without receiving valuable help. The last chapter of this group, "How Ideas Work," is especially

noteworthy as containing one of the most attractive and forcible presentations of the pragmatist theory of truth and error. The case of a sufferer from toothache is taken as an example; and the manner in which the man's ideas function in the 'reconstruction of the situation' is most effectively shown. For the elementary student this chapter should serve most admirably as a supplement to the second lecture of James's *Pragmatism*.

Nevertheless this part of the work does not seem to me to be a complete success. In the first chapter ("The Issue") especially, there is much in the exposition that strikes me as vague or even seriously inaccurate. Thus the reader is told—as if this were a chief point of contention—that the opponents of pragmatism generally hold that thinking is the expression of a special 'side' or 'instinct,' "coördinate with other instincts, as those of food, sex, etc." (pp. 6, 21). Elsewhere this is supported by a reference to Mr. Bradley and another to Professor McGilvary. But the chief sinner—if sin it is—in this respect was no other than William James; and, indeed, it is one of the striking peculiarities of his doctrine, that, in the determination of the truth or falsity of beliefs, intellectual satisfaction or dissatisfaction is simply summed up with other satisfactions and dissatisfactions. On the other hand, pragmatism is said to hold that thinking is "just the process of the interaction and consequent development of our instincts and appreciations." But this is not a bad statement of the Hegelian view of the dialectical relation of thought to the lower conscious processes. Again, no realist (or absolute idealist either) holds that an idea is "a mere psychical x for a world which remains unaffected by our algebra." The realist is well aware that ideas are real events. and that, as elements in human progress, they are important causes of other events. His contention simply is that the true judgment produces no immediate change in the specific relation which it affirms. Again, few thinkers of any importance now hold that moral ideas are "eternally given." For the Hegelian the terms are, if strictly taken, an express self-contradiction; and he further holds, very much as the pragmatist does, that good men participate in the "creation" (i. e., the development) of such ideals. Finally, it is altogether misleading to suggest that the chief opponents of pragmatism are united in the belief that evolution is unreal, or merely apparent. Many thinkers, indeed, hold to a distinction between phenomena and eternal realities; but they are far from the Eleaticism of identifying the phenomenal and the unreal.

.Chapter II ("The Rise of Absolutism"), which is a bird's-eye view

of Greek philosophy from the cosmologists to Plato, also contains inaccuracies which call for comment. Can the reader think of any historical basis for the following statement? "He [Socrates] was content to show that whenever the sophist went to the shoemaker or tried to convert anyone to his view, his doctrine of a merely individualistic truth was doubly refuted: (1) He refuted it himself in assuming that the shoemaker could understand his order; (2) The shoemaker refuted it in showing him that he had understood him by filling his order" (p. 32). But the following is, if possible, even more reckless. "This method [Plato's method of meeting the sophistic individualism] is simply to oppose to the transient, shifting, 'psychological' consciousness of the individual a 'metaphysical' world of universal and immutable reality" (p. 33). The truth, of course, is that from the Gorgias to the Timæus Plato's uniform point of departure is the assumption of a hard and fast distinction between 'knowledge' and 'opinion.' The existence of a world of reality as distinct from the phenomenal world is an inference which he draws from the observed differences between these two types of cognition. It is because these are distinct that their objects must be distinct. So far from its being true that his metaphysical procedure consisted in an attempt "to maintain a world of continuity and order in the face of an individualistic theory of human consciousness," that he assumes that world in order to account for the fact that human consciousness is not wholly individual.

I have gone into detail in these matters, partly because such a charge as I have brought can only be substantiated by detailed examples, and partly because, as it seems to me, this sort of inaccuracy is symptomatic of what has been one of the chief weaknesses of the work of the Chicago School as a whole. They are a band of men enthusiastically engaged in the construction of a widely ramified system of philosophy. They are possessed of a set of working principles that have shown the richest promise wherever they have been applied. They have felt themselves pioneers on a new frontier of speculation. Under such conditions a premium is laid upon suggestiveness at the expense of clearness and accuracy. The thought that 'seems to explain so much' is eagerly welcomed in the confidence that whatever little defects it may contain are of no account, or can easily be removed by later reflection. Meanwhile the serious difficulties of the position are hidden by catch-phrases, which to the initiated seem full of meaning, but which convey no clear sense to the outsider to whom they are addressed.

Consider, for example, Professor Dewey's famous avoidance of the problem of the relation of mind and body as it is rendered in Chapter X of this book. Here (with the original italics) is the critical passage. "Not only in its origin, but in its continued development and operation must it [the individual consciousness] always be a function of the whole social situation of which it is born. However 'private' or 'individual' consciousness may be, it is never to be regarded as wholly or merely the function of an individual 'mind' or 'soul' or of a single organism or brain." The trick is turned by the words "wholly or merely." The individual consciousness is not merely a function of a "single organism or brain," because it varies with variations in the physical and social environment. But it is (so far as we know) wholly a function of the "single organism or brain," inasmuch as no change in the environment affects it except as the organism or brain is simultaneously affected in a completely parallel fashion. And again the individual consciousness is not merely a function of a single "mind or soul," because of our sympathy and suggestibility. But it is wholly a function of a single "mind or soul," because only the experiences of the single "mind or soul" are combined, associated, and recalled. And the pragmatists were outraged because social psychologists were unwilling to give their countenance to this confusion!

For a second characteristic example of loose thinking, consider the treatment of the relationship of Darwinism to teleological explanation. Of the following passages, the first is from Chapter IV ("The Rise of Pragmatism"); the other is from the last chapter ("The Ethical Aspect"). "... Does not the conception of the mutability of species at any rate make an opening for purposive, ideational control as a type of change? Whether or not all changes are already purposed, does not the simple recognition of the variation of types open the way for any type of variation that may be efficient, and therefore possibly of the ideational, purposive type of variation? That is, must not variation in species admit variation in species of variation as well" (p. 76). ". . . Darwin's work in science, as Hegel's in logic, revealed a new type of teleology-a dynamic, evolutional teleology. . . . But as soon as science found that it could talk of 'wants' and 'needs' and 'purposes,' without committing itself to the determinism of an allinclusive and absolutely fixed purpose, it rapidly lost its teleophobia. For it found these categories of 'want,' 'desire,' 'purpose' very serviceable, especially in biology." The question in the first passage is so vague that one can scarcely essay to answer it, except perhaps by another. If the human species were not now undergoing any sensible

variation in its congenital characters, would purposive conduct be excluded? Or—a second question—is it possible that the writer wishes to imply that the purposive control of the evolution of the human species (eugenics) is the only purposive control that is really worth while? With reference to the second passage it need only be remarked, that 'wants' and 'needs' and 'purposes' may be treated in as strictly 'mechanical' a fashion as sensations or images, or even as molecules or atoms, and that they have been so treated by Darwinists everywhere. For that matter, not even Hobbes or Spinoza dreamed of doubting the actuality and efficacy of human purposes. They simply regarded them as a type of efficient causes, leaving the universal mechanism undisturbed; and Darwinism does the same.

The indubitable strength of the book lies mainly in its controversial character. A counter-attack is the best defense, as chess-players say; and Professor Moore is a master of this sort of tactics. I have left myself no space to dwell upon this feature of the book. But readers will not have to go farther than Chapter VII (which gives its title to the whole) to find abundant illustration of the writer's remarkable vigor and resourcefulness.

THEODORE DE LAGUNA.

BRYN MAWR COLLEGE.

NOTICES OF NEW BOOKS.

La Crise de la psychologie expérimentale. Par N. Kostyleff. Paris, Félix Alcan, 1911.—pp. 176.

The author's summary of the achievements standing to the credit of experimental psychology leaves upon the reader an impression like that made by Francis Bacon's censure of the sciences as cultivated in his own time. Now that the heyday of random experimentation is drawing to a close, we perceive that "the psychologists have hastily filled up the abyss of the unknown with a quantity of investigations, without care as to the bond which ought to unite them" (p. 6). This verdict though severe is probably just. perimentalists of the standing of Titchener and Binet have testified to the hopelessness of attempting to coördinate the data we have already amassed; they realize how far we are from any systematic account of psychical phenomena. Whether the labors of the past thirty years have brought us forward at all in the direction of true science, is doubtful. On many of the earlier problems work has been suspended, leaving veritable libraries of material that is either useless or of very relative utility. For the vast labor spent on Weber's law and on reaction-time researches, we can hope for no commensurate return. Failure has marked the course of psychophysics and physiological psychology; also of psychometry, the most sterile province of all.

The present outlook is hardly less discouraging. Real advance is made in certain directions, but the general range of interests is contracting, and the problems now under investigation bear less reference to one another. Segregated coteries are pursuing isolated researches, especially among the Germans. The French, true to their type, are still realistic, positive, very precise, eager to measure all that is measurable; but they are drifting away from the establishment of general principles, toward the study of individual mental differences, with the possible realization of an applied science—something like anthropometry—guiding them. In Italy the main interest centers in physiological tests, where variations in circulation, blood-pressure, respiration and bodily temperature are recorded as concomitants of mental activity, but with little or no prospect of explaining the mental states themselves, and with considerable doubt as to the meaning of the results when obtained. Americans are devising mental tests applicable to the study of memory, the association of ideas and the mentality of children.

However, among the many who fail to see the wood for the trees, there are a few who feel the need of systematization. A broader view has led them to frame extensive series of tests covering wide ranges of mental processes, in the hope that, by working in extension, they may supplement the disconnected researches in intension, and place the science on a groundwork of general

principles. Toulouse, Vaschide and Piéron, working together, have tried to realize such a plan, but we observe how they gradually relinquish these high hopes and arrive at a conclusion which may well astonish the majority of psychologists, but which the authors of the program have had the courage to make, namely, that psychology has for its principal object a psychological characterization of individuals (p. 46). Nor does better success attend the similar endeavors of Binet and of members of the Würzburg school, whose researches Kostyleff describes in some detail. These efforts show very clearly the crisis at which experimental psychology has arrived. After a long series of tests upon two sisters, Marguerite and Armande, aged thirteen and fourteen and a half years respectively, together with experiments upon younger children, Binet, too, comforts himself with the modest belief that his results may aid school-teachers, also alienists in classifying backward children, and finally magistrates in estimating the degrees of penal responsibility. Surely, this is no proper aim for a positive, homogeneous and general science of psychic phenomena. The Würzburg school followed in the same quest. Their methods show very clearly the crisis at which psychology has arrived; numerical results here give place to data obtained by questioning the subject, introspection is encouraged, and there is a drift toward metaphysical explanations.

But let us hasten on to seek encouragement in the constructive part of Kostyleff's essay. The author states what he regards to be the initial defect at the base of all these researches; then sets forth a new project, one of complete reorganization, to be inaugurated by the psychologists of his own Russian school, at St. Petersburg. He feels that a fundamental error has misled all our efforts; we have assumed that mental states—sensations, percepts, images and all the rest-are static phenomena, like pictures thrown on a screen, modifications imposed upon constellations of brain-cells. This habit of thinking will be hard to overcome, but in many ways it has been conclusively demonstrated to be wrong. We are referred to the researches by R. Wahle and E. Mach; of Bourdon and Uhthoff and Nuel on visual perception; of Bonnier, Hurst and others on auditory perception, in all of which we find a new dynamic conception based on the functional development of reflexes as opposed to the current view that images are static entities in consciousness. The issue resolves into this: we have misplaced the psychic event; we have supposed that mental states are directly due to inflowing currents or to revivals of the same, whereas consciousness is correlative, not to these physiological processes, but rather to the cerebral reflexes resulting from them, and is connected with the motor rather than the sensory side of the organism. "To state precisely the character of this difference, let us say in brief that consciousness of an object is represented by a bundle of reflexes, consciousness of a verb, by the relation established between two or more bundles; direct perception points to the peripheral origin of these bundles; while mnemonic or associative recall points to an internal origin; abstraction, finally, represents an internal reproduction of very general reflexes that have been formed by a great number of direct perceptions. This distinction is, for the moment, purely hypothetical, but the important point is that the hypothesis, which in part we have seen fully established, is in other respects susceptible of experimental verification, and may become the point of departure for our study" (p. 134).

The proposed plan proceeds on lines suggested by this hypothesis. The immediate aim is to establish the time at which new mental phenomena appear in the life of the child; for example, when imaginative associations are first formed, when the first images of internal origin appear, when adjectives appear in the utterances, and whether qualities of things are apprehended before the things themselves. From this early stage the investigator should pass on to the formation of judgments, of abstract ideas, and to the study of words without images. Obviously, this project requires the study of minds at an extremely early age. A special laboratory, under the charge of Professor Bechterew, has been created in St. Petersburg for the systematic study of a number of young children. In this *Institut Psycho-pédologique* last spring four infants were being cared for, and there is good prospect that many more will enter.

EDWARD M. WEYER.

WASHINGTON AND JEFFERSON COLLEGE.

The Value and Dignity of Human Life. By CHARLES GRAY SHAW. Boston, Richard G. Badger, 1911.—pp. 403.

This disciple of Rudolf Eucken believes that the problem of human life arises from the ambiguous position of man in the universe, midway between the natural state in which he cannot remain, and the spiritual state toward which his striving is directed. History, literature, philosophy, art, and religion are to be interpreted in terms of this progress toward the state of ideal humanity. Three types of humanity are revealed in this process of self-realization—the naturistic, characteristic, and humanistic—corresponding to the ethical theories of hedonism and eudæmonism, intuitionism and rigorism, and the type of humanistic idealism advocated by the author.

The development of naturism, which begins by defining worth in terms of pleasure and pain, but soon finds these inadequate, and next resorts to such hedonistic compromises as utilitarianism and evolutionism, which also prove inadequate, terminates in eudæmonism. Ancient eudæmonism emphasized contemplation, whereas modern eudæmonism stresses activity. The comparison of Plato, Aristotle, Bacon, Montaigne, Voltaire, Goethe and Kant in this connection is masterly, and furnishes an excellent illustration of the erudition and interpretative skill that characterize the work as a whole (pp. 141–159).

Contrasted with naturism, which leads to a sense of 'value' that man receives from the world, characteristic ethics reveals, in the capacity of a moral character distinct from nature, "the dignity of human life." Though the four concepts that are subsumed under human dignity—conscience, rectitude, freedom and duty—at first seem external to the individual man, he later learns to recognize in them the voice of universal humanity speaking within him.

Both naturism and characteristic ethics, however, fail to interpret correctly the true end of life, which is fully to realize for its own sake a humanity which includes within itself, but is not circumscribed by, the values of ethics, art, and religion. While neither school has passed beyond these limitations in its ethics, both have developed some exponents of a truer life-philosophy, that of "major morality." "Major moralists" find their premises in "the universal conditions of life" and "the self-affirmation of the soul as the one thing needful and valuable," and they realize that "the world is aiming to produce, not moralists, but men," while "minor moralists" have confined themselves to arranging "the details of conduct for the time," and lack systematic treatment of the life problem as a whole. Logical as this distinction seems to be, it leads to the surprising classification of Plato, Aristotle, Hobbes, Spinoza, Shaftesbury, Hume, Schopenhauer, Spencer and Nietzsche in one group as "major moralists," in opposition to Socrates, the Stoics and Epicureans, Cudworth, Clarke, Butler, Adam Smith, and Kant, who are "minor moralists."

The philosophy of life presented in the work as a whole is noble; and to the present reviewer, in the main convincing. Its most serious limitation, perhaps inevitable in an idealistic system, is the vagueness of its supreme conception, "humanity," an ideal from which practical guidance in a concrete situation could hardly be obtained. Little attempt is made to meet the arguments of naturalistic philosophers. Perhaps the value of the work as a contribution to the theory and history of ethics is to be found in its numerous incidental interpretations and criticisms rather than in its metaphysical system as a whole. In both respects, however, it deserves the serious attention of specialists. Its philosophy of life is lofty and stimulating, and ought to appeal to general readers whenever the author presents it in popular form.

WILLIAM K. WRIGHT.

THE UNIVERSITY OF WISCONSIN.

An Introduction to Social Psychology. By WILLIAM McDougall. London, Methuen & Co.; Boston, Luce & Co. Third edition, 1910.—pp. xv, 356.

An outline of the general features of this book is hardly necessary, as it has already become well known, and the new edition contains only two important changes—the addition of the "food-seeking impulse" to the list of primary instincts (p. 83), and of "remorse" to the complex emotional states involving the sentiments (p. 158). Perhaps, however, some impressions derived from experience with the work as a text in undergraduate courses may be of interest in throwing light upon the successfulness of the book in accomplishing its purpose. This purpose, stated in the Preface (p. v), is to provide students of all the social sciences "with the minimum of psychological doctrine that is an indispensable part of the equipment for work in any of these sciences," and to do this without implying previous familiarity with psychological treatises, in a way that shall be "intelligible and interesting to any cultivated reader." The purpose has, I believe, in the main been successfully accomplished. The social science student receives a modern psychological point of view, freed

from hedonism and other psychological anachronisms still common in treatises in social sciences. While the list of primary instincts is open to criticism, it is no doubt accurate in the main, and the tests by which it is determined are useful, and correct the student of the inclination to call any impulse an instinct whenever it happens to be convenient to do so. The social applications of the primary instincts are sufficiently illustrated in the second part of the work, without encroaching upon the specific fields of sociology, economics, political science and ethics. Contrary to its effect upon some reviewers, the book does not at all give to students in a class the impression that human nature is wholly or chiefly explainable through hereditary instincts, suggestion and imitation. On the other hand, the development and importance of the sentiments, self-consciousness and volition are appreciated, and felt to be more ethically inspiring because they are seen to have evolved from the instincts, and to be based upon more solid foundations in human nature than either hedonistic empiricism or a priori rationalism could afford.

The purpose of the book would have been more completely attained if the material had been differently arranged. Chapter II is altogether too technical to introduce a reader unfamiliar with psychological treatises to the main doctrines of the book. It would be pedagogically advantageous if the social applications were incorporated in the earlier chapters in connection with the instincts which they illustrate. As the distinction between sympathy, suggestion and imitation is lost sight of in the social application in Chapter XV, it would appear to be of doubtful utility, despite its theoretical plausibility. Although the distinction between complex emotions and sentiments is asserted in the Introduction to the second edition to be "fundamental to the constructive part of the book," the classification in accordance with this distinction at times seems rather arbitrary. Why, for instance, are shame and resentment complex emotions involving sentiments, while envy is not? The psychology of attention, imagery, memory, and reasoning are important for the student of social sciences, and would seem to have deserved special treatment. It is particularly surprising that a fuller account of habit does not appear, in view of its connecion with instinct. Social applications of the sentiments, self, and volition might well have been added. If these last had concluded the work, the criticism that the place of the instincts in social life is unduly emphasized would have had no ground.

Notwithstanding these limitations, the book furnishes the beginner with a psychological introduction to the study of society that is profoundly illuminating and inspiring. Its value for the advanced student lies in considerable measure in its furnishing a more accurate and discriminating terminology for the psychology of morals, ethics and religion than is found in contemporary treatises in these fields, as well as for its numerous original contributions, among which the doctrines of instinct and emotion, play, and the self-regarding sentiment are perhaps the most important.

WILLIAM K. WRIGHT.

THE UNIVERSITY OF WISCONSIN.

Philosophie de la Religion. Par J. J. Gourd. Paris, Félix Alcan, 1911.—pp. xix, 311.

This is the work which occupies the leading place in M. Lalande's account of "Philosophy in France in 1910" in a recent number of this Review. The first part of the work treats of the domain of religion, and carefully distinguishes this domain from other fields of human interest. This part occupies about three fourths of the volume, and is much the more interesting and valuable part of the work. The second part sets forth the conception of God demanded by the view of religion thus developed, at the same time distinguishing the theological view propounded from the traditional conceptions of philosophical theology.

Professor Gourd is not a disciple of Bergson or James; but in many ways his work is an expression of the same thought tendencies. The pragmatic trend of his interest is illustrated by the fact that he begins his work with a practical postulate. It is this: the supreme end of human effort, the object of universal value which is of worth in itself, and to which everything else of value is only a means, is enlargement of spirit. Our spiritual life may enlarge itself in two directions. One way consists in extension, and proceeds by means of coördination; the other way is by intensity and proceeds by means of the incoördinable. In these two terms we have the peculiar catch-words of the system. The spiritual life is a manifold function. It manifests itself in four principal orders of activity: the intellectual, the practical, the æsthetic and the social. In each of these four orders of spiritual activity, Professor Gourd finds his favorite dualism of coordination and the incoordinable. Science, morality, beauty, society are all manifestations of coördination in these several orders of spiritual activity. But along with each of these are found certain incoördinable elements. However complete science may be, there are certain elements which forever resist its analysis or fail to find a place in its systems. Alongside of the moral life which conforms to law there are certain acts of spontaneous generosity, heroism, sacrifice which are beyond law, and are not therefore to be received as belonging to the moral field, but nevertheless serve to heighten and intensify the life of will. In the æsthetic field, besides the objects of beauty which are characterized by symmetry, harmony and coordination, we find also elements of contrast and above all, objects of sublimity which are essentially incoördinable. The social field also has its incoördinable elements. Besides the conventions, similarities, conformities to law which are characteristic of the social order, we find also individual spontaneity, genius, rebellion, insurrection, revolution, and no matter how much of evil these lawless forces may at times occasion, they nevertheless cannot be dispensed with if human life is to advance and enlarge itself in the future. In Professor Gourd's view the peculiar field of religion is thus marked out. Science, morality, art and the social order are all matters of coördination, religion, whose function is to intensify our spiritual life, finds its domain in the incoördinable.

What, then, is the incoördinable? It is not something outside and apart from the world as has frequently been the case with the object of religion. It is an element of given reality. It is not to be confounded with the unknowable, it is directly and immediately known; it is a concrete, which is known in its individuality, although not known by the abstract intellectualism of science. Were there no such incoördinable individuals or elements in reality there could be only undifferentiated likeness, and if reality were absolutely coördinable in all its aspects it would not differ from the Eleatic unity. In fact coördination itself would be impossible without incoördinables. The doctrine of the incoördinable must not then be confounded with agnosticism. "It is rather the certitude founded on the possibility of an intensive knowledge." It is not of a transcendental nature. It is given in experience. It escapes science, but not simple intelligence. As that which is 'beyond law' it may properly be called the absolute, But if we use this term of traditional philosophy, we must be careful to eliminate from it those incompatible notions which usually accompany it, especially the notions of infinity and necessity.

A few words now as to the theology of the incoordinable. In spite of radical departures from the ordinary meaning of the term, the author would still hold to the familiar word God, as the appropiate name for the object of the religious life. But God is no longer to be regarded as the universal cause or as the ground of law and reason in the world. "God," says the author, "should have no other rôle than that of giving us the highest objective representation of the 'beyond law,' and as immediate consequence, let us say, that in place of being the principle of the 'beyond law' he should be the 'beyond law' itself. But the 'beyond law' put to profit intellectually, exploited. . . . There is need here of a dialectic analogous to that which we have known but in an inverse sense. The dialectic of science from one element of reality forms nature; the religious dialectic from another element of reality, the opposite element, ought to form God. And God will be as real as nature, if by real we understand founded on reality. The incoördinable is not any more than the coördinable an invention of our spirit, a subjective impression; it imposes itself on us, it dominates us." Of course there is no limitation in number to the incoördinables. Perhaps we should say that the numerical idea, one or many, has nothing at all to do with the incoordinable, the 'beyond law.' Our author, like Professor James, hints that polytheism may have more in it than is generally recognized. But still he would at any rate prefer to speak of God as one. This one may be any absolute taken as a representative both of absoluteness in the abstract and of all the other concrete absolutes. Traditional views of the divine are not to be regarded as totally false, but rather as imperfect stepping stones to the truth. For example, God is transcendent, not indeed as existing outside of the world, but as transcending all science, law, and reason. Again, God is immanent; he is in the world, but not in the pantheistic sense of containing all reality in himself. As the dialectic of science constructs nature to suit our intellectual needs, so the dialectic of religion constructs God to suit our religious interests. We may then represent the absolute as personality, and in this divine person find the symbol of the absolute, the incoördinable, and all that is beyond law.

Let us look now for a moment at the practical side of this theory of religion. It is preëminently the religion of freedom. Separated as the author would have it not only from science and art, but also from morality and social life, it seems to have its main function in cultivating a respect for individuality, and in encouraging those transcendent feelings of sublimity and acts of heroism and sacrifice which without justification of the law heighten and intensify the spiritual life. Now it is doubtless true that we admire disinterested sacrifice, sacrifice which is, to be sure, not demanded by ordinary conceptions of the moral law. But, after all, is it not because there is a reason for such sacrifice in a larger view of human good, rather than because it stands outside of the law of human welfare? Or take the case of the insurgent genius in art, or in social life. Such a one is not beyond law except in the sense of the law as recognized up to date. He is really the revealer of a higher law. Religion may often require us to go beyond certain recognized stages of law. Men say sometimes we will obey God rather than man, but when this attitude is a genuine one it means not lawlessness, but the recognition of a higher law. The true God of religion is not a being beyond law but the realization of the highest law. Professor Gourd's theory might well be characterized as the religion of the higher anarchy.

F. C. FRENCH.

COLGATE UNIVERSITY.

Romantisme et Religion. Par André Joussain. Paris, Félix Alcan, 1910.—pp. 178.

This little volume is an interesting study of romanticism as it has developed in the fields of art and literature, manifests itself in philosophy, and bears upon the great religious problem of today—in short an essay upon the philosophy of romanticism and the romanticism of philosophy. The double movement, the reaction of thought upon life and the reaction of life upon thought, has translated itself into literature and philosophy by the opposition of the classic spirit and the romantic spirit. The classic spirit exalts abstract knowledge at the expense of intuitive knowledge; it tends towards the complete subordination of feelings and will to reason. It crystallizes itself in representation; it moves among concepts. The romantic spirit on the contrary affirms the superiority of intuition over the concept, maintains against pure reason the rights of instinct and sentiment, in fine subordinates knowledge to will. Classicism makes the theory precede the work of art and aims to regulate inspiration in advance in the name of good taste. Romanticism puts the work of art before the theory and demands that the inspiration of genius be untrammeled.

These two tendencies show themselves in all the great systems of philosophy both in their form and their substance. Scholasticism with its subtleties and puerilities manifests the classic spirit in the extreme. Spinoza, approaching romanticism in his deep feeling for the unity of nature, falls a prey to classicism in pretending to demonstrate philosophy in the manner of geom-

etry. It is the tendency of classicism to proceed a priori and to define mathematically and to regard its systems as the totality of truth, while the romantic spirit proceeds a posteriori and is disposed to see in its systems a picture of reality from a single point of view rather than the total truth. It admits the possibility of other points of view and hopes for an ultimate agreement of thought amid a diversity of formulas. Modern science, positivism, contemporary sociology and the philosophy of the universities are all manifestations of the classic spirit. Bergson and the pragmatists are the present-day bearers of the romantic standard.

A considerable section of the book is devoted to a sympathetic sketch of Bergson's philosophy. The reader who is not already familiar with Bergson at first hand will be likely to find this the most interesting part of the book. The writer's view of the place of Bergson may be seen from the following passage: "It was natural that the rationalistic movement of which modern positivism is one of the aspects, should provoke a reaction all the stronger as its proggress had been more lasting and its action more extended. This reaction, already visible with Berkeley, who combated the abstractions of philosophy in the name of common sense, manifested itself clearly with Schopenhauer, who in his lively anxiety to grasp reality as it is and to break with concepts in order to hold himself to the intuition of the real, rose in revolt against the Kantian formalism in the name of experience and life. This reaction is continued subtly and profoundly in the philosophy of M. Bergson whose proper work is to seize in its moving complexity the originality of the inner life" (p. 45).

Traditional orthodoxy, the ethics of sociology, and Comte's religion of humanity are all products of classicism. Modernism however is a manifestation of the romantic spirit. It is to religion in this form that romanticism in general and Bergson's philosophy in particular give efficient support. That the universe is an indivisible continuity, that it can be apprehended only by intuition, that science with its intellectual analyses and causal explanations can deal only with the parts or aspects of reality, such views of Bergson serve to limit the field of science and make room for religion. Science and religion have their distinct domains, and their mutual independence is safeguarded. All the dogmatic part of religion belongs to representation and not to will, to the concept and not to pure intuition. As such it comes within the field of science and falls before it. Religion can therefore be reconciled with science only on condition that its dogmas be accorded a merely symbolic value. Modernism is precisely an effort to reconcile religion and science by regarding religion as preëminently an inner principle of faith and action. Modernism and pragmatism, both firmly established by the Bergsonian philosophy, mutually support each other and correct the possible excesses of romanticism.

F. C. FRENCH.

COLGATE UNIVERSITY.

Le Pluralisme, Essai sur la discontinuité et l'hétérogénéité des phénomènes. Par J. H. Boex-Borel (J. H. Rosny-aîné). Paris, Félix Alcan, 1909.—pp. 272.

If one may judge from the references in current books and periodicals, the theory of pluralism is usually regarded as essentially connected with pragmatism, and perhaps on this account as belonging peculiarly to American thought. Nevertheless in the book entitled *Le Pluralisme*, by M. Boex-Borel, we have by far the most careful and systematic study of pluralism that has as yet appeared. The mode of treatment is at once critical and constructive. While the difficulties of pluralism are frankly admitted, an attempt is made to show that those inherent in monism and dualism are still greater. The entire discussion is characterized by an impartiality that of itself adds weight to the arguments advanced; and even those readers who are not convinced, will be inclined to agree with the author's modest statement at the close of the book, that there is a place for pluralism in the intellectual world of to-day. It is a theory which deserves at least to be considered seriously.

The man who believes in pluralism believes also in discontinuity and heterogeneity, and the fundamental nature of all three becomes more and more evident to the student, as his comprehension of science and of life increases. The monist is deceived by the apparent identity represented by the concept, and fails to realize that the concept is based upon analogy and is merely a convenient mode of procedure, in which the differences everywhere present are, for utilitarian reasons, ignored. Monism and dualism are the limits towards which the formation of common terms constantly tends. As such they have their value; but they are fundamentally false if they are regarded as in any way representing the ultimate nature of reality. Moreover, they carry with them inconsistencies and contradictions which pluralism escapes. For instance, the problem of consciousness, insoluble for both dualist and monist, ceases to be such for the pluralist. Since he regards the diversity of things as real, not apparent, consciousness becomes merely that group of phenomena which offers the least analogy to other groups. He is not compelled by the exigencies of his theory to deny the multiplicity of the universe and to transform analogies and resemblances into identities. He has similar advantages when confronted with the problems of persistence and change, of quality, quantity, resistance, space and time. These bring with them plenty of difficulties, no doubt, but the pluralist is at least not foredoomed to failure at the very outset.

The question of the limits of knowledge is one which M. Boex-Borel regards as of especial interest and importance for pluralism; and it gives him occasion for an extended consideration of the principal monistic and dualistic theories concerning the Unknowable, the chapters upon which are among the best in the book. The numerous varieties of the Unknowable are characterized and rejected in favor of an Unknown, which, on the one hand, sets no fixed bounds to knowledge and, on the other, recognizes the futility of an identification of the knowing subject and the object of knowledge. There is no phenomenon

with a barrier set before it, just as there can be no hope of ever knowing more than a small part of the manifestations of the universe. Here, as always, pluralism is found to be in accordance with the results of history and science.

That which, in the reviewer's opinion, constitutes the weak point of what is otherwise an excellent book, is a certain superficiality with respect to metaphysical questions, and an exaggerated tendency to identify the particular with the real. Much of philosophical speculation does end in verbal distinctions, it must be confessed, and these cannot be criticized too severely; but there is also a mode of criticism which tends to give a verbal interpretation to something much more ultimate, and which fails to realize the significance of the theories condemned. Philosophy has doubtless much to learn from history and from science; and perhaps the impatience with mere speculation fostered by them both has much justification; but if men had been contented with the particular and the concrete, there would never have been any pluralistic philosophy.

G. N. Dolson.

SMITH COLLEGE.

Nouvelles études sur l'histoire de la pensée scientifique. Par G. MILHAUD. Paris, F. Alcan, 1911.—pp. 235.

The eight studies of which this volume is composed are reprinted from various scientific and philosophic reviews appearing between 1900 and 1910. They are, however, happily brought together in a single volume, for with the possible exception of the first, an appreciative miscellany of impressions and memories of Paul Tannery, all feed a single interest, that of the logician.

The history of science is too much neglected by logicians nowadays, but perhaps that is not wholly their fault; technical histories, for example M. Cantor's masterful history of mathematics, demand a too special knowledge for those who must always remain comparative amateurs in science. Yet the problem of logic is always pushing them toward such histories, for if logic is to be a science of method, of formal proof, and perhaps even of discovery, where can its material be more fruitfully observed than in the processes through which scientists have actually made discoveries and raised hypotheses to the rank of established truths in the past? And where are significant fallacies to be found if not in the errors into which great minds have strayed? If we are ever to get beyond the barren formulæ of our logic texts which, almost daily, are multiplying a dull formalistic discipline on our hands, it will be through the work of some great intellect that shall have a grasp on the evolution of science by which it can squeeze out the significant attributes of the operations of intelligence, forgetting Holy Barbara, and creating a doctrine that exhibits what is vital in thought and not thought's mummies. In other words such an intelligence will recreate the logic of Aristotle instead of carrying on or amending scholastic attenuations of it.

Profoundest gratitude is then due to those who prepare the way for such a master work, and among the foremost of them is Paul Tannery, who has done

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The history of science is too much neglected by logicians nowadays, but perhaps that is not wholly their fault; technical histories, for example M. Cantor's masterful history of mathematics, demand a too special knowledge for those who must always remain comparative amateurs in science. Yet the problem of logic is always pushing them toward such histories, for if logic is to be a science of method, of formal proof, and perhaps even of discovery, where can its material be more fruitfully observed than in the processes through which scientists have actually made discoveries and raised hypotheses to the rank of established truths in the past? And where are significant fallacies to be found if not in the errors into which great minds have strayed? If we are ever to get beyond the barren formulæ of our logic texts which, almost daily, are multiplying a dull formalistic discipline on our hands, it will be through the work of some great intellect that shall have a grasp on the evolution of science by which it can squeeze out the significant attributes of the operations of intelligence, forgetting Holy Barbara, and creating a doctrine that exhibits what is vital in thought and not thought's mummies. In other words such an intelligence will recreate the logic of Aristotle instead of carrying on or amending scholastic attenuations of it.

Profoundest gratitude is then due to those who prepare the way for such a master work, and among the foremost of them is Paul Tannery, who has done

so much to bring the science of Greece into intelligible relations with its philosophy—a most important task, for there is always a peculiar value in beginnings, in as much as great processes then appear in their simpler forms; the confusing detail of facts is lost and meanings stand in relief. It is therfore fitting that Tannery's name should stand at the head of this volume of M. Milhaud's. And M. Milhaud has ably carried on and extended the work Tannery began.

Mathematics is chiefly here in question, for mathematics has a peculiar power of kindling human imagination. "These are the two contradictory characteristics that constitute the apparent miracle of mathematical thought; spontaneity of the flight of intelligence which, heedless of every practical application, soars ever higher in its dream of abstractions—and unceasing progress of knowledge of the physical world through the possible utilization, sooner or later, of the symbols so created" (pp. 29–30).

Genuine mathematics, as a science, appeared first in Greece about the 7th century A. D., and the longest, if not the most important, chapter of this volume (pp. 41–133) is devoted to an analysis of such contributions of the Orient and Egypt to Greece as made the development of this, and the other sciences, possible. The reputed scientific knowledge of Egypt, Chaldea, India and China fades in the light of the investigation, and all that we find remaining from these civilizations is a mass of empirical rules mingled with crude superstitions and incoherent theologies. These, however, are not unimportant, and are the materials out of which science has been constituted. Logical method is the contribution of Greece, and through it comes order and that pure speculative interest that is the true mark of science.

The chapter entitled "Archimedes' Treatise on Method" is an account of a newly (1907) discovered and published manuscript. Its peculiar interest lies in the fact that in it—mathematical methods only are under consideration—Archimedes draws a sharp distinction between the method of discovery and the method of proof, including mechanics in the former because of its greater admixture of not wholly intelligible notions, such as motion; a subtlety which M. Milhaud attributes to Greek purism.

Two chapters are devoted to Descartes. The first examines the claim that Fermat was in possession of the method of analytic geometry before Descartes published his results, and considers the right of each to the honor of priority. The conclusion is reached that undoubtedly Fermat was equally in possession of the method of analytic geometry, but the seventeenth century did not feel it was a discovery on the part of either man, for the method is only an application of a procedure prevalent even in Greek mathematics. The author thinks the seventeenth century was right and that analytic geometry is only a continuation of the methods in use by Archimedes and Apollonius.

The second chapter on Descartes concerns the famous law of sines. Is Descartes's use of it (1637) a plagiarism from Snellius, who died in 1626, as Vassias says in 1662? Probably not, for considering the current status of the problem at that time we ought to be more surprised that Keppler did not

also discover it than that Snellius and Descartes discovered it independently at about the same time. There is therefore no need to appeal to plagiarism to explain the coincidence.

Of the two remaining chapters, the "Laws of Movement and the Philosophy of Leibniz" is a valuable synthesizing of the scientific and the metaphysical side of this author for it traces his turnings in trying to avoid the mechanical difficulties of the Cartesian dualism between mind and body, and studies the peculiar concept of force at which he arrived through this effort.

The last chapter, on Descartes and Newton, examines the propriety of ascribing to either exclusively the title of 'Father of Modern Science.' Newton seems to be the more modern, for he is not mechanistic in the sense that Descartes is, and, for him, science has already ceased to be a system of explanation, to become merely representation, while Descartes seeks explanations by the help of definitions which he seeks to impose on facts, and does not always separate metaphysics from mechanics. The question is insoluble, however, for Descartes and Newton represent two different aspects of the scientific mind. While the latter aims at observation of experience, the former intends primarily anticipation; so they complete each other. Neither of them understood the movement of which he was a part.

HAROLD CHAPMAN BROWN.

COLUMBIA UNIVERSITY.

Manual of Mental and Physical Tests. By Guy Montrose Whipple. Baltimore, Warwick & York, 1910.—pp. xix, 534.

The author's purpose is to bring together tests that have been actually used in physical and mental measurements, to make them available for other workers and to compare and sift out those that are most promising for future work. In furtherance of this ideal he has presented what is perhaps the most comprehensive discussion of tests in English or for that matter in any language. Fifty-four tests are described under thirteen different chapter titles. Aside from the more usual mental tests there is a preliminary chapter on the treatment of measures which gives not only an outline of the theory of probabilities as applied to measurements, but a treatment of the various measures of correlation on the basis of the work of Pearson, Spearman, Thorndike and the author. The next chapters are devoted to anthropometric measurements and physical tests. The following chapter on Sensory Capacity includes tests of muscular defects of the eye as well as the more usual tests of sensory acuity. In these earlier chapters much material is presented that is useful to the teacher. For the psychologist, there is much material that is not within his immediate province, and should prove sufficient to guide him when his problems lead, as so often they do, into the realm of physiology. In the later chapters full description is given of the methods of report or Aussage, and of the graded tests of de Sanctis and of Binet and Simon. No important field of investigation is omitted.

Each test is accompanied by a full bibliography and the results of the more

important investigations have been given, so that the *Manual* becomes at once a manual and a handbook of results. The directions for the conduct of the tests are reasonably full—full enough to save the tyro from many mistakes, although of course no book can give the full spirit of scientific work or prevent the bungler or slip-shod worker from falling into error. In the selection of tests the author has been most catholic. He has excluded no variant that seems at all promising, and has perhaps erred, if at all, on the side of admitting too many rather than by excluding any that may prove valuable. The tests chosen are, on the whole, those that can be made with relatively simple apparatus, although no sacrifice of accuracy to simplicity has been made. A complete list of the apparatus required is given and arrangements have been made with a well-known firm to supply both apparatus and material. This should add greatly to the usefulness of the book, particularly for those who have not at their disposal a fully equipped laboratory or are little familiar with apparatus.

The author is to be congratulated on providing so convenient a work of reference for those more familiar with the subject at the same time that he has prepared a guide for the beginner in mental measurements.

W. B. PILLSBURY.

University of Michigan.

La Conscience de devoir dans l'introspection provoquée. Par PIERRE BOVET. Genève, Kundig, 1910.

This is a study in the psychology of ethics by the professor of philosophy at the University of Neuchâtel. It forms the second stage in the execution of a plan which the author intends to complete, by publishing a treatise on the moral sentiments. The first stage consisted of a series of experiments made by Professor Bovet in the Geneva psychological laboratory. These were repetitions of those already conducted by Messner and Bühler, similar to those made by Ach and by Michotte and Prüm at Louvain.

In this monograph, the author proceeds to discuss some of the results hitherto obtained. It must be taken as a report of progress and not as a completed theory. As the title indicates, it is an application of the experimental method to the analysis of the "sense of oughtness" or duty. Instead of relying on the independent introspection of the observer, the author employs a more objective method. The problem is to discover what happens in the mind when it is provoked from without, to know, feel or do, by what Professor Bovet calls la consigne or command (die Aufgabe of Ach). By studying these individual cases, the laws of psycho-ethical phenomena are to be ascertained. The command is given by the experimenter: the effects of the command in consciousness are reported by the person experimented upon. An essential element of the reaction in the consciousness of the person experimented upon, is not only that something is known, but that something has to be done.

The first part of the book is devoted to a discussion of the nature of the consigne or command, as related to the experimenter and to the subject—

its acts and states, the accompanying images and the content of the command. The author observes a distinction between the "states" and the "functions" of the mind. The former are either "sensitive" or "cogitative." Sensitive states include representative images and feelings. Cogitative states are noèses of impotency, knowledge, impressions and thoughts in the wide logical sense.

Having described the nature of the consigne, the author examines the varieties of the consciousness of oughtness, thus stimulated. The idea of duty or oughtness may refer to the past, the present or the future. It may be the idea of duty obeyed or resisted, positive or negative. The feelings aroused in the subject by such ideas are noticed, particularly the relation of the agreeable or of the disagreeable to the obligatory.

From the consciousness of oughtness, Professor Bovet distinguishes certain states which are closely allied to it—consciousness of will, inhibited intentions, consciousness of power, and of "having the right" to do. In conclusion, he discusses the consciousness of necessity, qu'il faut, as distinguished from that of oughtness. These two kinds of consciousness are alike in this, that in neither is the subject the author of the tendency which is experienced. They differ, however, because the consciousness of duty is connected with an accepted command, while the origin of the consciousness of "must" is obscure, being related to a mechanism foreign to intelligence and will.

ARCHIBALD ALEXANDER.

La Prière, Essai de psychologie religieuse. Par J. SEGOND. Bibliothèque de Philosophie Contemporaine. Paris, Félix Alcan, 1911.—pp. 364.

This essay is an attempt to make a strictly psychological study of prayer—to analyze the prayer experience as it appears to the person praying. The chief sources are the writings of the Christian mystics.

In his Introduction the author discusses at length the various aspects under which the question of prayer may legitimately be viewed; gives his reasons for believing that prayer raises a specifically psychological problem, and answers various objections of sociologists, physiologists, dialecticians and experimentalists; defines his problem by showing the nature of prayer and its relation to other mental states of the Christian mystics; and explains his method of work. Next come four chapters upon (I) meditation, the essential characteristic of prayer, (2) aspiration, the ardent desire for the repose of meditation and the thrill of desire itself, (3) the feeling of a Presence, the unique prayer experience in which the self is conscious of something other than, and larger than, self alone, and (4) renunciation, the surrender of the personal self to the larger Presence. "The essence of the life of prayer—the goal of aspiration—is the complete surrender of self to the Presence, in meditation." And prayer is the central experience of the religious life. The active side of prayer is considered in the chapter on "Mystic Soliloguy and Colloguy." Then come two long chapters upon "Prayers of Petition and Intercession," and "Collective and Ritual Prayers," rich in illustrations drawn from ancient and modern

mechanism at present, despite his allegiance to it, incapable of an answer. If space permitted, the reviewer would undertake to sketch a fairly plausible mechanistic explanation.

The remainder of the monograph treats of Bonnet's theory of maternal love, a purely egoistic and non-finalistic theory; his doctrine that the difference between the human and the animal mind lies in the possession of abstract ideas by the former,—in connection with which his recognition of the fact that abstraction depends upon attention is of considerable historical interest;—and his attempt to explain how an animal such as a polyp or worm, which can divide into independently subsisting individuals, can still possess a soul: a problem which he solves in terms highly suggestive of Weismann's by maintaining that the whole body of the animal contains germs each of which represents the whole animal and hence, in germ, a soul.

Anti-anthropomorphism, anti-finalism, and the beginnings of experimentation: such were the characteristic features of Bonnet's views on animal psychology. He was not without influence on a train of German thinkers, but this influence "was suddenly annihilated by the revolution produced with the rise of the Kantian philosophy. Empirical psychology was abandoned, and Bonnet and his followers fell into oblivion."

MARGARET FLOY WASHBURN.

VASSAR COLLEGE.

The Philosophy of John Norris of Bemerton. By Flora Isabel Mackinnon Baltimore: The Review Publishing Co., 1910.—pp. iii, 104.

The Department of Philosophy of Wellesley College has already done useful service towards rendering the work of the less-known English Platonists more accessible, through Miss Bowman's edition of Collier's Clavis Universalis. The service is continued through the present excellent monograph, which will be welcomed by all students of the history of English thought. Norris is almost the least logical and least vigorous-minded of his school; but historically, as the author sufficiently shows, he has a certain representative significance. In him Platonism has already passed over-so far as the logic of its position is concerned—into an idealistic theory of the physical world; only the personal timidity of Norris deters him from taking the plunge. Miss MacKinnon's exposition of Norris's metaphysics and her account of the sources of his ideas are done in a thoroughly careful and scholarly fashion, and with a brevity which can hardly have been learned from the subject of the analysis. Most of the seventeenth-century charm of Norris's style disappears in the process of condensation, and not much is left of the glow of his mysticism; the treatment is almost too dry and objective. But his doctrines, and his arguments for them, are set forth clearly in relatively small space, in a better arrangement than Norris's own, and with few considerable omissions. It would, however, have been worth while to reproduce Norris's criticisms on Locke in his Cursory Reflections upon an Essay Concerning Human Understanding (1690), which is too briefly touched upon, and to give some account of his ethics, to be found

largely in his Treatise Concerning Christian Prudence (1710). The entry for this work in the appended bibliography of Norris's writings seems, by the way, to be partly erroneous; the third edition is given as of 1749-whereas the reviewer's copy of the seventh edition bears the date 1722. Norris was distinctly a writer with a vogue, and editions of many of his works appeared in rapid succession; thus his Practical Discourses (which wrongly figures as two different works in the bibliography) went into a fifteenth edition by 1728. It is a little surprising that the author nowhere mentions her principal predecessor, M. G. Lyon, whose L'Idéalisme en Angleterre au 18° siècle contains an extended study of Norris and much valuable material concerning the whole movement of thought with which he was connected. That "the dependence of Norris's thought on that of Malebranche has been somewhat exaggerated," the author seems to me successfully to show; she makes it appear fairly certain that the English writer had elaborated much of his philosophy, including the doctrine of our "vision of the ideas of all things in God," before he became acquainted with Malebranche's theory.

One fact casually indicated by the author in a footnote has some interest in relation to the history of philosophical terminology. Norris repeatedly uses the words "subjective" and "objective" in their modern senses. Thus he writes (1701): "Certainty is either subjective or objective. By subjective certainty I mean that firmness of persuasion whereby we assent to the truth of a thing. By objective certainty I mean that state of the object which affords just ground or foundation for such a firmness of assent" (Theory, I, p. 184). "Objective" is expressly defined as "of the thing," "subjective" as "of the understanding" (ib., p. 310); these definitions, moreover, are not presented as in any respect novel or unusual. One ought not, therefore, to say, with Eucken (Fundamental Concepts, p. 2) and most of our philosophical dictionaries, that the change from the scholastic to the present (and exactly reversed) meaning of these adjectives "was not completed until the expressions passed over into the German language," about 1730, and only later spread to England, where "the new usage was for a long time felt to be strange." Murray gives a clear example of the employment of "objective" in the modern sense by Stillingfleet in 1662, and a possible case still earlier. It is probable that the terms in their present meaning were in fairly common English use in philosophical circles in the seventeenth century.

A. O. LOVEJOY.

THE JOHNS HOPKINS UNIVERSITY.

Studien zur Philosophie der exakten Wissenschaften. Von Bruno Bauch. Heidelberg, Carl Winter, 1911.—pp. viii, 262.

"The purpose of this book, as its title indicates, is not to present a philosophy of the exact sciences, but only to be a study preliminary to such a philosophy. . . . As these studies are to serve me myself as the prolegomena of a more extensive investigation, I hope that they may do a similar service to the reader by offering him an introductory study (Vorübungen) to this field of research"

(Preface). How the book is really to do either puzzles the reviewer unless to do so it be enough to advertize that there is one more Kantian and loyal follower of Otto Liebmann in the world; for the book from beginning to end is but a profession of Kantian transcendentalism and criticism and all the light thrown upon the nature of the exact sciences is used exclusively to call the reader's attention to critisicm as the one valid philosophical standpoint.

Of course the reviewer, being a neo-dogmatist, may be incapable of judging fairly of such a book because he reads it already convinced that Kantian criticism in all its forms is a vicious circle. However, is it not reasonable to insist: Either such a book should be a direct exposition and defense of criticism: or, assuming the standpoint of criticism to be familiar to the reader and to be well founded, it should proceed to open up to view the problem before the philosopher of the exact sciences? In this book neither seems to be done to any adequate extent; rather we are given the merest hint as to the nature of the latter problem and in addition two essays, which, though excellent and interesting in themselves, are no substitute for the former undertaking. Of all this the author is no doubt fully aware, for there is every reason to believe that he intended to write a much less ambitious book than an adequate treatment of either subject would require. But, as the book stands, the purpose it can actually fulfill is not apparent. Every topic taken up in the first half of the book leads in a most unconvincing way to criticism and transcendentalism. The titles of these chapters are: The Relation of Philosophy and Natural Science; The Problem of Experience (Zur Problem der allgemeinen Erfahrung); Experience and Geometry in their Epistemological Relation. The last one hundred and twenty pages are different in content, being given directly to expounding and advocating the critical philosophy. They consist of two chapters which are really distinct essays. The first (thirty-five pages) gives a sketch of the doctrines of Otto Liebmann and calls our attention rightly to their importance and to the ability of their author. The second chapter (eighty-three pages) might be called a brief introduction to philosophy from the standpoint of Kantian criticism. Its actual title is, "The Analysis of the Problem of Substance and the Logical Scale of the Standpoints." It expounds and criticizes in succession, naive realism, materialism, dynamism (die energetische Metaphysik), psychology and the spiritualistic idealism, positivism, and lastly, criticism.

In my opinion it is doing no injustice to the book or its author to say to the English speaking philosopher: It is not necessary to read this book. Read rather the writings of Liebmann. Then, too, as a book for the beginner the author himself would be the last one to substitute his present work for the writings of Liebmann.

WALTER T. MARVIN.

RUTGERS COLLEGE.

Das Erkenntnisproblem in der Philosophie und Wissenschaft der neueren Zeit. Von Ernst Cassirer. II. Band. Zweite durchgesehene Auflage. Berlin, Verlag Bruno Cassirer, 1911.—pp. xv, 832.

As the author notes in his Preface to the second edition, the changes made in the second volume are not so extensive as in the first, though a very considerable number of changes has been made here also. The order of treatment has been modified in the first part of the volume. Instead of completing his discussion of Rationalism before taking up Empiricism, as he did in the first edition, Dr. Cassirer has now divided the book dealing with the latter subject, placing the chapters on Bacon, Gassendi, and Hobbes in a separate book after Cartesianism and before the continuation of Rationalism by Spinoza and Leibniz. The Appendix to Book VI, which in the first edition dealt with a somewhat miscellaneous collection of non-empirical English thinkers, has disappeared and the contents have been distributed to the appropriate places in the new arrangement. The English Rationalists are placed in a separate chapter as part of the continuation of Rationalism; Arthur Collier is treated in conjunction with Berkeley, and the Scottish School in conjunction with Hume. The arrangement of the last two books, which deal respectively with the Science and Philosophy of the Eighteenth Century and with Kant, remains for the most part as it was in the earlier edition. Changes in the form of expression and modifications in detail have been made throughout and some of the sections have been changed very considerably, as for example that dealing with Gassendi. The usefulness of the book has been greatly enhanced by the addition of a very complete index of names and subjects.

GEORGE H. SABINE.

LELAND STANFORD JR. UNIVERSITY.

The following books also have been received:

The Realm of Ends, or Pluralism and Theism. By JAMES WARD. New York, G. P. Putnam's Sons, 1911.—pp. xv, 490.

Thought and Things. Vol. III. By James Mark Baldwin. London, George Allen & Co., Ltd., 1911.—pp. xxi, 284. \$2.75.

Psychology of the Religious Life. By George Malcolm Stratton. London, George Allen & Co., Ltd., 1911.—pp. xii, 376. \$2.75.

Body and Mind. By WILLIAM McDougall. New York, The Macmillan Co., 1911.—pp. xix, 384. \$2.75.

Authority. By A. v. C. P. Huizinga. Boston, Sherman, French & Co., 1911.—pp. 270. \$2.25.

A Short History of Ethics. By REGINALD A. P. ROGERS. London, Macmillan & Co., 1911,—pp. xxii, 303. \$1.10.

The Ethics of Freedom. By George Paxton Young. Selected, translated and arranged by James Gibson Hume. Toronto, University Press, 1911.

—pp. 76.

Höherentwicklung und Menschenökonomie. Von RUDOLF GOLDSCHEID. Leipzig, Verlag von Dr. Werner Klinkhardt, 1911.—pp. xxvi, 664.

Griechische Religionsphilosophie. Von Otto Gilbert. Leipzig, Verlag von Wilhelm Engelmann, 1911.—pp. 554.

Nietzsche als Bildner der Persönlichkeit. Von RICHARD OEHLER. Leipzig, Felix Meiner.—pp. 31. 60 Pf.

Das Künftige Jahrhundert der Psychologie. Von G. Heymans. Leipzig, Verlag, von Johann Ambrosius Barth, 1911.—pp. 52.

Weltbegriff und Erkenntnisbegriff. Von VIKTOR KRAFT. Leipzig, Verlag von Johann Ambrosius Barth, 1912.—pp. xii, 232.

Schellings Metaphysik der Persönlichkeit. Von Ernst Schertel. Leipzig, Quelle & Meyer, 1911.—pp. 85.

Teleologie und Kausalität. Von Horst Engert. Heidelberg, Carl Winter's Universitätsbuchhandlung, 1911.—pp. 50.

Études de Morale. Par F. RAUH. Paris, Félix Alcan, 1911.—pp. xxv, 505. Science et Philosophie. Par Jules Tannery. Paris, Felix Alcan, 1912.—pp. xvi, 336.

Le Génie Littéraire. Par A. RIMOND et PAUL VOIVENEL. Paris, Felix Alcan, 1912.—pp. 303.

Maïmonide. Par Louis-Germain Lévy. Paris, Félix Alcan, 1911.—pp. 284. La Morale et l'Intérêt. Par J. Novicow. Paris, Félix Alcan, 1912.—pp. 241.

L'Infinito. Par Luigi Botti. Genova, A. F. Formiggini, 1912.—pp. 529.

SUMMARIES OF ARTICLES.

[ABBREVIATIONS.—Am. J. Ps. = The American Journal of Psychology; Ar. de Ps. = Archives de Psychologie; Ar. f. G. Ph. = Archiv für Geschichte der Philosophie; Ar. f. sys. Ph. = Archiv für systematische Philosophie; Br. J. Ps. = The British Journal of Psychology; Int. J. E. = International Journal of Ethics; J. of Ph., Psy., and Sci. Meth. = The Journal of Philosophy, Psychology, and Scientific Methods; J. de Psych. = Journal de Psychologie; Psych. Bul. = Psychological Bulletin; Psych. Rev. = Psychological Review; Rev. de Mêt. = Revue de Métaphysique et de Morale; Rev. Néo-Sc. = Revue Néo-Scolastique; Rev. Ph. = Revue Philosophique; Rev. de Ph. = Revue de Philosophie; R. d. Fil. = Rivista di Filosofia e Scienze Affini; V. f. w. Ph. = Vierteljahrsschrift für wissenschaftliche Philosophie; Z. f. Ph. u. ph. Kr. = Zeitschrift für Philosophie und philosophische Kritik; Z. f. Psych. = Zeitschrift für Psychologie und Physiologie der Sinnesorgane, I. Abtl.: Zeitschrift für Psychologie. — Other titles are self-explanatory.]

Mr. Bradley's Doctrine of Knowledge. E. H. STRANGE. Mind, No. 80, pp. 457-488.

The basis of Mr. Bradley's theory of knowledge is the given fact of feeling. It is in feeling alone that reality is encountered, not in the objects of perception or of reflective thought. There are two main reasons for this: (I) feeling is a datum temporally prior to everything else in experience, prior even, to the self; (2) the question of knowledge is looked at from the point of view of the psychologist. The first combines the tabula rasa theory with the subjectivity of the Kantian theory of knowledge, while the latter assumes that the mind of the subject of investigation is a thing to be explained by time, space, and causality alone. But the activities of the self are not exhausted in the subjective and the momentary. They are directed outwards, and have relations which are theoretical, practical, emotional, and permanent. Mr. Bradley's "whole of feeling" is an unwarrantable psychological assumption which invalidates the necessary distinction involved in all knowing. The position collapses as an explanation of the self and of self-consciousness. If every object of perception is lost in the "whole of feeling," or has its roots for existence in the "whole of feeling," material things are mere psychical existences, and the distinction of subject and object vanishes. Similarly, if any definite 'thing' short of the Absolute is mere content, divorced from existence, mere ideal construction; if, in other words, the basis of thought and judgment is the original "whole of feeling" which is psychical and identified with the individual, there can be no such thing as objective reality at all except the Absolute, and experience as we know it is a fiction. Moreover, if the objects of reflective thought are ideal constructions, then thought is an abstraction from a concrete whole, or the Absolute, with which it can never be identified. This makes the mental factor in any concrete situation to be the whole of the situation, which leads at once to agnosticism, and puts reality as much beyond finite thought as

does the Kantian thing-in-itself. But reality is not beyond the objects of finite thought, which, if true, is reality; if not true, reality is not separated by a great gulf from the object of finite thought, but continuous with, although more comprehensive and harmonious than, the object.

MARK E. PENNEY.

Negation Considered as a Statement of Difference in Identity. Augusta Klein. Mind, No. 80, pp. 521-529.

Predication for Hegel and the Hegelians was a statement of identity in difference. Negative predication was not considered by them, and although negation is by no means on the same level with affirmation, no doctrine of Predicables is complete that does not present a negative, as well as an affirmative scheme of predications. This is the defect of the Hegelian identity in difference and of Sigwart's logic. The statement of negation as difference in difference is equally defective. The only adequate statement of negative predication must be Difference in Identity. This position rests upon the distinction between statement and implication. In negative predication the difference-copula states a difference and implies an identity, but the implication is so prominent as to make the affirmative proposition apparent, while in the affirmative statement the implication is so weak that the negative is generally lost sight of. Our schemes of affirmative predication, therefore, need revision, not from the standpoint of formal symmetry, but for the sake of limiting, and so completing, a term's intension.

MARK E. PENNEY.

Some Modern Advances in Logic. PHILIP E. B. JOURDAIN. Monist, XXI, 4, 564-566.

Mathematics is traditionally supposed to be occupied with questions about number and quantity. Euclid did not reckon among his axioms the fundamental ideas of logic itself. Peano developed a system of symbols for logical propositions. Russell has carried on this work. Mathematics and logic seem to form part of a continuous whole. It now appears that the essential character of mathematical propositions is not as Euclid would have it—"A is true, therefore B is true," but "if A is true then B is true." The first volume of the Principia Mathematica, by Messrs. Russell and Whitehead, is written mostly in Peano's symbolism, and expounds the modern views on logic and mathematics.

M. W. PAXTON.

The New Realism and the Old. W. P. Montague. J. of Ph., Psy., and Sci. Meth., IX, 2, pp. 36-46.

Epistemology has two aspects, structural and functional. The criterion of truth is functional. The structural problem is that of the relation between knower and known. In this last mentioned problem is developed the question of naïve realism, dualistic realism, and subjectivism. Naïve realism, the

oldest of these, conceives of objects as directly presented to consciousness and being precisely what they appear to be. Later the soul is set against the phenomenal world. Descartes and Locke conceive the mental states as representations of the external world. Then, subjectivism says there can be no object without a subject. The issue between realism and subjectivism does not arise from a psycho-centric predicament, a difficulty of conceiving known things apart from my knowing them; but rather from the "ego-centric predicament"—the difficulty of conceiving known things apart from my knowing them. Hume attacked the spiritual substance of Berkeley but later clouded the issue.

If the absolute is known by its own fragments, each fragmentary self must assume that its own experience constitutes the Universe—which is solipsism. If independent reality is set up for the absolute it is relegated to the externality of the dualistic realist. The difficulty results from making knowledge an internal relation and hence constitutive of its object. This new realism lumps all subjectivists together and is itself almost identical with naïve realism.

M. W. PAXTON.

Richard v. Schubert-Solderns erkenntnistheoretischer Solipsismus. REGINE ETTINGER-REICHMANN. Ar. f. g. Ph., XVIII, 1, pp. 69-98.

The thorough-going subjective idealism of Richard von Schubert-Soldern is a reflex of the economic individualism of the present age. Designating his position as epistemological solipsism or empirical idealism, Schubert-Soldern asserts that sensations give us the only reality, and that all metaphysics which affirms a reality existing beyond consciousness must be discarded. On this view, philosophy, whose function it is to analyse the immediately given into its constituents, is held to contain the elements common to all the particular sciences. Scientific epistemology, according to Schubert-Soldern, must take the standpoint of immanence and abstain from all previously formulated hypotheses in its analysis of the given. Time, space and difference constitute the subjective connection of the given world. Within the totality of consciousness we may isolate the ego from the non-ego, the physical body from its environment. Such abstraction reveals the fact that perceptions and ideas belong to two different causal series which do not affect each other except in a mediate way, through the body. In criticism we may say that Schubert-Soldern, in holding that the separation of subject and object is artificial, is really starting out, not with an original fact but with an interpretation of reflective thought. This point of departure is, in fact, quite foreign to ordinary ways of thinking and sets at naught the distinction between psychology and natural science. True, in a psychological sense, we start out with the immediately given, but we cannot admit that the data of consciousness give us the only reality and never lead beyond themselves. The refusal on the part of Schubert-Soldern to recognize existence beyond the consciousness of the ego, leads him into inextricable difficulties in his treatment of objective time and space, an external world, and other egos. On the other hand, were he to remain true to his assertion that perceptions alone give us the real, he could not logically recognise the regularity of nature.

J. R. TUTTLE.

La forme moderne du problème des universaux. Ch. Dunan. Rev. de Mét., XIX, 5, pp. 699-722.

Modern science is not interested in origins and essences, but only in laws and connections. This limitation of interest springs from the practical motive at the root of modern scientific investigation which is concerned merely to produce things through a calculation of laws, not to penetrate into the meaning of things. But if laws, which are simply common characters in things, are to be retained, so should essences; for essences are the laws which command as contrasted with the laws that describe; they are the ideals immanent in particular phenomena, to which those phenomena increasingly conform. Although metaphysics posits the essences, and leaves to science the task of developing their meaning, a certain kind of knowledge of essences is none the less possible. They cannot be represented by the imagination, but can be intellectually apprehended by the thought that creates them. Moreover, the positing of higher and better objects by thought is made possible by the progressive explanation of the meaning of objects by the scientific understanding. The process of scientific explanation culminates in the activity of thought, just as the infinite multiplicity of being culminates in pure and perfect unity. This Aristotelian view of essence, while transcending the abstractness of Nominalism, of Realism, and of Conceptualism, yet absorbs the truth asserted by each of these views. Nominalism is right in asserting that only particular being in the strict sense exists; Realism is right in asserting the essential nature of particular being to consist in the intelligible ideal there to a certain extent phenomenally embodied; Conceptualism is right in ascribing the apprehension of essential natures to the activity of thought.

KATHERINE EVERETT.

Do Things Exist? JOHN E. BOODIN. J. of Ph., Psy., and Sci. Meth., IX, 1, pp. 5-14.

To early philosophy, individuality belongs to things; minds were part of a universal principle. Philosophy to-day has reversed its attitude; minds are more easily granted individuality. Several motives are at the bottom in denying individuality to things. One is a mystical temperamental bias which seeks for reality in haziness rather than in distinctions. Others are conceptual difficulties such as the difficulty of conceiving interaction between plural things, etc. Another and more serious objection against the reality of things has been raised from the Herakleitian viewpoint, so ably championed by Bergson. But while we must recognize novelty and interpenetration as facts of our experience, we must recognize a certain amount of constancy. The constancy of our symbols must correspond to constancy of reality or they

are of no value. Things must be granted individuality and existence outside of our perception, though they may consist of many interpenetrating impulses all travelling at diverse paces. Individuality is difficult to define. Though things for experience have a 'relational' background, they must be accorded an individual history, a particular pattern of parts which our own ideas must copy sufficiently for identification and prediction. Boodin prefers the instrumental way of looking at the 'thing,' because unlike the 'self' the 'thing' has no meaning or value that we can share with it. This pragmatic way of taking 'things' involves persistent identity, subjective and objective, and social agreement.

HENRY MAYER.

L'Intuition Philosophique. H. BERGSON. Rev. de Mét., XIX, 6, pp. 809-827.

At the basis of every philosophical system is an intuition, simple and spontaneous, which is realizable only through the images which place it forcibly before the philosopher and enable him to deny that which is contrary to it, whether in the developments of his own philosophy or in the thought of others Though this intuition expresses itself in forms common to the age, and so it is possible to pick out the source of a system, and though its conceptual development leads to an apparently organic connection of the parts of the system, neither of these is the real philosophy; that is, the primary intuition itself. For example, we may show that, in the case of Berkeley, his fundamental postulates, idealism, nominalism, spiritualism, and theism, are derived from Duns Scotus, Malebranche, theology; or we may show how any one of these, as idealism, makes necessary certain others, and so show the interconnection of his system as an organic unity: but when we do so, we do violence to his philosophy, as this consists in the intuition at the base of all this development. The real secret of Berkeley's philosophy is rather to be learned from two images which strive to express his intuition; (I) the idea of matter as a transparent film between man and God which becomes clouded by the terms used to explain it, (2) the idea of matter as a divine visual language. This intuition expresses itself conceptually in the form prepared for it by the time in which it was seeking expression. In the same way the philosophical intuition is related to the science of its time, and is not, as some think, a synthesis of sciences which completes and fulfils them, carrying them beyond the point which they can attain of themselves. This, in so far as it is possible, is not philosophy but science, and is analysis rather than synthesis. Philosophy has rather to do with pure duration than with the pulverized time of science and common life; and if this attitude should be brought near to life and made common, there would result a great moral and æsthetic quickening of the individual life.

F. R. PROUT.

Positivisme et Pragmatisme, Criticisme et Pragmatisme. L. DAURIAC. Rev. Ph., XXXVI, 12, pp. 584-605.

Auguste Comte's conception of science is as dogmatically religious as any papal idea of religion; the scientific truth arrived at in the evolution of truth is absolute and, once attained, can not suffer any change, though further elaboration may take place. This conception admits of no scepticism, of no probabilism, it is rationalism, and as such, must be carried to its full conclusion. It would appear that this is far enough from pragmatism. But now this conception receives its climax in the science of sociology and the pragmatic movement is a result of sociology; even in the case of Comte himself this took place. He saw from his social study that (1) there is no society without religion, (2) religion needs dogma, (3) it is fetishism which results in dogma; accordingly, with these things in mind, he set about forming a religion. The fact that religion requires love, and this a disciplined love, led him to form the idea of the Great Being; is it not then a truly pragmatic idea and based on practical value? In the letters to Clotilde de Vaux we see the same spirit at work; for these recognize that prayer has a value for the one who prays although all thought of an actual hearer of the prayer be absent. James tells us that by watching the conduct of a person we may see the results and the truth of his religion; the ideas are fundamentally the same. Comte then seems to have foreshadowed the tendencies of his successors in all lines (a) empiricism, (b) rationalism, (c) pragmatism; between these elements he made no choice. It would be generally admitted that Kant is the father of criticism, but would one as readily admit him for the father of pragmatism? Yet we might give a very good case for this second idea, and might base this, not merely on the Postulates of the Practical Reason, obviously pragmatic, but on the Critique of Pure Reason itself, wherein the mind moulds reality in accord with its necessities; but in that there is an unknown world, we see the rationalism appear beside the pragmatic phenomenalism. We must now consider the criticism of the present day, and this in the work of Renouvier. In the Premier Essai de Critique générale, we see the rationalistic spirit working to list the categories and analyze perception; but when he later treats of Spencer and of J. S. Mill he evidences an empirical spirit; nor is this all, for in the Deuxième Essai de Critique générale, the foundation is the theory of mental vertigo, an analogy with physical vertigo, and this means simply that the idea works. It is still too early to speak historically of the position of Renouvier but we can see that in him there is a dilemma between rationalism and pragmatism.

F. R. PROUT.

Defective Logic in the Discussion of Religious Experience. MARY WHITON CALKINS. J. of Ph., Psy., and Sci. Meth., VIII, 22, pp. 606–608.

Ames argues that religion is social in origin and nature, and concludes (1) that it is merely the highest type of social experience, and (2) that it does not consist in relation to a personal God or gods. The first position, however, is

too vague to criticize, and the second is based on the assumption that, if primitive man has no definite conception of a personal God, that conception plays no part in his religious consciousness. This argument is valid, however, only against intellectualistic forms of personalism.

A. H. Jones.

Reflections of a Temporalist on the New Realism. ARTHUR O. LOVEJOY. J. of Ph., Psy., and Sci. Meth., VIII, 22, pp. 589-599.

The new realism is new in that it attempts to combine two positions which have heretofore been regarded as antithetical—epistemological monism and realism. It seeks to do this by maintaining (I) that relations presuppose, and do not constitute, the existence of the objects related, and (2) that consciousness is not a substance or thing, but a particular kind of relation between known objects. The first position seems to prove the realistic existence of objects, and the second the monistic character of knowledge. These two propositions, in fact, constitute the major and minor premises of the new realism. The realist's theory of consciousness (to consider only the minor premise of the theory) is at fault, however, in that it does not allow for subjectivism and error. Maintaining that all the facts of experience, as real objects and real relations, stand on the same plane of objectivity, it cannot account for these aspects of experience; or if it explains them, it can only do so by passing from a relational to some form of dualistic epistemology.

A. H. JONES.

Der kategorische Imperativ gegenüber einer Wahrheit von Sittengesetzen. Dr. Boden. Ar. f. G. Ph., XVIII, i, pp. 7-53.

Is it not possible to retain a formal first principle, essentially similar to Kant's categorical imperative, along with a plurality of particular material principles? The particular principles of ethics would not be derived from, but rendered consistent with, this formal principle. Kant really makes use of two ultimate principles, the good will and the categorical imperative, corresponding, respectively, to feeling and to reason. A mediation between the two may be attained by our recognition that the feelings and impulses constitute a unity which reason regards in a purely formal view without attempting to give norms to the will. In the present discussion we may leave out of consideration that type of ethics which treats of the individual will as solely directed to the satisfaction of its own inclinations, for in strict logic, this theory must treat all volition as of equal or indifferent ethical worth. We must rather consider value-ethics, which places an evaluation upon volition according to some objective standard external to the inclinations of the individual. But the types of value-ethics are various and we also have many standards of customary morality, varying with the character of the group or sub-group. Hence we need a test of all those qualities which conduce toward a following of every valid customary law. This measure must be independent of any particular customary law and must therefore stand in

some sort of relation to the categorical imperative. Every particular moral law is the expression of a definite social organization and the social group or totality must count upon and make use of the impulses of individuals in a planful way. It must make use of their desires for esteem, for power, and for gain. Beyond this, the interest of the individual in the social group may rest on the impulse for an ordering of life according to reason, an impulse which is closely allied to the concept, and which is active in the sphere which Kant assigns purely to the reason. The group must foster in its component individuals a planful choice between, and organization of, their impulses. He who directly follows his momentary impulses is useless for the purposes of the group. Now every impulse is one-sided. Not even sympathy or the sense for order will suffice as a basis for all ethical action. Therefore, no single impulse may be regarded as of absolute ethical worth. If the impulses taken together contain the goal for man, it is the reason which furnishes the means for its attainment. While the impulses are manifold, the method of the reason is unitary. The capacity for rational thinking varies in different individuals and he who possesses in the highest degree the faculty of clear and resourceful thinking and for organizing his impulses, is best able to conform his conduct to every valid ethical law and is most fit to be a member of a social group. This necessary organization of the impulses is nothing more nor less than will. The general view here maintained is opposed to the denial on the part of Kant and Christian Ethics that the truly ethical is in any way dependent on rewards and punishments. Rewards and punishments are socially indispensable and an intelligent appreciation of their meaning and conformance of action thereto is distinctly ethical and conducive to social stability. On this view, the criterion of the ethical is the degree of rationality which agents or actions manifest. In the conflict of the ethical ideals of different social groups, he who best grasps the idea of the whole will be best able to decide complicated cases. Again, since new ethical norms trace back to reason, those individuals may be rated as of higher ethical worth who are able to originate higher and more farreaching standards. Withal, we can only claim universal validity for the categorical imperative if we have it purely in the conceptual realm and do not attempt to derive from it any material norms. The present standpoint permits the most extreme ethical relativism to be reconciled with a general principle closely connected with Kant's categorical imperative. While not giving particular guidance, this principle will hold forth the ideal of an ethical toleration thoroughly rationalized by full and clear concepts. The chief means of the social organization to render this principle effective is an education in the deeper purposes of the group.

J. R. TUTTLE.

Mind and Body. J. S. MACKENZIE. Mind, No. 80, pp. 489-506.

Descartes and his immediate successors regarded the mind as a receptacle for ideas. From this it was only a short step to the conclusion, not only of Berkeley, that the whole material system, so far as we know it, is in our minds; but to that of Leibniz, that everything is in our minds, including even the minds themselves. Malebranche made an advance upon this by his theory of the vision of all things in God, and not in our minds, using the term God to mean the Universe. Thus, two distinct conceptions of mind must be recognized: (1) that of the psychologist, for whom the mind consists of conscious states and processes. Bodies for such a mind would be other conscious states, physical bodies, geometrical figures, etc., and the relation sustained by the mind as conscious states to bodies of this kind would be simply the fact of awareness. This awareness can be explained only upon the possibility of qualitative transformations of motion. If the Conservation of Energy be always stated in quantitative terms, Huxley was not far astray in regarding consciousness as an epiphenomenon. Objections to qualitative changes can be urged with equal cogency against quantitative, and it is only upon the admission of the former that the relation between conscious states and bodies can be explained. (2) Mind is something to which all other things refer. This presupposes a Universe, in which the many are related in one Idealistic whole. This Universe must be interpreted as a system in which purpose, choice, and goodness have a place, and not one which is determined by the more materialistic conceptions.

MARK E. PENNEY.

Freud et le problème des rêves. N. Kostyleff. Rev. Ph., XXXVI, 11, pp. 491-522.

In his interpretation of dreams Freud recognizes four principal moments in the foundation of a dream: (1) the condensation of the psychic data; (2) the change in their value for the individual; (3) the change of their form in the sense of plastic representation; (4) the secondary recomposition. The determining factor in the fusion of these moments is a secret desire. The desire is more or less strong through the day, and at night manifests itself in the form of a dream. Freud has established the fact that most of the dreams of children correspond to this conception, while those of adults correspond to an organic need, or to an immediate desire. With adults the mental life is too complex for a desire to be able to pass directly into a dream. With them the desires generally date farther back, present themselves under a disguised form, and necessitate some organic reënforcement to convert them into a dream. This reënforcement, according to Freud, can be nothing but an infantile desire, of the same nature, preserved in the realm of the unconscious. These unconscious desires may be considered as remaining always active, always ready to manifest themselves and to transmit their intensity to new impressions. Dreams of terror, Freud considers as having a sexual origin: in children, as the result of the first awakening of the sex instinct, and in adults, as the consequence of some alteration in it. The materials of Freud are very interesting, and his interpretations very suggestive, but he goes too far. Observation alone is not enough to explain such complex phenomena. It is not enough to affirm here a condensation, there a change of value, elsewhere an intervention of the ego in the psychic data. To explain the results, they must be traced back to some general law of being, and connected with some psychic or mental faculty of the organism. From the point of view of objective psychology, the very irregular work of Freud takes on a significance which nullifies all the judgments passed upon it up to the present time. Among the faults to be criticised are the conclusion that all dreams may be traced back to the repression of a desire, and the arbitrary nature of a mass of conclusions which result from the analysis of particular cases. These faults are effaced, however, by the importance of the capital fact which was recognized by him: the process of sensorial repression. This finds a physiological basis, in the functioning of reflexes, which responds to all varieties of dreams. The reenforcements which the reflexes receive in the brain explain all the constellations of the latter. The accessory hypothesis of desire, and the arbitrary conclusions attached to it, fall of themselves; but the fact of having recognized this phenomenon by means of internal observation remains the incontestable merit of Freud.

ALMA R. THORNE.

Le problème sociologique et le problème philosophique. E. DE ROBERTY. Rev. Ph., XXXVI, 11, 449-490.

To produce concepts is the supreme end of all true society. Abstraction and social conservation are strictly synonymous. Abstraction is the imum fundamentum of the social order. It is developed, however, with extreme slowness and much vacillation. What we call laws are merely the apparently invariable relations between our concepts and things. According to the quality of the concepts which they unite, these laws are either empirical or theoretical. In sociology, as well as in philosophy, there is no lack of concepts, but they have not yet passed the empirical stage of development. The sociological problem has become the most pressing of all the problems of today, and the constitution of sociology necessarily carries with it a radical revolution in the conception of the end and the methods of philosophical labors. The social phenomenon par excellence is knowledge. Sociology is a theory or analysis of knowledge, of religious, philosophical, and æsthetic concepts, and of human conduct. Since Comte, as before him, the sociological concepts remain, at bottom, empirical. We have not yet rectified the vague and fleeting ideas of good and evil; of virtue and vice; of liberty, equality, and justice; of progress, power, and crime, etc., which sum up the social experience of past centuries and form the present stock of our present sociological wealth. The prime quality of this social savoir, or universal science, was metaphysics. Today metaphysics seems to have fallen into decay because the progressive emancipation of physical, chemical, and biological science has made it merely a lining to sociology. Philosophy, in its metaphysical phase, has been confused with the initial and empirical savoir. It has been the substitute for sociology and for theology, but there is a profound difference between philosophy and science. Science is analysis. The truly synthetic or philosophical thought works with

the partial generalizations due to analysis, and the concepts which it forms in its turn are worth no more and no less than the data which it utilizes. Sociology is an analysis of concepts. Synthetic thought is as old as the analytic thought from which it results. The philosophical problem is as old as civilization, but in our time it is confronted with indifference and distrust in the élite, learned; and, if from time to time there seems to be a partial revival of interest, it is quickly discovered that old systems, long dead and forgotten, have been temporarily galvanized into life. Those who would replace philosophy with science meet another difficulty. In sacrificing the necessarily monistic synthesis of the universe to the necessarily fractional analysis of nature, they are subject to the reproach of having impoverished humanity on the side of philosophy without having enriched it on the side of science. Modern philosophy is scarcely more than a vague study of certain social phenomenatheories of knowledge, æsthetics, morality, and conduct-a sociology which has not even the courage which philosophy formerly possessed of representing itself as the microcosm, the synthetic reduction of the universe. If the sociology of the savants has already posited its problems, the sociology of the philosophers appears to be the principal obstacle to its solution. Never, in the course of history, has philosophy found itself in so grave a situation. Behind it extends a glorious past, though encumbered with dead things; and before it stretches an avenue full of superb promises, but demanding a radical renovation of the principal methods of synthetic thought. In the philosophical crisis, which has the significance of a crisis in the increase of all modern culture it is sociology which plays the truly decisive rôle. The problem of philosophy is intimately joined with the problem of sociology, and the simultaneous solution of these two great questions depends upon the progress made in the theory of knowledge when finally transplanted from the arid soil of metaphysics to the fertile field of a particular science.

ALMA R. THORNE.

Social Consciousness and its Object. E. S. AMES. Psych. Bul., VIII, 12, pp. 407-416.

Our social experience is the basic phase of all our experience. Within it are gradually discriminated selves and things, the social group and the ideal social self. Through the interplay of gesture and response, oral and written speech, the individual comes to consciousness of himself. The very objects of perception are nothing more than registrations of group habits and activities. Closely allied to the social character of the growth of individual consciousness is the development of a sense of the group on the part of the individual. This group sense is fostered by warfare for a common end, by coöperation, or by any other dominant interest. The character of a deity will represent some fundamental group interest. Polytheism is the natural accompaniment of a number of imperfectly coördinated social habits or selves of the group, while monotheism expresses a stage when the life interests are sufficiently unified to refer to one main activity.

J. R. TUTTLE.

Husserl (Sa critique du Psychologisme et sa conception d'une Logique pure). V. Delbos. Rev. de Mét., XIX, 5, pp. 685-698.

The explanation of knowledge may be either logical, i. e., an exposition of the laws of an ideal procedure of thought; or psychological, i. e., an exposition of the psychological fact of knowing in its empirical setting. The representatives of psychologism admit that there must be a doctrine of science in general which shall determine the universal forms of knowing and the meaning of the title of science in the abstract; but they contend that these definitions may be furnished by psychology. What they prove, however, is not the allsufficiency of psychology, but the need of cooperation between psychology and logic. Logic can never be reduced to psychology, for psychology yields only inexact correlations of empirical facts, while logic demands exact concatenations of timeless truths. The failure of psychology to explain logical relations is evinced in its identification of logical inconsistency with the impossibility of psychological coexistence; its logical effect, in the subsequent appearance of scepticism as to the possibility of an absolute and independent truth. Psychologism confuses (1) the objective laws of pure logic and the accidents of human psychic existence; (2) that psychological aspect manifest in any science whatsoever, and the logical concatenation of things which is the essence of science; (3) the logical and psychological meanings of evidence in truth. Husserl's pure logic is not only a reaction against psychologism, but also a positive construction. Its content is (1) primitive concepts, such as conjunction, disjunction, and hypothesis; (2) categories, such as object and unity; (3) laws based on these categories, such as the laws of the syllogism and the pure theory of number. Pure logic investigates empirical science with the aim of discovering some inner essence in the presented course of phenomena. The obvious criticism of this procedure is that pure logic not only excludes psychology from logic, but psychology from psychology.

KATHERINE EVERETT.

L'Introspection. L. Dugas. Rev. Ph., XXXVI, 12, pp. 606-626.

The present tendency on the part of some thinkers to deny the import of introspection as a method for psychology either wholly or in part, and to substitute for it the use of physical, physiological, or sociological tests, destroys the existence of psychology completely, as only in the act of introspection do we get the real primary mental fact; hence the question of the import of introspection as a scientific method, is really that of how psychology is possible as a science. This question of the *import* of introspection involves first a discussion of the *value* and that, in turn, of the *nature* of introspection. It has been claimed that the introspective method is contradictory in that it involves the return of the subject upon the object and the identity of the spectator and the actor. It seems that the subject-relation to the act in question does wrong to the act itself, hence some have thought to get rid of the trouble by appealing to retrospection rather than introspection; but the objection holds good here too, as appears in almost all Memoirs, for the subject

seems to exercise a selective memory as well as to color the present state by reason of his psychological purpose. And while we discuss the possibility of introspection, the introspective psychologist goes on and uses this method with satisfactory results; it would seem then that some men exist who are able to turn and consider their own inner states, and this without altering them by the act of examination. This ability seems to be a native quality but yet is capable of increase through practice and of acquiring a knowledge of its limitations; hence it tries to correct its procedure by an appeal to the external object. But it need not so appeal, for in retrospection we have the real test of the validity of our introspections, the test of experience. Rigorous introspection does not need the help of external objects nor of the experience of other minds; it is self-sufficient. What then can we say about the general import of the result of introspective psychology? Introspection, then, has a scientific value and this because the psychological facts manifest themselves to a greater or less degree in each individual. Those, then, who attack the introspective point of view, are attacking psychology itself; for introspection is the stand-point of psychology proper and is also a valid and useful help in any other mental science, which must inevitably have at its base a psychological problem.

F. R. PROUT.

Vie animale et vie morale. André Lalande. Rev. Ph., XXXVI, 11, pp. 523-528.

By comparing moral life with animal life, we see how our human nature differs from our animal nature. The will-to-live belongs particularly to the latter and signifies the effort not to be overcome by the *millieu*, the desire to maintain the characteristic type of race or species, and to preserve individual differences. On the other hand, the moral life expresses the alteration of the type, the destruction of individual or of collective differences, to the profit of a more general type or of a common thought. In every man there are two men, each rejoicing at the failings of the other, and exhibiting the eternal struggle of the spirit against the flesh and the flesh against the spirit.

ALMA R. THORNE.

Schopenhauer's Contact with Theology. WILLIAM MACKINTIRE SALTER. Harvard Theol. Rev., IV, 3, pp. 271-310.

For Schopenhauer, consciousness is a guide to action in attainment of desire. Will is the wish to be freed from pain. Satisfaction, always momentary, is the beginning either of another desire or emptiness. Some desires become passions and make brutes of us. Pain is the reality of living. Time hastens pleasure into its opposite or boredom. Yet pain slackens time and seems utterly abnormal. We never question pleasure. Even the most high of life have their wants checked, and this is the common lot. Society is a war of egoistic interests with methods of cunning and force. Our world makes a very good comparison with Hell as the worst of possible worlds in

times when human demons sacrifice thousands of lives under the pretext of a pious delusion. Yet ours is not the worst possible world. It is merely the worst possible world that could exist. In amusement and non-predatory pursuits deceit, of self and others, gives us the greatest joy and apparent well being. The idea of progress is an occidental illusion. They should try to produce the most perfect types existing. There is no hope for a higher type. The idea of a fall seemed to Schopenhauer a moral and metaphysical necessity. Back of the world of suffering there is eternal righteousness. We blindly choose our present mode of life, guilt and misery are identical. He who injures another bites into his own flesh. Sin is really contrary to us. Although we cannot understand freedom, we can see its place and necessity. Then, too, ethics is impossible without responsibility. Since will is cause of life we cannot end it by merely ending life. The craving for individual life is the cause of all pain. Disinterested life overcomes this. The escapes from the will to live lie through Philosophy and Art and Saintliness. Schopenhauer has Nirvana in mind when he speaks of Nihilism as the goal.

MATTHEW W. PAXTON.

NOTES.

Dr. John Grier Hibben, who has held the chair of Logic at Princeton, has been elected President of the University.

Dr. Eleanor H. Rowland, Associate Professor of Philosophy and Psychology in Mount Holyoke College, has resigned to accept the position of Dean of Women and Professor of Philosophy in Reed College. Miss Rowland will spend the remainder of the present year abroad and will enter upon her duties at Reed College in the autumn.

Dr. S. P. Hayes, Professor of Psychology in Mount Holyoke College, has leave of absence for the second semester. He will spend the time abroad, chiefly at Cambridge University. During his absence Dr. Kate Gordon will have charge of four courses in the Department of Philosophy and Psychology in the College.

Dr. John J. Tigert has been appointed professor of philosophy in the University of Kentucky.

We give below a list of the articles, etc., in the current philosophical periodicals:

MIND, No. 81: S. Alexander, The Method of Metaphysics and the Categories; H. A. Prichard, Does Moral Philosophy rest on a Mistake?; W. E. Hocking, The Meaning of Mysticism as seen through its Psychology; Homo Leone, The Vedantic Absolute; H. S. Shelton, The Limits of Deductive Reasoning; Discussions: Hastings Berkeley, The Kernel of Pragmatism; E. D. Fawcett, Truth's "Original Object"; Critical Notices; New Books; Philosophical Periodicals; Notes.

THE JOURNAL OF PHILOSOPHY, PSYCHOLOGY, AND SCIENTIFIC METHODS, VIII, 25; Ralph Barton Perry, Notes on the Philosophy of Henri Bergson, I; Walter B. Pitkin, Philosophy and the Flatfish; H. L. Hollingworth, Vicarious Functioning of Irrelevant Imagery; Reviews and Abstracts of Literature; Journals and New Books; Notes and News.

VIII, 26: Report of the Committee on Definitions of the American Philosophical Association; *Christine Ladd-Franklin*, The Foundations of Philosophy: Explicit Primitives; *Ralph Barton Perry*, Notes on the Philosophy of Henri Bergson, II; Notes and News; Index.

IX, 1: John E. Boodin, Do Things Exist?; Discussion: Edgar A. Singer, Consciousness and Behavior: A Reply; John Dewey, A Reply to Professor McGilvary's Questions; Reviews and Abstracts of Literature; Journals and New Books; Notes and News.

IX, 2: Jay William Hudson, The Aims and Methods of Introduction Courses: A Questionnaire; W. P. Montague, The New Realism and the Old

Discussion: Julius Pikler, Opposition as Condition of Consciousness; Reviews and Abstracts of Literature; Journals and New Books; Notes and News.

The American Journal of Psychology, X XIII, 1: Barbara E. Roethlein The Relative Legibility of Different Faces of Printing Types; E. B. Titchener, The Psychology of the New Britannica; Edmund C. Sanford, The Function of the Several Senses in the Mental Life; Frederic Lyman Wells, The Relation of Practice to Individual Differences; H. L. Hollingworth, The Influence of Caffein Alkaloid on the Quality and Amount of Sleep; M. Valerie Atherton and M. F. Washburn, Mediate Associations studied by the Method of Inhibiting Associations; Mary W. Chapin and M. F. Washburn, A Study of the Images Representing the Concept Meaning; J. S. van Teslaar, Recent Literature of Psycho-analysis; Alfred Binet; Book Reviews; Book Notes.

THE PSYCHOLOGICAL BULLETIN, VIII, 12: E. S. Ames, Social Consciousness and its Object; General Reviews and Summaries; Special Reviews; Notes and News; Indexes.

IX, 1: General Reviews and Summaries; Notes and News.

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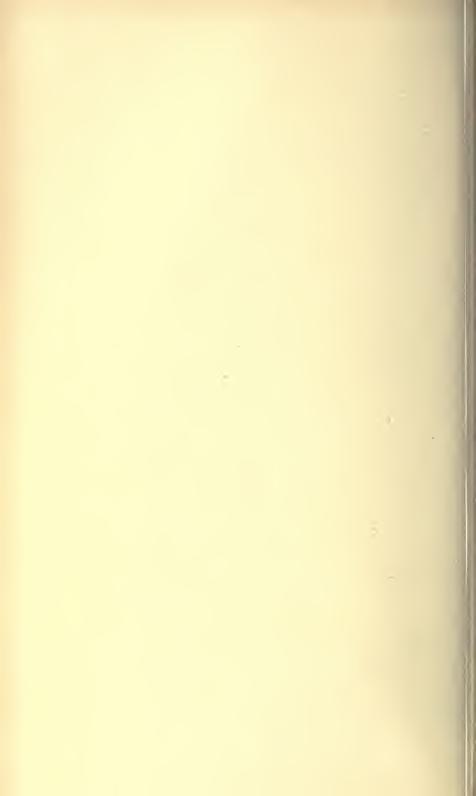
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THE

PHILOSOPHICAL REVIEW.

PHILOSOPHY IN FRANCE IN 1911.1

I.

In the year 1911 occurred the meeting of the International Congress of Philosophy, which is held every four years, and which this year took place at Bologna. French philosophy, represented by such men as Boutroux, Bergson, Durkheim (to mention only the most noted), occupied a prominent place. The active spirit of French philosophy, the profoundly studied character of its great doctrines, its constant preoccupation with the ideal as founded upon an absolute respect for positive knowledge and for facts, were all plainly evident at this Congress.

The problem which occupied the first rank was that of the nature, method, and function of philosophy.² In the first place, M. Boutroux, with his great authority, formulated the problem in the form of a consideration of the relation of the sciences to philosophy. After having rejected the old solution which confused them, the over-simple solution which presumes to be able to do away with philosophy, and the positivist solution which attempts a synthesis of the sciences conceived according to the scientific type, he has shown the original and irreducible rôle of our studies; above the sciences there is the raison d'être of science, in a word, Reason, whose function it is to reflect upon the sciences and upon life. However it may appear at first, there are not in the philosophy of knowledge and the philosophy

¹ Translated from the French by Dr. E. Jordan.

² The French communications to the Congress at Bologna have been published in the *Revue de Métaphysique* for July, 1911, except that of M. Bergson, which appeared in the November number of the same review, and those of M. M. Poincaré and Langevin, which appeared in the *Rivista di Scienza*.

of action two domains closed against each other: in both cases there are the same categories which employ the reason. The infinite, quality, the better and the worse, liberty, the reality of the individual and that of society, such are the directive and rational ideas which are the common root of science and action and the object of philosophical reflection.

M. Durkheim also seeks the unity of science and life; but he exhibited this by an analysis of certain characteristics peculiar to judgments of value and judgments of reality. This paper made a strong impression upon the audience which heard it. In addition to the properly philosophical problem involved, it had also a polemic interest of the first order. In pointing out the close connection between judgments of value and judgments of reality, the head of the French sociological school answered one of the objections most frequently urged against his doctrine: "In considering values as products of the social life, do you not degrade them to the rank of natural phenomena? And, in so doing, do you not deprive them of precisely that transcendent character which permits us to find in them a sort of categorical imperative, the raison d'être of science, art, and morality?" No, replies M. Durkheim, the ideal begins with the real, but transcends it. Each degree of being, precisely in utilizing the lower forms, combines them in a new way which unites itself intimately with them, but which was not originally contained in the lower forms. Life is something more than a chemical phenomenon, although it respects the known reactions of oxygen and carbon; likewise society, in combining individuals, causes to arise from that combination something more than the sum of their preëxistent properties, and that something is just the reign of ideals. The ideal is the proper object of sociology, the quid proprium which distinguishes it from biology or psychology. Instead of destroying the ideal, sociology rather assures its reality. For it demonstrates the independent existence of ideals as superior to that of individuals, and as something which dominates their wills. In virtue of the energy of its content, of the essential properties of the facts with which it deals, sociology is thus a philosophy of mind without ceasing to be a positive science.

And it was still the question of the end, the means, and the nature of philosophy which was discussed by M. Bergson, whose appearance on the platform, awaited with an impatient curiosity, called out profound enthusiasm. No, says he, there is no synthesis which can restore to unity the procedure of science and that of philosophy. They seem to unite sometimes, for example, in a philosophical system as formulated and constructed. that is an illusion which a more attentive study should dissipate. Philosophers, in order to communicate their views of things, are obliged to make use of words, phrases, analyses, and abstract reasonings. But it is never by reasoning that they arrive at their theories, nor do they demonstrate them to themselves after the manner in which mathematicians or physicists discover or demonstrate a result by calculation. This fact is very evident, for example, in the case of Spinoza, where the geometrical form is so different from the profound vision of things which it serves to express. The peculiar character of the philosopher, that which radically distinguishes his attitude from that of the scientist (although scientist and philosopher may accidentally be found united in the same person) is the gift of intuition. Experience is presented to us in two forms: one, the external, where facts are juxtaposed to facts, are repeated, measured, calculated, with an approximation more or less complete, and are organized by classifications and laws; the other, the internal form, where, by an attitude exactly the reverse of the intellectual, the essence of that reality which manifests itself in sensible appearance is reached through a unique illumination. "We must penetrate into the inmost being of ourselves; the deeper the point which we reach, the stronger will be the impulse which sends us back again to the surface. Philosophical intuition is that contact; philosophy is that élan." Thus each great doctrine is, at bottom, a kind of vision of a unique and indivisible art; every true thinker, in order to be understood, must be comprehended in a central impression, in a typical image, a living seed of all his discursive thoughts. Just as the sense of a phrase does not consist in the words used, but can be expressed by various combinations of words, and in many different languages, so the philosophical

intuition of a man of genius takes various analytical forms in contact with the problems and traditions of his time, but remains essentially one in that which it has from the original source. Thus nothing is more useless than always to seek the origin and sources of philosophical systems, as the historians of philosophy habitually do. As well explain Hamlet by the history of the English language. As well explain a whirlwind by the dust which it gathers on the road, and which gives its form to our sight. To recover the creative intuition in its freshness and originality, or at least the image or images which approach it most nearly—this is the true method of understanding the philosophers. In this way, one comes into sympathy with them, just as they themselves have come into sympathy with things, and one communes with their personality instead of calculating their habits. An acquaintance of this kind is thus beneficent, vivifying, joyous, like art and action; not blighting and exhausting, like the knowledge of words and books.

In addition to these more important communications, there were many others, all illustrating the great activity of contemporary French philosophy. Except some works on the history of philosophy¹ and an isolated communication on esthetics,² one can classify nearly all of them in that group of questions which comprise logic, critical theory of reason, and the methodology of the physical or moral sciences. In pure logic, M. Goblot presented a new theory of deductive reasoning, while M. Roustan endeavored to find a precise definition of deduction and induction adapted to modern knowledge. In the physical and mathematical sciences, M. Poincaré subjected to a critical examination the idea, at present current, of a transformation of the laws of nature, showing in what sense that transformation is logically possible, in what sense, on the contrary, it involves an absurdity. M. Langevin (professor of physics at the Collège de France) presented an analysis of the idea of time, setting forth the new difficulties which introduce into contemporary science the postu-

¹ Xavier Léon, Fichte et les decrets de 1788; Masson-Oursel, Objet et méthode de la philosophie comparée; A. Reymond, Le problème de l'infini dans la décadence de la science grecque; C. Werner, Sur la théorie kantienne de l'espace.

² Souriau, Les valeurs esthétiques de la lumière.

late of the unity of time. M. Pierre Boutroux (son of the eminent philosopher, and professor of mathematics at the University of Poitiers) discussed the question in what sense philosophical research is an analysis. M. Rey, of the University of Dijon, dealt with the nature of scientific explanation and showed in what sense science is necessarily realistic. M. Winter criticized the notion of infinity in mathematics.

In the group of moral sicences, M. Belot forcefully distinguished two problems whose confusion is an important source of fallacy: that which consists in determining moral rules, and that which consists in discovering motives efficacious in making men act morally. M. Dupréel discussed the relations of logic and sociology. M. Couturat, whose works on international language and its history are well known, treated of the relations between logic and linguistics. M. Parodi exhibited the necessary connection of intuition and reason. M. Weber criticized "la loi des trois états," and proposed to substitute for it a law of alternation which he calls the "loi des deux états"; the stage of technique and the stage of reflection. Lastly, the author of this article brought his contribution to the Congress in the form of two synoptic tables accompanied by a commentary, whose purpose was to point out the formal parallelism of the three fundamental normative sciences, esthetics, logic, and ethics, and to show some important methodological consequences which can be drawn from it.

II.

Among the philosophical works of this year one of the most interesting, both on account of the tendencies which it represents and of the personality of its author, is the posthumous work by Frédéric Rauh, published by a group of his former pupils under the simple title: Études de Morale.

Rauh was maître des conférences at the École Normale, when, in 1905, that famous institution was profoundly transformed and the personnel, teachers and pupils, found itself embodied in that of the Sorbonne. A cruelly premature death did not permit

¹ Central Seminary of Professors of *l'Enseignement supérieur* and *secondaire*, founded in 1794 under the First Republic by a decree of the Convention.

him to perform his new functions very long. But after the change, in accordance with his nature and his former practice, he continued to be the master of that philosophy in fieri where person speaks to person, and not the orator to a multitude. He had a hatred for the academic course, for that completely formulated instruction which unrolls from the height of the platform a system determined in advance. He delighted only in living, actual questions, of which it is one's duty to think, but of which one never knows, when one approaches them, whether it will be possible to find a solution. "To each of his classes," as one of his pupils1 tells us, "he brought a quantity of manuscript suggestions, often of a very miscellaneous character —themes for development, citations meant to serve as a basis for criticism or to confirm his own thought, a bundle of papers surcharged with notes, results of his own reading and reflections." Clippings from newspapers, reviews, remarks on current events were mingled with classic documents upon the history of science or of moral ideas. He often used only a small part of them. Ideas crowded each other, jostling each other to get out, sometimes barely indicated, leaving nearly everything to be divined by the listener; at other times, on the contrary, pouring forth in vigorous formulas—by a happy flow of extemporaneous speech. In everything Rauh did during the last years of his life, there was something ardent and feverish as if he felt obscurely that his days were numbered. This is seen in his Études de Morale. This quality is a characteristic of a philosophy "in the nascent state," as chemists say; a philosophy which has not yet attained a stable equilibrium, and which owes to this internal movement its rare power of action and enticement. The sentiment which has led nine of his former pupils, who belong to different generations, to bring these fragments together, is an evidence of the admiration and attachment he aroused in those who heard him.

I shall not try to summarize the five hundred pages of this book, which treat successively of ethical theories, of patriotism, of justice, of moral certitude and of moral reality. I shall rather try to make clear the tendencies which seem to me representative of a whole group of minds.

¹ Études de Morale. Preface, p. xxiii.

The first and most striking tendency is philosophically the most radical, pluralism and 'temporalism', Carpe diem, in the intellectual sphere as well as in the domain of action; here is the principle of all philosophy which is not satisfied to be put off with words. "Truth is actual . . . it consists in a present certainty, as if coined from day to day."1 "I always inform my hearers when I begin a course on a special moral question, the idea of justice or of patriotism, for example, that I formulate this problem in relation to France, and for a certain contemporary period of the history of France."2 The eternal belongs to the field of 'theology'; a mind truly positive must renounce this idea. More than that; in time itself it is necessary not to depart too far from the moment in which one lives. It is useless to look at history in its wholeness, for it leads nearly always to the substitution of the imaginary fact for the real fact. The efforts of the sociologists to return to the 'primitive' represent only the naïve transference of the need of an absolute, a conception from which modern philosophy must free itself entirely. The solution of our moral problems seldom demands a knowledge of what they have been in other forms of civilization. It is absurd to go back to the group and the clan in order to judge modern life. It is hardly necessary to study the history of the last century but one. "After 1870 Fustel de Coulanges and Taine, in order to know how to vote, applied themselves to the study of the origins of France. It would have been far better to study the actual France, for life renews itself. . . . The past is of value only in so far as it is connected with the present. We must not seek its origin too far back. To take the immediate succession of events, to study the past which acts in a distinct and continuous way upon us, to put ourselves at the point of view of the present, that is actualism, or if you like, the activism which we believe is justified in moral research." And likewise, it is not necessary to seek in the certainty of a future success

¹ Ibid., p. 2.

² Ibid. Preface, p. xviii. (Extract from a communication of Rauh to the Society of Philosophy. Bulletin de la Société, 1904, p. 20. The whole Bulletin is important in connection with the method and ideas of Rauh.)

³ Ibid., p. 204. Cf. also pp. 373-4.

a so-called demonstration for ideas which we believe right. To pretend that we have the future for ourselves is only another way of misjudging the unlimited development of humanity. There is neither an unavoidable destiny, nor a last judgment. The future will be what our efforts make it, and it will only be that for a time.¹ Morality ought to constitute itself entirely, if one may thus speak, in the differential of social movement in which we participate.

The second character of this philosophy is the exclusion of all abstract theory. Generalities in morals are always indeterminate or false. Neither Schopenhauer nor M. Bergson has been more severe with intellectualism and its arguments. The prejudice of logic, the superstition of the abstract is one of the great sources of fallacy denounced in the Études. Moral formulas can sometimes serve to sum up concrete intuitions—but only after the event; they are radically powerless to resolve deductively any difficulty. "It is the office of philosophy to demolish philosophical categories wherever they are employed to replace the experimental idea; in morality specially it is necessary to overthrow all metaphysical or pseudo-scientific theories. Scientists themselves exhibit too often philosophical prejudices in their reasonings; for example, vitalism, mechanism, etc. The philosopher ought to take up his position at the entrance to each science, in order to liberate the scientific idea by denying entrance to a priori notions." And in fact the first part of the Critique des Systèmes de Morale is taken up entirely with showing the futility, not only of metaphysical ethics, but also of the ethics of life, of selection, of races; with showing the weakness of historic materialism, of the history of philosophy, of objective sociology, of Nietzschean individualism, of hedonistic individualism, of sentimental individualism. The devastation is complete. And we see the same method applied to the problem of country, and to that of justice; it is only after a radical sweeping away of all the arguments, indeterminate or determinate, a priori or a posteriori, that the problem is directly faced.

¹ Ibid., pp. 196-7.

² Ibid., p. 3.

That is not saying that Rauh was an irrationalist or a voluntarist. Far from it. He believed in moral truth, and even, under reservations of which we shall speak later, in the possibility of determining that truth scientifically. "The human conscience when consulted seriously, says today that it is necessary to look all truth squarely in the face. It is wrong for certain minds to claim the right of looking at reality as it may please them, as suits their sentimental needs. In claiming this right they conceal from themselves the scientific truth, and that is cowardice. There is only a single case where one is permitted to take things 'du bon côté.' I mean the case where the truth is arbitrary and indeterminate, that is, where there is no certainty, no fixed truth. Thus, for Kant or for James, the existence of God and the immortality of the soul, are, from the theoretical point of view, possible or probable truths. One has a choice of believing or not. But what conscience does not admit is that the truth should be sacrificed to the exigencies of moral equilibrium."1

There are, therefore, cases in morals where certainty or a fixed truth is to be found. How is this reconcilable with the contempt for reason, with the radical 'mobilism' which Rauh has first shown us? Because here again, as with Schopenhauer, he holds in reserve, over and above the discursive understanding, whose errors he condemns, a rational capacity of consciousness of which he has not the same mistrust. That capacity he sometimes calls, as we have just seen, "the human consciousness seriously consulted," sometimes again, "reason," "the scientific idea." "the immediate contact with things." This efficacious and sound consciousness proceeds from a double source and is realized by the confluence of two distinct spiritual functions. (One might, indeed, have seen that a priori: for all verification, scientific or moral, presupposes the coming together and agreement of two independent series.) The one is an internal élan of life, by which each of us continuously, instinctively, and uncritically, desires what his nature leads him to find good. This impulse forms in each mind an inextinguishable source of practical affirmations, of judgments of value which are expressed

¹ Ibid., p. 87.

spontaneously, and which reveal that activity in the form in which it has been determined by the general needs of the animal and man, namely, heredity, environment, education, and the exigencies of life. Among these tendencies and affirmations are some which present a special and very remarkable character; they constitute invincible tendencies, incommensurable values, in comparison with which all others are annulled. The feeling of these incommensurable values, before any rational elaboration has taken place, dictates to us our conduct; it is 'conscience' in its undeveloped state. The partisans of the morality of feeling have rightly recognized this force. But their error consists in not going beyond the mere feeling. They do not see the other great function of the mind which furnishes a control for feeling. This conscience is an indispensable point of departure, but nothing more. Nobody, says Rauh, has the right to depend uncritically upon it, no more than one can in science depend upon the crude perception of things. Moreover experience shows that the upright man, the conscientious man, is precisely he who does not depend upon it blindly. Likewise, just as to study the progress of the scientist is the only means of learning what is the criterion of scientific truth, so in studying the manner in which a good man reaches his reflective convictions, one learns what is the criterion of moral truth.

This method consists of two parts; rationality and experience. "Rationality is always present when one puts a question to one-self and answers it in an impersonal, disinterested way." To think rationally is not always to think the universal. The most individual, the most fugitive fact can be thought in a way that is valid for all minds; it is only to think in such a way that our judgment takes account of what is not ourselves, that our conscience compares itself with the conscience of others. "But not all consciences are of equal value. What consciences are competent?" "I ought to accept only *informed* and *disinterested* consciences." Disinterestedness was noticed long ago; that was

¹ Ibid., pp. 373, 428, 429.

² Ibid., p. 381.

⁸ Ibid., p. 207. On the importance of intellectual value for moral competence, cf. p. 130.

indeed the only element of objectivity in the ethics of moral sentiment. But it is necessary to add that the disinterestedness should be intellectual as well as affective. It demands that one should not only be free from all material interest, but also from all theological or metaphysical bias, which might determine a priori the choice of a solution. Intelligence is a more novel criterion. Stuart Mill is almost alone in having noticed the importance of enlightenment in moral judgments. Yet Mill's point was not precisely the same. For Rauh, a conscience is 'informed' if it is the conscience of an intelligent man, having the habit of acting in a certain sphere of reality, or at least having lived among those who are habitually active in this field. the matter of penal justice, a magistrate of clear mind is an informed conscience; in economic matters, the business man who knows how to observe and reflect is qualified to give a moral opinion, as likewise the educated man whom circumstances have compelled to participate in the direction of a cooperative interest. On the other hand, it makes no difference what the conscience of a magistrate or of a business man says on the question of colonial civilization. It is only in the presence of facts that ideas take on a genuine significance.

But it does not suffice to base an inquiry into so large a question merely upon the conscience of competent men. It is necessary to study the realities with which we deal. Take as an example the problem of patriotism, so acute in our time and in our country. Each, from instinct, is ready to take sides upon it: the nationalist takes the internationalist for a traitor; the internationalist takes the nationalist as an unintelligent egotist. The philosopher is a man; therefore he also will begin by having his feeling. But with him the feeling will not remain a fixed prejudice as with the man of mere impulse. It will become an hypothesis, altogether comparable with the 'experimental idea' of Claude Bernard, which is likewise conceived a priori, by instinct, but referred by reflection to the verdict of experience. A difficulty arises here, however, as to how heterogeneous things like tendencies and judgments of value, on the one hand, can be compared with positive facts on the other. The fact can never decide as to the right. But in looking

at it more closely, one perceives that certain assertions of fact are always involved in our judgments of good and evil, and that the diversity of our moral appreciations depends in many cases upon the fact that we do not have the same idea of the realities with which they are concerned. The patriot admits not only the existence of his country, but also certain historical characters of his country. His belief is dependent upon judgments of fact about the race, civilization, the community of ideas and feelings; upon the conflicts of peoples, their economic condition, the degree of internationality realized among them; upon the observable effects of certain military, political, and administrative institutions. When the man of good faith has studied all these facts objectively, will not his primitive feeling be modified? Sully-Prudhomme has expressed in a famous poem the profound transformation which the experience of the war of 1870 wrought in his patriotic feeling. To judge rationally in morals is therefore to follow one's feelings; but after having enlarged and reformed them by a careful examination of opposed feelings, after having purified them of all the errors or material illusions which could vitiate them. In course of that critical inquiry moral certitude is produced, just as scientific certitude is produced in course of experiences in the laboratory, without our often being able to say at what precise moment these experiences become sufficient and indisputable. "Moral belief is the outcome of numerous and diverse methods; it is a residuum. All sorts of disciplines, of psychological, physiological, and sociological inquiries concur to form it. Moreover, that belief which one attains is actual and living. In this belief the upright man resembles the scientist, who, far from gaining the point of view of the eternal, only takes his place in the history of the science."1

Those who undertake to practice this method will arrive by it, oftener than may be supposed, at a positive and real agreement. For the man who accepts its authority, reason can disengage from the moral life these axiomata media, which are similar to those of science, which doubtless resolve no metaphysical question, but which clarify and direct action at the same

¹ Ibid., p. 120.

time that they reunite the thoughts of different minds.¹ The example of the scientist ought to teach us "the value of a modest attitude and the price of a limited certainty."² If there remain certain points upon which agreement does not appear spontaneously, perhaps a new discussion would reveal some element of information which had been neglected. Perhaps, on the contrary, opposite feelings would finally remain in conflict. If only each would act according to his conviction, and in the measure of his strength! Risk is a part of human life. Absolute moral unanimity can no more be attained than can complete scientific knowledge.³

This might seem a meager result when compared with the great ambitions of moral philosophy in the system of a Kant or a Renouvier. But that little is infinitely precious if one reflects on the complete moral disorder in which most of our contemporaries live. And besides, whether it be much or little, said Rauh, that is not the real question. Upon your conscience, can you affirm more? If so, do it. If not, do you believe that it is necessary to lie for the glory of God, and try to delude others in order to make them better, under the pretence of a moral faith of which you are not yourself convinced? The greatest mistake in ethics is to depart from an absolute sincerity.

III.

In opposition to this Heraclitean philosophy which shuts us up in the present moment, M. Alfred Fouillée has published a vigorous work, La pensée et les nouvelles écoles anti-intellectualistes, in which he subjects to a severe criticism all forms of contemporary activism, as represented by Renouvier, Nietzsche, W. James, Bergson, Mach, Poincaré, Le Roy and others. M. Fouillée is one of the seniors of French philosophy. He became famous about forty years ago by his thesis, La Liberté et le Déterminisme, and by his Philosophie de Platon. The two works represent fairly well the two fundamental and indestruc-

¹ Ibid., p. 380 and Preface, p. xiv.

² Ibid., p. 375.

³ Ibid., pp. 130-131.

tible points of view which his philosophy has always endeavored to maintain and reconcile. The first contains already the principle of his famous theory of 'idea-forces' which he has since developed in numerous works,¹ and which led Höffding to say that Fouillée was the first to formulate the psychology of voluntarism. In many respects he might be considered the forerunner of those whom today he opposes (without having on that account changed his doctrine). He has criticized pure intellectualism as severely as James or Bergson; he maintained long ago that thought is originally formed, not for speculation, but for action. He has sought to show that, in man, belief in liberty creates liberty; and perhaps even historically this doctrine has not been without influence upon James' theory of the 'will to believe.'²

But although M. Fouillée is a voluntarist, he is also a follower of Plato and maintains the value of reason, of the eternal and the intelligible, and does not allow libertarian doctrines to develop without counterbalance. The latter represent only one aspect of things, a legitimate aspect, however, and one which the philosophy of pure intelligence seriously misjudges; but, finally, a limited aspect, which must be complimented by its contrary. One of the most striking features of the work of M. Fouillée is the care with which in every case he marks the precise limit where the thesis must stop and the antithesis begins to be true. In every case he takes upon himself the task of reëstablishing an equilibrium among the exaggerated formulas which oppose each other so noisily in contemporary polemics. Like Leibniz, he believes that the truth can only be attained by a synthesis involving what is legitimate in each of the rival doctrines, and that philosophical theories are always true by virtue of the ideas which they bring clearly to light, and false by virtue of those ideas which they neglect.

Let us take some examples. The voluntarists accord the position of honor to intuition. For them, all discursive reasoning is illusory; and it is sufficient to descend into oneself and to put oneself into immediate 'contact' with things in order to appre-

¹ Especially in l'Evolutionisme des Idées-forces (1890); La Psychologie des Idées-forces (1893); La morale des Idées-forces (1908).

² La pensée, etc., pp. 276-7.

hend with complete certainty reality as it is. Granted, says Fouillée; but on condition that there is not given to merely subjective impressions the fine title of intuition. The 'sense of life' is necessary, but it is far from being sufficient. It is sometimes supposed that in dreaming we have marvelous intuitions regarding ourselves and things. But their value is nothing at all. The judgment of reason, which alone can distinguish the play of imagination from real knowledge is essential. Consciousness is full of fancies and illusions. To depend on it without reserve, to declare, with Jouffroy, that it is necessary "to accept the evidence of consciousness and to accept it entirely," is therefore to open the doors wide to error and arbitrariness.

"I see as polished a gold surface which in the microscope is full of apertures; the illusion of the man with amputated leg projects the sensation into an imaginary member. . . . What is given as immediate contains existence immediately only when that existence is implied by the appearance itself, as when I say: I am or I think. . . . Except in such a case, doubt is always possible." "One has the right to accept as intuition only that which all the world sees as the same. For there are persons of intelligence and good faith for whom certain given facts which you hold to be immediate are not evident. They are not therefore really intuitive."

To take another example. "Truth," you say, "presupposes utility. Nothing is more true. But you forget that utility, in turn, presupposes truth. The hammer is an instrument, but is such on the condition that the iron and the wood have intrinsic properties permitting that finality." The concept can only be efficacious if there exists a reality to which it 'corresponds'; and that 'correspondence' is a relation sui generis which cannot be resolved into utility. To say with James that that is true which succeeds, to succeed is to work satisfactorily, and that that satisfaction is itself an indefinable experience, is not admissible: how many people are satisfied with their own awkwardness and their own silliness! And if it is argued that

¹ Ibid., p. 373.

² Ibid., p. 401.

it is a matter of *legitimate* satisfaction, is not that simply to postulate anew the objectivistic theory of reality? Verification is, in the last analysis, a logical operation where effects are discovered independently of our desires. The very connection of objects with our purposes presupposes laws fixed and independent of our purposes. There is an intelligible order in things of which it is possible and essential for us to establish a representation in our thought. Thus "the conception of intelligence as superficial is itself superficial."

As a final synthesis which involves all others, it is certain that the basis of things is will. In this point Schopenhauer, Nietzsche, and James are in the right. But will for what? Everything is explained if it can be replied, as the doctrine of idea-forces would have it, "Will for consciousness." The effort which impels the being to grow, to transcend itself, even to excel others is, at bottom, only the desire to be conscious of itself as living, to know itself and the rest of things. This is why representation and thought are no less fundamental than action.¹ Both are found involved in an indivisible monism which explains and justifies at the same time the objections of voluntarism against the theory of the 'immaculate consciousness,' and the counter arguments of intellectualism in showing that, from the will alone and as unrelated to the intellect, no satisfactory explanation of truth can be found.

At the same time with Fouillée's book, there appeared another strongly original criticism of the 'new philosophy,' or, as its defenders in France often call it, anti-intellectualism. It is by René Berthelot, the youngest son of the famous chemist. Like Fouillée, he also shows his allegiance to the Platonic tradition. The title of the book is: *Un romantisme utilitaire*, étude sur le mouvement pragmatiste. After having drawn a very lively and very amusing picture of contemporary pragmatism, taken as a whole, Berthelot selects two men who seem to him particularly typical, the study of whom appears to him suitable to place in

¹ I indicate here the essential points of this doctrine without discussing it. As a more thorough analysis and critical examination of the monism of Fouillée, I published in the *Revue philosophique* for January, 1912, an article entitled "Le voluntarisme intellectualiste."

clear light the origins and the weaknesses of the doctrine, namely, Nietzsche and Poincaré.

What one sees specially in studying Nietzsche are the two sources of the pragmatic theories of truth. On the one side, there is German romanticism, the central idea of which is that of life, and which has itself a triple origin: the reaction of vitalist medicine against Cartesian mechanism; the reaction of art against the 'scientism' of the eighteenth century; the reaction of the religious mind, against the 'philosophy of enlightenment.' On the other hand, there is the utilitarian evolutionism of the English, which in its turn, is the result of the fusion, in Spencer's system, of the logical and moral ideas of Benthamism, with the transformist conceptions of Lamarck and Darwin. Papini has already remarked that Nietzscheanism was only the dithyrambic transformation of Spencerian evolutionism. But what has scarcely been noticed is that with Spencer himself there was also a certain basis of Romanticism, which is due to the influence of Coleridge, and in ill accord with the mechanistic side of the doctrine, but which facilitates the eclectic combination of the two systems in the imagination of the poet of Sils-Maria.

This combination suffers in fact from two internal contradictions, which one might also find, according to Berthelot, in all the other pragmatists, but never in so acute a form. In the first place, it takes as its point of departure a scientific objectivism which presupposes a real world which is knowable, and where the true and the false are perfectly definite, beyond the needs and wills of men. Nevertheless, through its theory of utility, it ends by destroying the objective notion of truth and substituting for it the relativism and the 'humanism' of a Protagoras. These two points of view cannot be reconciled. In the second place, Nietzsche's conception of science is mechanistic, Cartesian, and deterministic, as is evident especially in his hypothesis of the infinite regress. But at the same time he conceives life as the capacity of creation and of continual innovation. tradiction between these two conceptions, already latent in Spencer, becomes in Nietzsche open and pronounced. In this respect, the procedure of the latter makes plainly evident the

inconsistency of pragmatism; which, in order to make war on rationalism, borrows its arms at one time from utilitarian empiricism and at another from romantic vitalism and Schopenhauerian intuitionism. But it is necessary to make a choice; if one of these points of view is true the other is false.

What we learn from the criticism of Poincaré is quite different but of no less importance; this is that the concepts employed in the attempt made to replace the idea of truth are themselves hopelessly indefinite and ambiguous. Everybody knows the famous formula of the eminent mathematician: "Euclidean geometry is no more true than non-euclidean, nor the system of Copernicus than that of Ptolemy. One might just as well ask if the metric system is more true than the English system of weights and measures. They are only more convenient." Poincaré seems therefore to admit in the sciences, between the purely rational domain whose existence he recognizes (e. g., algebra, the theory of functions), and the empirical domain of which none can doubt, a middle ground where pragmatism triumphs, in which truths are neither facts of experience nor logical necessities. But what is 'convenience'? If we analyze the word the illusion disappears: now it has reference to logical simplicity, thus assuming the ground of idealism and rationalism; now it refers to practical and industrial interests and to advantages of a biological character. These latter interpretations of 'convenient,' however, are from the standpoint of Spencerian utilitarianism, otherwise called pure empiricism. Poincaré uses the word now in one sense, now in another; and that very equivocation has led to the belief that there exists in the scientific consciousness a middle zone demanding a new theory of truth. In our human knowledge there is the empirical and the rational; Greek thought discerned that long ago. In epochs of philosophical confusion the attempt is made to attain the unity of knowledge by formulating a curious mixture of the two principles, and in presenting that as a homogeneous whole. But as soon as the mixture is left at rest and is examined closely, the two heterogeneous liquids are seen to separate, and each to take the place which belongs to it.

IV.

The importance attributed to problems of method may perhaps be seen in the works which have already been noticed. Among philosophers nobody undertakes to examine a fact or an idea without first raising preliminary questions of method. The critical principle of Locke and Kant has become today a universal discipline; the golden ingot has been transformed into current money. And if sometimes in practice there is abuse of 'prolegomena,' it must be remembered that all progress has its drawbacks. Even scientists now-a-days adopt this method of procedure. The Collection de philosophie scientifique, edited by M. Emile Borel, has been enriched by a second volume of monographs on method, written, as was the first, by a group of specialists. They are: Méthodes anciennes de l'Astronomie, by M. Baillaud, Director of the Observatory; Chimie physique, by Jean Perrin, professor at the Sorbonne; Géologie, by Léon Bertrand, professor at the Sorbonne; Paléo-botanique, by R. Zeiller, professor at the School of Mines; Botanique, by L. Blaringhem, lecturer at the Sorbonne; Archéologie, by Salomon Reinach, member of the Institute; Histoire littéraire, by G. Lanson, professor at the Sorbonne; Linguistique, by A. Meillet, professor at the Collège de France; Statistique, by L. March, director of the Statistique générale de France. The philosophical and scientific journals are full of articles on method and on questions of general and formal logic. After having made the attempt I refrain from giving a list of titles which would fill more than one page. Moreover, some of these articles are detached chapters of works in preparation, which it is better not to anticipate. Finally, M. Henri Berr, for ten years editor of the Revue de Synthèse historique, has just published an important contribution to methodology, with the title La Synthèse en Histoire. I shall dwell at some length upon this work.

What is most striking, in taking up the book of M. Berr, is the author's wide reading and acquaintance with documents; his text and notes abound with citations and references, and form a valuable bibliography for the questions which he studies. Nevertheless he informs us that he has limited himself to only a part of the subject and that he has reserved for more thorough treatment in a second volume, all the German literature on the theory of history of the last fifteen years. But as one goes on reading the book, the impression changes, and what later becomes striking is the philosophical quality of mind shown by this great collector of documents. The reader feels that he is not one of those who makes pegs for the pleasure of filling boxes with them. He imposes upon himself the task of a thorough, precise, and minute research only in order that he may establish his right to general conclusions, and to come to breathe, outside the mine, the free air in the light of ideas. The author of the Synthèse en histoire is, by vocation, a man of broad views and profound hopes. He became well known about twelve years ago through the publication of an important work on l'Avenir de la philosophie, which had the sub title, "Esquisse d'une Synthèse des connaissances fondées sur l'histoire." He was the friend of the lamented Frédéric Rauh, whose doctrines may not have been without influence upon the dual character of his work. He also, as was seen above, wished that synthesis, the final value of which he recognized, should come only as a consequence of indefatiguable analysis and criticism. Doubtless he would have been pleased with a work such as we are just now mentioning.

This work M. Berr very modestly presents as a study of a special question of logic, in the light of its application. He wished to make, as he says, a technical treatise which might be of service to students: "to students of history in order to initiate them into general questions; to students of philosophy, to interest them in the particular problems of history." A work thus conceived is made neither to be summarized nor to be merely glanced at; but we can try to indicate the author's conclusions. In the first place, history is a science. This is today an accepted fact. It has not only an art value but a truth value. By methods of proved validity it attains results in the validity of which all sincere minds are obliged to acquiesce. This is, however, only a minimum, and we shall soon see what further results history can

¹ La Synthèse en histoire, preface, p. xi.

give; but that minimum is itself sufficient to assure it a place in the great order of the sciences.

This is not to assert that Michelet, Renan, Taine, Nietzsche, Albert Sorel, Benedetto Croce are wrong in insisting on the part which individual intuition and final choice play in history. If a mathematical theory can be elegant, why should there not also be art in the interpretations of the historian? Rigorous objectivity is impossible. According to the profound dictum of Albert Sorel "man would in that case cease to live." Auguste Comte has said more bluntly that if the absolutely subjective being is a lunatic, the absolutely objective being is an idiot. History has a raison d'être only when it is in accord with present life. It illuminates life, and receives in turn from life a sort of moral criterion. Our highest interests, and finally our actual interests are what decide whether or not a fact has historic value. And inversely, "it is only through history that one is truly a man of his generation, a citizen of his country, a member of humanity."2

This is, however, only one aspect of the question. In a domain thus defined by tendencies and feelings, there remains a place for the application of general principles, and for the procedure of quite definite methods. And besides, one could almost say as much about the most positive sciences. As J. J. Gourd has forcefully remarked, it is our "vocation of man" that puts the question to which physics and biology give answer.3 Logical systematization is only a means to that end. It is the same in history. It is through this fact that objectivity recovers its rights. "This erudite synthesis is subjected to the condition that all affirmation of it should be accompanied with proof, that all ignorance should be acknowledged, that all doubt should be formulated, that every hypothesis should be definitely stated as an hypothesis. . . . It would be wrong to believe that half-truths are of more value than lacunæ; they are, on the contrary, very dangerous, because, when invested with the

¹ Ibid., p. 240.

² Ibid., p. 256.

³Cf. also above the communication of M. Boutroux to the Congress at Bologne.

authority of the printed symbol, or with the renown of their author, they impose themselves upon us as whole truths."

But above the "erudite synthesis" which is content to reconstruct and organize past facts, there is the "scientific synthesis" properly so-called, defined, according to the old but always exact formula of Aristotle, by the discovery of the general. Carlyle did not speak as a genuine historian when he exalted rhetorically the value of: "John Lackland has passed here." One can easily explain the psychological reasons why the learned man should end by becoming hypnotized by his task, and should lose the taste to go further. But it is only necessary that a shock be given to that routine in order that scholars should come to recognize the need of knowledge which is truly synthetic, which is not limited by the individual facts. But where is this generality to be found?

To raise this question twenty-five years ago would doubtless have been to contribute to the cause of scepticism. But this is no longer the case. Numerous studies have shown that the repetition of mutually assimilable facts is not foreign to history, that the notions of cause and of law have been introduced from several directions, and the problem seems to be today rather one of choosing among the different points of view. Historical synthesis can be sought: (1) in the psychological laws of action and of character which determine, in a way that is often predictable, or at least render explicable, the ordinary conduct of individuals. This idea has already been pointed out by Bernheim, fully developed by Tarde, accepted by Seignobos; it can be complemented by the psychological laws of the reaction of mobs described by Rossi, Le Bon, Sighele, G. Dumas; but the limits of its application remain almost wholly to be discovered. (2) In the permanent characters of races, of countries, and of climates. This is the point of view of anthropology and sociogeography, whether or not these sciences appeal to economic laws, which, according to the well-known hypothesis of Marx, form the

¹ Ibid., pp. 258-9.

² These expressions are those of M. Berr.

³ Ibid., p. 16.

framework of civilization. (3) In laws sui generis, like those which objective sociology proposes to obtain, and which would consist in discovering a constant connection between the two classes of historical facts susceptible of an abstract and general definition; for example, to find in statistics two magnitudes which should always be functions one of another. Of this conception M. Simiand has given an interpretation which is as clear as it is vigorous. (4) In categorical laws (notwithstanding the objections of M. Naville) which define a regular progress of facts, in a sense follow a determined order—laws of evolution, of dissolution, of progress toward consciousness, of cyclical movement, etc. (5) In laws of finality, because the natural sciences do not err in using them widely, at least under a provisional title; besides, there are the laws of logic and of will, which are, whether unconscious or not, to be found wherever there is life.

Of all these ways of seeking the general, which is the right one? As a true philosopher on this point, and thoroughly in accord with the spirit of our time, M. Berr replies: "All of them are right; and the only precaution necessary is not to confuse them." For it cannot be decided a priori what sort of hypothesis will succeed in a definite order of facts. Nearly all who have wished to establish a policing of the sciences in the name of theoretical ideas, have ironically been given the lie by the facts themselves. "One can admit that the different categories of the various investigators give each group a different orientation, confining them to the study of definite kinds of causes, and leading each in the end to the investigation of the rôle of different factors, according to the point of view deliberately adopted."1 There are in truth several ways of furthering the work of historical synthesis. The error of the old philosophy of history was not in the end which it proposed to itself, but in the means which it believed could satisfy that end. The laws of human facts can no more be improvized than can the laws of the material world.2 From the mere criticism of a document up to the broadest hypothesis regarding human destiny, there is

¹ Ibid., p. 228.

² Ibid., p. 260. Cf. pp. 38-39.

nothing which should be condemned on principle except the intolerance of those who prescribe what they do not practice. In studying the different orders of causes and of laws, one discovers by degrees how they are bound together, what relations they sustain to each other; the points of contact which we do not today perceive will be brought out by a more complete analysis of each kind of relation, taken in itself. And, therefore, long before science will be perfect it will show by the fruitfulness of its applications the reality of its discoveries. "The study of causes in human facts (where their play is particularly noticeable or where certain ones are particularly active) will open perspectives upon the play of causes in nature and upon evolution as a whole. Moreover, the synthesis will expand into practical results; it will become mistress of life; it will render more comprehensible the sense of action, the possibilities of action, the resistances which hinder too rapid transformations. Not only will it mark out precisely to man his rôle in society, but it will aid him to become conscious of his rôle in the universe."2

It is evident that rationalism in France, although it has extended its old formulas, has lost neither its confidence in the human mind nor the hopes which it placed in the union of experience and reason. Renan, when he in 1848 wrote l'Avenir de la Science, did not ascribe a higher value to science than the author of l'Avenir de la Philosophie assigns to philosophy.

André Lalande.

SORBONNE, PARIS.

¹ Ibid., p. 159.

² Ibid., p. 229.

THE DETERMINATION OF THE REAL.1

THERE is one problem on which philosophers are commonly supposed to meditate that we should all probably agree in repudiating as not a genuine problem at all. That is the problem as to whether there exists a real objective world. Even the inquiry regarding the grounds of our belief in such a world probably seems to most of us at the present day, not merely superfluous, but based on a logical confusion of ideas. And, indeed, notwithstanding the appearance of occasional 'demonstrations' of reality, this is no new standpoint in philosophy. In spite of popular misconceptions, it remains true that the real existence of the world as an objective order has never been called in question by any serious thinker. The reality of the world is the assumption of philosophy, as it is of common sense and of the sciences; or rather, it is the 'situation' out of which and with reference to which, the life of thought and practice proceed. If not in explicit words, at least in spirit and method of procedure, all the great historical systems show their acceptance of the truth of Lotze's dictum that the world once for all is and we are a part of it. To explain how the world was made or to prove its existence are not genuine problems for philosophy or for any science. The real problem of thought in all fields is the determination of the real, the problem of making intelligible the nature of the world which our thought finds given along with the consciousness of itself.

Furthermore, that reality is knowable, at least in part, or in some of its aspects, seems to be a presupposition of all modern methods of philosophizing. Even when the formal claim to a 'knowledge' of ultimate reality is denied, it is assumed that this is nevertheless accessible to some form of conscious experience which is capable of appreciating, and to some extent at least of expressing, its value and nature. Again, there appears also to be a

¹ Read in part at the Cambridge meeting of the American Philosophical Association, December 28, 1911.

basis of agreement in the appeal which all schools make to experience, and in the common assent which they give to the proposition that all of the forms and factors of experience must be taken into account, since all furnish data that are significant for the philosophical interpretation of the world.

On the other hand, serious differences of opinion exist both regarding the terms in which the nature of the real must finally be defined, and also in respect to the closely related question concerning the criteria and methods for arriving at truth through the different modes of experience. The initial difficulty in securing agreement arises in connection with the problem as to what facts experience offers to a natural and unperverted view. On its face, this problem seems to be a very simple one. If experience were a store-house of facts, it would appear obvious that the one thing needful is to accept what it offers without question or theory. But, unfortunately, it is impossible to discover in experience any such a store of facts, lying, as it were, neatly arranged and labeled to our hand; in all cases what are called 'facts' are bound up with theories and conditioned by hypotheses. It appears, then, that any agreement regarding the standpoint of philosophy can be attained only through the strife of theories, and that injunctions to each other to lift up our eyes and recognize that experience presents such and such facts are not likely to produce much effect until some common understanding is reached regarding the conceptions to be employed in construing experience. Of course I do not mean that the test of theory is independent of fact, or the process of testing theories does not involve a constant reference to and evaluation of facts. I am insisting here only that there are no immediate 'facts,' prior to theory, to which we can appeal to settle our disputes. If, accordingly, it is admitted that a theory of experience is involved in every attempt to read off the facts which it presents, the question arises how and where one may obtain a theory adequate to the purposes and procedure of experience. The sharply emphasized differences of the present day, seem to make more apparent the need of attempting to define anew the initial standpoint and distinctive procedure of philosophy.

This task, however, has fortunately not to be undertaken from the first beginning. If we admit that there has been anything worthy of the name of philosophy in the past, it must be possible to obtain instruction and guidance from a critical study of its procedure and results. It is true that it is necessary to 'see through' the history of philosophy, as Professor Dewey says, before it can be of service to us; but to see through it is to recognize its positive achievements, as well as its failures and limitations. Even those who are inclined to attach little positive importance to the philosophizing of the past cannot fail to recognize the negative instruction or 'warnings' afforded by the presuppositions and logic of the history of philosophy. But it appears to me that it is only through the recognition that the efforts of the past have yielded positive results which exhibit a genuine development that we have any basis for confidence in achieving anything ourselves, or any platform that can render cooperation and intelligent discussion possible. Verbal definitions are not sufficient for this purpose, though these may often be necessary and useful.

Modern philosophy begins, as it has often been pointed out, with Descartes' assertion of the priority of the principle of subjectivity in experience. And this doctrine remained the common presupposition of subsequent systems, down, at least, to its issuance in scepticism in the system of Hume. Our president of today has published an admirable and instructive paper in which he maintains that this subjectivism has continued to infect all modern philosophy.1 While I agree with many of the contentions of that paper, I am inclined to believe that it is truer to the logic of modern philosophy to say that it presents, as one of its main aspects, a process of development in which the onesidedness of the subjective view is overcome by the recognition of the fact that objects are essential elements of experience. The course of development is indeed not always in a straight line, and does not correspond with the temporal succession of systems. It should be noted that the problem is not simply to recognize the connection of experience with a world of real objects. The fact

¹ F. J. E. Woodbridge, "The Problem of Consciousness," Studies in Philosophy and Psychology (Garman Memorial Volume).

of that connection was maintained, inconsistently, indeed, but none the less openly and emphatically, by all the systems, excepting perhaps that of Berkeley. But it was essential also to develop a theory of experience that would make *intelligible* the relation of knowledge and a world of real objects: so long as that relation was regarded as external and mechanical the question seemed to be as to which of the two sides could most consistently be reduced to the other.

After Hume had exhibited the scepticism which was inherent in the empirical view of inner experience, Reid attempted to reclaim philosophy from 'the way of ideas' and to set up a system of Natural Realism. Like many of the Realists of the present day, however, he was unable to free himself entirely from the theory of ideas which he combated, and neither he nor his successors in the Scottish school succeeded in developing any unambiguous and satisfactory theory of the relation of the object to the mind, or any critical method for an objective philosophy. Nevertheless, Reid's doctrine that experiencing is no matter of ideas, but a direct dealing with objects must be considered an insight of great importance. Kant's so-called 'Copernican revolution' seems at first to be nothing more than a renewed assertion of the priority of inner experience. But fortunately Kant's contributions to a theory of experience are more important than this misleading statement suggests. Although the presuppositions of his system prevented him from gaining a really objective standpoint, his conception of consciousness as a synthetic principle, and his development of a critical method were essential steps in this direction. One can say that although Kant's own view remains infected with subjectivism, his method and results point the way to a more satisfactory theory than his predecessors had been able to attain—a theory that makes it possible to understand how experience can be at once both subjective and objective. Jacobi's contribution consists mainly in his convincing exhibition of the inconsistencies and defects of the Kantian system, and the need for a different basis in order to secure objective certainty. He himself was unable to supply philosophy with any theory of the relation of the mind and the object that was capable of furnishing a critical principle of procedure: his valid protest against ideas and subjectivism end by an appeal to the immediacy of feeling and the certainty of faith.

It is probable that Schelling's interest in the natural science of his time explains, at least in part, his dissatisfaction with the philosophy of Fichte. This dissatisfaction issued in what Schelling himself described as his "Durchbruch in das freie offene Feld objectiver Wissenschaft," the recognition of the independent existence of the real world, and the necessity of dealing with it directly. It is true that by attempting to make philosophy do the work of the special sciences, Schelling's philosophy of nature soon brought discredit upon itself. Nevertheless, the new direction and the new interest thus given to philosophy were of great importance for its future. Schelling, however, never succeeded in uniting the logic of the transcendental method with the objective standpoint in philosophy. He rather alternates in different treatments of the philosophical problem between an internal method that follows the general course marked out by Fichte and an objective analysis of nature without any direct reference to the criticism of the categories and forms of experience. It is true that Schelling maintained that the two methods of philosophizing exhibit the same essential relationship of experience and nature: if we begin with one pole we are led necessarily to the other. But he never succeeded in actually demonstrating this unity by combining the two distinct modes of procedure as elements of a single method. It was by the elaboration of a single method capable of holding together the two sides of experience and exhibiting at once their organic unity and distinction that Hegel advanced beyond the philosophy of Schelling. The task of experience is to reveal the nature of things, and this is accomplished through the judgments of the mind. But the mind can discover the nature of the real only because the process of experience is guided by an immanent dialectic which at once exhibits the inadequacy of its first attempts and leads on to determinations that are truer. In defining and characterizing the

¹ Werke, Bd. IX, p. 366. Cf. Kuno Fischer, Gesch. d. neueren Philos. (1899), Bd. VII, p. 312.

real object, the nature and functions of the knowing intelligence reveal themselves in the dialectical development. These judgments then at once report both the nature of the world of real objects and also the structure of the judging intelligence. The categories are, accordingly, not merely forms of the understanding, as Kant supposed, but also at the same time constitutive principles of things. To regard the categories as a priori forms of the mind to which objects must conform, is just as misleading as the view against which Kant protested, namely, that the mind is passively determined by the merely outward course of events. Moreover, it follows that the forms of the mind can be discovered, and their meanings and limitations brought to light only in and through the objective process of experience itself. The categories reveal themselves and criticize themselves in their concrete employment. On the other hand, it is plainly impossible to discover truth and reality in an existing order of perceived events which may once for all be accepted as 'given,' without any analysis or criticism of the mode of experience through which it is known.

These references to modern systems, hasty and incomplete though they are, serve, I think, to show that real progress has been made in defining experience in such a way as to connect it organically with the world of real objects. I do not mean that the conceptions arrived at will not require revision in the future; but they appear to me to furnish a working basis for philosophy, bringing it into touch with, and to a considerable extent making intelligible, the standpoint of everyday life and of the special sciences. Philosophy seems to be justified, if we may judge from the logic of modern systems, in taking as its point of departure a real world and a real mind whose function it is to determine what reality is and is capable of becoming. The mind, however, cannot be conceived as something that has an independent and self-enclosed existence apart from its relation to the world. It is not a conscious or thinking 'substance'; but something which has its being only through its relations, direct and indirect, to the objective system of persons and things. If we inquire how the mind, a conscious unextended substance, comes to be aware of what is

beyond itself, we ask a question that can have no answer. For to be a mind is just to be a function of interpretation and synthesis of the real. If we refuse, then, to set the unmeaning problem of how experience is made, contenting ourselves with understanding, so far as we can, its purpose and immanent principles, we may define the mind as the function which realizes for itself the significance and relations of a world of persons and things.

Consciousness or mind, then, exists for experience only in its functional relationship to the world which it defines and evaluates. Moreover, so far as the individual mind is concerned, these two conceptions are not reciprocally correlative, and do not stand on the same footing. For while the mind of any particular individual has no meaning apart from its relation to objects, the latter exhibit no similar dependence on the individual mind. We think of the system of nature as existing and as forming the prius in some sense from which emerged all living and conscious beings. To this extent, it seems to me, all philosophy, must be realistic or naturalistic. This admission, however, does not predetermine, in any way the character of our metaphysical result. We cannot set out in our philosophizing as 'realists' or 'idealists.' What we are to think about the world will depend on what our thought is able to make of it, after the most comprehensive survey of which it is capable of the data offered by the various forms of experiencing, and especially as these have been analyzed and classified by the special sciences. If in the end we find ourselves obliged to construe reality by means of idealistic categories, this standpoint must be reached in an objective way. There is no short cut to idealism. It is not the presupposition of philosophy: its standpoint is not 'first for us,' even if it turns out to be 'first by nature.'

I have tried to maintain that, for the purpose of philosophy, it is necessary to keep fast hold of both the subjective and the objective aspects of experience. Now there are two opposed but closely related theories of experience which disregard this principle. They both appear to furnish a reading of experience in terms that are conditioned by the standpoint and purposes of special sciences. The one, adopting the standpoint of psychology

as final, construes experience in terms of qualities in a mind, or states of consciousness. As only the 'inner' can be experienced, objects—at least so far as these can be known—must be defined in terms of states of the subject. We find, accordingly, that what we call objects are constituted by relations between states of consciousness. The standpoint of experience, thus interpreted, reduces the object to terms of the subject, by a short but infallible method of procedure. This 'psychological' account of experience finds an almost exact counterpart in those theories that adopt the standpoint of the physical sciences. From this point of view, the nature and relations of objects are considered as merely outer; that is, the objects are taken as given without any reference to the process through which they are known. What is called 'consciousness' must accordingly be defined in terms of objects—as a relation of objects, or a togetherness of objects, or as behavior of objects, etc. Consciousness can be nothing more: for experience shows only objects and their relations and changes. If we assume that consciousness possesses any other reality, we must at least admit that such a reality is found nowhere in experience.

It would be interesting, if time permitted, to dwell on the almost exact parallelism in the arguments by which these two positions are supported. The truth is that the common presuppositions of subjectivism and objectivism are much more important than their apparent opposition. Both alike assume that the real is to be found in what is simple and immediate; both try to grasp the result and forget the process. The abstract inner and the abstract outer interpretations of experience are opposed only superficially; in standpoint and method they are identical.

Moreover, the artificial and untenable character of both these theories is shown in the same way—namely, by the fact that in the end both are compelled implicitly to admit what they begin by explicitly denying. This statement, I assume, will find pretty general agreement so far as subjectivism is concerned. It is not possible to bring the theory of subjectivism into relation to any concrete problem without going beyond it. Even in supporting the theory by means of arguments, one is at the same time refut-

ing it, since one must presuppose at least the real existence of other minds to whom the arguments are addressed, and of some objective media through which the ideas are expressed and received. In like manner, the exclusively objective view, in attempting to find some expression for consciousness in terms of the object, is able to proceed only because it presupposes, as all objective science presupposes, a mind which is aware of the relations or 'behavior' of objects. To omit all reference to the consciousness as the knower, and begin directly with objects is, as is well-known, the procedure which the purposes of the physical sciences impose upon them. But when philosophy adopts this standpoint, it loses its differentiating mark, and can contribute nothing to render the scientific results more intelligible or more concrete. The true science of philosophy consists in maintaining and developing the concrete standpoint of experience, and this can be done only by holding together, without obscuring, its subjective and objective aspects.

If one is to look to the history of philosophy for 'warnings,' it appears to me that one can derive from the history of the modern period useful instruction as to the futility of attempting to render philosophy 'scientific' by importing into it the principles and methods of the special sciences. Over and over again new movements have been inaugurated with great enthusiasm to reclaim philosophy from the error of its ways by assimilating its procedure to that of the special sciences, and over and over again the outcome has shown that philosophy cannot have a method imposed upon it from without, or be bound by any 'scientific' formulation of problems, no matter how skillfully prepared. A single consideration is sufficient to show the inapplicability of natural science concepts to philosophy: all the natural sciences deal with objects (or certain formal aspects of objects). Philosophy, on the other hand is concerned with experienced objects and experiencing subjects. In other words, philosophy is the science whose function is to maintain the standpoint of experience in its concreteness, and it thus includes, as an essential part of its task, a criticism of the categories of knowledge.

But, on the other hand, it must be remembered that the func-

tion of knowledge is not to construct objects in their relations, but to report them. Knowledge has to follow and interpret the nature of a preëxisting order of existence. It is sometimes said, however, that in the process of experience the apparent priority of the object is shown to be unreal; that the mind reduces the object to terms of itself, or translates it into terms of ideas. Now it is true that in becoming known, the object reveals its inner relationship to the mind, and that it thus loses the indifference to knowledge which it seemed to possess as a mere form of external immediacy. But it is misleading and inaccurate to speak of knowing as 'reducing' the object to a meaning or idea, or as 'abolishing' all differences between it and the mind. This form of statement, however, is often adopted by certain idealistic writers. It is even not uncommon to discover in the failure of the knowledge process to reduce the object completely to terms of the subject, and thus to abolish all duality, grounds for appealing to some 'hyperlogical' form of experience. In this way it is hoped that the fatal defect of the duality that persists in knowledge may be overcome, and the perfect identity between the mind and the object secured. Now it seems to me that such an ideal of absolute identity is wholly imaginary and spurious. It is surely not a rational demand of knowledge that the object shall be 'reduced' to a state of mind; that there shall be absolute identity between ideas and the things and events known through them.¹ To retain and to define in their reciprocal relations the distinct factors of experience is surely just as important as to discover identity. It would seem that knowledge must do both; that is, it must exhibit and define the differences between the mind and things, at the same time that it exhibits their aspect of identity.

The term 'identity,' however, needs to be carefully defined in this connection. The necessary assumption of experience is that

¹ One can 'overcome' duality in experience in two ways: either by going beyond consciousness to some form of mystical trance, or by deciding deliberately to forget its presence and take no account of it in our analysis. Moreover, it is important to note that both mystical idealism and abstract objectivism rest on the same assumption, viz., that the real is something capable of being given in the form of simple immediacy, and both alike feel the necessity of eliminating the mediating consciousness in order to be able to see the object 'face to face.'

the world of real objects is known, or at least knowable by the mind. The nature of the object is then such that it is capable of being reported in terms of experience. Of course any concrete individual experience fails, because of its actual limitations, to report completely and without error the objective order of events. But it must not be forgotten that the mind's capacity to know involves the capacity to sift out errors and eliminate subjective limitations, so that we can regard the mind as a potential knower and the object, as knowable. And, secondly, in attempting to determine in what sense there can be identity between the mind and the object we should look to a case where knowledge succeeds, to the ideal of knowledge, which may indeed never be completely realized in any individual experience but which is always realized in some degree in every case of real knowledge. Now judgment that expresses the result of actual experiencing affirms that reality, or some aspect of the real, is, or reveals a universal meaning or idea. (The full truth regarding the real cannot, of course, be expressed in a single judgment and no concrete judgment stands in isolation.) For it must be noted that, as genuine knowledge, the judgment is not to be taken as a mere connection of my ideas about things, but as an actual revelation of their nature. It is not the individual who, from an outside standpoint as it were, attaches ideal meanings to the thing, categorizing and classifying it according to his subjective fancy or convenience. But the relations and qualities of the thing itself come to light and are reported in terms of experience. No doubt experience always goes on in individual minds; but in so far as experience succeeds in realizing its purpose of attaining to knowledge, it is no merely individual affair. The nature of the object is indeed indifferent toward me as an individual so long as I attempt to know it in an external way through 'qualifying' it by means of abstract ideas, or pasting upon it the labels which are convenient for my own subjective purpose. So long as I maintain my independent position over against the object, its inner center and essence remain inaccessible, refusing to be 'reduced' to sensations and relations in my mind. Only by stripping off its subjective opinions and sinking itself in the object does the mind render itself capable of becoming the bearer of truth, and only then does the object reveal itself in terms of experience. This rapprochement does not involve any real loss of independence on either side. In knowing the object the mind realizes its own capacities and comes to know its true nature; while the object, although displaying its true nature in experience, does not thereby lose its reality as the being which is known, and so does not become numerically identical with the function of knowledge.

The proposition that experience maintains the duality of knowing and thing known is, then, not incompatible with the assertion that it also reveals their identity. For if there is no identity, knowledge cannot be objective and genuine; logical experience in that case is not a process of concrete determination, but a game that is played with abstract counters. That alternative I am not considering at present, but am assuming that objects are capable of being known. If this be granted, then there must be more than an external correspondence between the 'idea' and the object. The idea, we say, is the interpretation of the object, the revelation of its nature. This revelation finds illustration in the fact that cognitive experience may always be read both in internal and external terms; as the ideas and judgments of a mind, and as the determinations of real things. In its concreteness, it is both. Moreover, it can only be one in so far as it is the other. This statement, however, is not to be interpreted in the sense of the Kantian doctrine that experience is a compound made up of contributions from the mind and from the object. When the relation is put in these mechanical terms, the so-called contribution of the mind becomes a veil that makes it impossible to know the object as it were face to face. Because the mind expresses its own nature in the process of experiencing, the assumption is that it must thereby conceal the nature of the object: But apart from mechanical theories, why is such an assumption necessary? Because experience expresses the nature of the mind, does it follow that it cannot also express the nature of real objects? This possibility is excluded only by the theory that the relation between the mind and the object is external and mechanical. For those who accept the external view, and still wish to avoid subjectivism, the problem of how to eliminate consciousness naturally arises. What I am proposing is that we should not try to eliminate it, and should not regard it with Kant as an 'Unbequemlichkeit'; but should accept knowledge as real. And to accept knowledge as real is to accept the doctrine that logical experience is a form of functioning in which the identity in difference of mind and object is exhibited and defined.

It may perhaps be said that this is to complicate with words without adding anything essential to the fact of knowledge itself. How does the doctrine of 'identity in difference' make the fact of knowledge more intelligible? In reply to this objection two points may here be mentioned. The first consideration, which has already been suggested, is that the conception of identity in difference makes it possible to understand how the mind can know the object without introducing some foreign element into the knowledge of it. In this way, therefore, one can avoid both subjectivism and objectivism. And, secondly, this conception enables one to discard the theory of representative knowledge, while retaining the undoubted element of truth which that theory contains. For logical experience does not construct an image or subjective picture of the object, but reveals its essential nature and relations as an element in an organized system of ideas. The relation between 'idea' and real object is not external like that of a copy and its original, but the more intimate inner relation of existence and meaning.

It would therefore seem to follow that the question whether the real object and the idea are numerically identical cannot be properly raised. For the question as to whether two things are the same or different is possible only when the things compared belong to the same genus. But the 'cognizing' experience is not an object at all; it cannot even be regarded as an existing psychological process, or complex of processes. It is real, indeed; but its reality consists in its ideal significance or meaning as an element of a conscious experience. In the judgments through which experience is constituted, this 'idea' or meaning is affirmed to be at once identical with the object and different from it.

I have been trying to outline a view which maintains that all experience, of whatever kind, involves consciousness as a function of mediation. And since experience is assumed to furnish genuine knowledge of objects, it follows that no object can be in its own nature a simple unmediated entity. 'To be real,' would therefore seem to involve, not merely standing in relations, but functioning as an element in a related system. In so far as knowledge is genuine, i. e., in so far as experience fulfils its task of determining the nature of the real, the categories and forms of experience must be actual constitutive determinations of the real world. This, of course, does not mean that anything we are in the habit of thinking must be objectively true; nor does it imply that the hypotheses and methodological principles adopted for a special purpose are to be accepted just as they stand as statements possessing ultimate ontological validity. But when criticism has done its work, when all of the findings of experience have been taken into account, when the analyses of the special sciences have been evaluated and interpreted, what we are obliged to think in the end must be accepted as true, if not the final and complete truth regarding the object.1

I shall try to state briefly the bearings of the theory here outlined on the problem of the method of philosophy. In the first place, it appears obvious that the process of determining the

1 It seems impossible to deny the truth of the Rationalistic principle that the order and connection of ideas is identical with the order and connection of things. The failure of Rationalism was not the consequence of this assumption, but of the abstract dualistic conception of 'ideas' and 'things' from which it set out. It was thus never able to get beyond the idea of an external relation between the two terms which is expressed through conceptions like 'Occasionalism,' 'Parallelism,' and 'Preëstablished Harmony.' For the same reason it was unable to supply any adequate criterion or method for determining the true 'order and connection' of ideas. Just because the Rationalists held the same subjective view of experience as the Empiricists, they were obliged, like the latter, to find the criterion of truth in the psychological clearness and distinctness of ideas. It is interesting to notice the attempts which both Spinoza and Leibniz make to discover in 'ideas' a criterion of certainty, and how their abstract view of thought rendered it impossible for them to discover within experience any immanent principle of criticism which would serve to distinguish the inadequate ideas of the imagination from the adequate truths of reason. The result is that Rationalism went the way of all uncritical thought, and ended in abstractions and dogmatism.

nature of the real world must be accompanied by and involve the criticism of the categories of knowledge. Not only so, but these problems are one and inseparable. Epistemology and metaphysics cannot therefore be separated from one another: the categories of knowledge cannot be determined a priori but must be discovered and criticized through an analysis of the actual procedure of thought in dealing with the real world. Secondly, the conclusion seems to be justified that the fruitful method for philosophy cannot be that which proposes to begin by ignoring consciousness and dealing only with objects and their relations. With the idea underlying this proposal, viz., that experience brings us into direct contact with things, I am in full agreement. But the further assumption that such a relation to the real is not mediated by consciousness, but takes place solely through the mediation of the physiological functions, seems plainly contradictory of experience. The necessity of getting rid of consciousness plainly depends on the idea that this imposes upon the object an element foreign to its true nature. This, as we have seen, would certainly be true if consciousness were a thing or substance having only an external or accidental relation to the object. One may recognize that the recent attempts to define consciousness in terms of objective relations represent a valid protest against the conception of consciousness as a self-enclosed entity or independent substance. But, as I have tried to show, 'absolute' objectivism is the exact counterpart and parallel of the subjectivism which it seeks to escape. One view affirms directly of experience what the other denies; and, as is usual in philosophy, these contradictory statements rest on a common assumption. Both alike regard the identity exhibited in experience as an exact numerical identity which excludes differences. and is accordingly capable of being grasped as something simple and immediate.

For it is clear that all attempts thus prematurely to grasp the object, rest on the assumption that the real is a simple undifferentiated form of existence whose complete being and truth can be presented or given at one stroke. But is it certain that what is real, simply is or exists without mediation? I have already

said that if knowledge gives an accurate account of the nature of objects, to be real must mean to function as an element in a systematic totality. Undoubtedly some persons will find grounds for rejecting this statement, perhaps because it seems to make for idealism. To avoid any such objection, I am glad to accept the proposition that 'the individual is the real.' The individual is, however, never a simple immediate, but the individuated, which involves positive and negative relations to other things.

Furthermore, even if it were true that real objects possess this form of immediate existence, it would be impossible for the mind to know them. For to what mode of experience can we go to find such immediacy? Sometimes we are referred to 'science,' sometimes to the experience of the 'plain man,' and sometimes we are told that "Heaven lies about us in our infancy." I personally find it impossible to conceive of any form of awareness or feeling, of however primitive a type, that does not involve consciousness; and consciousness is surely in its very nature a principle of synthesis and interpretation. It is doubtless true that our knowledge of objects begins with a mode of experiencing in which objects with their determinations appear to be given as immediate facts. Nor can it be denied that this primitive experience furnishes the platform from which arise the problems that call out our subsequent processes of reflection. But this so-called presentative or perceptive experience presupposes the interpretation of thought. And, on the other hand, when we deliberately set a problem for thought, we do not cease to appeal to observation and to invoke intuition. What we call 'perception' is to a large extent thinking, and fruitful thinking is closely bound up with perceiving. Nevertheless, although the immediate and the mediate factors in the experience are always thus relative to each other, we can distinguish various stages in the process. The standpoint of ordinary experience, as already remarked, appears to possess immediacy as its prevailing characteristic. The reports of the special sciences carry us a long way beyond this immediacy of common sense. That is, they make it evident that 'the experience

of the first look' does not furnish a satisfactory account of the various kinds of objects. Their lesson is that the immediate presentation must be left behind, and the objects construed in terms of atoms and ions, ether, forces, affinities and relations of various kinds, the terms varying with the different sciences. It is to these reports that we are often referred for the final word regarding the nature of reality. But there are serious difficulties in the way of following this advice. In the first place, these reports are not presented by the various sciences in the same terms; and on the surface, at least, they often exhibit inconsistencies. Each of the special sciences defines its own field of reality in accordance with its own particular purpose, and adopts the methodological principles that prove most directly serviceable for describing and correlating the objects with which it is concerned. Moreover, the special sciences are concerned only with the various kinds of 'objects,' and there are aspects of reality that cannot be reduced to this form. More specifically, the special sciences abstract from the process of knowing and the other judgments of conscious appreciation, looking outward rather than inward for their problem. It is, of course, true that one frequently finds within a special science discussions of method, and oftentimes a clear analysis of the presuppositions upon which the science rests. But these discussions, in so far as they belong to the science itself, do not involve any analysis of the knowing process as such, or any attempt to correlate and evaluate the various forms and categories of experience. Now, it is obvious that systematization of results in terms of experience is essential, if any final synthesis and interpretation of the real is to be reached. This systematization is the peculiar problem of philosophy. It should be evident, however, from the outset that a genuine correlation of the sciences cannot be attained by falling back through a process of abstraction, as Spencer proposes, on the most general conceptions which underlie all the sciences. Abstraction can never be an end in itself. Philosophy can arrive at new and valuable results only as a process of concretion, i. e., by introducing into the special sciences the point of view of conscious experience. This means that philosophy must enter into and seek to reinterpret the procedure and results of the special sciences, assigning to them their place and value as functions and determinations of consciousness. It is in this way, by the restoration of consciousness to its proper place, and by the interpretation of the world of objects in its light, that the dead bones of abstract knowledge may be made to live, and that there may be discovered in the world that fluidity and concreteness of which the special sciences seem to have robbed it.

To avoid any possible misunderstanding, I wish to say in conclusion that in speaking of philosophy as criticizing and reinterpreting the reports of the special sciences, I do not mean to suggest that it is the business of the philosopher to dispute or deny the accuracy of the scientist's results, or to inform him as to their bearing on the special problems with which the latter is engaged. To do so would of course be idle and impertinent. But the procedure and results of the sciences are an important part of the data by means of which the philosopher is seeking to solve a problem which does not arise in any of the fields of special investigation. For this problem, which demands an answer in terms of conscious experience, these data require to be differently appraised and evaluated. Philosophy must therefore in a sense begin where the sciences leave off. The analyses which the sciences carry on furnish the philosopher with data that are indispensable for his purpose. He cannot make these analyses for himself. His function is rather to promote rationality and intelligibility by endeavoring to form a consistent conception of a concrete system of knowledge and of reality. In so far as philosophy succeeds in reaching a concrete conception of a globus intellectualis it has something to offer in return to the scientist who is seeking for a clearer view of the wider bearings of his own results. For this synoptic vision of the whole, if concrete, will include the parts, assigning to each of the special inquiries its proper place, and exhibiting its more general significance as contributing to the determination of reality. Philosophy and the special sciences sprang originally from the same root, and in spite of the enormous specialization of modern investigations, the bond of connection has never been broken; the life-giving sap has never

ceased to circulate through all the parts. Moreover, at the present time both philosophy and the sciences are recognizing a need for the restoration of the closer and more vital relation that formerly existed between them. On the side of philosophy, this result may be most certainly realized by maintaining a continuity with the past and its historic position as the science of experience, while not neglecting to understand and appropriate the wealth of material which the various sciences are making accessible at the present day.

J. E. CREIGHTON.

CORNELL UNIVERSITY.

THE PROBLEM OF TIME IN RECENT FRENCH PHILOSOPHY.

II. TEMPORALISM AND ANTI-INTELLECTUALISM: BERGSON.

THE logical point of departure of the metaphysics of Bergson is practically that of later neo-criticism; it consists in the conjunction of a fundamental conviction common to both systems with a preoccupation with two special problems, through their opposed solutions of which the two systems are brought to differing conclusions with respect to the relation of logic to reality. The common fundamental doctrine is, of course, a radical temporalism. No one has ever been more emphatic than Bergson in declaring that "all immobility is relative and movement alone is real." And with both, this temporalism takes the form of an indeterminist doctrine of radical spontaneity and creative becoming. (b) But, as James has remarked, M. Bergson seems to have come "into philosophy through the gateway of mathematics. The old antinomies of the infinite were," apparently, "the irritant that first woke his faculties from their dogmatic slumber." Consequently, his philosophizing has from the first been largely devoted to considering the bearing of these difficulties upon temporalism, and ostensibly to discovering in temporalism a way of escape from them. It was, he has declared, "in the arguments of Zeno of Elea concerning change and motion that metaphysics was born." This ascription of the primary place, logically and historically, in metaphysics to the Zenonian paradoxes is, of course, equally characteristic of the neo-criticists. (c) Both to them and to Bergson, again, has occurred the suspicion that some of the obscurities of this problem in the past have been

¹ La Perception du changement, Oxford, 1911, p. 16. Bergson's writings will be here designated by the following abbreviations: DI, Essai sur les données immédiates de la conscience (pub. 1889), 7th ed., 1910; MM, Matière et Mémoire, (pub. 1896), 6th ed., 1910; IM, Introduction à la métaphysique, in Rev. de Métaphysique et de Morale, Jan., 1903; EC, L'Évolution créatrice, 1907; PC, La Perception du changement, 1911.

due to a tendency of the human mind to ascribe to time the attributes of space, and through this confusion of *genres* to create for itself gratuitous and spurious difficulties. Both, therefore, have been much occupied with the task of discriminating the ideas of extension and duration and of eliminating from each all alien and unessential attributes.

Upon this last problem Bergson's characteristic doctrine made its appearance in his earliest volume, and has since been frequently reiterated. "Real duration," the time that is an immediately certain reality, the actual successsion of inner experience, he constantly insists, is not subject to the categories of number or quantity. Though it is a sort of "multiplicity," it is not a multiplicity composed of numerically distinct parts; it is "indivisible, though moving," its successive elements (i. e., the states of consciousness of consecutive moments) are "without reciprocal externality," they "mutually permeate" or "interpenetrate" one another. Magnitude and number in the proper sense are predicable only of space and spatial things; when we think of time as an aggregate of numerable moments, of the whole of a duration as a sum of lesser durations, it is because we have "spatialized" it and thus falsified this nature. "Strictly speaking, it is not a quantity" (DI, 81). A mind which had the idea or the experience only of time, and was wholly ignorant of space, would necessarily represent duration as "at once self identical and changing," "as a succession without distinction," as a "solidarity" (DI, 77). "Even the idea of a certain order of succession in time involves the representation of space, and should not be used in the definition of time" (ib.). "That time implies succession" is not denied, but that "succession presents itself primarily as the distinction of a juxtaposed 'before' and 'after'" Bergson cannot admit. In listening to a melody, "we have an impression of a succession—an impression as far removed as possible from that of simultaneity—and yet it is the very continuity of the succession, the impossibility of decomposing it into parts, which gives us this impression. If we cut it up into distinct notes, into as many 'befores' and 'afters' as we choose, we do so by interpolating into it spatial imagery and impregnating succession with simultaneity" (PC, 26).

It is in this paradoxical conception of the nature of real time that the genuine anti-intellectualism of Bergson consists. His doctrine of the essentially instrumental office of thought—the part of his system which is akin to pragmatism—of itself need have had no radical anti-intellectualist consequences. To say that thought has developed as a means to efficient action does not necessarily imply that thought wholly falsifies the nature of the reality upon which it enables us to operate; the opposite inference would, indeed, seem the more natural one. An instrumentalist in epistemology may well have doubts about the finality and completeness of our knowledge, and be sceptical about the fitness of the intellect for dealing with purely speculative questions, if there be any such; but, qua instrumentalist, he can have no ground for declaring that he actually knows reality to have a positive character other than that which thought ascribes to things and irreconcilable with the categories and logical principles of which the intellect makes use. But this latter position is the one taken by Bergson. Reality—such is his underlying argument—is pure duration; duration is without quantity, is a multiplicity without number, is a succession in which the moments are in no sense external to one another; 'intellect,' however, infected with spatial ideas as it is, inevitably applies to all things the category of quantity, inevitably assumes all multiplicity to be composed of distinct units, inevitably represents the moments in a succession as reciprocally exclusive. Hence it is that intellect is known to be incapable of representing the true character of reality, which is disclosed in 'intuition' alone. In other words, in the proper logic of Bergson's system, his temporalist metaphysics is prior to his instrumentalist epistemology; for it is the former that accounts for his anti-intellectualism, to which his instrumentalism is a sort of explanatory addition.

It ought to be evident, also, that this anti-intellectualism is (at least by implication) of the full-blown sort defined in the previous part of this study: it amounts to the doctrine that reality in its true nature is self-contradictory. Bergson, to be sure, never quite unequivocally asserts this doctrine; he commonly seems to wish to avoid it; and if it were put explicitly

before him, he would probably not subscribe to it. But the specific attributes which he does unequivocally ascribe to reality (i. e., to duration) are reciprocally contradictory, unless they are meaningless; and their being so is the ultimate and decisive reason why the nature of duration is declared to be so alien to the intellect. A consciousness of succession in which there is no distinction of 'before' and 'after'; a 'duration' which is not instantaneous, and yet has no quantitative character; a sequence to which the idea of serial order is wholly inapplicable; an indivisible totality of the past and the present which is at once continually present and continually moving (PC, 30):—if these phrases are not contradictiones in adjectis, it would be hard to know where to find examples of such things. But the true logical character of his conception of time is concealed from Bergson, and from some of his expositors and critics, by several circumstances, of which I may now mention two. The first is the fact that he is prone to reason also in the following manner: What is real and actually given in intuition cannot be self-contradictory; pure duration, with the above-specified attributes, is a reality given in intuition; ergo, contradictions discovered in the attributes of pure duration cannot be real contradictions. It is through this reasoning that Bergson has been led to suppose that he has given us, in his account of the nature of time, a solution of the Zenonian and Kantian antinomies, when in fact he has merely given us a reaffirmation of both sides of those antinomies. Metaphysics, he writes, would no doubt "end in irreducible oppositions, if there were no way to accept at the same time, and upon the same ground, both the thesis and the antithesis of the antinomies. But philosophizing consists precisely in placing oneself, by an effort of intuition, inside of that concrete reality, about which, so long as he looked upon it only from the outside, the philosopher of the Kritik was constrained to take the two opposed views." In the same way, Bergson seems to imagine, so long as one had never seen the color gray, the idea of the "interpenetration of white and black" would appear self-contradictory; but when that color has once been intuited, one "easily understands how it can be envisaged from the double point of view of

white and black." (I refrain from comment upon this analogy.) Thus "the doctrines which have a basis in intuition escape the Kantian criticism (i. e., the antinomies) in the precise degree to which they are intuitive; and these doctrines comprise the whole of metaphysics" (IM, 34). And thus, "in order to rid ourselves of such contradictions as Zeno pointed out, and to free our knowledge from that relativity with which Kant believed it to be stricken, we need only to make an effort to recapture change and duration" in their true nature (PC, 17). But obviously, a conception cannot lawfully be acquitted of the charge of self-contradiction merely by a change of venue from the court of logic to that of intuition. For the charge is one that can be properly tried only in the former court, from whose decision there can, on that particular count, be no appeal. If after full analysis two predicates are found to be reciprocally repugnant, the case, so far as the 'laws of thought' are concerned, is ended. By contradiction one means logical contradiction, and one is referring to concepts and not to 'intuitions' absolutely incapable of conceptual interpretation. It is a pity, therefore, that Bergson has failed to see that simply to assert, upon the alleged warrant of intuition, "both thesis and antithesis of the antinomies," is no logical solution of those difficulties; and that he did not say explicitly and in general terms what, implicitly and piecemeal, he maintains: that temporal consciousness is a logically selfcontradictory kind of existent, but is not on that account a whit the less 'real.'

A second reason why this trait of Bergson's doctrine has escaped many of those who have written about him lies in a certain elusiveness of his language. His reader may at times suppose him to mean by the 'indivisibility' of time merely the smooth fluidity of the stream of consciousness, the uninterruptedness of the ordinary sequence of mental states, or the imperfect definition of much of our imagery; and by the 'interpenetration' of moments merely the survival in the present moment's consciousness of part of the preceding moment's content, of memories from the remoter past, and of effects produced by vanished impressions. One cannot be at all sure that it is not of facts of this sort that

Bergson himself frequently is thinking, when he is endeavoring to describe "pure duration." But it is obviously not to these harmless commonplaces that he can be supposed to refer when he speaks of the "extreme difficulty" which all must experience in recapturing the intuition of pure duration (IM, 27). Nor, unless he is using language with a looseness unprecedented in modern philosophy, can his usual expressions be regarded as conveying any doctrine less paradoxical than that which I have indicated. It would be unfair not to assume that when he describes something as "without quantity or number" he means that quantitative and numerical attributes cannot be predicated of it; that when he says that "successive" moments of consciousness are "without reciprocal externality" he means, not that they follow one another without a break and contain in part the same imagery, but that—they are not external to one another. That time as a whole, or any 'part' of it, is completely innocent of all internal plurality, or distinction of elements, that the moments of consciousness, in the true intuition of duration, are "not even distinguished as several" (DI, 91)—these singular assertions are the truly original, and the most constantly reiterated, doctrines of Bergson's philosophy. They are not the less to be ascribed to him merely because they coexist there with (and even themselves imply) other assertions which are meaningless unless time be credited with quantitative determinations and internal multiplicity. For the peculiar character of this philosophy consists precisely in its conjunction of these two sets of assertions.

The self-contradictory view of duration which Bergson espouses (it should further be observed), though it is adopted in the name of the absolute 'mobility' of duration, in fact implies no less (and no more) plainly a doctrine of absolute immobility, of the unreality of what is ordinarily meant by succession—i. e., the banishing of certain content of consciousness to the limbo of the dead past, through the emergence into present existence of new—and hitherto merely potential—content. In a "succession without before or after" no such psychological tragedy could ever occur; no one would ever need to cry "Verweile doch, du bist so schön!" And in his recent Oxford lectures (as well as in MM)

Bergson avows as plainly as possible that for him there is no genuine ontological difference between present and past. People incline, he remarks, to represent the past as non-existent, and philosophers have encouraged them in this idea. But the idea is illusory—"an illusion useful and even needful for the life of action, but dangerous in the highest degree for speculation. In it you may find in a nutshell most of the illusions which vitiate philosophical thinking." For, of course, the present as a mathematical instant, the boundary between past and future, is a nonentity, a pure abstraction. What, then, is the present of which we ordinarily speak? Clearly, we mean by the term a certain "interval of duration." And the limits and extent of this interval are fixed by the limits of our field of attention. But this field is arbitrary—it may be lengthened or shortened at will. There is no reason why its bounds should not be indefinitely extensible, "so as to include a portion as great as you please of what we call our past." "A sufficiently powerful act of attention, and one sufficiently detached from practical interests, would therefore embrace in an undivided present the entire past history of the conscious person" (PC, 30-31). Now since, for Bergson, complete acquaintance with the durée réelle would demand a complete detachment from practical interests and involve an entire freedom from the limitations which they impose, it should follow that in the true intuitive experience of duration this existence of one's "entire past history in an undivided present" is actually realized. Here, then, we have in Bergson's philosophy nothing less than the totum simul which such an eternalist as Royce declares to be the true nature of reality—i. e., of the Absolute Experience; though with this one difference (which renders Bergson's position still more singular), that his undivided present fails to include the future, of which the content will yet eventually become past, and so become part of an undivided present. True, Bergson makes haste to add that this merging of present and past in a complete identity is not "a simultaneity"; but he thereby merely reminds us of the other half of the fundamental contradiction in his account of real duration. One of the most acute remarks that have been made about Bergson is that of Professor A. E. Taylor, who observes that the author of "Matière et Mémoire" is "at heart as much of an Eleatic as Mr. Bradley." But the whole truth is that Bergson is at once a thorough Eleatic and a thorough Heraclitean; that the essence of his philosophy consists in an analysis of the time-concept which leads him to just this contradictory combination of doctrines; and that he is a radical anti-intellectualist because, while thus led (in fact, if not in intent) to describe the temporal as self-contradictory, he, unlike Bradley, is unwilling to call it "mere appearance."

To this analysis of the time-concept—that is, to the reasons which impel Bergson to his paradoxical characterization of durée réelle—I now turn. The main reasons offered in his earliest work for the contention that the ideas of quantity and number and "reciprocal externality of parts" are applicable solely to space and not at all to time, seem to be fairly reducible to two arguments, here designated A and B, each of which I shall first summarize and then criticize. Two other arguments (C and D) are rather more fully presented in his later writings.

(A) (1) Since the representation of an aggregate of parts or numerable units involves at once distinguishing the units and summating them in a collective unity, it manifestly cannot be given through a purely successive apprehension of the units separately, as each makes its transitory appearance in consciousness. To add a series of units, so as to think them as constituting a sum, we must have them all represented simultaneously. (This is the third of the paradoxes left unrelieved by Renouvier.) (2) To represent two or more units simultaneously means to think of them as simultaneously juxtaposed in space. (3) Therefore, the representation of any sum or aggregate composed of parts is always the representation of a simultaneous juxtaposition of units in space. (4) But such a representation is not only different from, it is obviously exclusive of, the idea of duration. (5) Hence, duration cannot properly be thought as a numerical sum or aggregate of partes extra partes.

Of these propositions, the second, which in diverse forms is reiterated a score of times in the second chapter of the volume mentioned, is the keystone of the whole argument in its distinctively Bergsonian form. But taken literally it seems palpably untrue. It gets such plausibility as it has from a confusion of 'representing simultaneously' with 'representing as simultaneous.'1 When I compare (and, therefore presumably 'represent simultaneously') my expectations of yesterday with my experiences of today, I am certainly not representing these two states of mind as simultaneous, nor yet, strictly speaking, as in space. In a single specious present I am capable of thinking about two or more non-present moments, and of distinguishing them as temporally earlier and later. The coexistence, in the mind, of two ideas of objects or events is not necessarily identical with the idea of the coexistence of the two objects or events. If it were, we should obviously be unable to make any distinction between the coexistent and the non-coexistent; since the idea of the latter must coexist in the mind with the idea of the former in order that the two may be contrasted. But this distinction is in fact one which we all of us make with entire clearness and logical efficiency every hour of our waking lives. It is true that when, in a single moment, I think about two other moments, and contrast them as 'before' and 'after,' certain spatial imagery is usually, if not always, present. Those of a visualizing habit, at least, are likely to think of the successive moments as points in a vaguely pictured line in space. But this mere association of imagery (which, moreover, we have no good reason for supposing universal) no more proves that the idea of a succession of discrete moments is identical with the idea of a line of coexistent points, than the fact that most people think of space as colored proves the idea of space to be reducible to that of color. We constantly and perfectly discriminate the sort of one-dimensional magnitude in which the elements are thought as coexistent and juxtaposed—

¹ An illicit transition from the first to the second of these ideas is frequent and unmistakable in the chapter cited. Thus Bergson writes: "When I say, for example, that a minute has just passed, I mean that a pendulum, beating every second, has made sixty oscillations. If I represent these sixty oscillations to myself all at once, and by a single act of the mind, I exclude ex hypothesi the idea of a succession: I think, not of sixty beats succeeding one another, but of sixty points of a fixed line" (DI, 79).

which is the spatial line—from the sort in which the elements are thought as never being in existence together—which is the time-sequence.

Thus Bergson's first argument appears to result from a singular confusion of ideas and to imply the indistinguishability of two concepts which in fact we constantly distinguish. Meanwhile, the real difficulty about our time-consciousness is not very clearly brought out. But one ought, perhaps, to assume that it is this real difficulty which Bergson has had in mind, and that he has confused it with the paralogism just criticized. The difficulty consists in that paradox of time-perception to which reference has been made in the previous article. To experience succession means primarily to experience the transition from one presentation to an immediately following presentation. As successive these presentations must, it would seem, exist, and be experienced, at different though contiguous moments; one must be gone by the time the other comes. But on the other hand, it has appeared to many psychologists1 axiomatic that in (Lipps's words), "if two sensations are to be represented as following one another, the first condition is that the two be contained in one and the same act of representation,—that, accordingly, we have them in in consciousness contemporaneously, not now one and then the other." For to be aware of a succession is to discriminate the antecedent from the consequent term. But how can two terms conceivably be compared and discriminated unless they are both present in consciousness together? Here, then, seems to be at / least a prima facie antinomy. To constitute an experience of \checkmark succession, the two representations must be experienced one after \checkmark the other; but just as truly, it would appear, must they be experienced simultaneously.

Most psychologists, however, have not regarded this as a real antinomy.² They have rather divided into opposed schools upon

¹ For example, to Lipps (Grundtatsachen des Seelenlebens, 1883, p. 588), to Meinong ("Beiträge zur Theorie der psychischen Analyse" in Zeitschrift f. Psychologie, 6, 1894, p. 446) to Strong (Psych. Rev., 3, 1896, p. 150), to Ward (Enc. Brit., art. "Psychology") and to Royce (The World and the Individual, II, p. 117).

² Royce, it is true, asserts both thesis and antithesis, apparently with equal literalness. But he does not seem explicitly to note that he has thereby set up an antinomy, and given an anti-intellectualist account both of our own and the Absolute's experience.

the point, each embracing one alternative and rejecting the other. Some, to avoid the paradox of the simultaneity of the successive, have gone to the extreme of denying1 that "there is any such datum in consciousness as a present moment" without experienced duration, a mere simultaneity without apprehended succession and temporal magnitude. L. W. Stern² has with especial vehemence assailed what he calls the "dogma" that "nur solche Inhalte zu einem Bewusstseinsganzen gehören können, die zu irgend einer Zeit gemeinsam vorhanden, simultan sind." He endeavors to prove that, on the contrary, it is entirely possible for a "unitary and relational act of consciousness to be constituted by a psychic process lasting for a certain length of time, in spite of the non-simultaneity of its component parts." He urges as evidence for this view the fact that the rejection of it implies the denial of the possibility of our having any direct perception of temporal sequence; i. e., if the terms of any actually experienced relation must be given at once, then succession is never experienced, but only inferred. This consequence, however, has been accepted readily enough by Strong and others of those who hold to the opposite horn of the dilemma. Strong, for example, declares that only the present is an actual datum of consciousness, and that time is a sequence of 'real presents' none of which contain any admixture of past or future. "The lapse of time," he writes, "is not directly experienced but constructed after the event. The succession of our feelings is a fact external to our feelings themselves. If it were not for memory"-for memories of the past surviving as static content in each present moment—"we should never have any consciousness of succession at all." Such a description of our time-experience, however, Stern, Royce,3 and others declare to be in conflict with the facts revealed by introspection.

Here, I can't but think, are the materials for a clearer and more plausible argument from temporalism to anti-intellectualism than any which Bergson explicitly presents. The argument, though

¹ So James in Psych. Rev., 2, 1895, p. 111; Hodgson, Phil. of Reflection, I, pp. 24 ff.; Fouillée, Psych. des Idées-Forces, 1883, II, p. 84.

² Zeitschr. f. Psych., 13, 1897, p. 326.

³ The World and the Individual, II, p. 118.

it begins with the same consideration as his actual argument, does not involve an untenable identification of the idea of temporal sequence with the idea of spatial juxtaposition; it does not involve an impossible separation of the categories of quantity from the idea of time. It consists merely in declaring the prima facie antinomy of temporal perception to be for 'the intellect' a real and absolute antinomy, and the destructive reasonings of both schools of psychologists to be sound, though their conclusions are reciprocally contradictory. The argument could be accepted, however, only if the anti-intellectualist could show that both of these opposed lines of reasoning are sound, and that neither the way of escape from the paradox of the simultaneity of the successive which is proposed by the one side, nor yet the opposite way of escape, proposed by the other side, is logically practicable. This certainly has not been shown by Bergson; the sequel will, I think, prove that it cannot be shown. But it is time to pass to the second of the two principal arguments upon which he actually relies in his first book.

(B) The first argument, as we have seen, finds its premises in certain asserted conceptual necessities. The second is drawn from certain alleged facts of inner experience, revealed by introspection. Bergson's typical empirical example of the purely qualitative nature of the time-consciousness is the phenomenon of rhythm-perception. In identifying a rhythm or a melody, or in distinguishing one rhythm from another—we are told—we do not discriminate and count the beats or notes composing the complex; rather, we recognize the rhythm by a distinctive qualitative 'feeling' characteristic of it as a whole. It is obvious that the units, objectively considered, are actually successive and actually numerable; but in the experience of the subject they are not separately apprehended at the successive moments of their occurrence. They are given only as organized into an indivisible but qualitatively definite unity. Thus when M. Bergson hears the clock strike four, his mind, he tells us, "notes the succession of the four strokes, but quite otherwise than by a process of addition. The number of strokes is perceived as a quality and not as a quantity" (DI, 97). Here, then, he finds a

concrete instance of a real experience of succession and duration which involves no representation of number or quantity or reciprocal externality of parts. To this specific psychological example Bergson adds the remark that none of our more naïve states of consciousness ever succeed one another as discrete and numbered particles of experience, but "permeate" and "melt into" one another. This is especially evident, he finds, in our dream states, states in which the ego is cut off from the need of those artificial constructions and 'standardizations' of the elements of experience which are useful for social intercourse. "In dreams we no longer measure duration, but simply feel it; instead of quantity it has once more become a quality;" its phases confusedly and indiscriminably lapse into one another. The same is true, even in the waking state, of the deeper self of strong emotion. "Let a violent love, a profound melancholy, take possession of the soul:-it is made up of a thousand diverse elements, which fuse and penetrate one another, without definite contours, without the least tendency to remain external to one another (à s' extérioriser les uns par rapport aux autres)."1

If, now, we examine the specimen of "purely qualitative duration" which Bergson supposes to be found in the recognition of a rhythm, it is easily apparent that (even assuming the correctness of his introspective psychology here) the example fails to prove what is required. When, and in so far as, the successive beats of the rhythm do not separately enter consciousness at all, the recognition, simultaneously with the hearing of the last beat, of the qualitative character of the rhythm, ex hypothesi is not an experience of succession or duration. It is simply a case where a series of stimuli which objectively considered—from the point of view, for example, of the psychologist conducting the experiment—are successive, has finally produced in the consciousness of the subject an instantaneous apprehension of a certain definitely qualified content, not apprehended as a numerical aggregate nor as a succession. Bergson has simply treated as one the two experiences of the subject and of the experimenter; it is the former alone which is pertinent to his argument, and it

¹ DI, 100.

-if there be in it the complete absence of numeration and discrimination of moments which he supposes—can in no wise illustrate the nature of the experience of succession, since it bears no resemblance to an experience of succession. As for the argument from the confused character of our dreams and more turbid waking states, it seems to rest chiefly upon a confusion of two senses of the "melting" of one state into another. It is true that in our waking memories of our dreams (with the dreams themselves it may be otherwise) we find ourselves suddenly transferred from one situation to another which, according to the causal sequences of our normal experience, ought to be separated from the first by many intervening happenings. And when phase B supervenes upon phase A, we often in dream seem in some vague way to think of A as having always been B, though when immediately present A was something quite different. But in these oddities of our dream life there is nothing that can in the least be described as "a succession without distinction of parts." If dream images are experienced as temporal at all-i. e., if they are linked together from moment to moment by even a brief span of continuous memory—they are eo ipso external to one another. Certainly in my own dream-experiences, the moment when one falls from the roof is (happily) always "external to" the moment when one is about to be dashed to pieces on the ground-and awakes. Thus far, then, introspective psychology seems to offer no better warrant than did logical analysis for Bergson's account of the nature of the time-experience.

(C) In his first and in his latest book, Bergson seems somewhat obscurely to present an argument referred to in the former paper of this series—the argument from the continuity of time to its logical inconceivability. If duration is a continuum, the passage from any given moment to any subsequent moment would involve the summation of an infinite series. In other words, Zeno's paradox of Achilles and the tortoise can be transferred from motion in space to duration itself, and to "evolutionary becoming" (EC, 337), so long as duration is conceived as divisible, as having those spatial characters by which the Achilles paradox is engendered. Hence we must learn to think of time

as indivisible, and as destitute of all space-like attributes. The difficulty urged by Zeno is a real one so long as we take the movement, or the time it occupies, as "a length"; on this ground, M. Evellin is entirely in the right (ib.)—though, it should be noted incidentally, the result of his being so is to render the neocriticist combination of temporalism and finitism impossible, except at the cost of anti-intellectualism. But in truth, declares Bergson, "the movement is not a length," and we must not treat it (or its temporal aspect) "as we treat the interval passed through, i. e., as decomposable and recomposable at will. Once subscribe to this primary absurdity, all the others follow" (EC, 337; cf. DI, 87).

The reader will of course remark (as Bergson scarcely does) that the proposed way of escape from this absurdity lies in a flight to the equally great paradox of an indivisible and nonquantitative duration. On this sort of consideration, however, it is not necessary to dilate further here. It is more to the point to note that the whole of the present argument, as applied to pure duration (in distinction from spatial motion), rests upon a certain assumption: namely, that if time were a quantity at all, it would necessarily be a continuous, infinitely divisible quantity. This assumption, so far as I can recall, Bergson nowhere attempts to justify; he merely takes it for granted. A contrary supposition is conceivable; namely, that the succession of our actual duration-experience is not a true continuum, but rather a series of discrete, internally stable states, each of them containing a peculiarly temporal sort of backward and forward 'pointing.' Until this latter possibility (into which we shall later have to inquire) is excluded for explicit reasons, Bergson's third argument must be regarded as logically unsupported.

(D) In the greater part of L'Évolution Créatrice, Bergson is dealing with a conception of time wholly different from that to which we are introduced in his first book. Yet in this and other of his later writings there occurs an argument (closely related to the preceding, and already foreshadowed in DI) which is apparently regarded as supplementary to the three hitherto discussed, and as tending to the same conclusion. This argument, em-

bodied in the famous analogy of the cinematograph, is an application to time of another paradox of Zeno, that of the moving arrow-with a reversal of the Zenonian inference. If-Zeno pointed out—the arrow at each moment of its flight 'fills' some particular position, it must at that moment be at rest in that position; for it cannot at any given instant be both in and out of the portion of space in which it is. But if the flight as a whole is the sum of these moments, and of the corresponding series of positions, then it follows that at no time in its flight is the arrow otherwise than at rest-which is an absurdity. Zeno employs the absurdity against the idea of motion; he might equally well, Bergson finds, have employed it against the supposition that a motion is a sum composed of positions as its units. We arrive, observes Bergson, at a parallel absurdity if we suppose a conscious duration to be composed of states. A state is something of which you can say 'it is'; it is like one of the single pictures (which of themselves contain no representation of motion) in the moving-picture film. A multiplication, or even a (mere) serial arrangement, of such static units can never be equivalent to a duration. Time, then, can as little be a quantity composed of moments as motion is a quantity composed of positions. The positions are not really parts of the movement at all, nor the moments parts of time;1 the positions are not even 'under' the movement, as its loci. "Jamais le mobile n'est réellement en aucun des points" (IM, 19). Suppose the points or the moments to be as numerous as you will, and diminish the gaps between them ad indefinitum; "toujours le mouvement glissera dans l'intervalle, parce que toute tentative pour reconstituer le changement avec des états implique cette proposition absurde que le mouvement est fait d'immobilités" (EC, 323).

This, like the preceding variation upon a theme of Zeno's, seems to me a more serious and plausible argument than either of the first two. But one must note of it, first of all, that it does not necessarily tend to prove the same conclusion as that which

¹ Here the analogy between the intellect and the moving-picture machine breaks down—unless M. Bergson seriously maintains that the cinematograph gives a false picture not merely in the sense that it shows less than the reality contained, but also in the sense that nothing which it shows was in the original reality at all!

those two were supposed to prove. Even if valid, it shows only that a duration is not a quantity composed of states; it does not show that a duration is not a quantity at all. Time might conceivably be as truly characterized by an "internal multiplicity" of elements as space is, provided only that the elements were not "immobilities." Some further evidence would be requisite in order to show that, if time were a sum or a magnitude, the only elements which it could be composed of would be 'states' wholly divorced from transition. But let us, for the sake of getting forward with the argument, assume this last; let us grant that if our time-experience is to be regarded as containing parts or moments, those parts must be units none of which (nor, consequently, all of them together) contain any experience of transition as such, of passing (with the emphasis upon the -ing) from one state of consciouness to another. I would then simply ask: What reason is there for maintaining that we have any direct experience of transition as such? Suppose that when Bergson invites us to concentrate our thought "tout entier sur la transition et, entre deux instantanés, chercher ce qui se passe," he is inviting us to look for something which isn't there-something which very naturally baffles the intellect, for the simple reason that it is at once an unreality and an absurdity! To this question, at any rate, concerning the actual verifiability of the occurrence of an experience of pure transition —as distinct from the experience of a sequence of discrete momentary states, each of which contains as part of its content memory and anticipation and the past-present-and-future schematism—the issue respecting the value of the fourth of Bergson's arguments reduces—when the assumption mentioned is made. Upon this underlying question Bergson can hardly be said to offer argument. Certain psychologists; as we have already seen, deny that introspection reveals any such experience. Bergson does not directly meet the contentions of these writers; he merely habitually assumes the falsity of their contentions. In doing so he undoubtedly has common belief on his side; this basis of his argument for anti-intellectualism is drawn from a prejudice of common-sense. But it remains to

be inquired, after our review of the positions of Pillon and James, whether that prejudice is defensible, and whether a consistent temporalism involves the assertion of the reality of the experience of pure transition.

Meanwhile, it is to be observed that if such experience be a fact, it is a queer kind of fact from which to infer the non-quantitative nature of time. For surely 'transition' means nothing without a 'before' and 'after'; it implies at least two points or termini external to one another—and if external, then distinguishable and numerable But perhaps this additional paradox—the deduction of the indivisibility of inner duration from the fact of its divisibility, which is involved in the fact of conscious transition—is not so much an objection against the anti-intellectualist as it is grist for his mill. Doubtless, the more numerous the selfcontradictions in the anti-intellectualist's own philosophy, the more abundant is the evidence of the futility of the intellect. This particular contradiction, in any case, is an aspect of the more general one characteristic of Bergson's whole system. From the beginning, as I have already remarked, he has had, side by side with his non-quantitative conception of duration, another and an essentially quantitative conception. For example, he is fond of referring us to the experience of impatient waiting as an illustration of the nature of "real," i. e., of psychological time, in contrast to the abstract time of the physicist's formulas; he "always comes back to the glass of sugar-and-water" of the French university lecturer, as a convenient illustration of the secret of the universe. "I am obliged to wait for the sugar to dissolve. This duration is an absolute for my consciousness, for it coincides with a certain degree of impatience which is itself strictly determinate. Something compels me to wait, and to wait during a certain length of psychic duration which is forced upon me, and over which I have no control" (EC, 367). One is tempted here to the remark that if this is the sort of experience in which real duration is revealed to us, the attainment of the mystical intuition of that reality is scarcely so rare and difficult an achievement as many of M. Bergson's utterances have led us to fear; impatience is beyond the reach of few of us. But the fact is, of course, that we are introduced here to a quite distinct and far less paradoxical idea of time: a time that always has a longueur déterminée, a duration which is absolutely quantitative, though perhaps continuous; which as a whole ever receives, and is apprehended as receiving, a definite increment of magnitude; which, however, is not represented as in the least infected with "spatiality."

And it is in his developments of this second idea of time that the profitable and important part of Bergson's philosophy appears to me to consist. This duration (or the consciousness of it, of which he conceives the essential to be the conservation and continuous augmentation of the past in the form of stored-up memory¹) is a cumulative process, and because cumulative, creative. At each present moment it is (not absolutely, but in some degree) new, because at each moment it contains, in addition to the preceding moment's content, a fresh bit of reality. passé nous suit, il se grossit sans cesse du présent" (IM, 5). "There are no two moments that are identical in the same conscious being; a being which had two such moments, would be a being without memory," and therefore unconscious (ib.). Here, surely, we are dealing as explicitly as possible with quantitative categories, and have to do with an experience of which "internal multiplicity," and especially the distinction of each present movement from all the past, are of the very essence. Yet-to the reader's astonishment—on the very same page from which the last-quoted phrases come, Bergson returns to his original leit-motiv: "Anything that is pure duration excludes all idea . . . of reciprocal externality."

It might suffice to leave here our examination of Bergson's position. We should then have his anti-intellectualism standing clearly before us, as the joint assertion, in perfectly plain language, of these two absolutely contradictory accounts of the nature of "real duration"—for one of which, however, our analysis has shown that no convincing argument is offered. Yet I am afraid that to drop the matter here would be to fulfil the task of exegesis somewhat imperfectly. For, as has been mentioned, an

¹ Conscience signifie mémoire (IM, 5).

anti-intellectualist in the extreme sense Bergson is only reluctantly, perhaps even sans le savoir. And to the two reasons already suggested to explain why the precise logical character of his own position is somewhat hidden from him, why he habitually fails to see both sides of it synoptically, one other probable reason may now be added. This is that in the conception of the individual's past (i. e., his past experience) as accumulated without loss, and as therefore existent in its totality at each present moment, the two ideas of duration may, at first sight, seem harmonized. For in this view, the whole past (as has already been remarked) also is present. Introspection, to be sure, does not reveal it so; but that, we are given to understand, is because ordinary introspection does not penetrate to the true time-experience. Upon the perpetual presence of the past-and thus, in a sense, upon the "indivisibility" of all realized time—the very possibility of the augmentative, and the consequent "inventive," process of becoming is supposed to depend. But a little further reflection would show that the essence of even this representation of "duration," as an ever-enlarging and never-melting snowball, is the assumption that, while every present contains all the past, it also contains more than all the past, and must (if it is a consciousness of time that one is talking about) in some fashion apprehend the new total's distinctness from any previous total. Who has ever insisted more vigorously than Bergson that between "actually present sensations and pure memory there is a difference not of degree but of kind"? Though memory may engender a present sensation, "at that very moment it ceases to be memory and is transformed into something present, something that is now being lived through, actuellement vécue" (MM, 150). True (such are the tortuous windings of the Bergsonian doctrine) the existence of this present (and therefore the discrimination of the actuellement vécu from the souvenir pur) is based upon the necessity for action, and any way of thinking which is influenced by the necessity for action is always, according to Bergson, a falsification of reality. Hence we apparently ought to say that in reality nothing ever is actuellement vécu. But

Defined in the previous paper, this REVIEW, XXI, p. 12.

this is a strange conclusion for a temporalist philosopher, unless the philosopher deliberately means to be so radical an antiintellectualist as to balance his temporalism by an equally complete anti-temporalism. In fact, as we have seen, if we take Bergson's various utterances seriously and put them together, this is his position. But in so far as it is not with him a deliberately chosen position, but one from which he would desire to escape,—in other words, in so far as he wishes to be a genuine temporalist, and not one who reduces his temporalism to a nullity by the simultaneous affirmation of its opposite,—we should have to take the last citation as the statement of a real fact about "duration." Temporal experience would thus fall into the usual two parts: the true present, "that which is now being lived through"; and the past, summed up in "pure memory," which differs from the present by an absolute difference of kind. And that "continuous becoming which is reality itself" would consist in the increase of the sum of "memory" by the constant lapse of the concrete content of each given present into the status of a past, through the constant birth of ever-new 'presents.'

But this obviously quantitative conception of duration and becoming would, as we have seen, not involve anti-intellectualism of the extreme sort-would not even 'baffle the intellect' at all —unless at least one of three conclusions were proven: (1) that the possibility of an actual experience of succession implies the psychological paradox of 'the simultaneity of the successive'; (2) that we have an experience of pure transition not composed of 'states'; (3) that experienced time, if a quantity, must be a continuum; and that a transition or 'getting-over' from one moment to another, existentially 'external' to the first, would therefore involve the actual summation of an infinite series. None of these real prima facie difficulties about time, I have tried to show, has been altogether clearly presented by Bergson; though he has offered an argument remotely related to the first, and has incompletely elaborated the second and third. Certainly he has not given any good reasons for accepting any of the conclusions mentioned. Whether they ought in fact to be accepted must be a matter for subsequent consideration. The answer must depend

upon our attainment of a satisfactory analytical account of the actual nature of our consciousness of time—such as Bergson, with his strange description of duration as wholly alien to the categories of quantity and number, has failed to give us. As an aid to this analysis, I shall next examine some of the opinions of Pillon and of James about the characteristics of the time-experience, its relation to the idea of space, and its consistency with the principle of contradiction.

ARTHUR O. LOVEJOY.

THE JOHNS HOPKINS UNIVERSITY.

DISCUSSION.

CONSISTENCY AND ULTIMATE DUALISM.

In the January number of the Review there appeared an article by Professor Sheldon entitled, "The Consistency of Idealism with Realism." This article is noteworthy not merely because of the conclusions reached, but also on account of the persistent logic with which they are worked out. Mr. Sheldon shows the true philosopher's willingness to follow the argument patiently where it leads; but he also hopes thereby to compose an ancient quarrel of the schools by assigning to each party a secure territory which has equal rank and dignity with that of its former rival.

Mr. Sheldon begins by defining Idealism as the view that rests on the axiom of system, and Realism as that which assumes the ultimate reality of the limited or finite part. He then asks: "May it not be the case that there is really no contradiction between ultimate independence and ultimate system or dependence" (p. 53)? The object of the article is "to show that the idealist, while retaining his doctrine of the ultimate reality of the whole system, may without contradiction admit that of the parts as abstract, isolated, independent of the rest; and the realist, mutatis mutandis, may do likewise. The result will be an ultimate dualism, which should no more contradict monism than system contradicts independence." Hitherto the axiom of system and that of independence have been regarded as opposed to each other. Idealists, assuming the first, have argued to the selfcontradictory character of the abstract part, while attempts to meet these arguments and solve the contradiction have proceeded by the denial of this axiom. What Mr. Sheldon proposes is to free the conception of the abstract and independent from contradiction, while at the same time maintaining the validity of the notion of system. Both axioms are final and ultimate: neither is to be subordinated to the other. This is possible because the seeming incompatibility and contradiction of these axioms rests upon a misinterpretation of logical laws.

I do not propose to follow in detail Professor Sheldon's argument, which I assume is already known to readers of the Review. But I shall confine myself to an examination of the presuppositions on which he bases his conclusions regarding the relation of realism and idealism.

In general, I agree with him in maintaining that there is no real contradiction between these standpoints when properly defined. To show their consistency, however, it is necessary to exhibit their inner relation and dependence. To leave them standing side by side, each possessing final truth, as "an ultimate dualism," is not to effect any genuine reconciliation. In purpose and spirit, Professor Sheldon's article may indeed be regarded as an important contribution towards a better understanding. Nevertheless, in spite of the non-partisan spirit of his discussion and the pains he has taken to state the arguments on both sides fairly, he has reached a conclusion in which it appears plainly impossible to rest.

This conclusion follows directly from the assumption, maintained from the outset, of the self-sufficiency of each of the axioms already referred to, which he names 'independence' and 'system.' The purpose of his argument is to show that these axioms do not exclude each other. What I wish to suggest is that the argument should have been carried further to prove that these axioms are positively consistent, in the sense of including and implying each other. In that case, of course, neither taken in isolation could have been regarded as absolutely and finally true. But, as I hope to be able to show, the merely negative reconciliation which is proposed is not only unsatisfactory in itself but rests on presuppositions whose inadequacy has been already revealed in the history of thought.

In order to prove that the idea of an independent or completed part is neither contradictory in itself nor excluded by the conception of 'system,' Mr. Sheldon considers first the demands of pure logic as expressed in the laws of identity and contradiction, "as valid quite independently of the nature of fact, and giving us absolute criteria of reality without regard to the given nature of things" (p. 54). This contrast between thought-in-itself and the nature of things is the real basis, as will appear later, of the 'ultimate dualism' of his result.

Mr. Sheldon's actual discussion of the laws of thought fortunately does not abstract altogether from actual experience. By means of concrete illustrations and examples he proceeds to show that thinking in its real use constantly involves and exhibits sameness and differences, and that novelties and diversities are not in themselves incompatible or contradictory. This result it would have been impossible to extract from the abstract form of the so-called "pure logical laws." Or rather, if one undertakes to discuss the meaning of these laws 'in the realm of pure thought,' one will deduce from them just what one has already put into them. Thus, for example, Mr. Bradley in the

first part of Appearance and Reality demands, in the name of consistency, absolute identity without a shade of difference. Mr. Sheldon, professing likewise to consider only the criteria furnished by pure thought, reaches the conclusion that identity does not exclude novelty and diversity. While this conclusion does not seem to go far enough in recognizing the necessary implications of identity and difference, it is nevertheless an important advance on Mr. Bradley's Eleatic form of rationalism. The point that I am here urging, however, is that Mr. Sheldon reaches his conclusions—and this I take to be a virtue rather than a defect of his method—because he has not altogether failed to look to experience and to interpret thought in its concrete working with experience. The procedure of his argument has been determined, to some extent at least, by inductive results and has not been determined wholly by supposititious a priori principles.

Nevertheless, the separation is assumed throughout the article, and the more concrete view which is at times adopted, perhaps because it has been adopted inadvertently—does not in the end suffice to overcome the consequences of that assumption. Just because of the separation of the realm of logic from that of fact, the discussion shows a constant tendency to regard identity and difference as external to each other. It recognizes, indeed, at least in words, the necessity of identity in difference, but these are not taken as genuinely interpenetrating each other, but rather as mechanically joined as identity and difference. It is this interpretation which appears to make possible the author's main thesis of the ultimate validity of both the system and the isolated part. Mr. Sheldon is rightly concerned to maintain the reality of what he calls 'the completed part.' He sees also that the part is demanded by the system, that identity is abstract and unmeaning without difference. What he does not appear to recognize is the complementary truth that an identity or system enters into and is a real constituent factor in what we call the part or the individual thing. It is on this point that his view differs from Hegel's conception of the concrete universal. The difference between the two views is not, as Professor Sheldon supposes, that Hegel denies the reality of the parts as over against the system, while he himself is concerned to retain them. That may serve to distinguish his view from that of Mr. Bradley. But Hegel insists no less on the reality of the parts than on that of the system. He maintains, however, that the relation is completely reciprocal, that each factor enters as an actual constitutive element into the other. Professor Sheldon, on the other hand, if I interpret him rightly, does not get beyond the mechanical conception of parts and system. The parts are indeed essential; for without them there could be no system; but the latter is in no way essential to the reality of the parts, which have an absolute and complete independence as over against it.

There are, indeed, certain statements in the article that seem to point to a different view,1 but the course of the argument seems to presuppose the interpretation I have given. This may be seen from the latter part of the article where he turns from the consideration of the laws of thought to show that, from the standpoint of actual concrete experience also, there is no contradiction in the notion of a complete and independent finite thing. The answer to the arguments brought against this view, he finds in the conception of the "completed infinite," a conception which has more than once been appealed to by realists in support of their position. I do not wish here to examine this conception in detail; but one may fairly ask, I think, for an example of a completed infinite outside the sphere of abstract mathematics. Moreover, if such 'completeness' can be exhibited, does it not involve and imply a 'system'? It is true that the relations are now internal, organic to the very nature of the thing itself. But this is quite different from an independence which excludes system, or which can be ultimate without any relation to it. The completed infinite idea, if it can be carried over at all from mathematics, seems to make directly against the doctrine of external relations, which it is supposed to support. But as this is somewhat apart from the point I am discussing, I turn to certain other statements in these paragraphs.

"All explanation," Mr. Sheldon tells us, "is identification" (p. 61). "A fact is grounded on another in so far as it is reduced to identity with that other" (p. 66). This has been assumed as an axiom by Bergson and James. But instead of concluding, as these writers do, that logic is therefore inadequate to experience, Mr. Sheldon goes on to show, in accordance with his discussion of the laws of thought, that in the process of discovering grounds novelties and diversities

¹ Thus on page 63: "Thought expressly demands both sameness and difference; to the most formal possible thought each is meaningless without the other." And on page 61: "On my hypothesis the diverse element is reduced, for no whit of sameness is excluded from it, yet at the same it retains its diversity." But how, if this is true, is it possible to abstract from the aspect of identity and to consider the thing merely in its aspect of diverseness? For certain practical purposes this may indeed be allowable; but if the identity enters into it as a real element, how can the element of diversity taken by itself be final and ultimate? Or to put the same question in other words, if the diversity is 'partially reduced,' why is it not necessary to consider that feature in order to reach a truth that is absolutely final?

may make their appearance without interfering with the grounding through identity. It seems evident, however, that he does not hold that the diversities are essential to the process of grounding or in any way contribute to it. That is effected through bare identity. "All explanation is identification." The differences have no part in the process, they are simply there as logical epiphenomena which are untouched by the bath of identity. It is true, as I have already noted, that there are sentences that seem to bear a different interpretation. We are told that, "Everything does, indeed, in accord with the axiom of system, imply an endless wealth of other things, even in its own internal make up." 1 The passage however continues: "But it does not contradict that implication to fix attention on the other side, the completeness by itself of the thing; for completeness does not exclude dependence, though it is other than dependence. What properties are revealed in the study of the thing regarded as complete by itself, will therefore be absolutely and finally valid of that thing—because its completeness is an absolute and final attribute of it. Hence when a philosopher investigates the meaning of any important object, such as a category, he should investigate it in two ways: (1) as part of a total system, bound up with other categories, deduced from and implying others, and (2) as restricted to its own field, independent of other categories but revealed by the nature of the objects alone to which it applies. The former is the idealistic, the latter the realistic method; and both should be equally final" (p. 67).

One might naturally suppose that the conclusion to be drawn is that neither of the above mentioned ways of studying an object is in itself final, and that such a view cannot be reached by employing seriatim and independently the two methods of investigation. It would seem to follow that the two methods must be combined, one being used to throw light upon the other. But for Mr. Sheldon the dual method is a necessity of the unmediated dualism in the nature of each thing. The nature of the system is contained in "the internal make up" of everything, but, alongside of this, there exists also its completeness, as "an absolute and final attribute of it." The two attributes do not interpenetrate,—they are merely in juxtaposition. 'Completeness is other than dependence.' Hence the knowledge of one attribute does not involve in any way the knowledge of the other. We may add together in an external way the two pieces of information, but they cannot be brought into any logical relation. Just so, as we have seen, the two real elements of the thing stand apart and so do

¹ I have added the italics.

not exclude each other. It is doubtless true that anything may indeed without contradiction stand in juxtaposition with anything else. It is only when the elements are combined into some kind of a system that contradictions and incompatibilities come into existence. All things, as Leibniz says, are possible, but not all are compossible. Where there is no unity there can be no exclusion, and conversely without exclusion no unity. Accordingly it appears that Mr. Sheldon has obtained freedom from contradiction for the disparate aspects of things by sacrificing the element of unity. The thing is constituted wholly by a sum of parts or attributes which do not interpenetrate and therefore give rise to no real unity. Without the idea of unity, however, how can we speak of things, or attributes or aspects at all? The conception of system or unity which is recognized as obtaining between things is equally necessary within things to express the reciprocal dependence of their constituent parts. If we are obliged to recognize that concrete things are connected and interdependent, then a fortiori it seems impossible to think of the aspects or attributes of things as related only in a mechanical and external way. Mr. Sheldon's puzzle is to understand how the finite part and the system can both be real. And he has solved it by dividing things into two elements or attributes which do not exclude each other, but which have no positive relation or dependence. In virtue of one of these elements, each thing is in itself complete, in virtue of the other, it is dependent and finds its completion in a system. This, of course, is simply an ingenious way of retaining a mechanical mode of explanation, and is exactly analogous in principle to the procedure of physical science when, in order to explain change, it resolves a concrete thing into unchanging elements. unsatisfactory character of the solution seems therefore to depend upon his conception of identity and difference as external to each other, or at least as not interpenetrating and organic.

Moreover, as I stated in the earlier part of this paper, this interpretation of identity in difference is the consequence of an unfortunate separation of thought and the laws of thought from concretely experienced facts. For, when this separation is made, the principle of identity seems to express the nature of the procedure of thought, while the differences fall outside it, belonging to the concrete empirical order of fact which is ascertainable by observation only. Mr. Sheldon speaks, indeed, of thought 'demanding differences' and as 'pointing beyond mere thought.' Nevertheless, this demanding and pointing does not actually unite it with its 'other.' "For the difference, the uniqueness, the novelty, of each object of thought, while

implied by the very demands of thinking, whose nature as it is in itself thought cannot ascertain. As a matter of fact, only observation can do this. But even if observation does not, there is no contradiction present. Though thought points beyond itself, we are not driven out to observation by the goad of a contradiction. Thought is consistent enough internally even while it implies that there is more beyond. The only contradiction which could enter here would be that thought does not depend on observation for its filling-out. It can ignore observation without inconsistency, but it cannot deny the truth of observation. Viewed as independent, it has no fault in itself; viewed as dependent on experience, it becomes enriched. latter gives a larger, but no truer result" (p. 63). Thus we have the two orders of truth standing apart, each without any necessary relation to the other. Thought "depends on observation for its fillingout," but in its own field is perfectly consistent and independent. Consistency is a criterion which in no way involves completeness of empirical fact. The two kinds of truth can be taken successively or added together, but they do not enter into each other. But this is surely only another form of the Rationalist doctrine of the separation between 'truths of reason,' based on identity, and 'matters of fact' guaranteed to us by experience. True, Mr. Sheldon insists that the two realms are not contradictory, and that both points of view should be recognized. The same, however, is also true of Leibniz and his successors: Wolff, for example, works out a parallel series of rational and empirical sciences.

My main purpose in this discussion has been to bring to light the presuppositions of Mr. Sheldon's argument. If I have interpreted him correctly, the whole movement of the history of philosophy from Kant on furnishes the best commentary of the position he advances. For the most valuable result of that movement has been the formulation of the conception of the concrete universal and its application to the various problems of experience. The opponents of idealism at the present day have not generally recognized the full significance and bearing of this category, nor realized how completely it has rendered obsolete many of the problems of the older systems. If Mr. Sheldon is to defend his position, he must discuss and come to terms with the claims of this historical point of view.

J. E. CREIGHTON.

REALISM AND THE EGO-CENTRIC PREDICAMENT.

Mr. Perry's article on "The Ego-centric Predicament" has been frequently referred to in such a way as to indicate that many regard it as pointing out a plight which realists inevitably share with idealists.² To quote from Mr. Dewey: "To my mind, Professor Perry rendered philosophic discussion a real service when he coined the phrase 'egocentric predicament.' The phrase designated something which, whether or no it be real in itself, is very real in current discussion, and designating it rendered it more accessible to examination. In terming the alleged uniform complicity of a knower a predicament, it is intended, I take it, to suggest, among other things, that we have here a difficulty with which all schools of thought alike must reckon; and that consequently it is a difficulty that can not be used as an argument in behalf of one school and against another. If the relation be ubiquitous, it affects alike every view, every theory, every object experienced; it is no respecter of persons, no respecter of doctrines. Since it can not make any difference to any particular object, to any particular logical assertion, or to any particular theory, it does not support an idealistic as against a realistic theory. Being a universal common denominator to all theories, it cancels out of all of them alike. It leaves the issue one of subject-matter, to be decided on the basis of that subject-matter, not on the basis of an unescapable attendant consideration that the subject-matter must be known in order to be discussed. In short, the moral is quite literally, 'Forget it,' 'Cut it out' " (pp. 547-8).

Mr. Dewey's interpretation of Mr. Perry's paper is on all points but one the interpretation that I put on it; but this one point is so important that I should like to set it before the readers of Mr. Dewey's paper.³ I do not understand Mr. Perry, in terming the alleged com-

¹ Journal of Philos., Vol. VII, pp. 5 ff. The references to Mr. Perry, except as otherwise stated, are to this article.

² Mr. Bush's "The Problem of the 'Ego-centric Predicament,'" Journal of Philos., Vol. VIII, pp. 438-439; and Mr. Dewey's "Brief Studies in Realism," II, ibid., Vol. VIII, pp. 546 ff., are two of the more important papers in which this bearing of the problem is enforced. The subsequent references to Mr. Dewey will be to the article just mentioned.

³ This interpretation is not presented primarily as an exposition of Mr. Perry's position, but rather as a statement of a meaning which his words may bear. If Mr. Perry did not intend them to be taken in this sense the purpose of my present

plicity of a knower a predicament, to suggest that we have here a difficulty with which all schools of thought alike must reckon. On the contrary, he seems to suggest that we have here a difficulty only for idealism, and for idealism only "in so far as that theory is established by an appeal to the ego-centric predicament" (p. 5). In short the position of the paper is not that the predicament is an unavoidable one, but that it is unavoidable only if a certain method be pursued. "My contention," says Mr. Perry, "is that it [i. e., ego-centricity] proves nothing; or rather that it proves only the impossibility of using a certain method to solve the problem [of discovering the precise nature of the modification of a thing in its becoming known]. In other words, it is not an argument, but a methodological predicament" (p. 8, my italics). It is a predicament which goes with and only with one of the methods used by idealism to prove the truth of idealism. And Mr. Perry's moral is quite literally, 'Forget that method,' 'Cut that method out.'

It should be very clear that Mr. Perry's argument has one bearing on philosophical issues if my interpretation be true; and that, if Mr. Dewey's interpretation be true, it has another and a totally different bearing. On Mr. Dewey's interpretation the 'ego-centric predicament' is one from which the epistemological realist can not extricate himself, and the best he can do is to ignore it. According to my interpretation, it is a predicament which any one can avoid by refusing to use the method of which it is the necessary result. According to one interpretation the ego-centric predicament makes the position of the realist analogous to that of the 'foodist' in Mr. Dewey's striking illustration (pp. 549-550). According to the other interpretation, it makes the position of the writer of the paper exactly the same as that of Mr. Dewey when the latter says "that there is no terminus to such a discussion" (p. 550) as that between the 'foodist' and the 'eaterist.' According to one interpretation realist and idealist alike depart from a "common premise" accepted by both alike (p. 549). According to the other, the realist is using an argumentum ad hominem; the idealist's premise is not accepted by the realist, but is denied.

There is just one fact that seems to militate against my interpretation, but that fact appears again and again in the paper, making my interpretation appear not only mistaken, but obstinately mistaken.

discussion is not defeated; for the problem is whether a realist is *necessarily* involved in the ego-centric predicament when he recognizes the presence of consciousness in every experience. I present my interpretation therefore as one which I must place upon Mr. Perry's words if I am to accept the conclusions of his paper as sound.

The fact to which I refer is that Mr. Perry considers the circumstance he calls the ego-centric predicament an indisputable fact (p. 5). Is this not accepting the idealist's premise? I think not, but I must show why I so think.

Mr. Perry accepts "the fact that $R^c(E)$ can not be eliminated from one's field of study, because 'I study,' 'I eliminate,' 'I think,' 'I observe,' 'I investigate,' etc., are all cases of $R^c(E)$. In short $R^c(E)$ is peculiarly ubiquitous. There can be no question concerning the fact. . . . But we are left in doubt as to what the fact proves . . ." (p. 7). But what is $R^c(E)$? The reply that first suggests itself to the reader is that R^c means "any form of consciousness that relates to an object" (p. 6). If this reply furnishes the only key to the understanding of what Mr. Perry accepts, then Mr. Dewey is justified in regarding him as an 'epistemological' realist, *i. e.*, one who contents himself with the trivial assertion: "To be a mind is to be a knower; to be a knower is to be a knower-of-objects. Without objects to be known, mind, the knower, is and means nothing" (p. 550).

But a more careful examination of the paper should make one pause here. Does Mr. Perry commit himself to the view that Rc means "any form of consciousness that relates to object"? It is well to bear in mind the context in which this meaning is given to R^c . "What I mean by ontological idealism," says Mr. Perry, "is best expressed by the proposition: Everything (T) is defined by the complex, I know T. For the purposes of this proposition, the 'I' is in no need of any definition beyond what it contains from its being the initial term in this complex. In order to make it plain that the term is generalized, I shall substitute ego, or E, for the pronoun. The term T is primarily distinguished from other terms only in that it has unlimited denotation; it refers to anything and everything. It is desirable that the operation or relation 'know' should be freed from its narrower intellectualistic meaning; and it will, therefore, prove convenient to use the expression R^c , to mean any form of consciousness that relates to an object" (pp. 5-6). The words I have italicized, "For the purposes of this proposition," seem to indicate that when Mr. Perry defined the meaning of R^c to be "any form of consciousness that relates to an object," he was giving this meaning as the one which this symbol must be taken to bear in the proposition which expresses the idealistic doctrine that every object is defined by its relation to the subject or ego. As Mr. Perry is known not to be an idealist, it would seem that, when later he says he accepts the fact that $R^{c}(E)$ is ubiquitous, this accepted fact should be regarded as accepted in a way not inconsistent with his realistic views, unless such an interpretation of what he says is made impossible by other things he says. For surely it is one thing to accept a fact; it is another thing to accept a particular interpretation of a symbol which is used to express this fact. It is hardly fair to identify the two acceptances.

Now I can not but feel that the words with which the article concludes should be taken into account, when we try to decide what Mr. Perry accepted when he accepted the fact $R^{c}(E)$ as ubiquitous: "But we may still have recourse to that analysis of all the elements of the complex, of T, E, and R^c , which would be required in any case before our conclusions could assume any high degree of exactness. Having discovered just what an ego is, just what a thing is, and just what it means for an ego to know a thing, we may hope to define more precisely what transpires when a thing is known by an ego. And until these more elementary matters have been disposed of we shall do well to postpone an epistemological problem that is not only highly complicated but of crucial importance for the whole system of philosophical knowledge" (p. 14). I may remark by the way that this does not read like a warning served in a controversy by one side on the other "not to depart from their common premise" (Dewey, p. 549). It has rather the appearance of a warning served by the author on the reader that Re may upon analysis not prove to be what the predicamented idealist thinks it is, namely, a "form of consciousness that relates to objects." The mention of the three problems, "just what an ego is, just what a thing is, and just what it means for an ego to know a thing"-problems which are here represented as requiring investigation by the method of analysis -points back to the second paragraph of the article, from which I quoted a moment ago: "What I mean by ontological idealism," etc. It is made quite apparent, to me at least, that the 'I' or E, which for the purpose of the idealistic proposition "is in no need of any definition," in Mr. Perry's opinion does require further analysis. Likewise it is made quite apparent that the idealistic interpretation of Re, as "any form of consciousness in relation to an object," is unsatisfactory to Mr. Perry, else further analysis of Re would not have been called for. This very demand for further "analysis of all the elements of the complex, of T, E, and R^{c} " seems to prove that when Mr. Perry accepted the fact $R^{o}(E)$ he did not accept a premise common to idealism. The idealist converts this fact, accepted by both realist and himself, into a premise for his idealistic conclusion by giving a certain interpretation to this fact. It is

only the fact as thus interpreted that can serve as such a premise, and it can so serve only when a further premise is used, namely, that this particular relation Rc, thus interpreted, must be "taken to define, exclusively and exhaustively, all the connections" between the terms thus related (Dewey, p. 550). This latter premise is one that Mr. Perry expressly repudiates. Let us recall his own words. Some six months after the publication of "The Ego-centric Predicament," Mr. Perry contributed to "The Program and First Platform of Six Realists." In this Program he says: "The same entity possesses both immanence, by virtue of its membership in one class, and also transcendence, by virtue of the fact that it may belong also to indefinitely many other classes. In other words, immanence and transcendence are compatible and not contradictory predicates. In its historical application, this implies the falsity of the subjectivistic argument from the ego-centric predicament, i. e., the argument that because entities are content of consciousness, they can not also transcend consciousness: it also implies that, so far as based on such subjectivistic premises, the idealistic theory of a transcendent subjectivity is gratuitous."

This means that when T stands in the complex $TR^{c}(E)$ it has 'immanence'; but when this same T stands in some other complex TR^nT' , it has 'transcendence' with respect to the former complex. This may be illustrated by the fact that a man may have immanence in a family, by virtue of his membership in the family, and also transcendence of that family, by virtue of the fact that he belongs to various other organizations, such as the Republican Party, a country club, and the Society for Psychical Research. Transcendence of family by the possession of connections that are not family connections does not involve forfeiture of family connections. Nor are these other connections,—accessory and adventitious so far as his family connections are concerned,—to be "defined, exclusively and exhaustively," by his family status. In the same way the fact that T belongs to a consciousness complex does not preclude it from belonging to other complexes, and the status it has in these other complexes is not to be defined, exhaustively and exclusively, by reference to the consciousness complex to which it also belongs. "An entity possesses some relations independently of one another." For this reason "the subjectivistic argument from the ego-centric predicament" is declared by Mr. Perry to be invalid; that argument assumes that "because entities are con-

¹ Journal of Philos., Vol. VII, pp. 393 ff. The passages which I quote are on p. 398.

tent of consciousness they can not also transcend consciousness." In face of such a statement by Mr. Perry, it is somewhat amusing that Mr. Dewey, whose position has been so frequently misconstrued just because it has been interpreted subjectivistically, should suggest that Mr. Perry's doctrine is a conclusion from a subjectivistic premise held in common with the idealist. It is quite true that Mr. Dewey does not say explicitly that he is referring to Mr. Perry, but the reader who finds that Mr. Dewey's second "Study" begins with a reference to Mr. Perry's "ego-centric predicament" is likely to remain under the impression that it is Mr. Perry and realists of his ilk that Mr. Dewey has in mind when he likens "realists" to "foodists."

In this paper I purposely avoid further discussion of the bearing of the 'ubiquity' of consciousness upon realism. I do this because I suspect that the realists who so far have developed views that are in agreement will find themselves differing from each other very considerably on this point. These differences will have to be threshed out among themselves, with the help of criticism from others. But this criticism from others will not help them if it is based on a misunderstanding of what they agree upon, and on a mistaken supposition that they are in the same predicament with the idealist who appeals to ego-centricity.

EVANDER BRADLEY McGILVARY.

UNIVERSITY OF WISCONSIN.

DR. JORDAN AND SPENCER'S UNKNOWABLE.

DR. JORDAN'S article in a previous number of this REVIEW¹ has been brought to my notice. I regret that I have not seen it sooner because, in that I appear to be the only living philosophical writer who maintains the essential soundness of Spencer's work,² and as, moreover, Dr. Jordan specifically refers to me as an example of those who refer to him "ignoring the fact that these (Spencer's) special views either have no relation to, or contradict the fundamental principles upon which they are supposed to depend," his remarks certainly call for a brief reply.

But if Mr. Jordan is good enough to refer to me, he might do me the honor to notice what I said. I do not ignore anything, that is anything relevant. If he will read my article through once more, he will find that I have given reasons for my opinion that the Formula of Evolution, and, inferentially, the whole of the philosophy, is absolutely independent of what Mr. Jordan is pleased to call the fundamental principles, i. e., the doctrine of the Unknowable.

Dr. Jordan, on the other hand, appears to consider the Unknowable, the essential foundation of Spencer's system. The question, then, arises which of us has interpreted Spencer correctly. On this question the one individual who ought to know what Spencer meant is Spencer himself. And Spencer has taken special care to correct the misinterpretation which Dr. Jordan repeats. In the final edition of First Principles, there is a postscript, from which it will be sufficient to quote the following:—

"But now let it be understood that the reader is not called upon to judge respecting any of the arguments or conclusions contained in the foregoing five chapters, and in the above paragraph. The subjects on which we are about to enter are independent of the subjects thus far discussed, and he may reject any or all of that which has gone before while leaving himself free to accept any or all of that which is now to come. . . . Unfortunately I did not see that part I would be regarded as a basis for part 2 . . . very many have, in consequence, been prevented from reading beyond this point" (and so on).³

¹ Vol. 20, p. 29 seq.

² Cf. This Journal, XIX, p. 3; International Journal of Ethics, July, 1910, April, 1911; Mind, Jan., 1910.

³ First Principles, final (English) edition, pp. 109-110.

It would thus be possible for me to agree with the greater part of Mr. Jordan's criticisms, and yet to inform him that his whole discussion is irrelevant. In his first sentence he says:- "Spencer's philosophical doctrines have been shown contradictory often and thoroughly enough." Then why do it again? Philosophical apparently means the doctrine of the Unknowable. Mr. Jordan, I suppose, would not regard the coördination of positive knowledge as philosophy. If that is his standpoint, I would certainly advise him to leave Spencer alone. He does, as a matter of fact, refer very largely to the Psychology, but it is, perhaps, allowable to suggest that, if he reads that work with the bias that there is essential connection, where Spencer has informed him there is none, he may, possibly, not obtain from it the meaning it was intented to convey. That, however, is by the way. Dr. Jordan might, perhaps, have taken the line that, although Spencer was of opinion that the rest of his philosophy was independent of the Unknowable, he was mistaken, and that the remainder will not stand without such collateral support. But then he does not say so. He gives no reasons for thinking so. He is merely pleased to assert that the philosophy is based on the Unknowable. As a matter of fact, a philosopher of much greater note than Mr. Jordan, Professor James Ward, has taken that line. My own essay was, in large measure, an attempt to prove that the blunders rested with Professor Ward, with what degree of success it is not for me to say.

This, I think, is sufficient answer to Mr. Jordan. But it is as well to add that I do not thereby admit the truth of his criticisms, even on the Unknowable. But, here at least we reach a sphere where a number of interpretations are possible, and I can hardly maintain my own interpretation against possible difference of opinion, until I have had an opportunity of stating it. It is not possible to attempt any exposition of Spencer's Unknowable in a brief note. But I should not like readers of this journal to consider me as an example of those who ignore fundamental connections. It is, therefore, necessary to say that an article interpreting that section of Spencer's work, in the light of the other sections that have already appeared, was offered to this REVIEW, but was not published on the ground that, unless seen in the setting of the book of which it was a part, it was liable to misinterpretation, a criticism which will show that I can hardly be cited as an example of the fallacy Mr. Jordan appears to have found in some writers.

I would suggest, therefore, that those who undertake to criticize and to interpret Spencer's philosophy, would do well to pay more attention to the ten bulky volumes which constitute his coördination of natural knowledge, rather than to the minute fraction of one volume, insignificant in bulk and unessential in content, designated "The Unknowable."

H. S. SHELTON.

ASHFORD, MDDX., ENGLAND.

REPLY.

In my article on "Spencer's Unknowable" I was not concerned so much with the value or usefulness of the fundamental principles for the special sciences, as with the logical consistency of the principles themselves and with the logical method employed in establishing them. In that article I maintained that the Unknowable is an illegitimate conception; that it is not negligible because of the fact that it vitiates other results reached by the method which Spencer employs to establish it; that that method is faulty in both its psychological and logical aspects. I attempted to show that, by following Spencer's method in its psychological aspect, any psychic fact may be elevated to the dignity of a 'principle'; and by following the method in its logical application—in Spencer's argument for the relativity of knowledge—it is found to require supplementation. Under this completed form of the method, 'relativity,' instead of establishing an ultimate unknowable relatum, turns out to be the principle of interrelatedness or systematic connectedness of all reality; and with this as a completed principle, the Unknowable would have to be regarded as the negative factor which postulates a universal scepticism. Mr. Shelton's criticism, therefore, as inspired by the belief in the negligibility of the Unknowable and the value of the Spencerian principles for the special sciences, is entirely irrelevant to my argument, and therefore calls for no reply.

I have to confess that I did not see the final English edition of the First Principles, but assumed on the strength of the statements of the reviews that it contained no essential changes. The statement which Mr. Shelton quotes is certainly not important. Even though the content of the five chapters mentioned may be, as a result, "independent" of what follows, yet this independence constitutes a logical fission which Spencer himself was not able to bridge over. That is, as a ground for the operation of his method, as clearing away the debris for the expedition of the process of coördination of positive knowledge, these five chapters have to be considered. But it is agreed that their importance, though not negligible, is negative, since it vitiates his method; hence it has for this reason to be refuted.

E. IORDAN.

REVIEWS OF BOOKS.

The Realm of Ends: or Pluralism and Theism. By James Ward. New York, G. P. Putnam's Sons. Cambridge, England, University Press, 1911.—pp. xv, 490.

The general argument of Professor Ward's latest volume of Gifford lectures rests on the conclusions of the earlier one, Naturalism and Agnosticism. Concrete experience is a duality-in-unity which involves a spiritualistic monism. The fundamental contrast in experience is, not that of mind and body, but that of subject and object or self and not-self. And, in this contrast the object is probably always another subject, consequently, the world of experience means an organization of selves or subjects. By monism he means here a qualitative spiritual monism or panpsychism. Professor Ward's metaphysics has most affinity with Leibnitz' Monadology, but there are very important differences. The indefinite plurality of subjects or monads of Ward's theory interact, and their development is a process of creative synthesis, not of unfolding. The world of monads has a real history, and its evolution is an epigenetic process, in which the new is not the mere explication of the old. Evolution is a cumulative and creative process in which "subjects" are the agents. Reality is a Realm of Ends, a progressive and purposive process, in which the ends of the individual members are realized as parts of the system of ends which belongs to the whole society of finite subjects. The lower limit of this plurality of monads may be regarded, physically, as the mass-point or center of force, psychically, as a momentary consciousness devoid of memory and recognition. The starting point for philosophical construction, Professor Ward insists, must be a pluralistic universe of individual centers of force and appetition. the individual element there is actual development, qualitative change, and contingency. Consequently, the course of the whole process cannot be adequately expressed in a series of equations of identity. Change means, when taken either on the cosmical scale or that of the individual's growth, creative novelty. The standpoint for the determination of reality is historical and social. The "laws" of exact science are only statistical averages. They are relatively truer expressions of the habits of behavior in lower monads than in man, but nowhere are they adequate and precise expressions of the

course of reality, since this is, at all levels, the result of individual and psychical activity.

Professor Ward holds that there is no contradiction or inherent inconsistency in the purely pluralistic notion that the only unity in the universe is that of the mutual intercourse of the whole society of finite monads. It is possible to maintain that the totality of the real is just a vast society of individual beings in relation. But such a standpoint involves the admission of two limits—the upper limit of a possible Supreme Spiritual Unity to account for the apparent unity of direction in evolution and to furnish a ground for the belief in a final harmony and unity of ends, and the lower limit of an originating. ground of finite individuality. In a final synthesis these two limits would coincide in the notion of a cosmical unity of ends conceived as the Primum Movens. Voluntaristic pluralism may, indeed, deny the need for such a Supreme Unity. There would, however, remain, in any case, two fundamental difficulties for any form of pluralism of the panpsychistic type. First, it would be committed to the belief in individual preëxistence. Birth and death would be phenomenal and could not be regarded as altering the individual. Heredity would be "so much habit or memory." In the higher organisms, at least, we have to suppose a dominant or "soul" monad which rules a whole hierarchy of inferior monads. Now, in this dominant monad there is no conscious memory of its antenatal life. The inheritance of acquired characteristics and a real development of the individual do not square with the theory of preëxistence. "On the whole, it seems best to regard the organism on its psychical side as simply the Anlage or primary medium of the soul's life; this medium is its heritage, but how it comes by it we do not know" (p. 211). In regard to death, pluralism fails to afford any insight as to how the values acquired by the individual are conserved. "What of all this progress if we are forced to say of all the individuals concerned that one labours and another reaps the reward" (p. 214). Turning to metaphysical difficulties in pluralism the chief of these is found to be, not, as is usually argued, the impossibility of conceiving how interaction is possible between finite selves, since all interaction may be immediate rapport, but pluralism's failure to supply a teleological unity and continuity or sustaining ground of values for the historical evolution of the Many. Theism meets this difficulty. If we suppose the Many to be the creation of God, then he is the originating and sustaining ground of their lives, the purposive ground of the evolutionary process, and the Conservator of the values achieved by persons.

Professor Ward manfully faces the difficulties in the concept of creation. It cannot mean production out of nothing, nor can it be conceived as either transeunt or immanent causality in the sense in which these categories are applied in the empirical order. Creation means that God is the ground of the world's being. We may find, in the creative work of a human genius, an analogy to that intellective synthesis by which the Creator works. God is the Absolute Genius—the World Genius. Genuine creation of beings who are to achieve real self-initiated development implies the Creator's self-limitation. Hence, as ground of the world, God limits himself. He is not a mere primus inter pares in his pluralistic universe, but the act of his creation thereof is at once self-expression and self-limitation.

The problem of freedom in relation to theism is next discussed. The most important part of the discussion is concerned with the reconciliation of self-determination with divine foreknowledge. If the filling of the time-process is eternally decreed, then, says Professor Ward, necessitarianism is unavoidable. His position is that if God be a Creator, he creates creators. Hence he will have foreseen and determined the possible limits for the operation of human freedom. But if man be a really self-determining being, God cannot know future events in the sphere of human volition as we know past events. He may know the limits within which all finite volitions move, but he cannot know what is now a future event in this order as fait accompli. Hence God cannot know, in one completed timeless or eternal insight, every event in the actual time world. In this connection Professor Ward gives a very pertinent and effective criticism of Professor Royce's attempt to combine the freedom of the finite with the totum simul of his Absolute's eternal knowledge. Mr. Ward points out as significant, that Mr. Royce affirms eternal knowledge of the Absolute and denies of God temporal foreknowledge. In an appendix on the "Temporal and Eternal" he distinguishes three meanings of the Eternal: (1) formal or negative eternity, the timelessness of abstract truth; (2) ontological eternity, which means that experients are, in a sense, out of time but functionally related thereto; (3) axiological eternity or the conservation of values in the time process. The first meaning sheds no light on the nature of a concrete spirit's eternal character. The second meaning does, indeed, suggest that God may be not subject to time but functionally related to the temporal order. The third meaning alone gives us a positive insight in God's existence as the permanent ground of values.

There is a very full discussion of the Problem of Evil, Pessimism,

and Optimism. It is pointed out that the pessimism of Schopenhauer and von Hartmann rests upon a hedonistic conception of the Good. If the presupposition be denied, and Professor Ward denies it, the force of their argumentation is dissipated. The view that there is "metaphysical evil" means that there are certain limitations and imperfections involved in the being of the world. This form of pessimism implies that God might create a wholly indeterminate universe and that omnipotence is taken to mean that he might, for example, make two and two equal five. But any sort of world must have a determinate character. In no intelligible sense can it be said that God is a determinate being and, at the same time, that he could create any and all sorts of indefinite possibilities. As to "physical evils" Dr. Ward argues that in an evolving world, which grows through the self-determining acts of individuals, there must be flux. "A world perfect—in the sense of finished and complete at once—is a contradiction" (p. 351). "Even if there be a God he certainly has not made the world what it is to be, but rather endowed it with talents to enable it to work out its own perfection in conjunction with himself" (p. 356). Contingency is inseparable from evolution. The same principles hold true in regard to "moral evil." There is no cosmical power of evil. Moral order and moral evil originate, as does man's rationality, in the social historical life. The possibility of moral evil is involved in man's development as a self-determining agent. The actual existence of moral evil is incompatible with genuine theocracy only if God be its sole author. The tragedy of the world may be, Professor Ward suggests, after all a Divine Comedy.

Passing to the discussion of Immortality Dr. Ward insists that the chief argument therefor is the moral one, as stated by Kant. Only personal continuity can meet the moral demand for continuity of character. Hence continuity of memory and environment seem both to be essential postulates. The ancient doctrine of Transmigration provides for continuity of environment at the expense of continuity of personal memory, the Christian doctrine of Transfiguration secures the latter at the cost of the former. He suggests a possible combination of the two theories.

Belief in a future life and in God are moral postulates. This situation raises the issue of the relation of faith and knowledge. Professor Ward argues that in the actual evolution of life in nature, as in the individual life, progress has depended on faith. "We shall find that almost every forward step in the progress of life could be formulated as an act of faith—an act not warranted by knowledge—on the part

of the pioneer who first made it" (p. 415). Several striking instances from the biological record are given of this principle. "Life is primarily active, not contemplative; and thus it is only while striving for what is good that we learn what is true" (p. 419). This faith is not irrational. It is rational, since it is progressively justified by the event. "We may call it faith, but we cannot call it irrational, to believe that the world has a meaning and a meaning for us" (p. 420). "Either the world is not rational or man does not stand alone and this life is not all. But it cannot be rational to conclude that the world is not rational, least of all when an alternative is open to us that leaves room for its rationality—the alternative of postulating God and a future life" (p. 421). It may be objected that where there is room for faith there is room for doubt as well. This, says Professor Ward, is only a special form of the objection that may be raised to an evolving world as such. But, so long as we live in such a world the objection is selfcontradictory. If we could intuit our world sub specie æternitatis the objection would disappear. "The fact that knowledge has to grow from more to more is so fundamental and universal a characteristic of our evolution, that it is very doubtful if we can form any clear concept of an experience that develops at all developing on other lines" (p. 424). We have, then, a right to believe that the universe is a realm of ends, that in detail these ends are worked out through the lives of created and, in part, selfdetermining selves, that the process of their working out involves contingency as well as stability, that God is the Unitary Ground of the World and the Sustainer of Spiritual Values. "In such a realm of ends we trust that 'God is love indeed and love creation's final law" (p. 453).

There is a digression of two chapters on Hegel. Dr. Ward finds in Hegel two inconsistent strains—a pluralistic strain with unity as the result, and a panlogistic strain with all apparent development merely the phenomenal unfolding of the timeless Absolute Idea which is the sole reality. There are several supplementary notes, besides the already mentioned one on the Temporal and the Eternal. Most important of these is perhaps that on "Relation of Body and Mind." In this he reiterates the view that function determines structure and gives further arguments for his psychical monadism or panpsychism.

This panpsychism seems to me to be precisely the least adequately argued of Dr. Ward's theories. I am just as much in the dark as before as to how a momentary consciousness without memory develops into a unitary and continuous mind, or as to what positive grounds there are for the assumption that the inorganic realm is made up of

these momentary consciousnesses. I do not regard the law of continuity as in itself a sufficient ground apart from specific evidence. It seems to me that the emphasis on the epistemological co-relativity of subject and object affords no sufficient ground for the assumption that the object is always another subject, the not-self another self. If there be a Creator, God, I find that it puts no more strain either on my conceptual powers, or my power of believing, to assume that he creates non-psychical centers of force than it does to assume that he creates finite minds. Moreover, it appears to me that it is a simpler and not less intelligible hypothesis to suppose that non-mental objects interact with minds, than to assume that every apparent case of such interaction means that a mind knows its own subordinate or body monads directly, but knows another mind indirectly through the interaction of its monads with those that are subservient to that other mind. Why then should this gap exist between the cases in which I am sure (unless I am a thoroughly sophisticated panpsychist) that I am interacting with a mindless body and the cases in which I am sure that I am interacting with other minds? On epistemological grounds I find that the problem of self-transcendence does not differ in character and difficulty whether the not-self be mind or body. The argument from the epistemological subject-object relation settles nothing in regard to the nature of the object. If I can know another mind directly why cannot I know a body directly? If I can only know another mind indirectly through the medium of a body the assumption that body is psychical is superfluous. What has one really explained by calling a body a complex of souls? Are not the analogies drawn between the behavior of inorganic things and of minds so vague as to be valueless? Habit, routine, statistical averages, etc., seem to me to be loose metaphors in this connection. Is not our very concept of mind dependent on its contrast with that of body? The panpsychist should seriously undertake to tell us what, in the inorganic realm, corresponds to the unity of a conscious self. Is not the fact that panpsychism is a recrudescence of primitive animism a pretty serious objection, in view of the fact that progress in knowledge has meant differentiation of phenomena? I do not find any necessary connection between Dr. Ward's Theism and his panpsychism. believe that the former can stand on its own feet.

There is nothing very novel in the general results, but the whole spirit and substance of the book is admirable. One expects from Dr. Ward a masterly command of the classical literature and one is not disappointed. Learned, candid, fair and openminded, full of quotable

savings, rising frequently to a high level of insight into the philosophy of man and of his history and to a dignified eloquence of expression, the book gives one great pleasure in the reading. I have found his discussion of the functional relation of selves to time vague and unsatisfactory. And I think that Dr. Ward would admit that his treatment of the problem of evil leaves it still a pretty dark mystery. On the other hand, the treatment of the epigenetic character of evolution, and of the social historical origin of rationality, moral order, and moral evil are excellent. His statement of a pluralistic Weltanschauung as starting point is the sanest and best balanced that I have yet seen. His method of advance from pluralism towards the conception of God as the ground of the unity of direction in evolution and the principle of the conservation of human values seems to me the only fruitful method for a theistic metaphysics to-day. Professor Ward has produced a notable contribution towards the clarification and justification of a religious world-view. There is much in the spirit of the work that reminds one of Kant's Critique of Practical Reason. On the whole Dr. Ward's world view would be least erroneously described as Leibnitz' Monadology cleared of its inconsistencies and made to square with epigenetic evolution.

J. A. LEIGHTON.

THE OHIO STATE UNIVERSITY.

Gesammelte Werke. By A. Spir. Band I, Denken und Wirklichkeit; Versuch einer Erneuerung der kritischen Philosophie. Vierte Auflage, hrg. von Helene Claparède-Spir. Leipzig, Barth, 1908.—pp. xxx, 547.

Though this is the fourth edition of an extensive work on metaphysics and the first volume, tardily delivered for review, of the second edition of the author's collected writings, the philosophy of African Spir seems to be generally little regarded and in the English-speaking world at least practically unknown. Yet Spir was an original and systematic thinker who wrote in a style animated and clear. The biography, written by his daughter, the wife of the psychologist Claparède, of Geneva, and the portrait prefixed to the present edition of his chief work, reveal a nature singularly gentle and refined, modest and retiring. Spir was a conscientious truth-seeker, but lonely and unappreciated. He was born in South Russia in 1837. In early life he experienced a religious crisis and wanted to devote himself to theology, but he followed for awhile instead the career chosen for him by his family and served, at the age of eighteen, as second lieutenant on

one of the Russian ships defending Sebastopol. Shocked by the horrors of the war, he resigned his commission and went home. His father dying shortly afterwards, he came into the inheritance of extensive estates and many serfs. The serfs he set free, giving them at the same time housing and land for cultivation. He himself led a simple, quiet life in the study of philosophy, in the pursuit of which he spent two years in foreign travel. From 1867 on he settled down in Germany, having sold his estates and given away a large part of his property. He died in Geneva, a victim of influenza, in 1890. His writings include a dozen volumes, in which he sought to express with ever increasing clearness the depth and range of his moral and religious convictions in harmony with the metaphysical foundations of his system.

The aim of philosophy, according to Spir, is not to explain things, but to know them as they truly are. Its method is twofold, first, to establish the facts immediately given, secondly, to draw the simplest and obvious conclusions. This was the method of Hume, which in his hands led to scepticism. This was due to his failure to take account of the facts and implications of thought. If thought has a nature of its own, a nature not derived from experience, it may itself supply the norm of reality. The first task of philosophy, then, will be to investigate the laws of thinking; if in doing so we discover the norm of reality, we shall at the same time accomplish the other chief task of philosophy, namely, to know the given objects as they truly are.

This, then, is Spir's method, the 'critical' method, as indicated in the subtitle of the present volume. But though suggesting the method of Kant, the procedure and results are actually very different. Kant's peculiar doctrines, together with the whole elaborate machinery of his deductions, are rejected, the main and almost only point of agreement being the recognition that the fundamental laws of thought are a priori. In effect, Spir's method is very simple. It consists in the discovery and application of the norm of reality in the a priori law of identity. His whole system is professedly based on this law. It is not surprising, therefore, to find it closely resembling in its essential features the philosophy of Parmenides. The Eleatic metaphysics was also based on the abstract principle of identity; hence it was concluded, that being, or what truly is, is simply being, with no element of non-being, and accordingly is one, changeless and eternal. On this assumption the phenomenal world necessarily appears as an illusion. Spir concludes similarly that reality is a simple, self-identical and changeless unity and that the world of experience, including the self, is an organized illusion. We can see that it is an illusion because it fails to agree with the law of identity, but we have no insight into its connection with the true reality. This result is opposed alike to pantheism, theism and every doctrine which professes to 'explain' the world, but it has the advantage, in the author's opinion, of fulfilling the aim of philosophy, namely, knowledge of the absolute, and also, of making any conflict between philosophy and science impossible.

The point, therefore, to which before all else the attention must be directed in appreciating Spir's system is his formulation and interpretation of the law of identity as containing a norm which at once defines the ultimate nature of reality and condemns the phenomenal world as illusory.

The law of identity is formulated thus: "Every object in its essential nature is identical with itself" (p. 119). This proposition is held to be self-evident. It is also held to be a priori, underived from experience, since experience disagrees with it. If experience were conformed to the law, nothing, it is argued, could be predicated of anything different from its conception: all real propositions would be analytic. expression, A is B, can have a meaning which does not contradict the law of identity, but it can never express something that perfectly agrees with the law. That is obvious" (p. 121). Spir, accordingly, finds an opposition to the law of identity in the fact that while, e. g., a color is identical with itself, it is related as a quality to something else (p. 122). But may not an object taken concretely—the thing with its qualities—be identical with itself? The answer is, no. An examination of the law of contradiction leads to the conclusion that "one and the same object cannot in itself (an sich), in its own proper nature, be something different or contain distinctions" (p. 143). Again: an unconditional union of different qualities of any sort or kind is impossible (p. 134). This is regarded as the obviously negative form of the positive statement that every object in its unconditioned nature is self-identical. The law of identity is thus represented as the supreme law defining the absolute nature of things. We do not find the identity required in the objects of experience; they are composite, involve relations, suffer change. But, according to our author, they testify in these very respects, as do also our feelings of pain and unpleasantness, that they are abnormal and so, indirectly, bear witness to the truth of the law, evident in itself, which defines normal reality as being of quite another kind.

Is this conclusion to be accepted? To the present writer it seems to rest on a persistent misuse of false abstractions. These abstractions -abstract conceptions of identity, of contradiction, of the absoluteare in principle precisely the same as those which vitiated Eleaticism, and the criticism of them can only repeat what has been so often repeated in the criticism of Eleaticism from Plato down. Take the principle of identity; accept, if you will, Spir's formulation of it: every object in its essential nature is identical with itself. Does this tell us anything about the nature of objects? Assuredly, it is not an assertion about nothing. But, on the other hand, it does not in the least define the nature of their identity. That, apart from other considerations, might be either abstract, like pure 'being,' or concrete, like a plan of action or the organization of a state. If there were no differences in the content of an object, no assertion could be made about it that would not be tautological, i. e., meaningless. But for that very reason the law of identity, interpreted as requiring for complete conformity the exclusion of differences, can never be a genuine law of thought. Again, if any object is a unity of differences, it would not be identical with itself if any of the differences were omitted. And again, if there were any object naturally disposed to change, that object would not be rightly conceived as what it is, as identical with itself, unless conceived as successively passing through the changes which its nature demands. The law of identity no more requires that an object should be static than that it should be empty; if it is legitimate to regard an object as identical with itself in the diversity of any determinations whatever, it cannot be illegitimate to conceive of it as maintaining its identity in the continuity of a process, hard as it may be to define precisely within what limits of change it could be identified as the same. Spir's contention that change in the empirical world proves that world to be not conformed to the law of identity is based on the assumption that sameness is incompatible with difference. It is true, of course, abstractly, that if a thing changes it becomes in some respect different, but, concretely, may not this very difference be essential to the fulfilment of its identity with itself? The answer may be found by considering the identity of a plan of action concretely realizing itself in the process of its execution.

Spir himself says that the concept of identity and the concept of the real are not identical, for it is possible to conceive everything real as in constant flux, or, again, as at the same time everything else (p. 120). But how is this possible if the law of identity, interpreted as he interprets it, is the supreme law of our thinking?

His interpretation of the law of contradiction is as abstract as that of the law of identity. "The affirmation and negation of the same cannot both be true" (p. 123). Why not? Four is double (of two) and half (of eight). Yes, it may be said, but in different respects. Hence we have a new formula (p. 131): "two different assertions cannot both be true which refer to the same object in the same respect." But the illustrations, 'A is round,' 'A is square,' indicate a special kind of respect, namely respect to the quality predicated. That this is the author's meaning is clear from the whole preceding discussion (p. 127 f.) of the relation of opposition, which aims to establish the thesis that if one quality is predicated of a subject, it is contradictory to predicate of it any other of the same class, e. g., round, square, elliptical, etc. This, however, is by no means self-evident; it only appears so on the assumption that predication is made abstractly, without reference to the point of view and other conditions of assertion. If these are taken into account, there seems to be no contradiction in affirming that, e. g., the same table-top-'same,' that is, for purposes of identification—is both a rectangle and a rhomboid, the same piece of silk both green and blue. Much is made of the argument that different qualities are per se, as such, contradictory: what is square, e. g., is not per se, as such, red. This is, of course, obvious. The inference is then drawn that different things or qualities cannot be unconditionally united, though they may have a conditioned union; e. g., a red apple may be sweet. What is meant by a "conditioned union"? A union is conditioned, we are told, when the objects united are fundamentally and originally (vom Hause aus) alien (p. 140). From this it follows that the proper nature of things is unconditioned. A contradiction is here formally assumed between the object's own nature and that of its dependence on a foreign object. But the conception is purely formal. In spite of the definition, it might very well be that things with determinate characters, taken distributively, had no nature of their own, no an sich, but that any nature or essence which they possessed was determined in each particular case by relations to other things. It would, however, be quite consistent with such a view to conceive the nature of things taken collectively as unconditioned, the determinations of each being included within one self-determining system. Moreover, how are we to know what objects are fundamentally alien? According to the argument, the round object is not, as such, red; every difference whatever would seem to be of this nature. Hence, notwithstanding the assertion that not all relativity is foreign to the unconditioned, we are not surprised to find it explicitly affirmed

that there cannot possibly be an unconditioned union of the different. Of this proposition, the alleged obverse of the law of identity, it is said that "every one will admit it to be self-evident and beyond question." So far from being self-evident, it seems to the writer to be a manifest *Machtspruch*. Certainly the different is not the same, but to say that the same, or a nature identical with itself, cannot without dependence on something foreign, combine differences into unity is an unwarranted inference and one which leaves the absolute as empty of content as it leaves the rich content of experience without a unifying principle. And this in the end appears to be the position in which, in spite of unwonted ingenuity, both are left by the neo-Eleaticism of African Spir.

H. N. GARDINER.

SMITH COLLEGE.

La Logique de la Contradiction. By Fr. Paulhan. Paris, Félix Alcan, 1911.—pp. 182.

We have here a work of philosophical, rather than of logical analysis of the principle of contradiction, which purposes to give new and broader views of its nature, kinship and use. Although the author at first defines contradiction in the conventional manner, yet later on, in order to show its intimacy with opposition, contrariety, difference, etc., he continually identifies it with these conditions. The first chapter dwells upon its presence in intelligence (sensation, idea, and proposition or judgment), feeling, will and action, each of which domains has a logic of its own. The generality as well as the close relationship of logical contradiction with other terms of opposition are suggested by the author as indicating that it has not the absolute value which logicians have attributed to it.

The second chapter contrasts contradiction with identity, to which it is in certain respects directly opposed, the essential distinction being that the one permits substitution while the other does not. Contradiction is found in the syllogism itself, since the latter affirms the identity of its terms, notwithstanding that these cannot properly be substituted for each other. However, harmony, which is realized identity, always contains contradiction and struggle. Complete identity and complete contradiction are never found in reality, but are rather the limits toward which realities may tend. It is evident that if in the first chapter the author used the term contradiction in three senses, (1) that of formal logic, (2) that of contrariety, (3) that of opposition, here he is employing a fourth meaning, namely, un-

likeness or difference. In the early part of the chapter it is stated that the 'impossibility of uniting for a common end' is what gives to contradiction its special character and makes it recognizable, and perhaps this definition is intended to include the above four meanings.

Next comes an attack upon logical contradiction. It is quite useless. Just as the mathematical infinite is a contradiction which violates the logic of common sense, so did the discoveries of hypnotism, the phonograph, X-rays, etc., shock the logic of our forefathers; and accordingly these facts should impress us that reality is too complex for our grasp and make clear how absurdly obstinate it is for us to attempt to say whether any particular thing contradicts reality or not. In truth, it is reality which tells us what is contradictory, not contradiction which tells us about reality. Similarly, nothing in our practical activity is absolutely irreconcilable and incompatible; any two things may in some way exist together, as for example, walking simultaneously towards the east and west (carried in the one direction by the earth and in the other by one's feet). Hence the futility also here of attempting to say what is contradictory.

Nevertheless (fourth chapter) contradictions are necessary parts of consciousness and of things. Every belief, theory or idea has conflicting elements and is in opposition with others of its kind; indeed, the most closely associated ideas, like the best friends, may some day become embroiled. No idea or judgment (i. e., truth) is permanent, and this is due to the temporarity of our consciousness and of things about us, in terms of both of which any thing or idea must be defined. In short, to exist is to differ, and to differ is to oppose. However, we must recall that complete difference is nowhere, for also it is true that to exist is to resemble and to resemble is to unite.

In the fifth chapter a plea is made for a new logic—a logic of the greatest intellectual profit, which will not fear upon occasion to violate the principle of contradiction. Reasoning must not always be renounced simply because it is contradictory. If contradiction is a poison, nevertheless poisons are sometimes remedies; if it is, by itself, a disorder, nevertheless partial disorder is preferable to anarchy, and after all, complete order is unattainable. To buy richness and complexity at the cost of incoherence is not always a bad bargain. Often scientists might better be less conservative with regard to new hypotheses which contradict old views. In brief, complete truth is an unattainable limit, and if contradiction is an evil, it is at any rate a necessary one and we might as well make use of it. In thus recommending a logic of utility the author wishes it to be known that

he does not abide in Pragmatism, for by the side of the former he recognizes a logic whose end is not adjustment and profit but complete truth.

A chapter is now devoted to showing what use is and may be made of contradiction. First metaphors are cited as owing their charm and value not simply to the similarity of the images they arouse but quite as much to the difference (contradiction). Passing on to contradictions of belief, the author says that he does not mean that they should not be avoided when possible, but that they can be useful to the life of intelligence. There are three classes of contradiction which in certain cases are permissible: (1) where the ideas in conflict each belong to separate and distinct domains; so, for example, a man as philosopher may serviceably hold a different idea of matter from what he has as chemist; (2) in creative work where organization is not yet attained; (3) where an idea changes but its word does not; the old word is a soil for the new idea, an illustration being Darwin's use of the term 'selection.' A common character and utility of these three classes is that they ease the passage from a past to a future state. We should not spurn them for their temporary value, for what idea is herein different? These types of contradiction are represented, not alone in the individual, but also in society. To be sure, we can dream of more unified and logical communities, but various experiences have warned us of the danger of premature unification. Diversity is a contradiction which is not always an evil.

If, as is possible, the above outline is not perfectly complete, at any rate I trust that it discloses the general tenor of the book. It will be observed and doubtless regretted that the work does not make close connections with modern symbolic logic. The style is semi-popular, and confusion for the reader arises in certain cases where the relations of terms to each other are not defined. The author's conclusions about complete identity as well as those about the syllogism might be challenged, but I shall not enter upon a complete criticism of the work, and shall venture only to offer certain objections which may be conveniently put in five paragraphs.

I. It seems advisable to emphasize that the author has not demonstrated contradictions in reality itself—to use a familiar phrase. We all know that propositions may be contradictory, and he has pointed out that ideas, feelings, volitions, etc., also may be so; but considerable confusion arises, I believe, because, as a rule, he fails to distinguish between what might be called *contradictions of significance* and *con-*

tradictions of events. Propositions, and similarly ideas, feelings, etc., may be contradictory in the sense of attributing incompatible properties to the same reality—but this contradiction is one of significance only, since the attributing evidently is as such no impossible or contradictory event. We should not say that reality itself contains contradiction, on the ground that contradictory things may be said about it. On the other hand, of course, ideas, feelings, volitions, etc., may clash as events and so may suffer or be inhibited in some respects. The same sort of opposition, again admittedly occurs in the physical realm—the impact of two stones upon each other being a simple instance. M. Paulhan would say that the two stones contradict each other! but, after all, we should remember that if contradiction is similar to such clash or opposition, there is also a marked difference: it is mere opposition if the stones hit each other and rebound; it is contradiction if, notwithstanding the impact, they both undisturbedly keep on their way without any appropriate change of momentum The author would have rendered additional service. I believe, if besides showing the closeness of connection between contradiction and opposition, incompatibility, difference, he had also clearly outlined the marks of difference. If this had been done, he might perhaps have laid less emphasis on the futility of the principle of contradiction as ordinarily conceived—since, on the contrary, instances galore might be brought from the natural sciences to illustrate its great utility. Such an instance is Avagadro's law, cited by the author, contradictions of which in the history of chemistry have been of great importance for the organization of facts and the direction of experiment.

2. M. Paulhan succeeds, it may be, in establishing his point that there is no such thing as absolute contradiction—or more accurately, that no two incompatibles can be named which cannot in some respect be made compatible. Perhaps one might recall that there is at least one proposition which would contradict any other proposition or point of view or use with which it were associated—indeed, which would contradict the very association itself: namely, the affirmation of complete metaphysical nihilism. But passing this by and granting the author's disproof of absolute contradiction, it seems notable that he has defined the latter in such a way that no one need much care what becomes of it. For we do not trouble—either in scientific or in practical reasoning—to seek propositions or other things which shall be incapable of uniting under any conceivable circumstances—or 'for any end at all.' We are always interested in specific circumstances, specific ends, and if the principle of contradiction enables us

to affirm what cannot be and is not under these circumstances, then it is useful indeed. If, furthermore, we find by reasoning that certain things cannot be under certain circumstances or conditions, here is a universality of contradiction which might very well be termed complete or absolute contradiction! I have elaborated virtually the same point elsewhere (Jour. Phil., Psy. and Sci. Methods, May, 1910). And absolute incompatibles in this sense are known to science and to common sense, wherefore the principle has a utility which the author does not seem to have blasted.

- 3. Furthermore, denial of the permanent truth of any judgment seems strained. For the temporary character of reality and of consciousness, upon which he bases his remarks, does not impair the permanent validity of judgments, since it is right and proper that we distinguish between things and judgments made about them. A thing may changingly pass from state to state, but if the essence of a judgment be a predication about or reference to a given one of those states, then the validity of that judgment, essentially considered, obviously cannot be affected by time or change. (Cf. Bertrand Russell, *Hibbert Jour.*, 2, 812.) Here, of course, we are touching upon a much discussed topic.
- 4. There is an inner contradiction, if I am not mistaken, in the author's arguments that since reality is too complex for us to know all its attributes, we cannot say what is logically impossible for reality. For he admits (page 80) that wherever we have hypothesis, we may have certainty as to what is contradictory. But now on page 179, if I understand him, he avows that experience essentially involves an interpretation which is already hypothesis. If so, and if by reality he means experiential reality, it follows that here also we may have certainty as to what is contradictory.
- 5. Finally, if the theory of contradiction which formal logic has traditionally respected is to be put on trial, it is doubtful whether M. Paulhan's definition of absolute contradiction will fairly represent it. For his formula requires that the two propositions 'be incapable of uniting at any time for any end at all, and—(be incapable) of entering into the same collection of ideas' (p. 24). Now whenever in formal logic two propositions are considered as contradictory they actually are united, namely, to the extent of being together in a given universe of discourse as well as of being considered together by the logician. Accordingly the definition in question does not seem to fit.

NOTICES OF NEW BOOKS.

Elements of Physiological Psychology. By G. T. LADD and R. S. WOODWORTH. 2d edition. New York, Chas. Scribner & Sons, 1911.—pp. xix, 704.

This is an entirely rewritten edition of Professor Ladd's work published in 1887. The working over has been so satisfactory that the volume probably represents the present status of the science even better than did the original work the science of its day. As the title implies, the neurological and physiological parts are relatively fuller than the more strictly psychological parts, but this is not meant as a reflection on the later parts as one finds in them almost everything that one would expect from the title. The work is divided into three books: "The Nervous Mechanisms," "The Correlations of Nervous Phenomena," and "The Nature of Mind." The first book covers the phylogeny and ontogeny of the nervous system, its structure, gross and microscopic, the structure and functions of the sense organs, cerebral localization and the general problems of the action of the nervous system. One chapter is devoted to a review of the chemistry of the nervous system, and the treatment of the topic is unusually full, presenting a number of results that are not generally available. The discussion adopts the neurone theory, but the evidence for continuity of structure and the fibrillar theory are mentioned. Following Sherrington and MacDougall the synapse is given a large place. discussions of this part are full, clear and complete. It presents the most satisfactory treatment for the psychologist of the subject that the reviewer is acquainted with in English, in works on psychology or physiology.

The second book of nine chapters covers the more strictly psychological material. It begins with three chapters on sensation, then follow a chapter on the quantity of sensations, two on the presentations of sense, and one each on the time relations of mental phenomena, feeling, emotion and the expressive movements, the learning processes and the mechanisms of thought. chapter on sensation gives a very satisfactory summary of the present status of the topics. It seems rather less complete for vision than for the other senses. The most important criticism of the treatment for a work of reference grows out of the separation of the description of the structures from their functions. Thus the theories of hearing are given in the first book, while the Hering and Helmholtz color theories are treated in this second book. Even this generalization does not hold, since the difference in function of rods and cones is discussed in connection with the structures. If one is to separate structure and function this arrangement is as logical and convenient for the person who reads through as any other, but I have found in referring to the work that students and even more advanced readers are likely to miss what they are looking for.

Two chapters on perception deal mainly with space perception, and the treatment revolves about the rival theories of nativism and empiricism. Space is said in the beginning to depend upon three factors or conditions. (1) "The presence of series of sensations of like quality, which are adapted to combine into extended objects of sense, must admit of easy, rapid and frequent repetition in varying order of arrangement." (2) "They must be in nature comparable and associable with each other, and, in fact, simultaneously experienced by the mind." (3) They must possess a system of 'local signs.' The introductory treatment of space strikes the reviewer as containing some repetitions, and as lacking the clearness of statement that characterizes most of the book. The specific material treated is also not so complete as in the other fields. The limen of twoness for the skin is given a thorough treatment, but the corresponding topics for vision are slighted or omitted. The perception of depth is also given rather scant discussion. It is worth noting, too, that Listing's Law is still retained in spite of the negative results of Miss Barnes and Bárány and the obvious contradiction between Listing's and Donder's laws. The treatment of optical illusions and auditory space is particularly full and satisfactory. The general outcome of the chapter with reference to nativism and empiricism is a modified and by no means dogmatic nativism. It is interesting to note that in several connections a somewhat subordinate rôle is assigned to eye-movements in the development of the spatial notions. The perception chapters impress the reviewer as the least satisfactory in the more empirical parts of the book, although they are relieved by several very good discussions. One inclines to assign the difficulties in part to a difference in standpoint between the authors that has not been completely compromised.

The next chapter gives a summary of the work on reaction times down to date, including the work of Watt and Ach. The chapter headed "Feeling, Emotion and Expressive Movements" covers a wide range. Experimental æsthetics, automatic and ideo-motor action and fatigue are included as well as the topics mentioned in the title. The outcome of the chapter is largely negative on all points. The authors incline to define feeling as a vague form of consciousness. The chapter has among its early statements "Feeling can never be stated in terms of knowledge"; it therefore can not be defined but must be felt. The new forms of Wundt and Royce are rejected as are also most theories of feeling. It is specifically insisted that there are other forms than pleasure and pain. The theories of the emotions are also given no acceptance. The James theory is said to be plainly against recently established facts, and all others come off little better. The summary of the literature of fatigue gives the same balanced opinion.

The chapter on "Memory and the Learning Process" begins with learning in the lowest forms, traces progress through the higher animals, with a review of the recent investigations on animals, then turns to the recent work on the acquisition of skill, and finally discusses the recent experiments on memory in the restricted sense. This is one of the most satisfactory chapters in the

book. The final chapter in this part, "The Mechanism of Thought," covers attention, reasoning and the nervous functions involved in the higher conscious processes. Reasoning is treated as a modification of the process of trial and error, or as they prefer to call it, the 'method of varied reactions with selection of the appropriate response.' The neurological discussions bring to a focus the treatment of a number of topics that have been treated in different parts of the book, the formation of associations, the processes of selection, and their variants, among the others. It may be noted that MacDougal's drainage theory of attention or selection is looked upon askance. Control both of sensations and of associations is referred to convergent associations. The third book, "The Nature of Mind," is least changed by the revision, and contains fewer references to recent discussions. It covers a discussion of the relation of mind and body and similar more general questions.

Psychologists are to be congratulated on the appearance of this volume. It brings together much material that had not been easily accessible before its publication and gives a new point of view on many of the topics that have been somewhat fully discussed in other works. There are many references to the literature, and the work provides a convenient starting point for running down the earlier work on almost any topic. The most important general defect is an occasional discrepancy between the treatment of different parts that one is tempted to refer to the joint authorship, but this is never serious. The omission of time perception seems a little strange, but this is the only subject that the reviewer has failed to find that one would expect in a volume of the title. Criticism of these small points is likely to be misleading as most of them are matters of opinion only, and the book as a whole gives a very satisfactory review of psychological fact and theory.

W. B. PILLSBURY.

UNIVERSITY OF MICHIGAN.

Schopenhauer's Criticism of Kant's Theory of Experience. By R. A. TSANOFF. Cornell Studies in Philosophy, No. 9. New York, Longmans, Green & Co., 1911.—pp. vi, 77.

This monograph is a dissertation presented at Cornell University for the degree of Doctor of Philosophy. It is, however, no merely perfunctory piece of work, but is at once independent and distinguished by clearness of thought and expression.

The warrant for this monograph is found in the absence in the Schopenhauer literature in English of any adequate treatment of Schopenhauer's criticism of Kant. In addition to the Introduction, there are chapters on "The Nature and Genesis of Experience: Perception and Conception," "The Principles of Organization in Experience: The Deduction and the Real Significance of the Categories," "The Scope and Limits of Experience: Transcendental Dialectic," and "Experience and Reality: The Will as the Thing-in-itself." The method of presentation involves usually, first, a statement of Kant's doctrine as interpreted by Schopenhauer, and then the author's own interpretation of

Kant. Or, there may be a statement of Schopenhauer's criticism of Kant, followed by a consideration of its value, as well as of the value of the alternative solution offered by Schopenhauer.

The author's criticisms of Schopenhauer may in very general terms be reduced to something like the following: Kant was endeavoring to arrive at the underlying unities, whereas Schopenhauer is too fond of making hard and fast distinctions. Perhaps the fairest way of giving an example of Dr. Tsanoff's treatment would be by direct quotation (p. 49). "Kant's endeavor to treat causality in terms of objective succession may plausibly be interpreted and criticized as Schopenhauer interprets and criticizes it; or, again, it may be viewed differently, more in harmony with the real spirit of the critical method, as a recognition of the deeper significance of causality, by regarding it as the typical expression of the all-permeating coherence and objectivity immanent in all experience.

"Regarding the status of the notion of 'substance' in philosophy, one thing is certain: 'substance' is emphatically not admissible in its dogmatic sense of a transcendent substratum existent behind experience. Such a hypostatized abstraction is not only of no instrumental value for philosophy, but it makes impossible any consistent theory which shall do justice to the organic character of experience. For the more recent idealistic epistemology, experience is one and undivided, and its principles both of unity and of permanence must be in terms of itself; otherwise a dualism is unavoidable, with all its insoluble problems and hopeless surds. Schopenhauer, then, holding as he does that 'substance' is one and immanent in concrete experience, seems justified in refusing even an audience to the illegitimate concept of the immaterial soul to which Kant devotes a whole chapter of his 'Transcendental Dialectic.'

"Is Schopenhauer's own position, however, equally defensible, when he identifies his one Substance with Matter? This identification of Substance with the hypothetically permanent in physical causation involves a tendency towards a materialistic interpretation of experience; it means ignoring for the time the abiding character of the rational elements in experience. If the principle of permanence is to be immanent and unitary, experience itself must be regarded as one and undivided. The correct solution must lie in the opposite direction from the one Schopenhauer follows. The unitary character of substance can be an instrumentally valid conception only for an epistemology which recognizes its one Reality in the all-embracing, coherent, intelligible experience, in which every element is a factor in a self-perpetuating process of organization, and contributes to the permanent significance of the absolute whole."

In a general summing up of the Schopenhauerian point of view as arising out of the criticism of the Kantian doctrine as well as out of separate considerations, we are told: ". . . while the criticism of Kant's principles often lays bare the concealed inconsistencies of the Critical system, the solutions offered are as often inadequate. Is not the real explanation of the situation to be found in the fact that Schopenhauer is not the true successor of Kant at all?

Instead of being a neo-rationalist as Kant, on the whole, remained, he is fundamentally an irrationalist, so far as his attitude towards ultimate reality is concerned. He is keen in perceiving and criticizing Kant's confusion of various aspects and elements of experience; but, instead of tracing their immanent organic unity, which Kant imperfectly realizes and formulates, he goes so far, in almost every case, as to assert their actual separation. This was seen to be true of his treatment of perception and conception, understanding and reason. Instead of recognizing their unity in the concrete process of knowledge, Schopenhauer dogmatically separates them in a scholastic manner, thus substituting a lucidly wrong theory for Kant's confusedly right one. . . . He fails to realize the essentially instrumental character of all categories and the ideal nature of the reality which they interpret. Thus, in the criticism of the 'Transcendental Dialectic,' while clearly showing the impossibility of expressing the nature of the thing-in-itself in terms of the mechanical categories, he misses what, after all, is the chief result of the 'Dialectic,'—the truth, namely, that the mechanical categories are not the only categories, that experience has phases which demand explanation in terms of teleological principles of organization. Schopenhauer points out the confusion and error of Kant's proposed transcendental solution of the problem of the thing-in-itself by means of the postulates of Practical Reason, and correctly insists on finding the solution of the problem of experience in terms of experience itself. But, instead of showing that the mechanical categories cannot by themselves embody the ultimate solution, and therefore need to be supplemented by other organizing principles, Schopenhauer declares the causally connected world to be a world of mere appearance and illusion, and proceeds to seek reality in some other sphere of experience. He finds this metaphysical Real in the conative experience." 1 But in so far as he denies of this 'Will-Reality' all that he had before asserted to be true of the 'World as Idea,' he is involved in a duality no less than was Kant in his doctrine of the two worlds of phenomena and noumena. Moreover, he never had an adequate conception of the 'immanent unity' of experience to which all particular phases must be referred, and in view of this he was never in a position to really grasp the essential problem of the Kantian philosophy, nor was he himself able to solve the problem.

The foregoing quotations and statements will serve to show the careful character of the monograph and the broad, sane point of view implied in Dr. Tsanoff's criticisms.

PHILIP H. FOGEL.

PRINCETON UNIVERSITY.

De Kant à Bergson. Réconciliation de la religion et de la science dans un spiritualisme nouveau. Par C. COIGNET. Paris, Librairie Félix Alcan, 1911. pp. 155.

As the sub-title indicates, the relation between Kant and Bergson is considered by M. Coignet from the standpoint of ethics alone and from that of

¹ Pp. 75, f.

practical rather than of theoretical ethics. Kant is represented as having been the first to make possible, through his distinction between the pure and the practical reason, an ethics that should be independent of both metaphysics and religion. By this conception he gave rise to an intellectual movement, having its counterpart in social and political changes and especially evident among the group of writers in France who between 1865 and 1870 were. advocating the "Morale Indépendante." The war put an end to their activity, but M. Coignet, who had taken a prominent part in the movement, sees in the philosophical tendencies of the present time an approach to the theories which he then defended and which he still regards as true. Following in the footsteps of the independent moralists, scientific men like Poincaré, philosophers like Boutroux and theologians like Sabatier have taught us that religion, philosophy and science are not antagonistic to one another, but that each is valid in its own field. Thus they have all helped to prepare the way for the work of Bergson, who gives us a philosophy in which all opposition between science and metaphysics disappears. Bergson is said to have taken up the philosophical problem exactly where Kant left it, and to have produced a spiritualism far superior to any similar system of the past. To be sure, as yet he has left ethical and religious questions untouched; but M. Coignet speaks with a disciple's enthusiasm of the solution of all religious and moral difficulties that Bergson's philosophy has made possible and that his future books may be expected to develop and explain.

G. N. DOLSON.

SMITH COLLEGE.

La Pensée Contemporaine. Les Grands Problèmes. Par PAUL GAULTIER. Paris, Librairie Hachette et Cie., 1911.—pp. viii, 312.

There are two classes of readers to whom M. Gaultier's book should especially appeal: (1) men interested primarily in philosophy, who have read many of the books of which he treats, but who are glad to obtain a general survey of contemporary philosophical thought; and (2) those whose main pursuits are elsewhere and who for that very reason will welcome a brief and authoritative account of what is being done is this field. The arrangement of La Pensée Contemporaine is admirably adapted for either purpose. Each one of the twelve chapters is preceded by a list of the books and periodicals with which it is concerned; and though there is no index, the logical order in which the different subjects are treated is a sufficient substitute. Beginning with La Convention dans les Sciences, the author considers questions of metaphycics, psychology, æsthetics, ethics and sociology, until he closes with a discussion of pragmatism under the heading of La Valeur de l'Action. Although a detailed treatment of the theories is naturally impossible, it would be difficult to praise too highly the clearness and accuracy of their exposition, while the criticism is at once keen and sympathetic. Nothing could be further removed from a mere catalogue or summary of different books and their contents. Instead, as its title denotes, the book is an account of contemporary thought with its

problems and possible solutions, and as such is of real value for an understanding of the philosophy of the present.

G. N. DOLSON.

SMITH COLLEGE.

Die Parteiung der Philosophie: Studien wider Hegel und die Kantianer. Von Hans Ehrenberg. Leipzig, Verlag von Felix Meiner, 1911.—pp. iv, 133.

"Die These, die ich aufstelle, ist am besten so vorzutragen, dass von der innerlogischen Frage ausgegangen wird, um bei ihrer Behandlung darzutun, wie man sich immer schneller dem Metalogischen zubewegt. Die Schrift führt daher dazu, dass die Stellung der Logik im philosophischen System untersucht wird; zwar auch diese Frage ist für das System nur Vorfrage, führt aber doch bis an dasselbe heran und ist überhaupt die einzige Vorfrage, die vor dem System gedacht sein muss, wenn sie auch durch dasselbe hinfällig werden wird: woraus sich ergibt, dass die Isolierte Logik sich an ihrem Bekämpfer, indem sie ihn ihr eigenes Schicksal hineinreisst, rächt" (p. iv). These are the words in which the author sets forth the aim of his work.

As the title of the monograph indicates, the writer's method is historical. In every chapter the following order of discussion is faithfully followed. First, the position of Hegel is summarized in some detail; next follows a brief history of Neo-Kantianism, the Neo-Kantians considered being chiefly Windelband, Rickert, Cohen, and Lask; finally, this historical retrospect is followed by a statement of the writer's own views concerning the problem in hand.

The problems discussed and the pages devoted to each are as follows: The Categories as Objects of Logical Science (pp. 7-36); The Application of the Categories (pp. 36-52); Reason and Reality (pp. 55-79); The Absolute (pp. 80-98); The Position of Logic in the System (pp. 98-129). The work concludes with a discussion of four pages devoted to the principle of the dialectic.

G. W. CUNNINGHAM.

MIDDLEBURY COLLEGE.

The following books also have been received:

The Principle of Individuality and Value. By B. Bosanquet. London, Macmillan & Co., 1912.—pp. xxxvii, 409.

Logic, or the Morphology of Knowledge. Second edition, 2 vols. By B. Bosanquet. Oxford, The Clarendon Press, 1911.—pp. xxxv, 711.

The Problem of Human Life. By Rudolf Eucken. Trans. by Williston S. Hough and W. R. Boyce Gibson. New York, Charles Scribner's Sons, 1912.—pp. xxv, 582.

The Truth of Religion. By RUDOLF EUCKEN. Trans. by W. TUDOR JONES. New York, G. P. Putnam's Sons, 1911.—pp. xiv, 622.

A Short History of Logic. By ROBERT ADAMSON. Edited by W. R. SORLEY. Edinburgh and London, William Blackwood and Sons, 1911.—pp. x, 266.

The Scope of Formal Logic. By A. T. Shearman. London, University of London Press, 1911.—pp. xiv, 165.

Present Philosophical Tendencies. By RALPH BARTON PERRY. New York, Longmans, Green & Co., 1912.—pp. xv, 383.

Formal Logic. By F. C. S. SCHILLER. London, Macmillan & Co., 1912.—pp. xviii, 423.

Free Will and Human Responsibility. By HERMAN HARRELL HORNE. New York, The Macmillan Co., 1912.—pp. xvi, 197.

Nietzsche. By Paul Elmer More. New York, Houghton, Mifflin Co., 1912.—pp. 87.

William James. By ÉMILE BOUTROUX. Trans. by ARCHIBALD and BARBARA HENDERSON. New York, Longmans, Green & Co., 1912.—pp. vii, 126.

The Egyptian Conception of Immortality. By George Andrew Reisner. New York, Houghton, Mifflin Co., 1912.—pp. vii, 85.

Natural Philosophy. By WILHELM OSTWALD. Trans. by THOMAS SELTZER. New York, Henry Holt & Co., 1910.—pp. ix, 193.

The Five Great Philosophies of Life. By WILLIAM DEWITT HYDE. New York, The Macmillan Co., 1911.—pp. x, 296.

Outline of a Course in The Philosophy of Education. By JOHN ANGUS MAC-VANNEL. New York, The Macmillan Co., 1912.—pp. ix, 207.

The Educational Theory of Jean Jacques Rousseau. By WILLIAM BOYD. London, Longmans, Green & Co., 1911.—pp. xiii, 368.

The Learning Process. By Stephen Sheldon Colvin. New York, The Macmillan Co., 1911.—pp. xxv, 336.

Handbook of Mental Examination Methods. By Shepherd Ivory Franz. New York, The Journal of Nervous and Mental Disease Pub. Co., 1912.—pp. ix, 165.

Ethik. Von WILHELM WUNDT. Vierte umgearbeitete Auflage, Erster Band. Stuttgart, Verlag von Ferdinand Enke, 1912.—pp. xii, 304.

Grundzüge der Physiologischen Psychologie. Von WILHELM WUNDT. Sechste, umgearbeitete Auflage, dritter Band. Leipzig, Verlag von Wilhelm Engelmann, 1911.—pp. xi, 810.

Asthetik des reinen Gefühls. Von HERMANN COHEN. Zwei Bände. Berlin, Bruno Cassirer, 1912.—pp. xxv, 401; xv, 477.

Friedrich Paulsens Philosophischer Standpunkt. Von PAUL FRITSCH. Leipzig, Verlag von Quelle & Meyer, 1910.—pp. 43.

Jean Jacques Gourds Philosophisches System. Von Hans H. Bockwitz. Leipzig, Verlag von Quelle & Meyer, 1911.—pp. xviii, 120.

Philosophische Betrachtungen. Von GUSTAV LEVINSTEIN. Berlin, Verlag von Leonhard Simion, 1912.—pp. 99.

Die Instinktbedingtheit der Wahrheit und Erfahrung. Von FRIEDRICH BODEN. Berlin, Verlag von Leonhard Simion, 1911.—pp. 80.

Études de Philosophie Ancienne et de Philosophie Moderne. Par V. BROCHARD. Introduction par V. Delbos. Paris, Félix Alcan, 1912.—pp. xxviii, 560.

Le Sens et La Valeur de la Vie. Par RUDOLF EUCKEN. Traduit par MARIE-ANNA HULLET et ALFRED LEICHT. Paris, Félix Alcan, 1912.—pp. viii, 195.

Monde Moral, L'Ordre des Fins et des Progrès. Par HENRY LAGRÉSILLE. Paris, Libraire Fischbacher, 1911.—pp. 517.

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Morale et Moralité. Par Paul Sollier. Paris, Félix Alcan, 1912.—pp. 203. La Morale par L'État. Par André Marceron. Paris, Félix Alcan, 1912.—pp. vi, 304.

La Philosophie de William James. Par Th. Flournoy. Saint-Blaise, Foyer Solidariste, 1911.—pp. 219.

Dieu et Science. Par ÉLIE DE CYON. Paris, Félix Alcan, 1912.—pp. xi, 483. L'Action Criminelle. Par Henri Urtin. Paris, Félix Alcan, 1911.—pp. 268. Le Fondement de la Responsibilité Pénale. Par Henri Urtin. Paris, Félix Alcan, 1911.—pp. 103.

Esquisse d'une Éducation de L'Attention. Par J. J. VAN BIERVLIET. Paris, Félix Alcan.—pp. 137.

La Reazione Idealistica contro la Scienza. Per Antonio Aliotta. Palermo, Casa Editrice "Optima," 1912.—pp. xvi, 526.

Alle Fonti Della Vita. Per William Mackenzie. Genova, A. F. Formiggini Editore, 1912.—pp. 387.

SUMMARIES OF ARTICLES.

[ABBREVIATIONS.—Am. J. Ps. = The American Journal of Psychology; Ar. de Ps. = Archives de Psychologie; Ar. f. G. Ph. = Archiv für Geschichte der Philosophie; Ar. f. sys. Ph. = Archiv für systematische Philosophie; Br. J. Ps. = The British Journal of Psychology; Int. J. E. = International Journal of Ethics; J. of Ph., Psy., and Sci. Meth. = The Journal of Philosophy, Psychology, and Scientific Methods; J. de Psych. = Journal de Psychologie; Psych. Bul. = Psychological Bulletin; Psych. Rev. = Psychological Review; Rev. de Mêt. = Revue de Métaphysique et de Morale; Rev. Néo-Sc. = Revue Néo-Scolastique; Rev. Ph. = Revue Philosophique; Rev. de Ph. = Revue de Philosophie; R. d. Fil. = Rivista di Filosofia e Scienze Affini; V. f. w. Ph. = Vierteljahrsschrift für wissenschaftliche Philosophie; Z. f. Ph. u. ph. Kr. = Zeitschrift für Philosophie und philosophische Kritik; Z. f. Psych. = Zeitschrift für Psychologie und Physiologie der Sinnesorgane, I. Abtl.: Zeitschrift für Psychologie. — Other titles are self-explanatory.]

L'évolution de l'espace et du temps. P. LANGEVIN. Rev. de Mét., XIX, 4, pp. 455-466.

Recent developments in the electromagnetic theory make it necessary for us to revise our ideas of space and time, and in so doing show very clearly that these ideas are not a priori. Our present ideas of space and time are based on the 'law of relativity,' which states that the form of relations between physical phenomena remains the same whatever the position of the observer. This law holds for our present mechanics. Now when we consider the relations under the electromagnetic theory we find that the law of relativity still holds, but the form of the relations is very different from that under the ordinary mechanical theory. Here we see the entrance of a new conception of space and time, in accord with the newer theory and with the impossibility of instantaneous action at a distance. In our earlier conceptions it was possible to conceive of the alterations of apparent space relations in accord with the changing position of the observer; but the time relation remained the same, it had no absolute sense. But under the newer conception, space and time are put on one plane, and we can see the events under inverted relations of time as well as of space; though the relations are now reciprocal and more complicated than before. We have two categories of relation between pairs of events; first, when the distance in space of two events is greater than the distance covered by light in the interval of time between them, a properly placed observer will see them as coincident in time, or either may precede the other; but the space relation can not become annuled though it changes and passes to a minimum at the point where the time relation is annuled. Second, when the distance in space is less than the distance travelled by light in the interval of time, the events can become coincident in space but not in time: and the time interval passes to a minimum for that system where the spatial relation is annuled. Now it is evident that for the first of these categories there can be no causal relation between the events, in any sense in which we would mean the expression now, since we can overturn the relations of succession; but we can still state a relation between the events of the second pair.

F. R. Prout.

Die Kosmogonie Emanuel Swedenborgs und die Kantsche und Laplacesche Theorie. Hans Hoppe. Ar. f. G. Ph., XVIII, 1, pp. 53-68.

In the first volume of Swedenborg's Principia rerum naturalium sive novorum testaminum phaenomena mundi elementaris philosophice explicandi, there appears a cosmogony which anticipates in many particulars that of Kant and Wright, while the third volume contains theories strikingly like those of Laplace. Swedenborg bases his cosmology on a sort of monadology in which all things are traced to the unlimited. Aiming to derive his primal being from a purely conceptual source, Swedenborg holds that the immediate product of the infinite is the mathematical point, non-extended, indivisible, and endowed with conscious potency. The motion of the point, at first spiral in character, leaves its original plane, and the resulting conical motion generates physical body. Influenced, like Gilbert and Kepler, by observation of the behavior of magnetized metallic particles, Swedenborg applies the theory of spiral motion to the inclination of the ecliptic, to the motion of the solar and planetary bodies and to the motion of the Milky Way itself. The mechanical influence of one body upon another is regarded as mediated through the The work of Wright, which Kant only knew from a book-review, resembles that of Swedenborg in many important points. Kant's Himmelstheorie, though differing in certain ways from the cosmogony of Swedenborg, resembles it in all the more essential points. Most of the features, general and special, of the nebular theory of Laplace, are anticipated by Swedenborg. I. R. TUTTLE.

The Method of Metaphysics and the Categories. S. ALEXANDER. Mind, 81, pp. 1-20.

The fundamental fact of experience is the compresence of the apprehending act and the apprehended object. The mind is lived through or enjoyed, while its objects are merely contemplated. Mind is thus but one thing among many things. Admission of the above means that we must exclude from the method of metaphysics all forms of idealism which contend that things depend for their reality upon mind. We must also exclude the principle that mind is co-extensive with all things, or even with all life. Metaphysics is an attempt to describe the ultimate nature of existence and the pervading characters of things. We come to understand things through our experience of mind; mind, conversely, through our experience of things. Certain physical and chemical processes live. Certain living bodies have minds, apprehend, or enjoy. Thus a conscious organism lives on three levels of existence. Sensible quality is specific to material existence, life to living processes, consciousness to mental processes, but certain characters obtain on all three levels. These

are the categories, such as causality, time-character, spatiality, etc. We may understand the nature of causality and the other categories as they are for external things, by observing them in immediate enjoyment. On the above view, the categories are not, as for Kant, the non-empirical elements contributed by the subject to experienced objects. They are not, as Spencer holds, the result of an accumulation of experience which does not originally contain them. Neither are they to be explained by James' doctrine that they are variations in cerebral tendencies. The categories are, rather, the characters which are carried up from material existence into mental existence and are present there in enjoyment.

J. R. TUTTLE.

Les conséquences et les applications de la psychologie. R. MEUNIER. Rev. Ph., XXXVII, 1, pp. 44-67.

The position of psychology among the sciences is unique in that it has the ability to oppose its conclusions to those of any other science, as dealing with the general laws of intelligence that condition those other sciences in their methods and results. Hence psychology has consequences upon (I) logic. It explains the forms of mental activity involved in the principles of contradiction and of identity, and by the aid of pathological psychology we can come to build up a science of pathological logic. Theoretical ethics (2) receives influences from psychology. All the great moral ideals correspond to certain important tendencies of our emotional life and, as a result, we can explain them by psychology. This method in ethics has been used with some success by such investigators as Höffding, Duprat, and Richet. It is evident (3) that the results of psychology upon sociology are great. Finally, (4) we have consequences of psychology for metaphysics. Since it deals with the great laws of mental process it provides the clearest way to metaphysics.

In addition to these theoretical consequences we find certain practical applications of modern psychology. The first of these (1) is upon pedagogy, which up to very recent times was mainly founded on empirical data with regard to the instruction of children and which has mainly pursued the same object in its experimental work almost up to the present day. Work along these lines has been done to a certain extent and Binet has even tried to synthesize the new scientific with the older empirical views. The second application of psychology is (2) that of psychotherapy. This has been mainly confined to two forms of treatment, by hypnosis and by persuasion, and to a mixed form, suggestion in a state of consciousness; but these all are to a certain extent undesirable and are usually practiced without a clear knowledge and direction from psychology. But the application of psychology to the cure of abnormal states need by no means be confined to these two methods. It should, in the first place, be based on exact psychological knowledge of the particular subject of treatment; in the second place it should employ therapeutic means arising from our general psychological knowledge; and should make use of every means of cure accessible both to psychology and to medicine.

In regard to the application of psychology to (3) practical morality, it will be sufficient to point out that our present estimates of an individual's moral character are dependent on the observation of particular, momentary actions and not on any real comprehension of the act or of the real moral agent; and that, as our psychology provides us with a real test, we come ever more to see that the Socratic theory of crime as error is to a very great extent true. In the individual practical life, too, (4) we have to observe the applications of psychology which can, first, give us a basis of freedom in the sense of comprehension, and, from this, the possibility of a morality of action; and secondly, the great development of our inner life, which is the highest possibility of human personal life.

F. R. PROUT.

Les formes de la vie psychologique et leurs conditions organiques d'après Cabanis. F. COLONNA D'ISTRIA. Rev. de Mét., XX, 1, pp. 25-47.

Two sets of conditions determine the psychological life, those within the organism, age, sex, temperament, and disease; and those either wholly or partially without the organism, régime and climate. With increasing age there is greater complexity of structure and solidification of the tissues. infancy the coördination between body and brain is practically perfect. changes come with adolescence, the breast rather than the head becomes the center of congestions, and the organs of generation become active. The new bodily sensations stimulate the imagination and affections. Maturity is marked by a thinning of the fluids and a concretion of the solids of the body. The mental tendencies then settle into a more forceful and consistent character. The sexual life passes from a period of indecision in infancy to the decisive changes of puberty. On the physical side, there is an increase in nervous irritability, and in the cerebral energy which usually accompanies the activity of glands; on the mental side, an increase in restlessness, tendency to reverie, and the impulse to love. The accentuation of audacity in the boy and timidity in the girl points to the inevitable partition of kinds of activity. The end of the sexual life is marked by the lessening of certain affections and the purification and deepening of others. The ancient classification of temperaments into four kinds on the basis of the predominance of a certain humor is incomplete and partially unsound. With big lung capacity, good circulation, and muscular suppleness usually goes an agreeable and benevolent, but not a forceful or profound disposition. The bilious temperament is characterized by an habitual restlessness, due to the fact that the circulation cannot overcome the effects of the bile. The melancholic temperament usually accompanies a narrow chest and constriction of the organs. In this case, great vigor and sensitivity coexist with a feeling of constraint. The muscular and nervous temperaments are opposed in that the former results from a feeling of brute force combined with slight sensitivity, while the latter results from unusual cerebral activity with but a weak muscular basis.

KATHERINE EVERETT.

Foundations and Sketch-Plan of a Conational Psychology. S. ALEXANDER. Br. J. Ps., IV, 3 and 4, pp. 239-267.

This paper is an attempt to outline, in a tentative way, the main features of a conational psychology. It attempts, therefore, first to show that conation is the only mental element. To do this, the author divides experience into two elements, the experiencing act and the thing experienced; the former he calls sensation, perception, etc., and the latter the sensum, perceptum, etc. He holds, however, that psychology is not concerned with the latter, since it is non-mental, though not necessarily physical, in character. This leaves conation of course as the universal form of consciousness, and as the only psychological element. Conation has, however, two fundamental forms, the practical and the speculative; the first of which is characterized by the fact that it attempts to alter the external world, and the second by the fact that, though action is present in principle, it is nevertheless inhibited. All conation, therefore, is volitional in character. But given conation as the only form of consciousness, the problem of psychology is to describe in detail the various forms which this mental process assumes at the different levels of life. It must show, in short, the modifications which consciousness undergoes in sensation, perception, etc. This plan of treatment is then applied in outline and in a wholly tentative manner to such mental processes as sensation, perception, wish, association of ideas, desire, expectation and memory, thinking, judgment, etc. Feeling and external movement, however, are not considered.

A. H. JONES.

Le caractère normatif et le caractère scientifique de la morale. Fr. d'Haute-Feuille. Rev. de Mét., XIX, 5, pp. 759-779.

Both the traditional and the scientific doctrines of morality are attempts to ground practice in theory, virtue in knowledge. The traditional method of teaching morality is inefficient, because good conduct is not induced by rules derived deductively after the fashion of geometrical formulæ; neither is a metaphysic of morals a successful formulation of moral conduct, for such a metaphysic cannot apply to that moral experience with which it has nothing in common. Similarly, scientific or sociological ethics which treats as social facts those rules, commands, and prohibitions that the traditional ethics treats as metaphysical concepts, lacks efficiency, because in confining itself to the external and social aspects of conduct, it ignores the preëminent moral fact of the internal life of the individual. Moral living is an art, the practice of which springs from personal desires and ideals; and to this art, theory is subsequent and subsidiary, not prior and fundamental. The will cannot be instructed, but must be nourished by inspiration and guided by virtuous example. In short, the doctrine of morality is not a science, but a fine art which determines the value and end of life. The founding of morality upon the intimate experience and ideals of individuals might appear to lead to anarchy in moral conduct; but in morals, as in every other sphere of human activity, there is unanimity of practice and ideals among those competent to judge and act.

KATHERINE EVERETT.

Lebenswerte und Kulturwerte. HEINRICH RICKERT. Logos, II, 1, pp. 131-166.

It is customary nowadays to characterize whole periods of history by a single catchword; indeed, it is considered to be a new method of recording history. That this is an inadequate procedure in considering the entire culture of periods, needs no proof. However, catchwords may in many cases accurately indicate particular tendencies and have a real value when used in that way. Such a word characterizing the controlling tendency of the philosophy of to-day, is the expression 'life.' An idea of value or some concept to which a value is attached is the basis of any world philosophy. The biological philosophy though perhaps not caring for the term value is no exception to the rule. It considers life to be the highest good; and all culture and institutions are evaluated from its standpoint. From this point of view Nietzsche may well be considered one of the most interesting and influential of the biologists. Nietzsche's 'desire for power' corresponds to the 'desire for life,' and his 'superman' is the man with the greatest amount of 'life' in him. What differentiates Nietzsche from others is only his aristocratic tendency. From thought of this type results a biological economy in which an attack on the institution of marriage is an extreme instance. A peculiar outgrowth of this biological economy is the estimation of cultural development in terms of physical energy units 'at the service of life,' in the form of machinery, etc. Pragmatism is another case to be cited. Mind and its functioning are valuable in so far as they serve life. This biological view results in a monistic metaphysics which attempts to bridge the dualism of matter and spirit through the concept of life. Culture then becomes dependent on such a metaphysics, and its values are to be understood merely as a development and refinement of the universal life principle itself. Among these biological metaphysical theories are some of various degrees of idealism. Even a religious aspect may be detected in this biological world view. Social life, art and science are the finest product of a Pantheistic Nature. Is it possible to equate cultural values and life values? In order to decide this question the logical structure of the cultural philosophy based on a scientific biology must be critically examined; and its general premise that a science is able to determine norms and values, looked into. Confusion is made in biology as well as in physics; though in biology the terms 'organism' and 'development' already have teleological implication and value to start with. Thus it is seen that the biological foundation of cultural philosophy is not only due to a confusion of thought but it is apposed by all scientific biology. But this does not mean a degradation of biology as is sometimes supposed; but on the contrary an elevation to a position of independence. Another question presents itself: Has not life, if not the equivalent of the highest good, some other basic value in itself? It

is first necessary to clearly define what we mean by life. After careful consideration we find no value in life itself excepting that which is superimposed from without-from some other principle which we value as a good. It was not always so. At the dawn of history, knowledge and culture existed for life. In Greece, for the first time this relation was reversed. The biological overemphasis of to-day is therefore a return to primitive barbarism. The various sciences may be classified in the order of their relation to life. All of them deal directly with the non-living or intellectual phase of phenomena. A certain dualism or opposition is discoverable here. Art is closer to life than is science; and yet even for art, life itself has no æsthetic value. Art tries to represent the ideal rather than to accurately copy the actual. Ethics, in its subordination of the merely living to its own values, develops in some respects an even greater opposition. We find the maximum proximity to life in religion -but its emphasis, however, is the most distant from the purely biological life. It is thus seen that the merely living can never itself be a source of value but must always be subordinated to some cultural value.

HENRY MAYER.

Les Jugements de valeur et la Conception positive de la morale. M. S. GILLETT. Rev. des Sci. Phil. et Theol., VI, I, pp. 5-31.

The value-judgments of modern philosophy are nothing more or less than a return in another guise of the old "judgments of essence" (formal and final) which science has so rigorously banished. In a review of two papers before the Congress at Bologna (published in the Revue de Métaphysique et de Morale) by Durkheim and Belot, the author aims to prove that the attempt to derive value-judgments from judgments of existence or of reality fails to account for either their theoretical or their practical value. The theological conception of morality alone accounts for value-judgments by deriving them from judgments of essence, ultimately from the conception of the Supreme Being. The social ideal of Durkheim can not be derived from mere observation of society; in its content it passes beyond the bounds of science, the world of existence, into the realm of metaphysics, of essence, of reason. Neither the individual nor society has an adequate raison d'être apart from the conception of the Absolute; the social ideal is left hanging in midair unless it is attached to the Supreme Ideal, i. e., God; the Positive conception of Ethics must find its basis and justification in the larger conception of theological ethics.

HARRY L. TAYLOR.

De la valeur pratique d'une morale fondée sur la science. J. M. Lahy. Rev. Ph., XXXVII, 2, pp. 140-166.

Like everything which is not yet in fixed form, the new morality is not perceived by the majority. It is less a morality which is sketched here than an ideal of action, founded on scientfic knowledge. Whether we can have scientific morality or not, it is possible to base morality on science. Christian

morality, like other systems, has been determined by the collective thought of twenty centuries. The new morality will be similarly affected by the progress of the sciences. The particular science affecting it is sociology, which shows how morality depends on a people's conception of the universe, of life, and of man's destiny, and how morality varies with the progress of knowledge. Formerly the notion of God furnished a model to follow and forced believers to rise above their personal desires toward the attainment of harmony between them and their social group. Science offers the same stimulus and more certitude. Religious rites and scientific technique were closely associated in primitive times, but have diverged so widely in their evolution, that no trace of their common past remains. Nothing in the methods of research in religion is akin to those of science. In religion, intuition, uncriticized sensations, internal persuasion, are alone considered. The degree of certitude in science and religion is best found by an analytic study of the methods of science. There are four moments in the method of science: observation, experimentation, criticism, and hypothesis. In religion the starting point is certitude; in science certitude is the goal. Religion defines and limits the means to be used; science leaves the judgment free and keeps curiosity on the alert for the unknown. Religion limits man to God and forbids him to conceive anything outside of God. Science opens the way to every aspiration. In offering the spirit a method, it systematizes and harmonizes the mind and thus acts upon the moral life. The intuitive formulæ of the past were not wholly empty, for they tended to establish rules of conduct capable of disciplining men; but rules based upon ideas poorly supported by experience and not demanding any critical effort from the individual, remain only partly efficacious. The apostolic precepts have done nothing to suppress violence in the individual, because they never explained its physiological causes. Science does explain them and enables man to control them. Religions, with their fixity of ideals, have lost the power to organize an ideal in harmony with positive knowledge. Science in morality means an ideal indefinitely perfectible, supported by stable principles. Those who are alarmed by the disappearance of religions have not reflected sufficiently on the grandeur of the new ideal. Every man who possesses the maximum of exact knowledge acquired in his epoch, though not acquired by his own efforts, can control his actions, because science gives precise, even if relative answers to the questions he puts, and they suffice for the limits of his existence.

ALMA R. THORNE.

Mediæval German Mysticism. Kuno Francke. Har. Theol. Rev., Vol. V, No. 1, pp. 110–121.

Mediæval German Mysticism was a revival of Neoplatonism. One thought prevails throughout. The essential goal of human life is a return from the many into the one. For Master Eckhart, the whole universe, from the highest state of pure spirituality to the lowest worm in the dust emanates from one eternal will. The trinity is its highest expression. A mythical birth

of divine forms continues unceasingly in the highest regions of spiritual existence. Into the visible world the divine constantly discharges itself. Only here does the divine find its fullest expression. In the finite world man alone can free himself from dead matter. Eckhart is a forerunner of modern Pantheism. In Suso, the emotional tendency of German mysticism reaches its climax. He imagines Eternal Reason as a beautiful maiden. His writings range from naturalism to rhapsody. In Tauler German mysticism reaches its fullest popular influence and its sanest and most rational form. He strives for a reconciliation between duties to society and the divine inner consciousness. He lays chief emphasis on the striving of man towards perfection. Honest labor is more pleasing to God than an eccentric revelling in high inspirations and senseless imitation. When through all kinds of exercises the outward man is connected with the inward, reasonable man, God will descend into his heart.

M. W. PAXTON.

The Essence of Tragedy. Horace M. Kallen. Int. J. E., XXII, 2, pp. 179-202.

Socrates, in the Symposium identifies the genius of tragedy with that of comedy. Whereas Plato was so much interested in the highest good that he lost all sense of the independent objectivity of good things, Aristotle was so much interested in each thing apart, including the highest good, that his sense of their interconnection is not obviously clear, or strong. Hence Plato considers Art immoral and it is left for Aristotle to formulate its standards. His interpretation is that tragedy is no more than imitation and his analysis is mainly of immediate technicalities. The drama has its origin in religious needs. The mystery of self-asserting Dionysus grew into the negation we call fate. The mystery of atoning Christ grew into the tragedy of character. The spirit of Romanticism is the spirit of adventure. Nothing is, perhaps, so free as the interchange of the two sentiments, tragic and comic. Valuation is what makes tragedy. Comedy annihilates the rival, tragedy destroys the beloved. In tragedy there is a conflict of values resulting in a victory for one of them, and the catastrophe must drag the spectator down with it. The divergence of Sophocles and Aristophanes culminates in the problematic chances of Ibsen, which are tragic or comic as one chooses. The essence of Tragedy is a duel between two excellences, which cannot endure together, the meeting of incompatible values.

M. W. PAXTON.

NOTES.

The Western Philosophical Association held its annual meeting at the University of Chicago on April 5 and 6. The sessions were presided over by the President, Professor A. W. Moore. In view of the emphasis on epistemology by the National Association, it was decided to devote a special session to the consideration of problems of ethics at this meeting of the Western Association. Professors Sharp, Tufts, and Hudson led an interesting and lively discussion upon the aim and method of the first college course in ethics. On the second day of the meeting a joint session was held with the Western Psychological Association. Officers for the ensuing year were elected as follows: President, J. E. Boodin; Vice-President, B. H. Bode; Secretary-Treasurer, H. W. Wright; Members of Executive Committee, A. W. Moore, A. K. Rogers, G. A. Tawney, W. K. Wright.

E. P. Dutton are the publishers in this country of a work on *English Philosophies and Schools of Philosophy* by Professor James Seth. This book is the first volume of a series styled "The Channels of English Literature," published by J. M. Dent and Sons, of London.

Professor Otto Liebmann, of the University of Jena, died on the 15th of January at the age of seventy-one.

Professor Wilhelm Wundt, of the University of Leipsic, who has lately been decorated with the order *pour le mérile*, will retire from teaching at the end of the summer semester of this year.

Privat docent Dr. F. A. Schmid, of the University of Heidelberg, has been made professor extraordinarius.

A new educational annual entitled *Année Pédagogique* will be published by Alcan, Paris, under the editorship of two well-known writers, Prófessor L. Dugas and M. L. Cellérier, of Geneva.

Dr. John M. Warbeke, instructor in philosophy in Williams College, has been appointed associate professor of philosophy and psychology in Mount Holyoke College, to succeed Dr. Eleanor H. Rowland. Dr. Warbeke will enter upon his new duties in the autumn.

We give below a list of the articles, etc., in the current philosophical periodicals:

THE JOURNAL OF PHILOSOPHY, PSYCHOLOGY, AND SCIENTIFIC METHODS, IX, 3: J. W. Bridges, Doctrine of Specific Nerve Energies; E. L. Hicks, Is Inversion a Valid Inference?; Societies; Reviews and Abstracts of Literature; Journals and New Books; Notes and News.

IX, 4: Josiah Royce, On Definitions and Debates; Societies; Reviews and Abstracts of Literature; Journals and New Books; Notes and News.

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IX, 5: Norman Kemp Smith, The Problem of Knowledge; Discussion: John E. Russell, Bergson's Anti-Intellectualism; Reviews and Abstracts of Literature; Journals and New Books; Notes and News.

IX, 6: B. H. Bode, The Concept of Immediacy; Durant Drake, What Kind of Realism?; Discussion: Warner Fite, Explicit Primitives; A Reply to Mrs. Franklin; Reviews and Abstracts of Literature; Journals and New Books; Notes and News.

IX, 7: Joseph Kinmont Hart, The Relation of Individual and Experimental Psychology to Social Psychology; Societies; Reviews and Abstracts of Literature; Journals and New Books; Notes and News.

THE INTERNATIONAL JOURNAL OF ETHICS, XXII, 3: Bishop of Tasmania, A Plea for an Honest Casuistry; A. T. Cadoux, The Implications of the Golden Rule; Sitanath Tattvabhushan, Ethical Science Among the Hindus; E. W. Hirst, Morality as Inter-Personal; E. M. White, The Woman-Soul; Henry Neuman, Some Misconceptions of Moral Education; Book Reviews.

THE BRITISH JOURNAL OF PSYCHOLOGY, V, 7: Knight Dunlap, The Hipp Chronoscope without Armature Springs; C. W. Valentine, Psychological Theories of the Horizontal-Vertical Illusion; E. O. Lewis, The Illusion of Filled and Unfilled Space; B. Hart and C. Spearman, General Ability, its Existence and Nature; Publications Recently Received.

THE PSYCHOLOGICAL REVIEW, XIX, 2: V. A. C. Henmon, The Relation between Mode of Presentation and Retention; R. S. Woodworth, Combining the Results of Several Tests; John E. Boodin, Knowing Selves; Discussion: A. E. Davies, Professor Titchener's Theory of Memory and Imagination; E. B. Titchener, Memory and Imagination: A Restatement.

THE PSYCHOLOGICAL BULLETIN, IX, 2: W. V. Bingham, Report of the Secretary of the American Psychological Association; W. C. Ruediger, Report of the Secretary of the Southern Society for Philosophy and Psychology; Abstracts of Papers; Books Received; Notes and News.

IX, 3: General Reviews and Summaries; Special Reviews; Discussion: G. R. Wells, Reactions to Visual and Auditory Stimuli; Books Received; Notes and News.

ARCHIV FÜR SYSTEMATISCHE PHILOSOPHIE, XVIII, 1: Bélai Zalai, Untersuchungen zur Gegenstandstheorie, II Teil; Heinz Werner, Skizze zu einer Begriffstafel auf genetischer Grundlage; Iwan Iljin, Die Begriffe von Recht und Macht; W. Bloch, Das Icherlebnis; Rezensionen; Die neuesten Erscheinungen auf dem Gebiete des systematische Philosophie; Zeitschriftenschau; Zur Besprechung eingegangene Werke.

ARCHIV FÜR GESCHICHTE DER PHILOSOPHIE, XVIII, 2: Anna Tumarkin, Wilhelm Dilthey; Hans Zeeck, Im Druck erschienene Schriften von Wilhelm Dilthey; J. O. Eberz, Platons Gesetze und die sizilische Reform; Hubert Röck, Aristophanischer und geschichtlicher Sokrates; Ernst Müller, Die Anamnesis. Ein Beitrag zum Platonismus; H. Gomperz, Einige wichtigere Erscheinungen der deutschen Literatur über die Sokratische, Platonische und

Aristotelische Philosophie 1905–1908; Rezensionen; Die neuesten Erscheinungen auf dem Gebiete der Geschichte der Philosophie; Zeitschriftenschau; Zur Besprechung eingegangene Werke.

ZEITSCHRIFT FÜR PSYCHOLOGIE UND PHYSIOLOGIE DER SINNESORGANE, LX, 5 u. 6: Max Wertheimer, Über das Denken der Natur-völker. I. Zahlen und Zahlgebilde; Richard Müller-Freienfels, Vorstellen und Denken; Literaturbericht.

REVUE PHILOSOPHIQUE, XXXVII, 3: G. Richard, La Sociologie Juridique et la Défense du Droit Subjectif; Th. Ribot, Le Rôle Latent des Images Motrices; F. Paulhan, La Substitution Psychique, II. Substitution et Transformation; Revue Critique; Analyses et Comptes Rendus; Revue des Periodiques Etrangers.

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BERGSON AND PRAGMATISM.1

In view of the differences of opinion among the increasing number of expounders of Bergson, and with Professor Lovejoy's "Thirteen Pragmatisms" still in mind, one may well have misgivings about an attempt to discuss the relations between Bergson and pragmatism within the traditional limits of the period allotted to this paper.

As for Bergson, I think most of us will agree that "the elements are so mixed in him" that one may well say that he bids fair to become a mild rival of Kant in commentary possibilities. A Bergsonian Caird or Vaihinger will have no difficulty in pointing to a regress in Bergson which, if not quite so 'transcendental' as in Kant, is no less 'regressive.' And sooner or later, some one is sure to suggest that Bergson, like Hegel, should be read backwards.

The doctrines of Bergson's philosophy which are commonly supposed to contain its chief points of contact with pragmatism are: first, its instrumental theory of Knowledge; second, its anti-intellectualism which is a corollary of the instrumentalism; third, its evolutionism.

Of these proposed articles of alliance between Bergson and pragmatism, most attention has been given to the first two; to the instrumentalism, and the anti-intellectualism;—to the latter especially by James. But, in my opinion, it is Bergson's evolutionism which pragmatism may receive with the most unhesitating hospitality, while it is precisely his instrumentalism and anti-intellectualism that diverge most widely from what

¹ Read as the President's Address before the annual meeting of the Western Philosophical Association, at Chicago, April 5, 1912.

I understand pragmatism to be. It is these two doctrines, therefore, which I wish particularly to discuss.

I.

When we read in the second sentence of the introduction to Creative Evolution that the understanding is "an appendage of the faculty of action," that sounds indeed very much like pragmatism. And when further on we are told that one great stumbling block in the way of philosophy in the past has been the assumption that knowledge must be coexistent with the whole of reality, that sounds like more pragmatism; and hereupon many pragmatists have hastened to extend to Bergson the right hand of fellowship, feeling that in view of so much apparently fundamental agreement, whatever differences remain could be easily adjusted. And if this agreement were as extensive and fundamental as these and many similar passages taken out of their connection indicate, this action would be justified. I say 'out of their connection,' for as we follow up the context of these statements, doubts of their pragmatic character begin to haunt us.

The proposition that thinking is an "appendage" or even an organic part of action, is far from constituting a pragmatic declaration of faith. 'Action' is not the pragmatic password, much popular belief to the contrary. Not until one states first what he means by 'action,' and what he considers its place in the rest of experience can his pragmatism be judged.

What, then, for Bergson, is the nature and function of this action to which or in which knowledge is instrumental? Is this action itself instrumental? If so, to or in what? Bergson's responses to these questions are, as he says, "frankly dualistic." The action of which all reflective thinking is a part is the action of spirit on or through matter. Bergson hastens to let us know at once that he is aware of the difficulties which, as he says, have always beset this dualism. But he confides to us that he hopes to greatly lessen, if not to overcome them.

Now the fact that here at the outset Bergson is apprehensive

¹ P. 190.

² Matter and Memory, p. vii.

of the historical difficulties of this dualism shows that it is for him an ontological one. For if he held this opposition as an instrumental, a logical one, there would be no fear of the sort of difficulties which he here anticipates. From the instrumental standpoint, this sort of dualism has no terrors. Instrumentally, there is a dualism for every pair of correlative categories. Whatever then may turn out to be the nature of Bergson's instrumentalism, it is apparent from the beginning that it cannot be what pragmatism means by instrumentalism.

Returning to our inquiry as to the character of the action of spirit on matter, of which thinking is a part, it is obvious that we can make little headway until we know something of what Bergson means by 'spirit' and 'matter.' In the large, this is of course a problem for some Bergsonian commentator, and I shall have to treat it here very summarily. At the outset, the opposition between spirit and matter appears to be very similar to the later scholastic antithesis of pure activity and an external, inert, purely negative, resistance. As we seek for a general characterization of this pure activity of spirit-which in Creative Evolution is real or pure duration—we are confronted, for reasons which we shall presently see, with two accounts of it: When he is trying to draw action and its resistance as closely together as possible, Bergson speaks of this activity as unconscious. The other and the characteristic view is that "consciousness is the best term we have for it." To be sure it is not satisfactory. But if consciousness be purged of all perceptions, specific memories, and conceptions, what is left will approximate the activity of real duration. Psychologically, the content of real duration oscillates between a cognitive and a volitional character. But it is contact with matter which slows up, condenses, and precipitates this pure activity, the imageless consciousness of real duration, into the imaged world of space and spatialized time.

But before long Bergson begins to feel the pressure of some of those difficulties which he anticipated at the start. Besides the obvious strain in the conception of the 'action' of pure activity *upon*, or its 'contact with,' anything, there are all the troubles that belong to the metaphysical dualism of matter and

resistance. If spirit is really metaphysically independent of matter, why must it act upon or make its way through matter at all? Why may it not turn its back on matter and go on its way rejoicing? The only answer Bergson makes is that whichever way spirit turns it finds itself "confronted with matter." But if spirit is always thus confronted with matter, how can we say that this opposition is not essential to the very nature of spirit itself? This and the closely related difficulty in the conception of an activity without resistance, which real duration is if it can go on without matter, force upon Bergson the necessity for making a closer connection between the conceptions of activity and resistance. Hence the first statement of action must be revised. We are no longer to think of the action of which thought is an 'appendage' as due to the collision of pure spirit or pure duration with an external matter already there in advance. We must now see that matter is nothing but the stoppage, the relaxation of the activity of pure duration, and its condensation and preciptation into the imagery of the spatial and temporal world. This revision Bergson calls "the ideal genesis of matter."

Though this amendment succeeds "in lessening," as Bergson says, the metaphysical chasm between pure duration and its resistance, the comfort, if any, is short-lived. For the revised conception has now to face the question: Whence this stoppage, why this relaxation and condensation of the continuity of real duration? Whatever the other difficulties, the first account of action had an answer to this question. It is matter already there which somehow (just how is not altogether clear) inhibits real duration and condenses it into a world of imagery. But now this condensation, this imagery is matter, and there is nothing here to account for or give meaning to the inhibition itself. Whenever the exposition reaches the point where this situation becomes acute, Bergson simply falls back upon the first position. Matter is thus by turns a prior condition of, and then identical with, the condensation of real duration into images. The full significance of this circle will be considered a little later. What I wish here to notice is, that in the opposition between the intellect and the imageless consciousness of real

duration, we have the correlative of what is perhaps the fundamental antithesis in pragmatism, namely, the distinction between *immediate* and *reflective* or *logical* experience. Not that the basis or the content of the terms of the distinction are the same in Bergson and in pragmatism. Far from it. Yet there is the common distinction of immediacy and reflection. But while reflection for Bergson is 'instrumental' in the sense of being a part of action, this action, on either of the above interpretations of matter, is itself *accidental*. It stands in no vital relation to 'real duration' as such. The imageless consciousness of real duration goes on not by the help of, but in spite of, reflection. In relation to Bergson's immediate experience reflective thought is therefore not an instrument, but an accident.

Here, then, is the first radical divergence between Bergson and pragmatism. For the pragmatist, the action of which thought is a part is no cosmic accident; it is not a fall from a beatific Eden of pure duration. The pragmatist's version of Eden is that the fall happens before the apple of knowledge is eaten; that before the visit to the tree, the serpent of conflict and discord has already done his work; that in fact the eating of the apple, instead of the cause is an attempt to cure the fall the fall, namely, of unreflective experience into conflict and consequent woe. Now the first effect of a cure often is to exaggerate the symptoms of the malady it treats. And this may well happen here. For the remedy, being knowledge, will isolate and emphasize the elements in conflict, and this might easily be mistaken for the original trouble, as it apparently is by Bergson. But the pragmatist believes that the original sin is to be found in the conflicts of immediate experience.

But when pragmatism says intelligence finds its material in the conflicts of immediate experience this does not mean that immediate experience is always and as such, in a state of conflict and disintegration. This, as Professor Bode has pointed out in his interesting article on immediacy, was Kant's mistake. Bergson's, we may observe, is just the opposite. Immediate experience as such has perfect continuity while intellect is a disintegrating instead of a synthetic activity.

¹ Journ. of Philos., etc., Vol. IX, p. 141.

Here, perhaps, some or all of you are demanding that something should be said about the meaning of 'immediate experience.' The point is well taken. And this brings us to a second important difference between Bergson and pragmatism,—the difference in their views both of the basis and the content of the distinction between immediacy and reflection. For Bergson. immediacy is a quality attaching to a certain fixed kind of content, namely, the imageless experience of real duration. For pragmatism, immediacy is a character of any and every sort of experience—impulse, feeling, imagery, will, action of all kinds, in so far as they are not under doubt and inquiry. Immediacy is not a property belonging to one particular part or content of experience. It is the functional, the relational property of being free from doubt. To call a character 'functional,' however, does not mean that it may not in itself be perfectly specific and unique. 'Over' and 'under' are as specific as a color of the spectrum, though I suppose we should all agree that they are functional. So long as it is assumed that when a pragmatist speaks of 'immedate experience' he has in mind 'sensations' or 'mental states' or even 'action,' the 'misunderstandings' that have been so much complained of are sure to continue. It is true that in the early days of the pragmatic movement, so much was said of thought arising out of and returning into action that it is little wonder that immediate experience was taken to mean something called 'action,' into which it was about as difficult to get content as into Bergson's real duration. But as the exposition continued, it was soon made clear that mere action was neither the origin nor the goal of thought; that the action of which thought is a part, arises in response to the demand of conflicting immediate experience for reorganization; this immediate experience including unreflective actions along with things and qualities of every sort, personal and impersonal.

This functional character of the distinction between immediate and reflective experience implies that our instrumentalism must be reciprocal. This brings into view a third difference between Bergson and pragmatism. If thought is instrumental to the reorganization of immediate experience, its demand for this reor-

ganization is equally instrumental to thought. Instrumentalism is still for many an invidious term. To say intelligence is instrumental seems to many zealous defenders of the independence of thought to make intellect subordinate and in some way inferior in status to the rest of experience. The parallogism in this is, of course, elementary. So far as status is concerned, "let him that would be greatest be the servant of all." Besides, if we may indulge in a bit of Bergsonian animism, it is in the hour of sore distress that immediate experience comes supplicating the throne of intelligence. On the other hand, if we crown intellect lord of all, still even a lord must find it up-hill work trying to lord it all by himself, which is very much what a certain type of intellectualism seems to make intellect try to do. Now, if it be a fact that in our scientific and practical procedure we are obliged to treat the distinction and relation between immediate and reflective experience, not as ontological, accidental, and as moving in one direction, but as functional, indigenous and reciprocal, we should not be surprised to find that an exposition setting out with the former should find itself obliged to substitute the latter. And just this is constantly occurring in Bergson and is the explanation of the double rôle which nearly every important category in Bergson is forced to play. Let us examine a few instances. I am aware that what follows will appear to a Bergsonian to be the lowest dregs of intellectualism and to offer the best possible justification of all the hard things Bergson has said about the intellect. To this, I can only offer a denial of all captious intentions. I wish only to show the difficulties in the attempt to carry out the spirit and intent of an evolutional standpoint in philosophy, which Bergson undoubtedly represents, with a 'non-evolutionary' logic.

We may begin with the antithesis of matter and what is variously called spirit, life, real duration, will, intuition. As we have already seen, matter is presented as sheer external resistance; or as the 'inhibition' and 'reversal' of pure duration or life; as something from which the latter is struggling to get free. But we do not go far in *Creative Evolution* before we read that "life is more than anything else a tendency to act on inert

matter." What then would life or spirit do or be if it really succeeded in getting rid of matter? Here, perhaps, is the place to note in passing that Bergson's substitution in *Creative Evolution* of the term 'life' for 'spirit,' which is generally used in *Matter and Memory*, does valiant service in the work of getting rid of the ontological dualism. For in the former the term 'life' has two meanings. One is identical with spirit, real duration, and is in direct opposition to matter; the other meaning is that of a living organism, in which of course matter is included.

But not only is there a recognition of a general dependence of spirit upon matter, but this dependence is specified, and it turns out to be for no less a matter than the individuation of spirit or 'life' itself. "Regarded in itself, it (life) is an immensity of potentiality, thousands and thousands of tendencies which nevertheless are thousands and thousands only when specialized by matter. Contact with matter is what determines this dissociation. Matter divides actually what was but potentially manifold." 2... "The matter that life bears along with it and into the interstices of which it inserts itself, alone can divide it into distinct individualities. The sub-division was vaguely indicated (in life itself), but never could have been made clear without matter." 3

Another phase of this dialectic appears in its relation to the notion of movement. On the one hand, matter is the stoppage, the cessation, of movement. It is sheer position in contrast with life as pure movement. On the other hand, life is one movement and matter another co-ordinate with it, but in opposition to it. "In reality life is a movement, materiality is the inverse of movement, and each of these two movements is simple, the matter which forms a world being undivided, also the life that runs through it cutting out living beings all along its track." "Of these two currents," continues Bergson, "the second runs counter to the first, but the first obtains, all the same, something from the second. There results a modus vivendi which is organization. This organization takes for our senses and our

¹ P. o6.

² Ibid., p. 258.

³ Ibid., p. 269.

intellect the form of parts external to other parts in space and time." 1

It is obvious that such a passage, and it is one of a series, surrenders even as it proclaims the opposition of life and matter. For how could life cut living beings out of matter, if matter were nothing but the reverse movement of life? As such a movement, it would have to reverse this movement of cutting out living beings. But, on the contrary, it aids and abets it, not only so far as to secure a *modus vivendi*, but to the extent of real organization.

The oscillation in the treatment of instinct and intelligence is perhaps even more striking. At the outset, instinct and intellect are presented as two co-ordinate, radically divergent, yet "equally fitting" reactions of the life impulse on or through matter. Instinct which works only with living organs is much closer to the nature of life and real duration than intelligence which fashions its tools from inert matter. But soon we find that "it is the function of consciousness and especially of human consciousness to introduce into matter indetermination and choice," which are of the very essence of spirit. But "choice involves the anticipatory idea of several actions," 2 and this is intellectual consciousness. Again, it is at the point of human consciousness only that spirit breaks through its prison walls of matter to freedom. But "consciousness in man is preeminently intellect." 3 Again, though both instinct and intelligence are, in Bergson's words, "equally fitting solutions of one and the same problem," the problem, viz. of action on or through matter, yet in the same paragraph we read: "that nature must have hesitated between two modes of psychical activity, instinct and intelligence, one, assured of immediate success, but limited in its effects, the other hazardous, but whose conquests, if it should reach independence might be extended indefinitely," and, continues Bergson, "the greatest success was achieved on the side of the greatest risk" 4 (though "both are equally

¹ Op. cit., p. 249.

² Ibid., p. 96.

³ Ibid., pp. 266-267.

⁴ Op. cit., p. 143.

fitting"). Also in this passage there is another illustration of the workings of Bergson's metaphysical logic, in the way in which the immediate certainty of instinct and the larger range of intellect are set over against each other as fixed but mechanically compensating possessions. He overlooks the fact that the instinct's lack of range may at any moment destroy its immediate certainty. The instinctive strike of the fish, which in the depths of an undiscovered mountain pool makes it immediately certain of a dinner, makes it equally certain to be a dinner for someone else, when man and his spoon hooks arrive. If there is hazard in widening the range there may be greater hazard in not widening it. If instinctive food and shelter are nowhere to be found, there is no doubt a hazard in substituting something else, but it is a hazard of life against the certainty of death if we stick to the instinctive form.

Of the dialectic in the treatment of consciousness, I will only point out that consciousness appears at one time as a function of the action of spirit or real duration, on matter. At another it is the best term we can get for the nature of real duration itself, which is struggling to get through and through with matter. In many passages in *Creative Evolution*, this ambiguity might be charged to a use of the term 'consciousness' where intellectual consciousness is meant.¹ But it is difficult to continue this interpretation where, in *Matter and Memory*, we are explicitly told that pure memory, which there is the term for real duration, is unconscious; that it is precipitated into consciousness only by contact with matter, and where the conception of unconscious psychical states is defended with true Herbartian fervor?

And this brings us to Bergson's reconciliation of matter and spirit. Now a reconciliation of two conceptions which are in as sharp metaphysical opposition as matter and spirit or real duration, is a serious undertaking. So long as the opposed concepts are kept busy with specific problems, this opposition gets little chance to know itself. But when a deliberate recon-

¹ This we may note is still a source of confusion in current discussion.

² Chap. III.

ciliation is proposed, this means that the members of the opposition are to be brought face to face with nothing on hand but just the business of reconciliation. And this is always an awkward situation. From Bergson's standpoint, there can be only one method of effecting this sort of abstract reconciliation. That is simply to persuade the parties to the opposition that they are, after all, very much alike; that there is, in fact, only a difference of degree, not of species, between them. Hence, the necessity for the operation of anæsthetizing life into unconsciousness, galvanizing matter into life. Matter is suddenly awakened from its inertness and begins to vibrate in rhythms much more rapid than those of consciousness, and therefore really nearer the continuity of pure duration than is consciousness itself. Instead of matter being a condensation of consciousness, consciousness appears to be a condensation of matter. "The qualities of matter are just so many static views we take of its instability." 2 Finally, the only difference that remains is just the difference in the rhythms of motion—a difference of degree, not of kind.

But this reconciliation has a brief existence. For the moment Bergson starts to use these concepts of physical and psychical, in the discussion of a concrete problem, he discovers that there is more than a difference in degree between them. The difference between a physical and a psychical rose is primarily not one of degree. The physical rose is not redder or sweeter than the psychical one, neither is it merely more vivid and lively. This, as Bergson himself very clearly expounds at length, was the mistake of English sensationalism. There must be, as Bergson is here forced to say, a difference in kind; but (and this is the crucial question) what *kind* of a difference in kind? The only *kind* of a difference in kind which Bergson can assign is just a difference of ontological species, and when this in turn breaks down as we have seen, Bergson falls back again upon the difference of degree.

Here we have again, and perhaps in sharper outline than we have had before, the generic difference between Bergson and pragmatism. Bergson finds no alternative between a mere

¹ Creative Evolution, p. 301.

² Ibid., p. 302.

difference of degree and a difference of ontological species. For instrumentalism there is an alternative. It is that the difference in kind between physical and psychical is a difference in the kind of function which any content otherwise recognized as the same may perform. It is obvious that what for our purpose is otherwise the same is now psychical and now physical just as it may be now under, then over; here good, there bad.¹

If there are ardent Bergsonians present, some of you perhaps are saying: What a caricature of Bergson is this! As for instrumentalism, where, you will ask, can be found any more explicit recognition and use of instrumental logic than in Bergson's treatment of the categories of order and disorder, laws and genera, of being and nothing, and of the negative judgment? And the answer must be freely: Here is indeed such an extensive and systematic application of instrumental method that we marvel as we read how Bergson could have escaped feeling the necessity for returning and reconstructing the rest of his work so as to bring it into line with the treatment of these conceptions. he does not do this, we can only conclude that Bergson simply does not appreciate the importance of what he is here doing. The fresh enthusiasm with which Bergson in these passages expounds the positive basis of the negative judgment, makes one wonder if Bergson has followed the work of modern English logicians, not to mention Hegel.2

II.

Bergson's type of anti-intellectualism and his opposition of science and philosophy are of course but further consequences of the attempt to expound an evolutionary philosophy with a non-evolutionary logic. When he encounters the limitations and failure of this logic, instead of reforming it, he throws logic and the intellect over and takes his stand on pure immediacy.

¹ For a detailed treatment of this distinction, see G. H. Mead's monograph on The Definition of the Psychical, and Dewey, Studies in Logical Theory, pp. 53-54.

² So far as I know, Hegel's name does not occur in Bergson's works—though Kant is frequently in evidence. Yet there are passages in Bergson that might well pass for "Hegelisms"; e. g., "Consciousness in shaping itself into intellect, in concentrating itself on matter, seems to externalize itself in relation to itself."

Perhaps a Bergonsonian would reply that there are some things that are past reforming. And to talk of reforming the intellect through what you call 'instrumental logic' is like proposing to reform a liar by having him lie 'functionally,' or a burglar by teaching him 'instrumental' burglary. The gist of Bergson's indictment of the intellect is briefly this: All intellection consists in treating objects as consisting of units or elements. We do this because we find that by so doing we can reproduce or destroy or alter or in some way control the object as a whole or ourselves in relation to the object. This succeeds (when it does succeed) in accomplishing the particular purpose for which we desire this control. But, though we may call this 'knowing' or 'thinking' the object, in this kind of knowing we do not experience the object in its unity, because we experience it in units. We know in part because we know in parts. Knowing fails in two ways: first, it destroys the integrity of the object, which otherwise we might experience through sympathetic intuition or intuitional sympathy; second, it does not even get at the parts themselves. For the moment we regard things as mere units or elements of something else, we disregard and ignore all the properties which these elements have except just those that make them elements in the thing we want. If we are hungry and seek the elements of bread, we ignore the properties in these units that might make them elements in painting a picture or in running an engine, unless we should happen to want to eat and to paint and to run an engine at the same time. Even then, we should pass over innumerable other possibilities.

We have tried, but in vain, as Bergson thinks, to remedy this, by attempting to find elements that have no other properties except just to be elements. These are the mathematical and spatial unit. But, says Bergson, and rightly, we never actually work with these units unless we are pure mathematicians, and even a pure mathematician must now and then do something besides counts. The moment we set about any other specific project than one in pure mathematics, we must operate with definite things as units and elements, and then begins again our process of ignoring and leaving out everything in the units except

that which concerns our little enterprise. Intellectual analysis, therefore, is doomed by its essential nature to mutilate, and therefore to be untrue to reality.

Observe in passing that this from the author of *Creative Evolution* sounds strangely like a passage from Bradley's *Appearance and Reality*. But what now from Bergson's standpoint can be done? Doubtless as matter-encumbered beings we must go on acting, therefore we must go on with our unitizing, spatializing science. But, we must remember that we are also members of the world of real duration—even as for Kant we are members of the "intelligible world." And with this in mind and by a special, not to say mystic, effort we may succeed in shutting out the world of action and its machinery of units and space, of causes and effects, and find ourselves in the world of real duration, and our experience in the form of intuition, which is the method of philosophy.

Still the inexorable dialectic pursues us. At one time this philosophical intuition seems to be cognitive. "As it is the business of science to act," says Bergson, "it is the business of philosophy to see, to speculate." But 'seeing,' 'speculating'—these are visual terms, at least visual analogies, and vision, says Bergson, "is nothing but anticipated action." So we swing again to the side of feeling and impulse, and so far do we go in this direction that the creative impulse and intuition of the painter and the poet is contrasted with its 'interruption' and 'congealment' into lines and colors, words and letters. Whereupon we find ourselves wondering if we are to say that the creative intuition of the physician is interrupted by his patients; that of the lawyer by his clients; and the shop-keeper's by his customers.

Bergson seeks to avoid this absurdity by saying that the reason this congealment of the creative intuition into specific forms is felt as an interruption is because it has to use old material, old colors, old words, etc. If it could only completely create new material along with the new form, there would be no sense of interruption. But, aside from all the difficulties in the conception of a creation that is not a re-creation, if both the form and the matter must be wholly new, how then are we to keep hold of all

the past which Bergson so often insists is an essential character of real duration?

But supposing that in the experience of real duration we get rid of the unitizing method of the intellect, from the standpoint of Bergson's interest in not leaving out anything, are we any better off? For now we are missing all the images and qualities which the condensing intellect produces.

Instrumentalism quite agrees with Bergson that when, in science and practical procedure, we use some things as units or elements of something else, we do pass over possibilities in these elements which are not relevant to our purpose. But there is a consideration here which Bergson overlooks—one which measures the distance between a metaphysical and a functional logic. This is, that in the very process of unitizing, the intellect may recognize that its units are selected and constituted to control a certain object or class of objects.1 It may freely see and confess that it is here "passing over" properties in the "elements" that are to be reckoned with at other times and places, and for other purposes. And where this is the case, how much basis then remains for the charge of omission and mutilation? Here, the very act of ignoring involves a recognition and acknowledgment of that which is ignored, the positive side of the exclusion is the recognition that what is here passed over may be of value in other situations, and may acquire value for situations similar to this. As against a logic which does not recognize this, Bergson's indictment of the intellect stands good. But his substitution of pure immediacy falls straightway into the same ditch from the other side.

Here, doubtless, a Bergsonian will say: "Do you not see that when you talk of excluding something as even temporarily irrelevant, you completely miss Bergson's conception of intuition, and pure duration? Suppose you do recognize that you are ignoring something or pushing it into the background, this does not alter the fact that it is being ignored and passed over. If you ignore my presence it is small comfort to be told that you

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¹ Cf. Professor Perry's "Notes on the Philosophy of Henri Bergson." Jour. of Philosophy, Psychology and Scientific Methods, Vol. VII, No. 25, p. 677 ff.

know you are ignoring me, and if you apologize by saying it is only temporary, that my turn will come soon, still as a logician, not to say as a mere human being, I am bound to recognize that some one else must then be left out and so on endlessly. And does not all this confirm Bergson's contention that action and intellect are necessarily mutilative, and that if we are to experience reality in its unbroken continuity it must be done in an experience in which nothing is even temporarily irrelevant or in the background?"

Noting, once more, how similar to Bradley's absolute "sentience" this would be and how it would raise again the problem of individuality, let us observe further that in terms of attention it abolishes the distinction and interaction between the focus and the fringe. And it is difficult to say whether for Bergson what we have left is all focus or all fringe, or a combination of both. Sometimes it is one and again the other—depending on whether real duration is construed cognitively, or volitionally. In terms of art, it removes the distinction between foreground and background. Some have characterized Bergson's work as an attempt to carry over into Philosophy the standpoint and method of art. But in art the organic relation between focus and fringe, foreground and background, is fundamental.

But what I wish particularly to urge at this point is that Bergson does not see that the selection and construction of units and elements in the procedure of science involves the very sort of intuitive appreciation for which he is contending and which he is seeking elsewhere. In one of his 'reconciling' passages, Bergson goes so far as to say that "Intellect and Intuition though opposed are yet *supplementary* processes," the first, as he says, retaining only moments—that which does not endure—the other bearing duration itself.¹ But while this is quite different from the negative opposition with which we began, it is still far from an organic relationship. There is no statement of how they supplement each other. The supplementation seems to consist of one furnishing something which the other does not in making up the content of real duration. But in scientific

¹ Creative Evolution, p. 344.

procedure there is a real supplementation. It is precisely the presence of a fringe of intuitive appreciation of the continuum from which the 'elements' are taken and of the ignored characters of the elements themselves, that constitutes the sensitive alertness of the successful scientist. Not only as the immediate form of the 'inspired' invention or discovery, but as a part of the more plodding process of verification is intuition as indispensable in science as in art.

Again it would be easy to cite passages from Bergson in which this is recognized:—passages in which he speaks of the spontaneous and unpredictable character of the unitizing action of the intellect. But this spontaneity is not brought into any kind of organic connection with the results of the unitizing work of the intellect. It is simply a bit of real duration lodged in the interstices of the scientific process, saving science from a wholly unregenerate materialism.

In making intuition the method of philosophy, it is one of Bergson's cherished convictions that he is 'saving' philosophy from the dogmatism of the realist on the one side, and the transcendentalism of the idealist on the other. And it is indeed true that, for Bergson, real duration is not merely a presupposition of moral experience. He is not obliged, as was Kant, to be content with saying: "we know that real duration is, but not what it is." In moral and artistic experience, real duration is directly present. "The Grail in my castle here is found." And yet it seems that it is only when we close our intellectual eyes to the castle and its contents, or fuse them into a unity of impulse and feeling that we get-we cannot say a glimpse, for a glimpse is an image, and an image is anticipated action shall we say, then, a sense—or using Bergson's own term, an intuition of the Grail of reality. But after all, is not this the very essence of transcendentalism-namely, an attempt to find reality in or with some part or function of experience to the exclusion of the rest? Logically are not the difficulties the same whether transcendentalism appeals to a superempirical process or to some one process or experience as against the others? Logically is not the crassest sensationalist as much of a transcendentalist as the absolute idealist? So it will not be strange if, as transcendentalism has appeared to some to be a bashful intuitionalism, Bergson's intuitionalism should seem to others to be a shy transcendentalism.

I am aware that I have dwelt far more on the differences than upon the large common ground between Bergson and pragmatism. My excuse must be that the latter has been emphasized so much, that it has seemed to me important differences were being overlooked and that a canvass of these would make for a better understanding both of Bergson and pragmatism.

A. W. MOORE.

University of Chicago.

THE RELATION OF CONSCIOUSNESS AND OBJECT IN SENSE-PERCEPTION.¹

WHAT is the relation with respect to numerical identity or difference between real objects, meaning by these such objects as are true parts of the material world, and perceived objects, meaning by these such objects as are given in some particular actual perception? Different answers are given to this question. It is held by some that the real object is always given in some particular actual perception, that the real object cannot exist independently of any perception, that the real object and the perceived object, the object given in some particular actual perception, are at the moment of perception numerically one. What makes an object an object at all is the fact that it is perceived. Objects which are not given in some particular actual perception are not real, and yet not all objects given in some particular actual perception are real. This is the theory that goes by the name of subjective idealism. Epistemological dualism and realism declares that the objects given in some particular actual perception and real objects are not numerically identical. The perceived objects may be representative of the real objects, but they are at the moment of perception numerically two. The real object can exist at other moments independently of any perception. According to epistemological monism and realism, the objects given in perception are sometimes real, that is, true parts of the material world, and sometimes not real; and real objects are sometimes perceived and sometimes not perceived, that is, not given in any actual perception. The real object and the perceived object are at the moment of perception numerically one, and the real object may exist at other moments apart from any perception.

These theories evidently have points in common. Subjective idealism and monistic realism agree that the perceived object

¹ Paper read before the American Philosophical Association at Harvard University, December meeting, 1911.

and the real object are at the moment of perception numerically one, but that not all perceived objects are real, that perceived objects are sometimes not real, not true parts of the material world, and hence that the perceived object and the real object are sometimes not numerically one at the moment of perception. They differ in this: according to subjective idealism the real object cannot exist independently of any perception, while according to monistic realism it can. Any theory therefore which holds that the object which is perceived, or given in some particular actual perception, can exist independently of any such perception is epistemological realism. Consequently, in so far as the branch of idealism which is called objective idealism holds this, it is realistic; and in so far as it holds that the object given in perception is numerically identical with the real object, this form of idealism is also monistic. Whatever difference, therefore, there may be between monistic idealism and monistic realism will have to be a metaphysical difference, a difference in metaphysical standpoint. Epistemological dualism and epistemological monism, in so far as they are both realistic, agree that the real object can exist independently of any perception; but they differ as to whether the real object and the perceived object are numerically identical at the moment of perception. A realistic theory may, however, be monistic in its epistemology and dualistic in its metaphysics: it may hold that we directly perceive the real object, a true part of the material world, that the real object and the perceived object are numerically one, but that the percipient and the object are ultimately two.

The question at issue may, then, be stated thus: In cases where a real (and non-hallucinatory) object is involved, what is the relation between the real and the perceived object with respect (a) to their numerical identity at the moment of perception, (b) with respect to the possibility of the existence of the real object at other moments apart from perception? Are the real object and the perceived object numerically one at the moment of perception, or are they two? That is, is the complex of physical qualities, which is a true part of the material world, numerically identical with the complex of physical qualities,

which is given in some particular actual perception, or is it not?

To the naïve man this question will at first appear quite meaningless: to ask what is the relation between the real object and the perceived object will seem to him to ask what is the relation of the object to itself. For him the objects which he perceives here, over there, around him, his body and the things, are real objects and occurrences, of course; objects and occurrences which will go right on existing when he closes his eyes or removes his hands from them, and go right on existing practically as they are. They are what they are: we may perceive them differently at different times, under different circumstances; they may look different; but they are just what they are; the orange is yellow in the light and in the dark, that is its real color; in the dark we do not see it yellow, but it is yellow just the same. The question of the numerical identity of the real thing and the perceived thing does not occur to him at all; the thing he perceives is, ordinarily, the real thing: it does not disappear when he ceases to see it or touch it or taste it or hear it; he simply ceases to see it or touch it. Other persons will perceive it just as he perceived it; it will remain therefor any one that pleases to look at or touch it. And even if no one were there, God or man or brute, it would go right on being, being just what it is in itself. Nor does the naïve man regard the thing as the cause of his perceiving it; it is simply there, over there, or next to him, against his body. He perceives it exactly as it is; he may not perceive everything about the thing; with greater attention and all kinds of instruments he can see it better, but what he does perceive of it is there, in the thing. Nor does he regard the things as modifications of his soul or consciousness, or even as a state of his sense organs or of his brain.

Reflection upon certain experiences, however, such as differences in what is taken to be the same object, dreams, illusions, and hallucinations, provokes the inquiry, Why do we perceive objects in the *wrong* way; why do we perceive objects which do not exist at all? It would appear that, in some cases at least, what is perceived is not a true part of the material world, is not

something independent of any perception. Attempts are made to explain these facts, to discover what the real object is, attempts which may lead the inquirer farther and farther away from the naïve realism from which he started and finally land him either in a dogmatic metaphysics or agnosticism or scepticism. practical man will conclude that the object is, normally, actually what he perceives it to be, but that mistakes occasionally happen; he will eliminate certain perceived objects as pseudo-objects, or regard them as different view-points of the real objects, selecting certain experiences as the true reality; he will use his own and other persons' normal perceptions to correct his picture of the real world. These very facts, however, will suggest the inference that the real objects are not perceived exactly as they are, that our way of perceiving them contains many elements which are added by the percipient. They may give rise to the view that the real object is never directly perceived, that the perceiver does not get the object at all but only its representatives, which representatives may be, in whole or in part, similar to the real object, or symbols of it. Or the philosopher may declare that though there is a thing independent of the perceiver, this thing neither presents itself to him in brobria persona, face to face, nor through faithful representatives, but that it is unperceived and unknown. He may consider even the existence of such a thing in itself problematical, or he may finally deny its existence altogether, coming back to something like the original naïve position: perceived world and real world are one and the same; only, the perceived world is a mental world: the world is my idea; there is no extra-mental world.

The question arises whether there is any way of escaping the conclusion that the qualities which are given in some perceptual situations are not true parts of the material world. Natural science seems to confirm rather than shake it; indeed, it appears to compel us to take a still more radical position than the one suggested, namely, that the world of things in themselves is not at all what it is perceived to be. It is conceived to be made up of numberless moving particles of matter or points of force; the scientific *conception* of the universe does not agree with the

naïve perception of the universe. The complex of physical qualities, given in some particular actual perception, which we call a round, yellow, solid, fragrant object, is certainly not numerically identical with the complex of physical qualities,—moving molecules of matter and ether, molecular action in the sense organs and in the brain,—which is said to be a true part of the material world.

But let us throw physics to the dogs and start afresh. Let us dogmatically declare that the real object and the perceived object are numerically identical at the moment of perception, in the sense already explained; and let us see whether our difficulties can be removed. Experience tells us that what we regard as one and the same thing changes under the scrutinizing attention. under the microscope, under different conditions of the perceiver and his environment, that it is perceived differently by different senses, in other words, that the complex of physical qualities given in one continuing perception, or in different perceptual situations, is not the same. These facts can be explained. on the basis of naïve realism, only by assuming the existence in the real world of all the qualities given in perception. Such an assumption, however, calls for a new theory of perception, to construct which several unsuccessful attempts have been made. Professor Montague¹ offers us one based upon the metaphysics of energetics. A material object is a center of inflowing energies. With each form of energy there is correlated a quality, so that an object is not only a group of inflowing energies superposed upon one and the same part of space, but also a system of the qualities correlated with those energies as their reciprocals. It is likewise a center of outflowing energies, some of which impinge upon the termini of the nervous systems of animals; each stimulus having correlated with it a specific quale. The quantity and quality of the stimulus express the nature of the object which is its source except for such modifications as may have been imposed by the medium traversed. Now an externally observable current of kinetic energy in the afferent nerve passes or

¹ Articles in Journal of Philosophy, Vols. II, p. 309; IV, p. 374; and in Essays in Honor of W. James, 1908, p. 105.

seems to pass into a sensation. What really happens is that the kinetic energy of motion is transformed into an equivalent potential energy of stress at the nerve center. Whenever the potential energy at a nerve center is greater than the inflowing energy which is its cause, then there exists a conscious quality of that energy. In the perceptual field of objects, however, to which sensations give rise, the case is quite different. These sensations when connected in one system induce a center of stress or ego from which their several energy currents are reprojected as a field of perceptual objects and out into the same real space and time in which their physical causes are located. The perceived object is identical in substance (because composed of the same energy) with a part or aspect of the physical object, viz., such part as has directly, in the form of a present sensory stimulus, or indirectly, in traces of past sensations, flowed into the organism. This simply means that energy flows from the object into the organism, is transformed into potential energy at the nerve center, becomes conscious of its quality, is connected with other such conscious energies into a system, and with these reflected back to its source. The qualities march into the brain. become conscious, and then march out again. But is the quality of the perceived object identical with the quality of the material object? It is probable, we are told, that the specific quality correlated with the ether wave-length that produces perceptual red, when the optic nerve current which it arouses is transformed into potential energy in the visual nerve center, is itself something as different from red as the odor of musk. At the same time, we are told again, it must be remembered that our perceptual activity, when directed to an object, contributes to the nature of that object just as truly, though, of course, not so largely, as the sun's shining upon it. The attributes which we ascribe to it do forthwith belong to it. Hence it would seem, according to Professor Montague's theory, that the felt quality of red, red with consciousness inhering in it, is reprojected outward in a way reminding one of some forms of subjective idealism—only, being also a stream of energy, it causes a modification in the original source of the energy from which it sprang. In this view we get the qualities given in perception reflected back into the universe of flowing energies by rather heroic means; but even so, it would appear that we perceive only the qualities which we put into it—perceptual red is probably different from the real red—and that the qualities, as we perceive them, cease to exist when we shut our eyes. The complex of qualities, conscious of themselves, given in perception, is the result of the interaction of inflowing energies and organic energies; the result is a real energy that lasts as long as the interaction lasts; what the real energies are, apart from their relation to the perceiving organism, perception cannot tell us. Perceived objects are true parts of the material world, but they are the intermittent products of the relation between particular organisms and the world.

Professor Woodbridge's theory¹ tries to bring us nearer to the real object than the preceding hypothesis. There are specific qualities or differences in the world, but these would not have their specific effects if it were not for the sense organs: the sense organs are the specific means for rendering the differences effective. Eyes would be useless if there were not something to see. The very purpose of the sense apparatus is to realize interactions between the organism and its environment which otherwise would not be realized. The bare existence of such interaction is the fact of sensation. Hence if we had other and more adequate instruments, we might have a greater variety of sensory content, and if any part of the sense apparatus were lacking, the sensory content would not be so rich in qualities: the so-called secondary qualities, say, might be absent from the objects given in our actual perceptions. But there is no consciousness in sensation as such. If our sense organs existed in isolation and remained only disconnected media for specific causation, the world might possess all the variety we ascribe to sensation, but contain no more consciousness than exists in a camera when the sensitive plate is exposed. It is only when the sensations are connected and co-ordinated by means of the nervous system that what the organism undergoes in interaction

¹ Articles in *J. of Phil.*, II, p. 119; VI, p. 449; in *Psychological Review*, Vol. XV, p. 397; Garman volume, p. 137; James volume.

with its surroundings is made into a conscious experience. The organism with its sense organs and nervous system provides a center for the interplay and co-ordination of the varied differences in the world without allowing these differences to lose their specific characters.

According to this description of the mechanism of sensation, the sense organs are means of rendering effective the specific differences existing in the world, of enabling them to have their specific effects. Specific effects upon what, we ask? Evidently upon the sense organs themselves, for "it is the eye that sees, the ear that hears." This can mean that there is reproduced in the organ something analogous to the specific difference outside, say, a retinal image in the eye, in which case our sensory content would consist not of the things themselves, but of the analogous reproductions of these things upon our sense organs. If we define sensation as the bare existence of the interaction between the organism and the environment, then we surely cannot say that the perceived object, the patch of blue, is numerically identical with the real object, the physical and physiological events in question, that is, that the complex of qualities given in perception (the patch of blue) is numerically identical with the complex of qualities which is a true part of the material world (ether and eve activity).

Besides, unfortunately for this theory, the differences do seem to lose their specific characters: in the color-blind man, for example, the specific difference which we call red will not operate, or make itself effective; not only that, his sensory content will be blue or yellow, qualities not identical with the qualities which are a true part of the material world. Sensations would therefore seem to be qualities added to the real world in consequence of the interaction between the real world and the organism. It is true, when the color-blind man becomes conscious, that is, when meaning is added, he will come face to face with his sensory content as it is; in so far the perceived object will be a real fact in the world, but it will not be the red fact which his normal

¹ See the works of the German realist E. L. Fischer, Erkenntnisstheorie, and Die Gesichtswahrnehmung. Cf. also, Schwarz, Das Wahrnehmungsproblem.

neighbor perceives and which is said to exist independently of any perception: it will cease to be when organism and environment cease to interact. And if the coöperation of organism and environment is the fact of sensation, there is every reason to suppose that qualities are added, even in normal sensation, which disappear with the interaction. Further additions would seem to be made when the sensations are connected by means of the nervous system, so that the perceived object would neither completely agree with the sensory content nor with the specific differences in the world, from which we started.

It may be said that in this case the specific sense apparatus does not work properly, that the specific difference in the world cannot make itself effective, but that it is there none the less. This explanation may be acceptable on the ether theory, but it will fail if we declare that the object is exactly what it is perceived to be; how can what is red be also blue or yellow? To place the blame on the apparatus or on the physical media in this case shows the dependence of the sensation on organic conditions which not only make manifest the real qualities existing in the world, but somehow seem to affect these qualities.

The realist can answer that after all we do not perceive the things as they are in isolation or independently of one another, but only in their mutual relations; and that when we perceive them that way we perceive them as they really are. The objects seen are seen only through the coöperation of ether waves and the organism; this coöperation is actual, hence the objects are seen as they really are. To apprehend the book is not to know something in isolation, but to know it in its relation to ether and organism. If this means that the blue book we see is the interaction between a thing, ether, and organism, we are identifying two entirely different things. It is possible to say that object, ether, and organism in interaction produce in the object the colored surface, and that we apprehend directly that colored surface; but this view makes the colored surface relative to the organism and implies that such surfaces would cease to exist

¹ See A. Wolf, "Natural Realism and Present Tendencies in Philosophy," Proceedings of Aristotelian Society, 1908–09, p. 141.

as they are with the disappearance of organic beings from the world.

The fact is we can identify the complex of physical qualities given in some particular actual perception with the complex of physical qualities which are a true part of the material world, only so long as we ask no questions. What is given in perception is as real as anything can be, and will be accepted as such until the object begins to change under our scrutiny or otherwise, and we begin to inquire which of the many forms in which it presents itself is the object as it really is. And even here it is possible to take what is normally and universally given as our real world and come to rest. But as soon as we attempt to explain the origin of perception, to construct a theory of perception, on the basis of an organism and an environing world, perceiving becomes a relative affair. We can speak of the real object as directly given, but this object will be relative to another more fundamental reality, the truly real,—energies, molecules, ether waves, or what not,—which is not given in perception. But even if it were so given, the old problems and difficulties which trouble us now would still recur. We should still go on asking whether the object as given is the real object, what it would look like if nobody looked at it, and so on. We should imagine a case of pure looking, a situation in which pure object and pure perceiver meet, as Plato imagined the pure soul to meet the pure ideas face to face; and go right on calling our ordinary perception seeing through a glass darkly. Besides, we can always think of the object as further analyzable, and we do not stop until an ideal object is reached which is used as a standard for judging the real, that is, the perceived object.

But even if we disregard the theories of perception, based as they necessarily are upon some theory of the world, and limit ourselves to our experience as we find it, we cannot say that the complex of physical qualities given in some particular actual perception is numerically identical with the complex of physical qualities which are a *true* part of the material world. Using a figure of speech of which new realists are fond, we may affirm that the momentary light of perception does not reveal the object

in its completeness and truth. The true parts of the material world are not presented in a particular momentary perception; our momentary perceptions are not complete and free from error. The true object is not gegeben but aufgegeben; it is the object of our search. Moreover, the true object is not a mere isolated object; as a true part of the material world it is in relation with other objects; indeed, the world is an inter-related, interacting world, and there is nothing in it that stands alone. If we succeeded in isolating a part of what is given from its connections, and staring at it as we might imagine an infant or semi-comatose person to stare at it, we should not have a true part of the material world; true parts of the material world do not exist abstracted from the rest of the world. In momentary perceptions we get a fragmentary world, often a disconnected world; we do not get everything at once, we do not get all the qualities, all the relations, and we do not always get them right, as the experience of everyday life amply shows: if we did, what would be the use of the whole apparatus of scientific observation? The world as perceived by the infant is not the true world; there is both more and less in this than may be given in any momentary perception, and we approximate the true world in developed perception, by perceiving it in the light of past perceptions, that is, by interpreting it.

This naturally leads us to inquire into the question of consciousness as a factor in the perceptual situation, the factor by virtue of which the perceived object differs from the unperceived object. What is the positive nature of the difference, it is asked, between the status of a given object at those moments when it figures in some particular individuated stream of perceptions, and its status at those moments when it does not figure in that stream? The answer to this question will depend upon the answer given to the other question. To decide what consciousness adds to the status of the unperceived object we must have some notion of what is meant by the unperceived object. We may dogmatically declare that the object perceived is the object unperceived, numerically identical with it; that the complex of qualities given in some particular actual perception is a true part of the material world; that it goes right on existing as it is

independently of any perception, that is, whether perception shines on it or not. In that case, of course, there is no difference between the object, as object, in the perceptual situation and the object out of it, though there may be a difference in the two situations as a whole. We may say the object figures in different contexts; in the perceptual situation it stands in different relations from the relations in which it stands in the non-perceptual situation. It slips in and out of consciousness undefiled, untouched, unchanged; or rather, it stays what and where it is, consciousness simply turns its light upon it. An ideal spectator, observing the scene, would tell us: I see an object variously related with other objects, many of which affect and are affected by it; and I see that self-same object in relation with thought, feelings, and volitions, which do not affect its qualities or other relations in the least.

Let us see how some of the more radical thinkers deal with this part of our problem. It is argued that there is no difference between the perceived and the unperceived objects. Perceptions are pure natural events, not cases of awareness, and apprehensions, says Professor Dewey; the plain man does not regard noises heard, light seen, etc., as mental existences or as things known; they are just things. His attitude to these things as things involves their not being in relation to a mind or knower. Seeing is not knowing; 'seen' involves a relation to organic activity; the joint efficiency of the eye-activity and of the vibrations of ether condition the seen light.¹ According to Professor Montague, as we have seen, qualified energy flows from the object to the organism, is transformed into potential energy, becomes conscious of its quality, is connected in the brain with other such conscious energies, and with these reflected back to its source. We are conscious of quality in sensation: the quality felt and the feeling of it are inseparably blended. Perception is an organic activity by means of which energies are modified, made conscious, connected into a system, and turned back to their source. For subjective idealism, objects inhere in consciousness; for Professor Montague, consciousness inheres in its objects, which belong to

^{1 &}quot;Brief Studies in Realism," Jour. of Philos., etc., Vol. VIII, pp. 393-546.

the spatial-temporal system of nature. At the same time it is also a relation existing in a material nature along with other relations, describable ultimately in terms of basic relations of space and time. The perceived object is the result of the interaction between organism and environment; consciousness is a by-product of the same interaction. Professor Woodbridge tells us that sensation is a natural event, the bare existence of specific interaction brought about by means of a specific sense organ: it is the eye that sees, the ear that hears. But sensations are no more knowledge than the eclipse of the moon is knowledge. They account for the sensory content of experience without the addition of any faculty or power of sensibility, simple apprehension or awareness. In order, therefore, that what we are wont to call sense qualities may exist, consciousness would appear to be unnecessary. These sense qualities become indices of a variety of possible reactions in the organism and are thus connected in the relation of implication. It is then, when sensations are connected and coördinated by means of the nervous system, that what the organism undergoes in interaction with its surroundings is made into conscious experience. That is, when sensations are connected by the nervous system in the relation of implication, consciousness, which is a relation of meaning or implication, arises. When the necessary physical and physiological conditions are fulfilled, consciousness appears, full-fledged, like Minerva springing from the head of Jove: we not only become aware of the object, but of the meaning of the object; we cannot become aware of the object without at the same time becoming aware of the meaning of the object. If objects were in my consciousness, but utterly devoid of meaning, I should not be aware of them.

Now what Professor Dewey calls perception, the pure natural event without awareness of consciousness, is not what we ordinarily understand by the term: seen light of which nobody is aware is not what we mean by seen light. Sooner or later, these natural events will have to become conscious in Professor Dewey's system, and they do become conscious under a different name; instead of being perceived they are *experienced*: to give a just

account of a thing is to tell what that thing is experienced as, If we take Professor Dewey's notion of perception as a natural event without awareness literally, we shall have to say that a given object never figures in any particular individuated stream of perceptions, because there is no such stream; the given object simply is, and our second question is just as artificial as our first. It is true, as Professor Dewey declares, that consciousness is not merely cognitional or logical, that it is also emotional, esthetic, and morally practical, that, therefore, an experience may be existent which is not known, but it does not seem to me to be true that a perceptual experience can be existent, as an experience, which does not somehow get itself reported in some perceptual stream. The 'de facto presence in experience of a discriminate or outstanding quale or content' is a case of knowledge, not in the sense of logical or adequate knowledge, but in the sense of awareness, or whatever other harmless name we may choose to indicate the fact that such an experience is not an unconscious brain event. For Professor Montague, too, perception is after all a consciousness of qualities; indeed, if we carry out his thought, we find that the given object is always conscious, that consciousness is born at the very moment the sensory content is born. For Professor Woodbridge, what we should call perception in our psychologies is a highly developed process: it is awareness of a fact, and awareness of a fact is awareness of it as meaning something. Consciousness arises the moment the unconscious sensations are connected in the relation of implication by means of the nervous system; wherever, however, the sensory content is not connected up, the given objects (the sensations) exist, but they do not exist as they exist in consciousness, namely, connected in the relation of implication.

In the case of all these thinkers, perception is always, explicitly or implicitly, a biological process accompanied by consciousness; consciousness is a by-product of the interaction between organism and environment; the sensory content is, explicitly or implicitly, similarly dependent, to some extent, on this relation; and consciousness is a harmless looker-on. According to Montague and Woodbridge, the sensory content is connected and coördinated

by the nervous system, which also makes additions from its personal history to the result. Starting out with a naturalistic metaphysics, these philosophers naturally end with a naturalistic metaphysics: consciousness is an epiphenomenon, inhering in the objects. The object figuring in a conscious perceptual situation differs from the object out of it in the possession of consciousness. The nervous system, for example, in Woodbridge's view, connects the sensations in a relation of implication; consciousness as a relation of implication appears as a kind of unnecessary adjunct; why it appears no one knows; the connections are not conditioned by its existence; its existence is conditioned by them. Consciousness looks on; there is nothing else left for it to do. The real problem of perception here becomes a biological one. The question as to the difference between the status of the given object figuring in an individuated stream of perceptions and its status when it does not figure in that stream will have to be answered in biological terms. And so far as I can see from the accounts of the writers discussed, factors enter into the biological perceptual situation which depend on the nature and personal history of the organism, which means that the object with which the perceiver comes face to face bears the impress of his own nature and life history. Translated into terms of consciousness, this will mean that the object figuring in the conscious perceptual stream is interpreted, apperceived, and that we get more than a sensory content, more than an isolated piece of pure experience.

The biological theories all point to the view that the object given in perception never appears in isolation, that it is never out of relation to an organic being. Organic perception is so complex, so many functions are involved in it: actions and reactions and interactions, that it is more appropriate to speak of the perception of an object than of an object of perception. Examination of our conscious perceptual experiences reveals a situation similar to the one suggested by biology. However we may explain the machinery of perception, the nature and condition of the perceiver have something to do with the result of the process. The object, we say, looks different to different

perceivers at the same time and to the same perceiver at different times; a thing located in the same place, or otherwise identifiable as the same thing, is not quite the same thing; the complex of qualities appearing in one situation is not quite the same as that of another situation: there is likeness and yet there is difference. And so too we cannot talk of a perceived object as an isolated object, out of its relation to a conscious being. The object must be given or presented, presented to a self; some one must be aware of it, experience it in the way of awareness; it must somehow get itself reported. Perception is not a mere natural event, but the perception of a natural event, the perception of an event as natural, as objective. It is knowledge in the sense that something is presented for inspection. Being that is not presented may slumber on in the lap of reality till doomsday; unless the light of consciousness falls upon it, it is as good as nothing for us. To be aware, therefore, means to be conscious. But can there be awareness without further functioning of consciousness, that is, can there be mere awareness of objects and nothing else? The infant in the first months of infancy, the semi-comatose person, and even the wide-awake adult at times, may have experiences closely bordering on such states of mere awareness. However that may be, in our ordinary adult perception, awareness is a more highly developed process, or perhaps better, other mental functions enter into it. Objects are identified, recognized, assimilated, discriminated, felt as continuous with one another, held together in a unique way of felt togetherness, attended to, apperceived, suffused with meanings, judged; emotional and volitional elements play a part in the total result. The fact is, in perception the entire self is more or less in action. Physically and physiologically speaking, perception is the entire organism in interaction or relation with its environment; we cannot single out one particular element in that complex situation and call it the physical or physiological counterpart of the process of perception. No more can we, in speaking of perception as a mental event, abstract the so-called perceived object from the functions involved, in the hope that we may in this way get at the core of being. A perceived object cannot be torn entirely out of its

relation with a perceiving subject. Perceiving an object is an indivisible activity, which we can afterwards analyze, according to our purposes, but not with the idea of discovering the object exactly as it would be apart from any perceiver. We cannot set up the so-called pure experience of the infant, "the original flux of life before reflection has categorized it," as the aboriginal object, because we do not know what that big buzzing blooming confusion is. The only way we can form a picture of the original flux is to abstract from the adult perceptual situation; and each theory will get out of that and put into the pure experience exactly what it needs: no pure infant has ever failed to live up to what was expected of it by its theory.

It is possible to say that an object figuring in some particular individuated stream of perceptions also figures outside of that stream, but not that it always figures in both situations in the same way, that is, possessing all and the same features. Within a continuing perceptual stream it differs according to the presence or absence of attention, discrimination, selection, apperception, and interpretation; it may even contain characteristics which contradict each other. Which of these qualities shall we think of as existing independently of the perceptual stream? If we say all of them, are we not saddling ourselves with a chaotic world? If it be held that one and the same object is present, but that it may be inadequately perceived, the question at once arises as to what the adequately perceived object is. One of the objects must be chosen as the representative of the others according to some standard or ideal object actually experienced or constructed in the imagination. This would make it necessary to account for the inadequately and falsely perceived ones as somehow dependent on the perceiving process; perception can give and perception can take away. Besides, the question would always arise as to the standard object itself: Have we reached the truly real? We might choose as the standard the pure experience of the infant, the normal and social object, or the developed perception of the specialist; but the question of the truly real would persist: could not better means of perceiving give us a different object? It might be said that all the char-

acteristics normally perceived are real, exist independently of perception; the one object is present in all the perceptual situations in which it figures, with varying characteristics; every one of them is as real as any other. The one object is many things. has many qualities; some of them figure in the particular perceptual stream, others not; but all of them exist independently. outside of the perceptual stream, just as they are; all of them are true parts of the material world. The obstacle in the way of this view is the fact that the object reveals not merely more characteristics but contradictory ones in different perceptual situations: the staff in the pool cannot be both straight and bent. Most of our difficulties are removed if we assume that the mind has something to do with the way in which the object figures in the perceptual situation. We may say that in the perceptual situation an object is revealed, made manifest, its qualities are brought out, and that this is the work of consciousness. But we must also say that much that appears belongs to the mental realm, is read into the object, sometimes truly, sometimes not. This does not mean that the mind alters the object or that it creates the object out of nothing, or that the object creates a picture of itself in the mind, or that the object lies imbedded in the mind. All we can say is that a conscious organism perceives a real object in a certain way, according to the mental and physical factors involved. How it is possible for us to perceive at all, no theory has yet been able to tell.

FRANK THILLY.

CORNELL UNIVERSITY.

DESCRIPTIVE AND NORMATIVE SCIENCES.1

THE general division of sciences into descriptive and normative has long been one of the commonest devices used in classification, so much so that it has become almost traditional to refer to it even in the elementary text-books of logic and ethics. There obviously is a great difference between such sciences as physics on the one hand and ethics on the other, and the distinction clearly turns in some way upon the place of norms or values in the two. Ethics is possible only because men judge some conduct to be good and other bad, whereas it seems as if there might be a science of physics even if objects never were classified in this way. It is quite natural, therefore, that ethics and other sciences that imply valuation should have been called normative. and that the sciences which approach their subject matter with a more disinterested attitude should have been called descriptive. These latter sciences, it is said, attempt to state merely what is. The laws of physics, for example, are statements of uniformities that occur and recur in the existing and indestructible world of matter. Its subject matter is sheerly existent, and as such it is neither good nor bad. If its objects do in fact serve a useful purpose, an art may be created depending upon the science, as engineering depends upon physics and other sciences, but this use is extraneous to descriptive science as such. The most destructive catastrophe in nature,—the volcanoes, earthquakes, and hurricanes,—are as orderly, in the scientific sense of the word, as, to borrow Huxley's phrase, the 'sabbatical peace of a summer sea.' Ethics and logic, on the other hand, appear to be of quite a different kind. Their rules are said to state not what is but what ought to be. Thinking is correct or incorrect; conduct is moral or immoral. The laws of logic and of ethics, then, must show the norms to which thinking and acting ought to conform, whether they do or not. The normative sciences are evaluative

¹ A paper read before the Philosophical Union of the University of California, December 22, 1911.

rather than factual.¹ But the distinction thus made, simple as it seems, falls at once into a difficulty: What is the source from which logic and ethics derive their norms? If from the norms actually used in thinking and acting, are they not then descriptive sciences? Clearly the stoutest defender of the normative character of ethics does not suppose that ethics creates moral values or can do otherwise than study morality as it exists; but this admission goes far to blur the conception of ethics as a science of ideals.

Objections of this kind have contributed to a wide-spread reaction against the whole conception of normative science. The only really normative discipline, it is said, is an art rather than a science. In so far as logic and ethics furnish a technique for thinking and acting, they are arts; in so far as they are sciences. they are descriptive, as all science must be. The term 'normative science' is self-contradictory. A science, it is said, is purely cognitive and cannot, in its capacity as a science, lay down a rule for action; it deals only with facts and generalizations of fact. Now moral norms and good and bad conduct are existing processes, as are also logical standards and correct and incorrect thinking. It is possible to make these the subject of special and systematic inquiry, and when this is done there arise the sciences of ethics and logic. These sciences are normative only in the sense that their subject matter is composed of norms; their methods are descriptive like those of other sciences.2

The tendency at work here is no doubt wholesome. Ethics, especially idealist ethics, has probably had about it too much of what Professor Santayana calls the 'genteel tradition'; and in any case the effort to give to logic and ethics a larger empirical content is always valuable. Whether a science is normative or descriptive, it presumably cannot have too large a store of

¹ Cf., for example, Mackenzie's Manual of Ethics, 4th ed., pp. 4 ff.; Sidgwick, Methods of Ethics, 6th ed., pp. 1 ff.; Wundt, Ethics, Eng. trans., Vol. I, Introduction, Section 1. Among logicians Sigwart takes the rather extreme position that logic is primarily an art; Logic, Eng. trans., Section 2. A wide range of references to logicians who regard their science as normative is given by Husserl, Logische Untersuchungen, I Bd., Section 13.

² See, for example, Simmel, Einleitung in die Moralwissenschaft, I Bd., pp. 321 ff.; McGilvary, "Ethics, a Science," Philosophical Review, Vol. XII, p. 629.

facts. In many respects perhaps the most valuable work done in recent years for ethics has been in a sense extra-ethical-I mean the many admirable studies in the history and evolution of morality, just as, in many respects, the most useful work for logic has belonged quite as much to genetic psychology or the psychology of cognition. But while the attack of the so-called 'scientific' ethics upon the older conception of the science has had many good results, it has not contributed a great deal to the methodological conceptions involved in the conception of normative science. That science is not an art, and that logic and ethics have a subject matter like other sciences, are indeed true and worthy to be borne in mind, but these contentions of themselves do not go very far toward an accurate logical statement of the principles of these or any other sciences. Even the definition of normative science as a science which has norms for its subject matter is not of much consequence, for it leaves the question of method untouched; and even the most superficial classification of the sciences can scarcely adopt difference of subject matter as its principle. The point at issue involves the question whether evaluation plays an essential rôle in scientific method or whether it is wholly superseded by description, the latter being assumed to be a purely non-evaluative process, and it is to this methodological question that the present paper will be devoted.

The question in this form is most pertinent for methodology, especially at the present time. For, so far as one can estimate a tendency in current philosophy, there appears to be a strong and growing bias toward giving to evaluation a place of central importance in all experience, to regard it, one might almost say, as the very essence of consciousness. Indeed, the problem has run through much of the philosophy of the nineteenth century. When Kant constructed his theory of knowledge, it appeared to him to be essential, for the sake of preserving both the validity of knowledge and the security of morals, that evaluation should be driven as far as possible from cognition. Accordingly, he turned over the world of possible experience in toto to the mechanical principles of explanation, while he conceived the moral

will to operate primarily in a world from which experience was rigidly excluded. Valid knowledge was conceived to rest upon the necessary and a priori categories, and the categories, being conceived for the most part as ready-made forms of the understanding itself, operated throughout all experience in a thoroughly automatic and non-teleological fashion. On the other hand, moral evaluation was conceived to rest purely upon the reason, and its norms not only could not be determined by experience but might even never be realized in experience. But the distinction was no sooner made than it had to be broken through. Kant himself supplemented the categories with the regulative principles, which he regarded as absolutely essential for the guidance of knowledge, though they could never be constitutive of experience itself,1 and certainly not the least instructive part of Kant's philosophy is the eternal see-saw by which he tries to maintain and yet to escape from his distinction between the realm of facts and the kingdom of ends.

Nor did the problem perish with Kant. In one form or another the struggle to find a tenable standing-ground between the divergent points of view is the great problem of post-Kantian philosophy. And always as the struggle continued the impossibility of outlawing valuation from human experience became clearer. Nothing in the character of nineteenth century philosophy has been more striking than the extent to which some form of voluntarism has prevailed in it. Not only has it been made the cornerstone of philosophy by Fichte and Schopenhauer and all who followed them, but even with Hegel the most vital of all problems was to find a conception of reason broad enough to include the will and all its works. Kant's ethics was beyond question the weakest part of his system, but nevertheless the primacy of the practical reason has been a sort of philosophical axiom for his successors. The stream has broadened and deepened down to the present time. Pragmatism is founded upon the universality of valuation in all experience, cognitive

¹ On the untenability of the distinction between constitutive and regulative principles, see Albee, "The Significance of Methodological Principles," *Philosophical Review*, Vol. XV, p. 267.

and otherwise. Its attack upon Hegelian idealism has turned upon the adequacy of the latter's treatment of purpose as a logical category; that in some way purpose was essential to knowledge was not in issue. In psychology, as the problem of reasoning came more to occupy the center of the stage, more and more has been made to turn upon attention and attitude and less upon the quasi-mechanical combination and interaction of mental elements.

It is certainly pertinent, therefore, in view of the imminence and persistence of the problem, to inquire whether the ordinary conception of the descriptive sciences as entirely non-valuative is really justified. In order to make the discussion as definite as possible it will perhaps be best to develop it about a typical presentation of the supposed contrast between descriptive and normative sciences, and for this purpose I have chosen Husserl's careful treatment of the question, particularly his discussion of "Theoretical Disciplines as the Basis of Normative Disciplines." 1 Husserl's thesis is that "every normative and likewise every practical discipline rests upon one or more theoretical disciplines in so far as its rules must possess a theoretical content inseparable from the thought of valuation." This thesis is supported as follows. To assert that something ought to be is to judge it with reference to its goodness or badness; to say that 'A soldier ought to be brave' means that 'a soldier who is not brave is a bad soldier.' Such a judgment, unless it is purely verbal, involves a conception of certain qualities which the object must have in order to be good, and every quality which is essential to its goodness can be part of such a judgment of value as that instanced above. But values are relative and comparative; we do not merely judge things to be good or bad but also better or worse, best or worst. In consequence a group of particular norms implies a fundamental norm which defines the place of the subordinate norms in a system of values. The 'greatest happiness principle' in utilitarian ethics is such a fundamental norm. It bears a relation to the particular normative judgments

¹ Logische Untersuchungen, I. Bd., ii. Kap., Sections 14 ff.

² Op. cit., p. 40.

analogous to that which the number system bears to judgments of numerical relation in arithmetic. The normative science, then, is produced by the attempt to study scientifically a group of normative propositions that depend upon a fundamental norm. The fundamental norm is the principle of unity in a normative science. This marks it off from the theoretical science in which the principle of unity is the regularity of the things themselves. To give Husserl's own statement: "The theoretical disciplines on the other hand lack this central relation of all investigation to the attitude of value, this attitude being the source of a controlling interest in the application of standards. The unity of their investigations and the correlation of their facts (Erkenntnisse) is directed solely by the theoretical interest, which is directed to the investigation of things which actually belong together (i. e., which belong together theoretically according to the orderliness of things) and which therefore, as belonging together, are to be investigated together." 1 If these premises be granted, the dependence of the normative upon one or more descriptive sciences is clear enough. The normative iudgment depends upon theoretical judgments stating the factual content of the things valuated. These factual connections of qualities belong to the subject matter of some theoretical science. The normative science, therefore, must get its basis in fact from the theoretical sciences. It is a new grouping of facts chosen here and there from the theoretical sciences and brought into a new unity by their relation to some fundamental value.

The preconceptions in this account of the descriptive and normative sciences should be carefully noted. In the first place, the theoretical sciences arise from the theoretical interest, the interest in knowing things exactly as they are and without reference to any ulterior purpose that they may serve. In order to think about a subject at all, interest is of course necessary. But in order to think about a subject theoretically, this interest, it appears, must be of a peculiarly disinterested kind.² Whereas all other forms of interest seem to throw things together in a

¹ Op. cit., p. 46.

² Cf. Simmel, op. cit., p. 321, where a similar position is taken regarding theoretical interest.

merely human and evaluative order, the theoretical interest is precisely what enables us to know the world 'according to the regularity of things themselves.' It is a transparent medium which permits the objective relations of the things themselves to pass over into consciousness. The interest, therefore, is not a factor in the resulting knowledge, or at least it is a factor only by virtue of its complete self-effacement. In the second place, it is assumed that the knowledge, or more broadly the science. which results from the exercise of theoretical interest consists of descriptive statements in which no reference to end or value is implied. Such knowledge states what is absolutely; its laws present the relations of things as they are 'according to the orderliness of the things themselves.' The objects themselves, and not their relation to any value, determine what things belong together and what things must be classified apart. The nature of objective reality is the complete and sole determinant of theoretical categories. Let us now examine these two assumptions in order to determine whether they are tenable accounts of descriptive science, and let us begin with Husserl's conception of theoretical interest.

The conception is not really so clear as it seems. No doubt a large number of men are actuated by what may be roughly called a theoretical interest; that is, they are devoted to the pursuit of some science without much thought of the useful application of their discoveries. No doubt also most men feel more or less frequently and more or less strongly the touch of disinterested curiosity. Certainly no trait is of greater human importance than the capacity to postpone action and pursue knowledge in the meantime. But that these facts justify Husserl's inference is not so clear. In the first place, if the question is merely one of personal motive, the scientist's ulterior motive does not appear to have any bearing on the character of his science one way or the other. The chemistry of cement is not less a part of chemistry because it is studied by a man who wants to build houses; whether or not the chemist has such an ulterior motive is a matter of indifference to the methodology of the science. To be sure, he must not let a desire for a given result hurry him

on to a hasty presumption or an ill-founded judgment, but this is no truer of the theoretical sciences than of the normative, or of the arts, or of the most thoroughly utilitarian thinking. All thinking is disinterested in this sense of the word, but it by no means follows that thinking, in order to be good, must contain no factor of purpose or value. The fact that under certain conditions a purpose can produce a fallacy certainly does not justify the conclusion that a purpose always produces a fallacy or that the way to avoid fallacies is to eliminate purposes.

It is a misfortune that this question has so frequently been discussed as if the whole point were to be settled by reference to the purpose or interest of individual thinkers. For example, it was a misfortune that the earlier presentations of pragmatism depended so much upon the reflex arc concept, for this emphasis tied the new point of view to an exceedingly doubtful psychological theory of meaning, and it caused the question to be discussed as a matter of individual psychology more than the merits of the case required. The social aspects of disinterested knowing were alluded to in the discussion but they were not sufficiently emphasized. It must always be borne in mind that, on the one hand, science is a social product, and, on the other, a social institution. The former point has often been insisted upon, but the latter is perhaps the more important in this connection. It means that the sciences have a life of their own, and a function in human experience, that entirely transcends the attitude of individual scientists toward their work or toward life in general. As an existing social institution a science commands the devotion of the individual scientist and dominates his individual purposes exactly as politics may command the devotion of the statesman. In such a case one may say in a figure of speech that the institution has an end of its own which may or may not coincide with the purpose of the individual who, for the time being, is the human embodiment of the institution. The creation of such an institution is a case of social differentiation and the division of labor, and the division of labor is possible only because an ultimate end can be submerged temporarily in the attainment of a subordinate end, or perhaps even be submerged permanently for a given individual. It is clear, however, that such a submergence in no wise justifies the conclusion that the product of the divided labor is the result solely of the interest of the highly specialized laborer. There is always the further question: What social ends are built into the structure of the institution itself so that they form an ineradicable prius to the purpose of any given individual who maintains the institution? In the case of the sciences this type of criticism cuts two ways. If it shows the danger of regarding cognition as a process in the individual mind, it shows equally the danger of regarding it only as it appears in the institutionalized sciences. The first skirts the precipice of subjectivism and the other wanders in the desert of intellectualism or naturalism.

If we regard the sciences in their broader social aspect, it is clear at once how inadequate is the reference even of the descriptive sciences to mere 'theoretical interest.' In the long run no one is content, not even the scientist himself, that science should merely know; it must know something worth while, something that yields a satisfaction over and above that which comes merely from finding it out.¹ Perhaps no critical category is more frequently applied to the judgment of scientific work than that of importance or significance. A result in four decimals may be perfectly accurate, but if the data are such that only two decimals are significant, the additional two are an intrusion and an impertinence. The individual investigation must bear at some point upon the total structure of the science; it must 'make a difference' to those who care about that kind of investigations. If it does not, it may be accurate to a nicety but

¹ A singular example of the way in which this aspect of science can be recognized in set terms and yet relegated to a place of insignificance in methodology can be found in Royce's "The Sciences of the Ideal," an address delivered before the Division of Normative Science of the Congress of Arts and Science at the St. Louis Exposition in 1904, Report of the Congress, Vol. I, p. 151. Royce here denominates philosophy and mathematics 'sciences of the ideal,' because they rest upon free construction rather than upon empirical data. The free construction is limited, however, by the condition that "the exactly stated ideal hypothesis . . . must possess . . . sufficient intrinsic importance to be worthy of scientific treatment" (p. 154). It is impossible to withhold the comment that the qualification is more important than the thing qualified.

it is not good scientific work. It may be objected, however, that the significance in these examples may be significance for a purely theoretical interest. It may, of course, precisely because the science as an institution affords a norm by which the value of the individual investigation may be at least roughly measured. But the science itself is always being judged at the bar of human life. No science could persist for a decade that did not possess a human interest of some sort; that did not appeal to impulses other than disinterested curiosity and touch values other than those of abstract cognition. When, therefore, the scientist attacks a purely theoretical problem, he is working within a field already conceived to have value. The return in value from any given investigation, or even from the whole science, may be unexpectedly large or unexpectedly small, for values themselves are always growing or shrinking, partly as a direct outcome of scientific results.

It ought to be clear that this conception of science is not equivalent to the philistine demand for useful results; it merely points out the actual relation between cognition and value and does not in any way prejudge the question as to what ends are really the most valuable. In essence it means only that methodology ought to recognize the fact that the 'theoretical interest' is not an isolated and fragmentary part of human nature that works best when it is kept aloof from all other human interests. In order to be a thinker a man need not become temporarily a disembodied spirit. Thinking originates in the ordinary evaluating experience of the individual and its results return to and reconstruct that experience. The sciences originate likewise in the ordinary experience of the race, which is primarily a struggling, willing, evaluating experience, and they are held always more or less closely to account for their relations to those things which men hold to be worth while. And there is small reason to suppose that these and similar facts are irrelevant to the method of science. To take a single example, the principles of mechanics, interpreted in their literal abstractness, would make every puff of smoke from the stack of a locomotive exactly as important as the turning of the wheels and the pulling of the

load; that is to say, both are equally good examples of the purely mechanical principles on which locomotives are built, but it would be absurd to say that mechanics has been developed, or could have been developed, on the assumption of any such parity of value. The one is part of the working of the machine and the other is epiphenomenon. The conception of a machine is purely teleological and who can doubt that this value, this relation to end, has checked and guided the development of mechanical science at every step?

Husserl's theoretical science, then, the science pursued only from theoretical interest and without reference to the significance of the objects studied, does not exist. Let us now test the second of his two assumptions—the science of the absolutely existent. It will perhaps be well to begin by inquiring precisely what the existent means in this connection, for the term is not perfectly clear. Primarily and in ordinary usage the existent refers to the present time; it gets its content by contrast with that which was in the past but has now ceased to be, or with what may be in the future but has not yet arrived. In this sense the category of the existent has a chronological value and a critical value as against the prejudices which tie men to the past or baseless hopes for the future. The appeal to the actual thus comes, by a natural extension of meaning, to be almost synonymous with the appeal to direct experience. The existent is not only the present but the presented or the presentable, that for which there is evidence of observation. But in this, its most common and most meaningful sense, the existent is clearly not the special object of any particular science. It is the property and tool of all but the end of none, least of all of those sciences, such as mechanics, which are most frequently termed descriptive. The present time, however, is not a mathematical point but a state which can vary indefinitely in duration; it is a second, a day, or a year according to the context. Accordingly there arises a further natural extension of meaning whereby the existent is stretched to include that which always is, and which is therefore in a sense always present. The existent in this new sense is that in which

¹ The example is taken from Bosanquet's Logic, Vol. II, p. 184.

the passage of time is irrelevant. The judgment expressing such an existent has lost, so far as possible, the categorical reference to any 'here and now' and has taken on the hypothetical form which expresses permanence of relation, the permanence again being understood not to imply any special reference to the passage of time.

This latter sense is the one which most nearly represents the meaning intended in the phrase, 'a science of the actual.' The phrase really connotes universality—quod semper, ubique, et ab omnibus, as the scholastic definition had it. Mechanics is a science of the actual in this sense of the term. Now the question arises whether this type of science excludes all that can properly be called ideals or norms, as is commonly supposed. degree to which mechanics approximates to mathematics in its character and method, and the frequency with which mathematics is held to be the science of the ideal par excellence at once suggests an answer to the question, but it will be well not to make any assumption about the nature of mathematics. Let us rather examine briefly the nature of mechanical laws themselves. There is perhaps no mechanical law, certainly none of great generality and fundamental importance, that can be exemplified and directly verified in actual experience. The conception of the actual as the timeless really reverses the conception of it as the directly experienceable. The character of a mechanical law as applying to the universally existent precludes the possibility of its gaining actuality in the more usual sense of the word. The conditions laid down in the law are so highly idealized that they cannot be actualized. In the practice of the science, this fact is exemplified by the singular usefulness of the method of approximations in formulating its laws. The law states what apparently would be true if a pure case ever were isolated. The law, for example, that a body in motion moves in a straight line unless it is deflected by an outside force, is a case in point. The evidence on which the law rests is simply the greater and greater degree in which a body does so move as interfering conditions are progressively removed. Similarly, the law of inertia, that a body maintains the state of motion or

rest in which it is so long as it is not acted on by an outside force, is proved by the fact that a body does continue to move longer and longer as friction and other losses of energy are eliminated. But the law is not susceptible of direct proof because the experiment cannot really be tried; no body ever is completely screened from outside forces. The law states what ideally would be true in the ideal case.

These laws, then, and others like them, are really expressions of mechanical ideals and they act as norms with reference to the subject matter of the science.1 They represent the ideals of simplicity and intelligibility which introduce order into an otherwise chaotic manifold of physical actualities. In a certain sense, it is scarcely straining language to say that they indicate what existing physical systems *ought* to be; what they are ideally when irrelevant complications in the crudely actual have been eliminated. Now it is this ideal character that gives the law its value for the scientist. It is not a rescript of the empirically actual. In the now popular phrase, it is a working hypothesis, which means that it is normative for the scientist's experience, controls his investigations, and gives him a reasonable understanding of the way in which bodies may be expected to behave. It is a standard by which the scientist can judge the phenomena he is dealing with.

It may be objected, however, that the term norm as applied to these laws is strained, because, after all, the law really is completely exemplified in every particular case, even though it is impossible to show that this is so. The conditions may be so complicated that they defy human analysis, but there is every reason to suppose that the law holds absolutely and would be found to hold if it were possible to take account fully of every factor. The law is a norm, therefore, only on sufferance so to speak, pending the discovery of more perfect analysis, or only by virtue of the weakness of the human intellect; in itself it is an absolute fact. The objection is really a reassertion of the ontological validity of the scientific law as against the instrumental or

¹ The same conclusion has been stated by Albee, "Descriptive and Normative Sciences," *Philosophical Review*, Vol. XVI, p. 40.

functional conception of it, and this point is too large to discuss here. One can only say that analysis always is imperfect and in the nature of the case apparently always must be. But the objection has significance because it brings to light an essential characteristic of the mechanical point of view, a characteristic inseparable from the timeless nature of its laws. This characteristic is the assumption that every apparent exception to the law must be merely the result of unanalyzed, or perhaps unanalyzable, complexity in the combinations of the phenomena under examination. The assumption is that complete analysis would result in the breaking up of the complexity into a certain number, perhaps an indefinite number, of simple relations identical with those stated in the law. Explanation of this kind. therefore, always tends to conceive phenomena as combinations of self-identical units or homogeneous forces, and it is a postulate that qualitative difference must, so far as possible, be expressed as quantitative relations between homogeneous elements. What cannot be so expressed must be ruled out as irrelevant. Different colors of light, for example, can be symbolized by wave lengths of hypothetical ether vibrations, but the concrete qualitative distinctions thus symbolized are then pushed over into another sphere of existence and left there to be otherwise dealt with, or not dealt with at all, as the case may be.

Now the scientific law of this type is capable of a high degree of exactness, as everyone knows, but its exactness is paid for with the highly stereotyped form which it imposes on its subject matter. Its world is a world of timeless unchanging entities where there can be literally no new thing under the sun. From the point of view of mechanics there can be no change except change of position and direction in a perfectly homogeneous space; there can be no novelty except a new combination of the old elements. Time for mechanics is a homogeneous quantity; all its processes are ideally reversible. Now it is true that objects which can be conceived satisfactorily in this way are pervasive of our experience, yet after all they form only the substratum of it. Men are interested, perhaps most deeply interested, in precisely those phases of things which are irrelevant from the

mechanical point of view. The vast majority of our experiences, I presume, would be hopelessly garbled if we had to conceive them in terms of timeless actualities and as a mere repetition of identities. As Professor James was never tired of insisting, our most vital experiences are those in which time has not only quantity but direction, in which processes are not reversible but are valuable precisely because they bring to the birth something which did not exist before. The present in which we live is always big with the future, and the past to which we go back in history is a time when other men were realizing new and significant values not before known. All history and all evolution are filled with real changes—with just those qualities which, from the mechanical point of view, are irrelevant and indeed inconceivable.

The character of the norm as it appears in the mechanical sciences is the outgrowth of the peculiar form of abstraction to which the subject matter is subjected. What, then, will be the nature of the norm when it is developed with reference to the non-mechanical phases of experience? In general it seems clear that it must take on more and more the character which we commonly attribute to a norm; it must include more and more processes which are essentially evaluative and must take more and more account of ends. I have tried to show that valuation is not absent even from the most completely descriptive sciences, but that in these cases the norm is scarcely intrinsic to the subject matter. It belongs rather to the on-looker who applies his interest to the objects studied. But when one begins to deal with irreversible processes, processes which essentially have direction and therefore tend some whither, one finds that this type of subject matter develops ends, and therefore values, which have to be respected. The laws in such cases become more and more teleological and in consequence more obviously normative than they are in mechanics.

To take a single example, it appears to be quite impossible to define an evolutionary series except by marking out steps or stages which lead toward some final goal, this goal being taken temporarily at least as an end. In order that such a series may

exist at all, the reality of change must be assumed as a datum; change cannot be taken as a mere complication of preëxisting elements without destroying the concept of evolution itself. The existing species must vary, slightly or broadly, indefinitely or orthogenetically, if a new species is to appear. The old type must be broken through, the exactness of its definition must be blurred, or the evolution fails to take place. And once a series of such changes has established itself, each change can properly be said to have value as a means to the determination of the new type: they contribute to an end and this is only another name for value. The continuity of the series is nothing but this progressive creation or modification of value. Naturally the end in such a case need not have practical human value; it has no moral significance perhaps, and of course it need not be an end consciously chosen by the evolving object. On the other hand, the end is not in any proper sense merely the subjective attitude of the human investigator; it is not dependent on the scientist's will in any sense in which the properties of an atom are not so dependent. The end in this case, like the atom, is simply a category of explanation, and it is on quite the same logical basis so far as its validity is concerned. As a matter of fact, the biological sciences are filled with teleological conceptions, as the constant use of such terms as function, adaptation, organism, deterioration, progress, and a host of others like them abundantly testifies.

One further step in the development of scientific norms may be mentioned in conclusion—the case where the subject matter of the science is marked by consciously chosen ends, as in the sciences that deal with human institutions. Here what Professor Santayana calls the 'ideal dimension of experience' comes most clearly into evidence, and the reversible process and the timeless law play an insignificant rôle. Here teleology is not only de facto but to a large extent real, and here the values concerned are always human values,—not necessarily, indeed, the values of any given individual or of any special time, but always values that have developed in the course of human history and have in some way proved significant for mankind. These, therefore, are the normative sciences par excellence. They not only have values

for their subject matter but their procedure is at least implicitly normative. Thus history, which is in some respects the most inclusive of all the humanistic sciences, cannot be written except with reference to the evolution of value. Not that the historian needs to express his own individual preference for this or that historical character, or that he is primarily engaged in condemning this or praising that; whether he does this or not is trivial and largely a matter of temperament. But his selection among all the innumerable facts that might be chronicled must be determined by the bearing they had upon some valuable outcome, and the sheer fact that he takes this outcome as valuable is itself a process of valuation. In every case the outcome taken as an end is one to which human beings have attached an especial value. And this relation to value is not temperamental but methodological. Again, to return to the case of ethics, it is not enough to say of the moralist that he describes and explains values. He certainly need not exhort—this again is a matter of temperament largely-and he certainly ought not to treat his subject matter from the point of view of his personal preferences, but he must treat it from a generally evaluative point of view. If, for example, he commits himself to statements of this kind: 'Such and such conduct is detestable to normal human beings'-a statement which Professor McGilvary calls 'purely descriptive'1-he certainly has gone far beyond mere description. The 'normal human being' in this case is presumably not an arithmetical average or even a type that can be determined exclusively by counting heads. If such a statement has any special ethical significance it must represent the judgment of a certain moral type, and the determination and choice of the type by ethics must be implicitly evaluative. The only way to avoid evaluation is by refusing to select among possible types, and this is precisely the same as refusing to give any systematic account of moral judgments whatever.

The main theses of this paper may be summarized as follows: The traditional distinction between descriptive and normative sciences will not hold. In so far the defenders of 'scientific

¹ Loc. cit., p. 634.

ethics' are quite right, but the reason they allege—that all science has a factual subject matter—does not go to the root of the question. The true methodological reason for abolishing the distinction is not that all sciences are descriptive but rather that all are normative. Cognition is not unrelated to processes of valuation, and relation to value is present as an essential part of the method of all science and as an ever present factor in the control and guidance of science as it develops. The sciences which have appropriated the name descriptive are those which. through the nature of the abstractions they make, come to regard their subject matter as made up of timeless entities existing in an eternal now. Even here, however, the normative character of thought appears in the ideality of the laws which standardize the crude matter of fact. The attempt to treat realities without thus devitalizing them, to preserve their character as processes, brings to light the true rôle of valuation in scientific method, a rôle which is more or less concealed in the so-called descriptive sciences. The sciences which are usually called normative—especially the humanistic sciences—are those in which the place of valuation is too clear and distinct to be overlooked

GEORGE H. SABINE.

LELAND STANFORD JR. UNIVERSITY.

DISCUSSION.

CONSISTENCY AND ULTIMATE DUALISM.

In the last number of the REVIEW the Editor has discussed an argument of mine in the January issue, which urged that idealism is consistent with realism. The argument claimed that the fundamental axiom on which idealism rests-the axiom of 'system'-offers no contradiction to the fundamental axiom on which realism reststhat of 'independence'; and that since each axiom represents an irrefutable and ultimate instinctive belief, both views may and must be accepted. The source of the supposed opposition between them was found in the course of the argument to be, that sameness and difference, when united in one point, contradict each other: and the argument tried to prove that they do not, but may exist side by side in closest union without logical injury, and consequently, it was urged, thought and experience, whole and part, ves, even the two ultimate axioms themselves, dwell together in harmony, and with equal rank; each member of these pairs being finally valid in its own right and alone, yet consistent with the results gained from the other member.

Professor Creighton points out that this result, though satisfactory in so far as it removes the supposed conflict between the two parties, nevertheless does not bring us to a complete reconciliation. He says that "the argument should have been carried further to prove that these axioms are positively consistent, in the sense of *including* and *implying* each other" (p. 345). Two enemies are not reconciled merely because they have ceased to fight; to stand side by side in utter indifference is not to be friendly unless the interests of each enter into those of the other, implying them and implied by them. And the 'ultimate dualism' of my result simply leaves the two parties indifferent. Each makes his bow to the other and passes on to what he himself regards as the really important work of philosophy.

This criticism of my argument seems to me, from one point of view certainly, eminently just. If the proposed reconciliation carried no further than to this indifference, it would be, as he says, "plainly impossible to rest" in it. And it is quite correct to say that I did treat sameness and difference, thought and experience, and the two 'axioms,' as externally conjoined rather than as mutually implied and interpenetrating; nor did I, probably, indicate with sufficient clearness

that the proffered solution was of a more than merely negative character. That I did believe it to be so, however, was indicated by some statements which he has noticed (footnote p. 347). While, in short, the argument in question regarded the two sides as externally added, it also implicitly claimed that they are to be viewed as mutually penetrating; and if I did not bring out this implication, it was because I failed to realize its importance. It is, I believe, true that thought may move in abstraction from experience, with ideals solely its own and valid of themselves; it is also true that thought, viewed in another aspect, implies experience for its filling out. While examining the nature of thought's ideals, I professed not to borrow from experience, though for clearness' sake I used a concrete illustration or two. So might a teacher of elementary arithmetic illustrate addition by counting beads: yet addition may be perfectly defined formally by the logical manipulation of symbols. But the independence of thought does not, in my view, contradict its interpenetration with experience. Again, I believed that the 'whole' and the 'abstract part' may validly be viewed as indifferent to each other, each as if the other were not. But I also believed that this indifference is only one side of the matter. and that each may be viewed as implying the other. In fact, it is simply the logical consequence of the whole position taken above, that we should apply the axioms of 'system' and 'independence' to those axioms themselves. They too must be regarded as systematically interwoven, interpenetrating, and also as independent, externally conjoined. In the article discussed, I applied only the axiom of 'independence' to their relationship. Dr. Creighton has rightly pointed out that I should apply the axiom of system to them (and to all the pairs of the argument). It seems to me however that he would not be willing to apply 'independence' to them, whereas I should apply both. That is why I said above that 'in one sense certainly' this criticism was just. As indicating that the original argument should have proved interpenetration of all the pairs, I believe it to be so: but if he would deny externality, it would seem to me to be unjust to a fundamental axiom of philosophy.

Pure thought implies experience: it is the axiom of 'system' which sees this. But there is also a point of view in which it is self-sufficient; and this is seen by the axiom of 'independence.' Of course I do not mean that we have concepts or meanings without a psychological and sensuous setting (though who knows?) but that its validity commands assent regardless of the character of the setting, and may be regarded as final in abstracto. Abstract or pure mathematics furnishes instances

innumerable of self-sufficient systems of pure thought. And it is much the same with sameness and difference as it is with thought and experience. Abstract sameness implies nothing beyond itself: pure Eleatic being offers in itself no contradiction. To it difference is external, though not contradictory. But when sameness is viewed in the light of the axiom of system (that is, as concrete) it is seen to imply difference. And the same holds of difference. To be sure I said in the article here discussed "to the most formal possible thought sameness and difference are meaningless without each other" (p. 63); but that is true only under the axiom of system, not that of independence. Indeed, if we can see that each of the axioms holds with regard to the relationship between sameness and difference, the other difficulties vanish. I think, at once. As all the contradictions turned on those two categories, so do the negative and the positive reconciliation. Even the two axioms themselves must imply each other. when they are viewed by the axiom of system as forming the totality of our knowledge; yet again in so far as they are different axioms, there is an irreducible outstanding element in each which renders them independent and indifferent. As sameness may logically coexist with difference, so may their interpenetration coexist with their externality. The very fact of independence is for the axiom of system meaningless without a deeper systematic unity; but for the axiom of independence each axiom is again independent of the other.

What seems to me novel in the proposed method of reconciliation is that it enables us not merely to accept 'sameness-in-difference' but also to combine the mutual implication between idealism and realism with their externality and indifference. This, which seems impossible to those who solve the contradictions of thought by appeal to experience, is possible to a view which would solve them on their own ground. As far as I know, no one, not even Professor Royce in his too little appreciated 'Supplementary Essay' in The World and The Individual (Vol. I), has attempted to do this. But only in this way, it seems to me, can the isolated (whether in the realm of thought or in that of experience) have justice done it; for this method alone solves the contradictions without building solely on the axiom of system. Once we are free to use both these axioms, we can see that they too, like all the rest of our knowledge, apply to themselves, and thus guarantee their own mutual penetration at the same time with their indifference. If it is, once more, objected that this last couple, penetration and indifference, are themselves indifferent and not reconciled, the answer is the same as before. These

two again are both indifferent and interpenetrating. This may lead to an infinite regress, but I have in the original article already dealt with that problem. Accordingly, it seems to me that unless there is some mistake in the argument about sameness and difference, we are inevitably led to "an ultimate dualism which no more contradicts monism than system contradicts independence" (p. 53). Indeed, it is monism, as well as dualism. If this is a return to pre-Kantian metaphysics—as I quite admit—it is also more, since it includes Hegelian monism as well. It would have been refuted by the post-Kantian movement only if the axiom of system contradicted and excluded externality. If I may be allowed a perhaps irrelevant comment, I do not think we can feel sure that later results in philosophy are better results: progress may be zigzag even when it seems consummative. And it seems to me that with all the undoubted greatness of the German idealism, it may have overlooked something which was vital in the earlier dualism.

W. H. SHELDON.

REVIEWS OF BOOKS.

Les Fonctions Mentales dans les Sociétés Inferieures. Par L. LÉVY-BRUHL. Paris, Félix Alcan, 1910.—pp. 461.

This important book will doubtless find many readers; not so much because of its importance, as because it falls within that interesting borderland which lies between the loosely delimited provinces of sociology, anthropology, psychology and the history of religions. It is written from the point of view of the French sociological school represented by M. Durkheim and his collaborators of L'Année Sociologique, and its object is to seek precisely what are the directive principles of the mentality of primitive peoples and how these principles make their presence felt in institutions and practices. The author thinks he has been able to determine in what respects the mental mechanism of primitive men differs from ours, and to establish the most general laws of its operations. He thinks that ethnologists and anthropologists have hitherto neglected the social nature of the facts to be explained. This social nature is expressed by the term representations collectives. Readers of L'Année Sociologique will not need to be told that the word representation as here used does not mean an idea or image of an object, nor a concept. It is not simply an intellectual or cognitive phenomenon, but includes emotional and volitional elements as well. Collective representations are common to members of a social group, they are transmitted from generation to generation, they have their own peculiar laws and do not obey the laws of a psychology founded upon an analysis of the individual subject. They impose themselves upon individuals and awaken sentiments of respect, hope, fear, adoration, etc., towards objects which are regarded as possessing occult powers capable of acting upon members of the social group (pp. 1-3, 27-30).

The mentality of primitive men is 'mystical,' because the reality in which they move is itself mystical. Because they attribute mystical powers to everything, they do not perceive anything as we do. The mystical properties of objects and beings make an integral part of the primitive man's representations. For us, the fact that we do not perceive the presence of certain properties in objects, is decisive. But when the collective representations of primitive men imply the presence of these properties, nothing will dissuade them from it, since it is perhaps the nature of these properties not to manifest themselves

to perception. Hence the primitive mentality is impervious to experience (pp. 30-67). It is also prelogical. This does not mean that it is antilogical or alogical, but simply that it is indifferent to logical contradiction. It does not obey the laws of our logic; but the collective representations of the lower societies are connected by what we may call, in fault of a better term, the 'law of participation.' This law is difficult to define, but we may attempt to describe it by saving that in the mentality of primitive men, beings and objects can be, in a manner incomprehensible for us, at the same time themselves and other than themselves; they can emit and receive forces, virtues, mystical actions, which make themselves felt outside of themselves without ceasing to be where they are (pp. 68-80). For example, when the Trumai say that they are aquatic animals and the Bororo assert that they are red parrots, there is no difficulty for a mentality ruled by the law of participation. When an Australian or New-Zealander finds that he has unwittingly eaten of forbidden food and dies from violation of the taboo, it is because he feels himself impregnated with a deadly influence which has introduced itself by a participation into the food, as for example when a common man eats the leavings of a chief's repast.

The essential theses that M. Lévy-Bruhl attempts to establish are: First, that the institutions, the practices, the beliefs of primitive men imply a prelogical and mystical mentality which is oriented otherwise than ours; and second, that the collective representations and the relations of these representations which constitute this mentality are ruled by the law of participation, and as such are indifferent to the logical law of contradiction (p. 425). Primitive men do not abstract, form concepts, generalize nor classify as we do; and the relations between their collective representations are not to be explained either by feebleness of mind, by association of ideas, by a naïve use of the principle of causality, or by the sophism post hoc ergo propter hoc.

This bald exposition necessarily ignores the wealth of illustrative material which the author brings to the support of his theses, and in order to bring my comment within reasonable limits, I must make it general. It amounts to this: while the author is quite right in emphasizing the psychological roots and also the collective character of social phenomena, I think he overestimates his own originality and exaggerates the difference between the mentality of the lower societies and our own. M. Lévy-Bruhl develops his theory in opposition to the English anthropological school, 'with its great hypothesis of animism.' He contrasts his own "working-hypothesis," viz.,

the notion of a prelogical mentality, with the animistic hypothesis which is the immediate consequence of the postulate or axiom that the mental functions of superior and inferior societies are identical. How far it is true to say that the English anthropologists simply assume mental functions identical with ours and then ask how such a mentality could have produced the beliefs in question; or whether it would not be truer to say that certain beliefs and practices existing and requiring explanation, they seemed to be best explained by mental functions identical with our own, I shall not pause to inquire. In any case the real contrast is surely between animism and 'dynamism' on the one hand, and between a logical and a prelogical mentality on the other, and not between an English axiom and a French hypothesis. The animistic hypothesis is probably the best one we yet have; but it is not as universally accepted, nor is dynamism as novel a theory, as M. Lévy-Bruhl appears to think.

I can profess only the most casual acquaintance with anthropological literature, but even such casual acquaintance reveals the existence of what M. van Gennep¹ calls l'ecole dynamiste, which takes a position clearly against the animist theory and is represented by such writers as Marett, Hewitt, Farnell, Haddon, Sidney Hartland and van Gennep himself. The author's view is that the mentality of primitive men recognizes a continuum of spiritual forces—an Allbeseelung—but that individualities or personalities, souls, spirits, appear only secondarily. This reminds one of Mr. Marett's 'animatism' and 'preanimistic period'; and it is interesting to compare his modest and tentative Essays (collected in The Threshold of Religion) with the present more exhaustive and sytematic, but no more original, work.

That the theory of primitive man's belief in undifferentiated mystical powers, in an animated nature of mysterious potency as distinguished from Tylor's animism, is not a new idea, is farther shown by M. Lévy-Bruhl's own references and by much that has been written about mana, wakan, and orenda. What lies 'at the back of the black man's mind,' or what mental functions are involved in an animatistic or dynamistic attitude, is another question. It is quite legitimate to distinguish between the content of the consciousness of primitive societies as revealed in their customs, institutions and beliefs, and the mental operations lying behind or involved in these practices and beliefs. The latter problem is philosophically the more important, and it is the one with which the author is primarily concerned. Indeed, for him, the significance of the study of collective representations

¹ Les Rites de Passage, pp. 8-9.

and their relations among primitive men, lies in the conviction that this study will be able to throw some light upon the genesis of our categories and our logical principles, and thus lead to a new and positive theory of knowledge founded upon the comparative method (p. 2). M. Lévy-Bruhl attacks the English anthropologists on the ground that they ignore social psychology and the comparative method. and that they assume the unity or essential identity of the human mind in all times and places. Just as they are said to assume the unity of the human mind, so the author in order to account for the genesis of our categories and logical principles by the comparative method, assumes (as a working-hypothesis, at any rate) that they are not present in the mental operations of primitive societies. There is no doubt that he accentuates the difference between the mental functions of the lower and the higher societies. That is the basis of his whole attack upon animism and the essence of his own workinghypothesis.

The difficulty of fair comment here grows out of the difficulty of interpretation, for it is not easy to say how great M. Lévy-Bruhl conceives the difference to be between the mentality of primitive societies and our own. This difference is much more radically stated when he is criticising the methodological presupposition of the English anthropologist than when he sums up results in the concluding section. One's first impression is that he regards the two types of mentality as wholly different in kind, though in the sequel I think it turns out that the difference is one of degree. He says that primitive men do not perceive anything as we do; and again that they perceive scarcely anything as we do. The mentality of primitive men is prelogical and mystical; but prelogical does not imply that this mentality constitutes a sort of period prior in time to the appearance of logical thought. Whether there have ever existed groups of human or pre-human beings whose collective representations did not obey the laws of logic, we do not know; but it is not likely. At any rate, prelogical is not meant to imply that the mentality of societies of the lower type is antilogical or alogical, but simply that it is relatively indifferent to contradiction (p. 79). The author also admits that considered as an individual, in so far as a primitive man thinks and acts independently of collective representations, if that is possible, he will feel, judge, and conduct himself most frequently in the way we should expect. The inferences that he will form will be precisely those which would appear to us most reasonable under the circumstances (p. 79). In spite of the fact that the author is able to heighten the undoubted contrast

between his two types of mentality by taking as one term of comparison the collective representations of primitive societies and as the other term the mentality of our own society as defined by philosophers, logicians and psychologists (p. 21) who for the most part, according to the author's own view, ignore the collective and non-rational element in our common beliefs, I do not feel that his careful and comprehensive study of the mental functions of the lower races impairs, or tends to impair, the validity of the belief in the essential identity of the human mind. Rather, it tends to confirm this belief; for unless I misread him, his conclusion is that logical and prelogical elements coexist in the apparent unity of the thinking subject, and as the former element has always been present to some extent, so on the other hand it will never entirely supplant the latter.

Impermeability to experience is a relative matter and tends to become less in proportion as the demand for logical consistency becomes more strongly felt. But many, if not most, of our own collective representations, or the representations of most unreflective people even in civilized societies, express a mental attitude which is very far from being strictly logical or purely rational, and I believe it would be possible to find among our current beliefs some parallel to nearly everyone of M. Lévy-Bruhl's instances of the prelogical among primitive peoples. The author himself suggests some of these parallels and it would not be difficult to add others. The sailor who will not leave port on Friday, the scholar who will not sit down with thirteen at table, the man who thinks it bad luck to walk under a ladder, and the Christian Scientist who refuses to believe in the reality of pain even while suffering, are quite as impermeable to experience as the savage who still believed in a mystical bond between himself and the alligator which bit off his leg. But the savage explained the incident quite logically from his point of view by saying that the alligator must have mistaken him for a stranger and that the spirits seeing the mistake saved his life.

The objective efficacy of prayer seems to be contradicted just as often as it is confirmed by experience, but people go on praying and believing that prayer will save life or bring rain or avert disaster, on other grounds than that their belief is confirmed by experience. Many people believe in the resurrection of Lazarus or the Virgin Birth, though to others these beliefs seem not only at variance with experience, but just as incompatible with the laws of nature as the savage's belief that a woman has become pregnant by a serpent or a crocodile. But as the author admits, the latter belief is no more

illogical from the savage's point of view than the former beliefs are from the standpoint of supernatural Christianity. The assertions of the Bororo that they are red parrots and of the Huichols that the deer, the corn and hikuli (a sacred plant) are in a sense identical, are no doubt less intelligible for us than the statement 'I and my father are one,' and the belief in the mystical union or identity between Christ and the believer. They all alike express the consciousness "d'une participation vecue, d'une sorte de symbiose par identité d'essence" (p. 94): but this felt participation or belief in identity of essence in the case of the Bororo and the Huichols does not prove that their mentality is so essentially different from ours that it operates without the principles of identity and contradiction. It is no doubt difficult to rationalize the doctrine of the Trinity without running the risk of falling into some kind of heresy; but this doctrine was formulated by conceptual thinking and Trinitarians see a mystery and not a contradiction in the statement that God is at the same time One and Three. He is 'in a sense' One and Three, just as the deer, the corn, the hikuli, and the cloud 'are in a sense' identical for the Huichols.

"Dans un grand nombre de sociétés de type inférieur, l'abondance du gibier, du poisson ou des fruits, la régularité des saisons et celles des pluies, sont liées à l'accomplissement de certaines cérémonies par des personnes déterminées, ou à la présence, à la santé d'une personne sacrée, qui possède une vertue mystique spéciale." "L'Indien, à la chasse ou à la guerre, est heureux ou malheureux, selon que sa femme, restée dans son campement, s'abstient ou non du tels ou tels aliments ou du tels ou tels actes" (p. 78). The reader can readily supply the modern parallels. To take only one, the Roman doctrine of the influence of 'the Church' upon the condition of souls in purgatory, is an instance of belief in the mystical power of certain persons and ceremonies and in 'action at a distance.' So also the doctrine of transubstantiation is an instance of the prelogical belief that 'a thing can be at the same time itself and other than itself.'

The law of participation and the law of contradiction co-exist, and the influence of the latter is already active first in operations which would be impossible without it, such as numeration and reasoning, and then in those that the law of participation governs (p. 112). When a member of an inferior society thinks 'deer' or 'feather' or 'cloud,' the generic image which presents itself to him implies something altogether different from the analogous image which comes to the mind of the European (p. 136). No doubt it does; but the same thing is true of us. When the scientist who would botanize upon his

mother's grave, thinks 'flower,' the generic image which presents itself to him implies something very different from the generic image which presents itself to the painter or the poet. When the Bororo assert that they are red parrots, one is not surprised that M. yon Steinen who reports the fact, is loathe to take it literally. M. Lévy-Bruhl takes it quite literally, and says that for a mentality ruled by the law of participation there is no difficulty in this astonishing belief. But, one may ask: Why do the Bororo say they are red parrots? Why do they not say they are white mice or green snakes? The author says the 'savage philosopher' is a myth, and that primitive man does not ask How or Why. Nevertheless, we ask these questions; and an explanation which simply asserts that this collective representation of the Bororo is due to a mystical participation, is no real explanation at all.

The emotional, traditional and collective character of many of our own beliefs is obvious. That the mentality of primitive men is essentially unlike our own and operates without the principles of identity and contradiction and causality, is a totally different and, so far as the present work is concerned, unproved proposition. Apart from the question what mental functions are involved in the collective representatons of the lower races, the idea of mystical participation does not appear to account for all the facts; e. g., totemism. No one would deny that much obscurity still surrounds the origin of totemism. The author's theory is that from the participation directly represented and actually felt, the passage is easy to the belief which affirms a relationship between certain groups of men and certain animals. But is this sense of mystical participation in the essence of a plant or animal prior to, and the ground of, the belief in the relationship, or is the imagined relationship the ground of the represented participation? Among the Aruntas, who are put down with the Bororo as belonging to the lowest type, an animal or semi-animal and semi-human ancestry seems to be recognized. The same thing may or may not be true of the Bororo.

Personally, I do not see that dynamism (as a substitute for animism) necessarily implies a mentality essentially different from ours. Neither do I believe that the alternative between a mentality identical with our own and one that differs from ours, is one which never presented itself to the mind of the English anthropologist (p. 7). Nor, finally, do I find any justification of the author's 'general rule of method' viz. to mistrust the 'explicative' hypotheses which imply a logical and psychological activity like our own, though more puerile and

unreflective (p. 438). In view of his admission that the so-called English axiom affords a 'probable explanation' (with the aid of a little ingenuity no doubt) of almost all primitive customs and beliefs, we may make bold to disregard his warning and still employ the ridiculed hypothesis, not as a postulate admitting of no alternative, but as a working-hypothesis or tentative method of explaining the origin of totemic myths and all other collective representations, until we are satisfied that another hypothesis affords a better explanation of primitive beliefs and practices.

GEORGE S. PATTON.

PRINCETON UNIVERSITY.

Present Philosophical Tendencies. A critical Survey of Naturalism, Idealism, Pragmatism and Realism, together with a Synopsis of the Philosophy of William James. By RALPH BARTON PERRY. Longmans, Green, and Co., New York, London, Bombay, and Calcutta. 1912.—pp. xv, 383.

"To avoid any misunderstanding as to the scope of the present book, let me say at the outset that with the exception of the Appendix, it is a critique, rather than a history. I have attempted not merely to summarize, but to estimate, present philosophical tendencies; and my criticism is throughout based on the realistic philosophy which I set forth constructively only at the end" (p. vii). This constructive statement of realism occupies about seventy-five pages, only one fifth of the volume. It deals with general questions rather than with the detailed problems that realism must work out to some sort of conclusion if it is permanently to compete with its rivals. This is what is to be expected of realism at this stage of its development. The volume before us must therefore be regarded as an effort to clear the way for the new philosophy and not as a thorough-going attempt to grapple with the numerous difficulties that confront this system of thought. It deals with tendencies, and with realism only as a tendency. To many readers it will doubtless be a disappointment that the author has not seen fit to give us a different kind of book, but the time is not yet ripe for any great constructive achievement in realism, as it is not yet ripe for any such achievement in pragmatism. When one remembers that a century elapsed between the appearance of Berkeley's "Treatise" and Hegel's systematic development of idealism, and still another century before Royce rounded out the system, the natural impatience to get results over-night will be seen to be an unwarranted demand on time. To compare present-day realism

or pragmatism with present-day idealism is like comparing a babe in arms with a man in the full vigor of maturity. Mr. Perry therefore was without doubt wise in limiting himself to the task which he has accomplished so well.

The value of the different parts of the book is by no means equal, and to the reviewer the Introduction is the least satisfactory of all. Its aim seems to be to secure a favorable hearing for the new view from those whose interest in philosophy is primarily religious. In securing this end the contrast between theory and belief is overdrawn. "Theory does not directly nourish and sustain life, as belief does; because, unlike belief, it does not suit the humor of action. To theorize is to doubt. The investigator must be both incredulous and credulous, believing nothing, and prepared to believe anything. . . . Intelligent living proceeds not by doubting, examining, experimenting, and proving, but by assuming" (pp. 8–9). Is not assumption, far from doubt, examination, experiment, and proof, unintelligent rather than intelligent living?

Naturalism is defined as "the philosophical generalization of science -the application of the theories of science to the problems of philosophy. Both philosophy and science have, as we have seen, a permanent and institutional character. Each has its own traditions, its own classic authorities, and its own devotees. But naturalism proposes to make the institution of science serve also as the institution of philosophy" (p. 45). The science here meant is physical science. which deals with things as bodies. Scientific explanation is description. subject to two controlling conditions: "scientific description must reveal the general and constant features of its subject-matter," and it "must be analytical or exact in its final form" (pp. 54-55). A description of a natural event which conforms to these two conditions is "a law. And it is certain that nothing more is required for purposes of scientific explanation than the discovery of the law" (p. 55). The author illustrates this procedure of science by reference to the laws of Galileo, Newton, and Mayer. Now as naturalism is "the assertion that scientific knowledge is final, leaving no room for extra-scientific or philosophical knowledge" (p. 63), it is the philosophy which interprets everything in terms of such laws. There are two forms of naturalism, one in which these laws are regarded as manifestations of some universal substance such as "matter" or "force," and the other "condemns the search for universal substance and first cause as futile. Its last word is a theory of knowledge, in which science is asserted to be final because the only case of exact knowledge" (p. 63). Both

forms of naturalism are vigorously criticized by the author. The conclusion to which he comes is that without prejudice "to the truth of science or to the validity of its methods, without disparagement of the reality of physical nature, or the reduction of it to dependence on consciousness, it is still open to us to conclude that science is not all of truth, nor physical nature all of being. That which distinguishes such a critique of science is its recognition of science and nature, as they stand. They are not partially true or real; they are simply parts of truth and reality. And the other parts, while they do not undo or transmute the fact, may nevertheless put a wholly new face on the total situation. They disprove every claim to the exclusive truth of science; and provide a balance that may justify religion" (p. 108).

That religion needs such justification in view of the claims of science is due to the fact that science, when it is erected into a philosophy, endangers the hopes and aspirations of man. "If all being is bodily, and all causation mechanical, then there can be no support for the belief that the cosmos at large is dominated by goodness. Life is impotent; and the aspirations and hopes to which it gives rise are vain. Enlightenment destroys what the heart so fondly builds. Man is engaged in a losing fight. He may 'develop a worthy civilization, capable of maintaining and constantly improving itself,' but only 'until the evolution of our globe shall have entered so far upon its downward course that the cosmic process resumes its sway; and, once more, the State of Nature prevails over the surface from our planet'" (p. 85). To offset this desperate conclusion, it is necessary to believe in "moral causality" (p. 341). "There is sufficient ground, ... in reason and in fact, for asserting that interests operate, that things take place because of the good they promote" (p. 342); "religious belief is a confidence that what is indifferent will acquire value, and that what is bad will be made good—through the operation of moral agents on a preëxisting and independent environment" (p. 344). "Were it necessary that the good should triumph only in the breach of mechanical law, then the growth of science would indeed be ominous. But life triumphs in and through mechanical law. . . . If life can have established itself at all, it can by the same means enlarge its domain. And if interests can have freed themselves as they have from preoccupation with immediate bodily exigencies, they can by a further and like progression still further reduce the tribute which they pay to the once omnipotent environment" (pp. 344-5).

The influence of James and also of Royce on our author in his de-

spair over the outlook of what unmitigated science offers is apparent. But whether this method of reëstablishing hope is as effectual as theirs is not so apparent. For both Royce and James set for science limits different from those which our author is willing to set. Although life triumphs in and through mechanical conditions, it seems as a matter of fact to be possible only under certain mechanical conditions, and how long these favorable conditions will prevail seems to be a question for science alone to determine, if science be accepted as definitive within the sphere of the mechanical. Should science determine that these favorable conditions are only temporary, then the man who accepts the findings of science as final within its own realm seems to have little ground for hope of life beyond the time when, "once more, the State of Nature prevails over the surface from our planet." To the reviewer therefore Mr. Perry's attempt to reconcile the acceptance of the findings of science as conclusive within its own limits, with the entertainment of religious hopes, seems to miscarry. Either we must accept the findings of science as final and let our hopes be determined by these findings, or else we must challenge these findings when they conflict with these hopes. For science does not deal with things irrelevant to our hopes; the subject-matter of science is the material home of our spiritual life. The optimism that cherishes religious hopes in view of the nebular hypothesis is too happy-go-lucky. The only way of escape open from pessimism to a man on scientific terms lies in the recognition that science is seldom justifiably definitive in its larger generalizations. It is constantly revising its own conclusions. The nebular hypothesis, which sat with so oppressive a weight on the religious hopes of the last generation, is a case in point. Its scientific sufficiency is being seriously doubted now-a-days by scientists themselves, and doubted on scientific grounds. The fallibility of science on matters which come within its own domain, and especially on those matters which concern religious hopes, is the only scientific justification for such hopes. The lack of finality of science in scientific matters is its own stimulus to progress and likewise is a sufficiently ample indulgence for legitimate religious interests.

The chapters on idealism deal with "The Cardinal Principle of Idealism," "Objective or Transcendental Idealism," and "Absolute Idealism and Religion." The cardinal principle of idealism "is a theory of knowledge. For the purposes of technical philosophy it consists in a single proposition, to the effect that knowledge is an originating or creative process. Idealism's claims can be substantiated only provided it is true that to know is to generate the reality

known" (p. 119). "In other words, one cannot conceive things to exist apart from consciousness, because to conceive is ipso facto to bring within consciousness. It is to this argument that Berkeley appeals in the last resort, and his procedure is . . . so typcial as to deserve to be ranked with 'definition by initial predication' as one of the fundamental arguments for idealism" (p.129). "It is doubtless true that idealism has had a long and eventful history since Berkeley; and there are many who would maintain that idealism did not begin its history until after Berkeley. But to any one who refuses to permit the issue to be confused, it must be apparent that the theory with which Berkeley startled the world in 1710 is essentially the same as that which flourished in the nineteenth century in the form given it by Fichte and Hegel" (p. 134).

Whether Mr. Perry is fair to idealism is a question that will undoubtedly find varying answers according to the affiliations of the reader. In this review it is obviously impossible to enter into this question. A more interesting question to the reviewer at present is whether Mr. Perry succeeds in escaping the embarrassments of the 'ego-centric predicament.' In the last number of this REVIEW I discussed Mr. Perry's article on this subject and came to the conclusion that in that article he gave no reason to suppose that he was in its clutches. A careful study of this volume leaves me in great doubt whether Mr. Perry succeeds in making his way out of the predicament. If "what the idealist requires is a proposition to the effect that everything is an idea, or that only ideas exist" (p. 131), it is a very nice question whether the idealist does not have all that he requires when it is conceded to him that "every mentioned thing is an idea" (ibid.). For we must remember that 'mentioning' a thing is a general term that includes thinking about that thing in any way whatsoever. It would seem that Mr. Perry's philosophy of ideas would require him to say that he cannot think about anything except ideas, inasmuch as so to think would be a contradiction in terms. He speaks of discounting the ubiquity of the ego-centric predicamant (p. 132). Now can we discount what is ipso facto counted in the very act of discounting? Or to put the matter in another way: "According to this view," i. e., epistemological monism, "instead of there being a fundamental dual division of the world into ideas and things, there is only the class of things; ideas being the sub-class of those things that happen to be known" (p. 126). How can we believe in any but the sub-class if to believe presupposes thought about the object of belief, and if we cannot think about anything but ideas? The idealist who requires "a proposition to the effect that everything is an idea" seems on such a showing to be precluded by the realist from getting a proposition to the opposite effect. Philosophy can hardly be a dealing with things we cannot think about; realistic philosophy would surely jeopardize its future by claiming that its realism concerns unmentionables alone. More light will doubtless be thrown on this problem by "A Realistic Theory of Independence" which the author promises (p. 313, footnote 3) to contribute to The New Realism. Until the appearance of this contribution the reviewer does not feel competent to criticize Mr. Perry's position further than to indicate the difficulty he finds in it at this point. He ventures to suggest however that this difficulty can be avoided if the realist would distinguish between an idea and its object, and would maintain that a thing does not become an idea when one thinks about it. We could then think about things that are not ideas, and think about them as not being ideas. I refer to a theory of ideas worked out on the line indicated in "The Fringe of James's Psychology the Basis of Logic" (this REVIEW, Vol. XX, pp. 137 ff.).

Pragmatism is treated in three chapters, "The Pragmatic Theory of Knowledge," "Immediatism versus Intellectualism," and "Pluralism, Indeterminism and Religious Faith." Mr. Perry stands very close to pragmatism, and while criticizing with great acuteness various forms of pragmatism, he himself accepts the main contention of pragmatism: "On the other hand consider the case of an idea in the discursive sense, an idea of something. It is an idea of something by virtue of the fact that it is connected through my plans or expectations with some portion of the environment. And in this case, there is nothing intrinsically either true or false in a, or in any relation of a to b, except that of my intention. Whatever a be, whether fact or fiction, it is then true only when the use I make of it is successful; or false when the plans I form with it, or the expectations I base on it, fail" (p. 327).

Naturally the most interesting part of the volume is that which deals with Realism; to this the author devotes three chapters: "A Realistic Theory of Mind," "A Realistic Theory of Knowledge," and "A Realistic Philosophy of Life." It is difficult to summarize any of these chapters. The views presented need for their understanding all the elaboration which the author gives to them. The relational theory of consciousness is exhibited in a very illuminating fashion. What differentiates Mr. Perry's view of consciousness from that of some other realists is his insistence on three points: (1) "that mental

action is a property of the physical organism" (p. 298), (2) that as "mind appears in nature and society, it consists primarily in interested behavior" (p. 300), and (3) that "neither behavior, nor even conduct, is mind; but only because mind is behavior, or conduct, together with the objects which these employ and isolate" (p. 303). There seem to be serious difficulties in this conception of mind, but time does not permit discussion of them here.

The exposition of James's philosophy in the Appendix brings together into a single field of vision the various elements which that great Harvard philosopher unfortunately had time to develop only in serial fashion. Coming from one who was so intimately associated with James, it is a welcome and useful service to the history of philosophy.

This review will give an entirely wrong impression of the book, unless the reader bears in mind that I have dwelt mainly on the points that stand out by reason of their questionableness. The lucidity of statement, the keenness of criticism, the freshness of view, all contribute to make the volume a notable contribution to philosophical discussion.

EVANDER BRADLEY MCGILVARY.

UNIVERSITY OF WISCONSIN.

Truth and Reality. An Introduction to the Theory of Knowledge. By John Elof Boodin. New York, The Macmillan Company, 1911.—pp. viii, 334.

This book is divided into four parts: "Truth and Mental Constitution," "The Nature of Truth," "The Criterion of Truth," and "Truth and its Object." Part I discusses "Mind as Instinct" and "The Categories of Intelligence." All our fundamental categories are instinctive adjustments. In the development of conscious response to the environment there are three main stages—the sensitive stage, in which the primitive instincts appear; the stage of associative memory, characterized by the secondary instincts; and the stage of reflection, in which the ideals or sentiments come into being. The categories of intelligence represent four levels of intellectual development. On the level of perception we have the categories of space, time, habit, and imitation; on the level of reproductive imagination, those of contiguity, similarity, and dominant interest; on the level of empirical generalization, those of quantity, quality, causality, and individuality or substance. Finally, on the level of idealization we have the higher categories of the intellectual, ethical, and æsthetic realms. The author discusses only those of the intellectual field. The fundamental category here, the feeling of wholeness, expresses itself in four demands—for unity of inner experience, for unity of outer experience or nature, for unity of social experience, and for unity in the totality of being. To all these categories we must apply the pragmatic test. For example, the soul is substance in so far as we can recognize continuity in its states and can predict its conduct; this is the only practical signification of substance.

In Part II the author takes up, in fresh and interesting fashion, the nature of judgment, the problem of the externality of relations, and the postulates of truth. On the externality of relations he takes a position mid-way between the extreme views. "There is nothing contradictory" in the "conception of internal relations. . . . In every teleological whole" such relations are found, and if "the teleological relation of whole and part is contradictory," truth is impossible (pp. 112 f.). But while it is obviously an error to say that all relations are external, it does not follow that all are internal. It has not been proved that reality is one significant whole. If we follow the leadings of experience, we should be inclined to say that while some relations are internal, others are external, at least for us finite beings.

There are four fundamental postulates of thought. The law of consistency includes the laws of identity, contradiction, and excluded middle. The law of totality asserts that in order to be known, facts must cohere into a whole, at least for us. The law of duality declares "that you cannot transcend the subject-object relation while you remain within the concept of thought" (p. 138). The law of finitude tells us that thought or truth is essentially finite: thought "means the active selecting and assimilating of a datum by an apperceptive system"; and "both the content selected and the system within which it is to be related or defined must be finite in character" (p. 141). These four laws are proved by showing that if you suppose any case whatever in which they do not hold, truth is there impossible. "When the will sets itself the task of thinking," it "accepts or postulates certain norms" (p. 155); and if we are to play the game of thought, we must abide by the rules. But the necessity of these postulates is only epistemological. Ontologically considered, they are hypotheses which can be verified only through experience. We can conceive a world in which these laws do not hold-e. g., "a world of dreamy absorption or even of no experience," in which the subject-object relation would not prevail—but in this world there would be no thought (p. 153).

Perhaps I have failed to understand Professor Boodin's discussion

of the validity of these laws, but in one respect he seems to contradict himself. He says that the postulates are absolutely necessary for our thinking, and that "if we are to know, they must hold for our universe as experienced." But he also says that "from the point of view of reality they must be treated as hypotheses to be verified in the procedure of experience" (p. 152). This is difficult for me to understand. It may be that laws which are necessary for our thought do not represent the structure of reality an sich. But if they must hold for all that we experience, how could their ontological validity be either proved or disproved in the procedure of experience? If all that I can know must conform to these laws, any fact which, if known, would discredit them, must be of such character that it could not possibly be known by me. I do not see how Professor Boodin could escape from this difficulty by urging that experience is a wider term than knowledge; for although this may be granted, we should still maintain that proof and disproof belong to cognitive, rather than non-cognitive, experience.

In Part III perhaps the most important chapter is the one on "Truth and Agreement." Truth is agreement with reality, but there are two distinct modes of agreement: (1) a copying or sharing of the nature of reality and (2) an "instrumental relation of the knowing attitude to its object" (p. 217). Thought is instrumental whenever it deals with something which is immediate—and which therefore suffers violence "in being dealt with reflectively" (p. 217)—and whenever it introduces "systematic arrangement" into "facts which themselves know no system." But some objects have "a meaning of their own, . . . which we must acknowledge" (p. 219). In their case truth is a sharing in the nature of the object. Agreement is instrumental when we are dealing with the physical aspects of man's environment; it is sharing when we are dealing with its institutional aspects.

Throughout the book, Professor Boodin's pragmatism reveals itself as very moderate and conciliatory in its character. The position which he takes here is an instance of his constant effort to mediate between anti-pragmatists and radical pragmatists. But I question the wisdom of applying the same term 'truth' to relations so different in character as the author himself asserts these to be. It would seem more reasonable to say that in some spheres of experience we can hope to attain truth, while in others all that we can look for is a sort of substitute, which does very well for practical purposes, but which does not give us the real nature of the object. In one passage the author seems to admit that in the latter cases we have a substitute

for truth, rather than truth itself. "When such sharing is impossible," he says, "we must be satisfied with such artificial or phenomenal correspondence as the uniformity of our perceptions makes possible" (p. 222).

In Part IV there are chapters on "Pragmatic Realism," "The Object and its Contexts," "Metaphysics-The Overlapping Problems," and "The Reality of Religious Ideals." In the first chapter what seems to be a rather vague sort of epistemological realism is supported by the argument that whatever is known, must have a meaning beyond the momentary consciousness of the individual: since "our own cognitive meanings are necessarily finite, and any other type of knowing is necessarily hypothetical, it is difficult to see how any theory of knowledge can avoid being realistic" (p. 253). As for metaphysical realism the employment of the pragmatic method leads to the belief that while some qualities of things exist "as part of our perceptual context," there are others which exist "independent of perception in their own dynamic thing-contexts" (p. 264). The last chapter is a pragmatic defence of the Christian religion. A belief becomes objective when we act on the assumption of its truth and "the environment responds to our action by ratifying our will" (p. 316). Now if man, "in order to attain his highest development" must "act as if" the spiritual environment were real, "then the religious ideal must in some degree possess objective reality" (p. 321 ff.).

According to the Preface, Professor Boodin's book "is intended to be used in connection with a course in elementary logic or as an introduction or sequel to it" (p. vii). For this purpose its directness of presentation and simplicity of statement are admirable, but it seems to me to presuppose too much general knowledge of philosophical problems to be very useful to the beginner. But to those who are acquainted with contemporary issues in philosophy it will appeal as an interesting and suggestive treatment of some of the most important of these issues. The effort of the author to mediate between extreme views, although occasionally—as in the discussion of truth and agreement-resulting in some vacillation on his part, is most commendable. On the whole, the book is admirable for its combination of openmindedness with clearness of thought and frank statement of the author's individual point of view. All who have read it will await with interest the companion volume which is promised, under the the title, "A Realistic Universe."

ELLEN BLISS TALBOT.

MOUNT HOLYOKE COLLEGE.

Études de Morale. Par F. RAUH. Paris, Félix Alcan, 1911.—pp. 502.

The volume consists of four lecture courses given at the Sorbonne and the École Normale from 1903 to 1907. It is the work of some half dozen men who after Rauh's death and in his honor set themselves the task of reconstructing from his notes and those of his students as much as possible of the form and substance of his thought. So far as such work can be successful, they have succeeded.

Of these courses the first and fourth ("Critique of ethical theories"; "Problems of moral philosophy") are methodological and constructive; the second and third ("Patriotism; Justice") are special studies in moral beliefs and applications of the method and point of view developed in the others.

It is not difficult to define Rauh's goal: a concrete, reconstructive technique of moral beliefs; an experimental, plastic, autonomous moral science; a modest moral philosophy. It is, however, difficult to trace the origins of his thought and the *motifs* that cross and recross his argument. In a period as restive scientifically and philosophically as ours, constructive theories detach themselves from a mass of controversy, often express strong but perplexed demands, and give themselves as tentative revisions, chiefly of method. Out of such a situation Rauh's thought develops at a double rebound. He is out of sympathy alike with the metaphysical formalist in ethics and the rabidly objective biologist or sociologist. To rescue ethics from metaphysical dogma and not from scientific dogma is the acme of unkindness; it is curing to kill.

Rauh begins this clearing process by pointing out a number of philosophical and scientific sophisms. The universal, the permanent, the static are assumed to be fundamental values and carried over into ethics; the metaphysical sense in which such terms as perfect, rational, natural are used is confused with the moral sense; the hygiene of the thinker is confused with that of the moral man and the ideal of a contemplative life applied where it does not fit, to the moral life. Kant, a valuable analysis of moral experience is damaged because of too abstract and narrow a treatment and because of a logical tyranny for which the categorical imperative with its principle of universality will always remain an outstanding symbol. With Fichte and Hegel there is much à priori forcing of facts; the same logical scheme leads the one to a revolutionary, the other to a reactionary view of the state. Biological ethics at the very outset has to choose between an aristocratic or a democratic interpretation of evolution. Certain facts of natural selection, of the rule of the strong, favor the former; others,

such as the strength of collectivism, favor the latter; choosing either ideal and applying it to morality is a matter of onesided and vague analogies. Apart from this initial difficulty, the biologist who explains and tests the moral consciousness in terms of the survival of the fittest imposes upon himself the choice of either a very simple, narrow, crude reading or a vague reading of the facts. There must be a sacrifice of either carrying power or precision. Sociological ethics—in Marxism, for instance—begins with the interpretation of social change and progress in materialistic terms-economic changes, social displacements, inventions, etc., and the assumption that only a thing of weights and measures can be matter for scientific treatment. Recent objective sociologists have avoided this externalism and recognized the influence of ideas, convictions, purposes at every turn of the social process. They strengthen their position by speaking of a collective consciousness or conscience. In this collective conscience they see the sum total of morality. But Rauh accuses them of reducing this collective conscience to middle class standards and social utility values; and as a consequence, of overlooking two important facts: (1) the place of the individual non-conformist conscience, and (2) the fact that in the most advanced as well as the most primitive society there are at work certain æsthetic and moral preferences not reducible to social utility values. There follows an interesting discussion of individualism and its sophisms.

How then is ethics to be liberated from such externalism of method and point of view? By constructing a moral science. Two things characterize a science: a special subject matter and method, and a system of working principles developed, applied and reconstructed by means of the give and take of concrete problems. Moral science has for its subject matter moral beliefs. However heterogeneous in origin, these beliefs have certain common marks. They give themselves as a specific type of reaction to a problem. They affirm incommensurable values in unconditional, invincible terms and from an impersonal point of view. This distinguishes them from æsthetic and prudential values. Like scientific beliefs they seek to place a fact rationally, but they have their own distinctive interpretation of rationality. These beliefs, imperfectly embodied in the substance of social morality, are to be found in public opinion and in the ideas and convictions of single individuals. It is from them that ethics must start. It must study these preferences and working principles concretely and sympathetically. In practice a moral problem is solved when conscience can put the stamp of approval on an act; in ethics

also the approval of conscience is the ultimate. But what conscience? Rauh admits that moral beliefs are many and contradictory. Is then the individual conscience with its intuitive preferences to be the final judge? If so, we are committed to moral impressionism and individualism. That is not Rauh's goal. Conscience must be standardized. The well-informed, efficient conscience is the judge. A painstaking study, psychological and sociological, of the whole situation from which the particular moral problem starts enables it to place its preferences rationally. It must, however, clearly be understood that this rationality is not absolute, for all time; it stands for what in this particular problem commends itself to the honest man of enlightened conscience. All moral beliefs are in reality working principles, must keep in touch with a concrete problem, and must submit to reconstruction. Such reconstruction is autonomous—in the interests of the moral consciousness itself—and plastic.

Rauh in the second and third courses has attempted an application of his method to two problems, that of patriotism and that of justice. He purposely points his discussion with reference to certain live moral problems of the France of to-day: internationalism and nationalism, immigration, international law, race prejudice and the Dreyfus affair, capitalism and the masses, philanthropy, class problems, and socialism. They are live problems before whose complexity conscience halts. To disentangle with minute care the moral strains, the implied social and economic factors and moral beliefs, is the task Rauh sets himself; and thus to furnish the moral reality by means of which conscience rationalizes its intuitive preferences.

That such an intuitionism with safeguards represents a very welcome reaction against externalism and formalism in ethics admits of no doubt. Whether Rauh could have worked out his constructive program satisfactorily must remain an unanswered question. He was still feeling his way when he died. It would be unfair to measure a volume of lecture courses by standards applied to constructive work, for here the constructive impulse does not work quite freely and evenly. But of a well-stocked mind and of agile, enterprising and balanced thought we get not a little.

Louis W. Flaccus.

University of Pennsylvania.

NOTICES OF NEW BOOKS.

Das Problem des absoluten Raumes und seine Beziehung zum allgemeinen Raumproblem. Von ALOYS MÜLLER. Braunschweig, Vieweg & Sohn, 1911.—pp. vii, 154.

The object of this book, which is addressed both to philosophers and to scientists, is to discuss the rôle and justification of absolute space in physics, and the logical structure of the concept involved.

Part I investigates the problem of absolute and relative motion, from an epistemologically neutral standpoint. This is a standpoint which assumes the fact of the subject-object relation, but does not inquire into its nature or reason. This is the point of view of the older physics. Absolute space is here defined as such a space as would permit the ascription of rest or motion (of rotation) to a Neumann (i. e., an absolutely isolated) body. It results that only relative motion (motion with respect to a reference body) is knowable or measurable. This is sufficient as far as pure kinematics is concerned. Not so in the case of dynamics. The principle of inertia is inapplicable unless axes of zero inertia, a so-called inertial system, can be found. This is tantamount to saying that the the motions of dynamics must be referred to absolute space, in the sense defined above. This version Müller calls the phoronomic dynamic concept. Such an inertial system is ideal. Practically we can only approximate to it by finding, with reference to the stars, axes that may be taken as fixed, without sensible error. This is the business of the astronomer. Accepting the modern result, that the sidereal universe is a finite system. Müller points out that it constitutes itself a Neumann body, to which we may properly assign motion. But though from the laws of mechanics, its rotation may be determined, its translation is indeterminable, yet not inconceivable. This leads to the further concept of absolute physical space, which would permit the ascription of translation to a Neumann body. Such a space possesses a reality of its own independent of bodies. Absolute motion, or motion with respect to space, is hence a limiting case of relative motion. Absolute space is the essential condition of the latter. By vitrue of the principle of superposition, the application of the principle of inertia does not require a knowledge of absolute translation, but only of absolute rotation. The conclusion is therefore reached, that the phoronomic dynamic, but not the physical, concept of absolute space, is essential to a complete and consistent system of dynamics.

Part II now assumes that the correct epistemological standpoint must lie somewhere between naïve realism and absolute idealism. Things as they appear to us are neither wholly objective nor wholly subjective. Their general qualities may be the latter, but there must be some absolute basis in reality for what Müller calls the concrete determination of things. To every relative motion, which is subjective, there must correspond an absolute

motion, which is real. The latter may in itself be unspatial, may consist merely of certain space-factors, as Müller calls them. (This view reminds one strongly of Helmholtz.)

Space is independent of things, but physics everywhere shows the complete dependence of things upon space. Space actually affects them. Müller goes further and suggests that even their very existence may depend upon space. Things may be a sort of "Emanation" of the absolute space-factors.

A strong support for this theory Müller finds in certain recent physical investigations. Kaufmann has shown that the mass of an electron depends upon its velocity. Planck's interpretation of the Michelson-Morley experiment seems to show that the very dimensions of a body depend upon its motion with respect to the ether. At the same time the electro-magnetic theory has shorn the ether of all those astounding physical qualities once thought so essential. There remains but one further step to make,—to identify the ether with absolute space. This would give the most complete and unified view of the physical universe.

In the concluding chapter is discussed the possible utility of the adoption of a Non-Euclidean Geometry. It would remove the antinomies concerning the infinity of space, and would explain the deformation of bodies with their motion, required by Planck's theories.

Two appendices and an excellent list of literature complete the work.

M. MOTT-SMITH.

COLBY COLLEGE.

Kant's Critique of Æsthetic Judgment. Translated, with seven Introductory Essays, Notes, and Analytical Index by James Creed Meredith. Oxford, The Clarendon Press, 1911.—pp. clxx, 333.

This work contains a translation of the Preface, Introduction, and First Part (Kritik der ästhetischen Urteilskraft) of Kant's Critique of Judgment. The translator has contributed to the volume also seven Introductory Essays which are entitled as follows: "Problem of the Critique of Judgment," "Last Stages in the Development of Kant's Critique of Taste," "The Beautiful," "The Sublime," "Interest in Beauty," "Art and the Artist," "The Dialectic."

The translation has evidently been made with the greatest care. The translator has endeavored to find an English equivalent for Kant's technical and semi-technical terms and has used the term chosen consistently throughout. In certain cases this has led to a slight violation of ordinary English usage, as for example the rendering of beurteilen by 'estimate' (to distinguish it from urteilen, 'to judge') and of Zweckmässigkeit by 'finality.' But in these cases the reason for the peculiar usage has been frankly stated in the notes and the unusual sense of the English word explained; the translator has scrupulously avoided the use of these words in their ordinary senses in his essays and notes. All things considered, the advantage of having a distinct English term for each of Kant's terms probably outweighs the awkwardness of using ordinary

words with a technical meaning. The translation, so far as I can judge by comparing random passages with the original, is accurate and to a large extent literal. One naturally compares it with the existing translation by Bernard. Mr. Meredith has given more polish to his English and has succeeded in making his translation more readable than Bernard's, but to do this he has sacrificed somewhat the extreme literalness of Bernard's rendition. It is an open question which of these qualities is the more desirable. For the reader who has no German and who merely wishes to read Kant in translation, the easier English may be the better, but one who desires help with Kant's German may still find Bernard the more serviceable. In any case, however, Mr. Meredith's departures from literalness do not produce inaccuracy, and are undertaken usually with a view to bringing to light the meaning which is more or less concealed by Kant's crabbed style.

The Introductory Essays, as can be seen from the titles, deal in order with the parts of the Critique that are here translated; the second essay, however, discusses the origin of Kant's æsthetics and attempts to identify in the published work the book which already existed in manuscript in 1787, and which Kant mentions in a letter to Reinhold under the title of "Critique of Taste." The Introductory Essays are scarcely intended for the general reader or the elementary student of Kant. They do not seek to interpret Kant's æsthetics broadly with reference to the rest of his system or with reference to other theories of the beautiful and sublime. They presuppose a considerable acquaintance with the text and are devoted mainly to discussions of the internal consistency of Kant's views on æsthetics and the interrelations of the parts of his theory. Mr. Meredith evidently feels that Kant's æsthetics has a high value for its own sake and he resents the tendency of standard English works on the subject to regard Kant as an introduction to Hegel (cf. pp. xxviii ff.). Without committing himself in regard to the relative merits of the two philosophers, Mr. Meredith very properly suggests that there is a good deal of humor and not a little significance in the fact that "Professor Caird, who wrote on Kant, was a devoted admirer of Hegel, while Mr. McTaggart, who writes on Hegel, is at heart a Kantian" (p. xxix). The result of thus limiting his Introductory Essays to the meaning of Kant is to create the impression that Mr. Meredith takes the machinery of the 'Critique of Æsthetic Judgment,'the external form which Kant borrowed from the Critique of Pure Reason,a good deal more seriously than most critics have seen any need to do. And while his exposition and interpretation of Kant's argument is excellent, the reader is likely to feel that the discussion moves in a realm of symbols the meaning of which is not very clear. A good many students of philosophy will sympathize with Mr. Meredith's refusal to interpret Kant in terms of Hegel, but they may still wish that he had showed more clearly either the significance of Kant's æsthetic theory as an interpretation of our æsthetic experience, or its value for the criticism and elaboration of other philosophies of the beautiful.

GEORGE H. SABINE.

William James and other Essays on the Philosophy of Life. By Josiah Royce. New York, The Macmillan Company, 1911.—pp. xi, 301.

This volume is made up of five essays, all of which were written by Professor Royce as public addresses. The leading essay on "William James and the Philosophy of Life" was given as the Phi Beta Kappa oration at Harvard University, while the paper on "The Problem of Truth in the Light of Recent Discussion" was read before the International Congress of Philosophy at Heidelberg. The other papers have the titles: "Loyalty and Insight," "What is Vital in Christianity," and "Immortality." In these essays Professor Royce undertakes to apply and illustrate the idealistic principles set forth in his more systematic writings by bringing them into relation to certain practical problems of life. While the positions maintained in this volume are familiar to readers of his other books, the form of statement is fresh and interesting. Indeed, the briefer and more direct form of presentation of these addresses gives sometimes a more definite form to his philosophical doctrines, while the applications and illustrations which are supplied should help to remove some misunderstandings of the bearings of the idealism which the author professes.

The opening essay is at once an eloquent tribute to Professor Royce's friend and distinguished colleague, and a fine appreciation and criticism of certain aspects of contemporary thought of which James was one of the foremost representatives. Whatever may be the verdict of the future regarding the special form of philosophical doctrine which James advocated, no one can doubt the propriety of linking his name, as Professor Royce does, with those of Ionathan Edwards and Ralph Waldo Emerson as the great representatives of American philosophy. The conclusion with which the address ends, that James's philosophy is something more than positivism, or pluralism; that it is an ethical idealism which recognizes a "Rule of Reason" in man and the universe—may at first sight seem more questionable to some readers. But notwithstanding the length to which James was sometimes carried in his protest against abstract intellectualism, I think that Professor Royce's interpretation is correct. It was against the claims of an abstract or isolated reason that James protested unceasingly; against absolute principles that appeared to him to obscure or supplant the reality of the concrete variety and fluidity of experience. To preserve the latter he was willing, if need be, to repudiate logic and declare himself an irrationalist. But it seems to be a truer estimate of James's philosophy to recognize, as Professor Royce has done, that in spirit and in its best expression it is a demand for a more concrete rationality, a protest against the categories of the Understanding in the interest of the more distinctly vital and human point of view of the Reason.

The paper on the "Meaning of Truth" is more technical in character than the other parts of the book, being a criticism of current instrumentalism. This has lately been brought to the attention of readers of the *Review* by Professor Dewey's reply (Vol. XXI, pp. 69 ff.) which repudiates entirely the subjective or psychological view of experience which Professor Royce ascribes

to the instrumentalist. It is to be hoped that the latter may be able to go on with a discussion which promises to yield significant results. For the points at issue between idealism and instrumentalism are now more exactly located and clearly defined than they were ten years ago, while during these years there has also been progress in mutual understanding, constituting something like a common platform upon which discussion can be profitably carried on. This of course implies that neither party has remained where it was. The instrumentalism which Professor Dewey advocates today requires a broader philosophical basis than the functionalism founded on the 'reflex arc concept.' And the whole emphasis of this volume of essays—the emphasis on will, individual experience, and personal ideals, which is characteristic of the present day, shows clearly that Professor Royce has not hesitated to gain instruction from his opponents.

J. E. C.

The Educational Theory of Jean Jacques Rousseau. By WILLIAM BOYD. London and New York, Longmans, Green, and Co., 1911.—pp. xiii, 368.

Dr. Boyd published last year a very useful translation of The Minor Educational Writings of J. J. Rousseau. He now gives us an excellent exposition and criticism of Rousseau's educational theories in the light of his social philosophy. It was his first purpose, as he informs us, to make the Emile the central theme of his book. This work, "with all its faults," he regards as "the most profound modern discussion of the fundamentals of education, the only modern work of the kind worthy to be put alongside the Republic of Plato" (p. 5). "But," he goes on to say, "as I grew more intimate with his writings, I was reluctantly forced to the conclusion, already indicated by Rousseau in one of the last of his Dialogues, that the right method of approach to his theory of education is not through the Emile but through his whole social philosophy. . . . Though it is the most detailed and authoritative statement of Rousseau's educational doctrines, it represents only one of the two points of view with regard to the social institutions between which his mind constantly oscillated."

Dr. Boyd's book is a thoroughly sound and scholarly piece of work. He shows us Rousseau's educational ideas in their historical and psychological setting, and thus creates a perspective which enables us to understand the reason for the paradoxical form in which they were often set forth, and also to appreciate what elements are of central importance. The book is no mere summary of Rousseau's doctrines. It is in the best sense a philosophical exposition and criticism of his principles, which will contribute much, not only to a better understanding of Rousseau, but also to an appreciation of the essential greatness of his thought. It is now just two hundred years since the birth of the great citizen of Geneva, and he can scarcely be said to have yet gained the historic place to which he is entitled as the father of modern education.

No one can doubt the wisdom of Dr. Boyd's method in connecting, as he has done, the educational theory with the social philosophy. I venture to suggest, however, that the exposition would have been clearer, and the inconsistencies in the educational theories more intelligible, if he had emphasized the fact that Rousseau represents a turning point in social and political philosophy between the older contract theories, to which in his form of statement he adheres, and the more modern 'organic' view. This is very convincingly shown in Dr. Bosanquet's *Philosophical Theory of the State*, a book to which Dr. Boyd does not refer.

J. E. C.

A System of Psychology. By KNIGHT DUNLAP. New York, Charles Scribner's Sons, 1912.—pp. ix, 368.

Professor Dunlap gives as the raison d'être of this new text-book on Psychology the belief that there is danger lest the purely analytic method of psychological investigation prevent the proper and final integration and the mind be not appreciated as coherent and unitary. In this purpose he will undoubtedly have the approval of not a few psychologists who in their modes of thought are actuated by philosophical ideals. To the "strictly scientific psychologist" his purpose may seem a clear case of intellectual apostasy. But the question is not so much the desirability of the end he proposes—that we are willing enough to concede—but what is his method and how well has he succeeded?

In the first place, his method does not dispense with a systematic treatment of the usual topics in the general text-book on this subject, and we find, as a consequence, a statement often limited but usually fresh and vigorous, of much that is accepted by all students of this science. He does omit as a subject too complex for cursory treatment, any discussion of cerebral anatomy, but gives nevertheless just about one third of the book to a discussion of the one subject of Sensation. In the second place, and more positively, his method does call for a clear enunciation of belief that looks forward to a certain conception of the ultimate character of the mind. The book while in no sense reactionary is sane and safe and will be eminently useful for those who have had an elementary course in the subject and are interested to go further and desire light upon some of the more theoretical aspects of the science. Concerning the Ego he contends against any form of the 'content' hypothesis, but asserts that we are obliged to assume a point of reference over all content of consciousness, and this transcendental unity of apperception is the Ego. As such it is forever safe from analysis or investigation. Or as the conclusion is phrased "We must bear in mind the fact not only that we can know nothing about the Ego, but that there is nothing to be known about it."

The style is clear and easy. The presentation of his matter is fresh and stimulating.

HALBERT H. BRITAN.

Free Will and Human Responsibility. By H. H. HORNE. New York, The Macmillan Co., 1912.—pp. xvi, 197.

In this book the author does not aim to develop a complete and systematic philosophy of freedom. He desires rather to supply a clear and brief treatise, covering both sides of the free-will controversy, which shall be serviceable as a class-room manual. Judged in the light of its avowed purpose the volume deserves praise. It is lucidly written, some of the life and interest of a real debate are communicated to its pages, and skillful use is made of extracts and illustrations gathered by the author in his wide reading upon the subject. Even the methodical subdivision of the chapters and the treatment of the material under a multiplicity of headings-a feature which may grow wearisome to the general reader—is helpful in a text-book. Defining freedom as the ability to act in either of two or more ways (p. 65) the author throws the burden of proof upon the determinist, asserting that "The determinist supports a universal affirmative proposition; every act is determined; a single exception disproves his case" (p. 68). Accordingly, he first allows the determinist to present his case, follows with a rebuttal of these arguments from the libertarian standpoint and then argues in favor of free-will. In general, the freedom of the will is ably and, for the most part, convincingly defended. Sometimes the reasoning is inconclusive and the pronouncements of the author seem mere dogmatism; as when, for instance, in reply to the deterministic argument from the universality of causation, he asserts that "the law of causation is that every effect has a cause, not that every cause has a cause" (p. 135). In the chapter on Pragmatism and Freedom, the pragmatist's contention is disposed of in rather too easy and off-hand a manner. Indeed, the way the subject is approached in the first two chapters invites loose thinking and hasty generalization—from which the author does not entirely escape. The effort in the first chapter to discover 'analogous issues' in other fields brings to our attention resemblances that are superficial, and, in certain cases, misleading, as when in Biology the theory of evolution from determinate variations is connected with the deterministic theory of will. In the second chapter it is maintained that both in practice and in theory the amount of determinism has decreased and the amount of freedom has increased in the course of human history. This is certainly to neglect the salient fact that the present strength of the determinist theory is due mainly to the growth of natural science and its triumph over animistic ideas of the world.

H. W. WRIGHT.

LAKE FOREST COLLEGE.

L' Education du caractère. Par L. Dugas. Paris, Félix Alcan, 1912.—pp. xi, 258.

In studying the education of character, the author does not assume that such education is possible. The main problem of the book is to show that it is possible and, as a means to this end, to discuss fully what is meant by both education and character. Character is a normal state comparable to

bodily health, differing in different individuals and changing in the same individual in accordance with definite laws. It is determined by a chain of causality of which the will is a part, and it is therefore not fatally determined. The character of an individual is not the sum total of his qualities, but the characteristic unity of these qualities-a unity dependent upon memory and reason. By education is meant not the whole of experience influencing character, but a systematic series of influences planned for a definite end. It must be both formal and material in that it must develop the particular powers inherent in the individual and at the same time harmonize these into a unity of character. If character were fatally determined, that is, if it were not modifiable at all, its education would be impossible. If it were indefinitely modifiable, its education would be dangerous. That it can be changed to a limited extent by such influences as climate and occupation, is shown by the fact that we have typical national and professional characteristics. Since character can be modified only to a limited degree, it follows that its education must not do violence to nature, but must have regard at once for society and for the individual. The education of character is to be distinguished from that of the mind and the body.

The book cannot be called original, since the facts cited are matters of common knowledge and the deductions from them are not new. Moreover, it cannot be called practical, since only the most general concepts are dealt with and no suggestions are given as to means or method. The author himself gives as his purpose to systematize current concepts of character and to set forth his own ideal. He has succeeded in carrying out this purpose in a logical way. Perhaps the greatest value of the book lies in its insistence upon the importance of moral education, and its sharp separation of this from the education of mind and body.

Helen M. Clarke.

The Philosophy of Music: A Comparative Investigation into the Principles of Musical Æsthetics. By Halbert Hains Britan. New York, Longmans, Green & Co., 1911.—pp. xiv, 252.

The author of this work tells us that "while the bibliography of music is voluminous, attempts at a scientific, psychological analysis of music, and at a systematic discussion of the principles of musical æsthetics are surprisingly few. . . . Under the circumstances it seemed best to the author therefore to start boldly out, trusting to his psychological knowledge for chart and compass, and to his philosophical training to lead him through the subtleties and half-mystical generalities which for so long have beclouded this particular field of art" (p. vii). He then analyzes the various problems coming under the philosophy of music into four: the psychological analysis of music, the results of this analysis as applied to musical criticism, the relations of music to other fields of human thought, as morality, religion, and education, and the question of the content of music; and after a preliminary survey of the subject of musical form, he proceeds to the psychological discussion of the musical experience.

This he divides into the traditional elements of rhythm, melody, and harmony, and after an analysis of each of these adds a chapter on musical expression to this division of the subject. Throughout all this he seems to want to show primarily that the musical experience is not merely emotional but includes also important "intellectual" elements; owing to the essential correctness of his main contention, at least in so far as is necessary for the applications which he wishes to make, it seems a pity that he is not slightly more definite and precise in his use of such terms as 'intellectual,' 'psychical,' terms which have, for technical psychology, either no meaning through their vagueness or a very technical and hence very precise meaning.

Keeping these two elements in mind he shows, in Part III, that the question of the form versus the content of music is a false division, as all music must have both elements to a certain varying degree; that the art of musical criticism can and should be based on the definite principles of criticism derived from the nature of music as a psychological experience and as a form of æsthetic activity, thus subordinating the instinctive response to rhythm to the more intellectual activity proper to the higher elements of music, melody and harmony; and that music is well adapted to fill a large place in modern life through its great value (1) as a form of recreation, something especially necessary in this period of great complexity of life, (2) as a form of mental training capable of resulting in a type of mind possessed of the ability to make peculiarly delicate discriminations, (3) as a means of developing the finer types of emotional feeling and hence to lead to moral effects; for these reasons then, the author holds that music should be made an essential part of the plan of our education and that this musical education should be primarily not technical, but adapted to develop a fine appreciation of the better class of music in so far as this is possible. This last part of the work is so essentially sane and valuable that we cannot but feel regret that it is hardly more than a mere outline.

F. R. PROUT.

CORNELL UNIVERSITY.

The following books also have been received:

The Philosophical Works of Descartes. Rendered into English by ELIZABETH S. HALDANE and G. R. T. Ross. Two Vols., Vol. I. Cambridge, University Press, 1911.—pp. vi, 452. \$3.50 net.

Kant and Spencer. By Borden P. Bowne. Boston and New York, Houghton Mifflin Co., 1912.—pp. xii, 440. \$3.00 net.

Essays in Radical Empiricism. By WILLIAM JAMES. New York, Longmans, Green, & Co., 1912.—pp. xii, 283.

Memories and Studies. By WILLIAM JAMES. New York, Longmans, Green, & Co., 1911.—pp. 411.

From Religion to Philosophy. By Francis Macdonald Cornford. London, Edward Arnold, 1912.—pp. xx, 276. 10/6 net.

Modern Science and the Illusions of Professor Bergson. By Hugh S. R. Elliot. London, Longmans, Green, & Co., 1912.—pp. xix, 257. \$1.60 net.

The Science of Logic. By P. Coffey. Two Vols., Vol. I. London, Longmans, Green, & Co., 1912.—pp. xx, 445.

Lectures on Moral Philosophy. By John Witherspoon. Princeton, Princeton University Press, 1912—pp. xxix, 144.

The Educational Theory and Practice of T. H. Green. By ABBY PORTER LELAND. New York, Teachers College, Columbia University, 1911.—pp. 62. \$0.75.

Beauty and Ugliness. By Vernon Lee and C. Anstruther-Thomson. London, John Lane, 1912.—pp. xiii, 376. \$1.75 net.

A System of Psychology. By KNIGHT DUNLAP. New York, Charles Scribner's Sons, 1912.—pp. xiv, 368.

Association Tests. By R. S. Woodworth and Frederic Lyman Wells. Princeton, Psychological Review Co., 1911.—pp. 85.

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Immanuel Kants Werke. Herausgegeben von Artur Buchenau. Band I. Berlin, Verlegt bei Bruno Cassirer, 1912.—pp. 541.

Aristoteles und seine Weltanschauung. Von Franz Brentano. Leipzig, Quelle & Meyer, 1911.—pp. viii, 153. M. 3.

Kant und die Epigonen. Von Otto Liebmann. Besorgt von Bruno Bauch. Berlin, Reuther & Reichard, 1912.—pp. xii, 239. M. 4.

Principien des Metaphysik. Von Branislav Petronievics. Erster Band. Heidelberg, Carl Winter's Universitätsbuchhandlung, 1912.—pp. xxxviii, 570. Band I and II. M. 16.

Geschichte der Griechischen Ethik. Von MAX WUNDT. Zweiter Band. Leipzig, Verlag von Wilhelm Engelmann, 1911.—pp. ix, 506. M. 14.

Hauptprobleme der Religionsphilosophie der Gegenwart. Von Rudolf Eucken. Vierte und fünfte Auflage. Berlin, Verlag von Reuther & Reichard, 1912.

—pp. 182. M. 4.

Matter and Form in Aristotle. By ISAAC HUSIK. Berlin, Verlag von Leonhard Simion Nf., 1912.—pp. 93. M. 2.50.

Möglichkeit und Widerspruchslosigkeit. Von Hans Pichler. Leipzig, Verlag von Johann Ambrosius Barth, 1912.—pp. 72. M. 2.40.

René Descartes Meditationes de Prima Philosophia. Von C. GÜTTLER. Zweite Auflage. München, C. H. Beck'sche Verlagsbuchhandlung, 1912.—
pp. xii, 269. M. 5.

Das Problem der Methode bei Descartes. Von Ferdinand Stöcker. Bonn, Carl Georgi, Universitäts-Buchdruckerei und Verlag, 1911.—pp. 63.

Identité et Réalité. Par Émile Meyerson. Paris, Félix Alcan, 1912.—pp. xii, 542. 10 fr.

Contre la Métaphysique. Par Felix le Dantec. Paris, Félix Alcan, 1912.

—pp. 255. 3 fr. 75.

Fragments sur L'Histoire de la Philosophie. Par ARTHUR SCHOPENHAUER. Traduit par Auguste Dietrich. Paris, Félix Alcan, 1912.—pp. 196. 2 fr. 50.

Devoir et Durée. Par J. WILBOIS. Paris, Félix Alcan, 1912.—pp. 408. 7 fr. 50. Annales de L'Institut Superieur de Philosophie. Tome I. Directeur, S. DEPLOIGE. Paris, Félix Alcan, 1912.—pp.705.

Esquisse d'une Philosophie de la Nature. Par André Joussain. Paris, Félix Alcan, 1912.—pp. 197. 2 fr. 50.

Les Concepts de la Raison et les Lois de L'Univers. Par EUGENE DE ROBERTY. Paris, Félix Alcan, 1912.—pp. 177. 2 fr. 50.

Etude sur la "Théologie Germanique." Par MARIA WINDSTOSSER. Paris, Félix Alcan, 1912.—pp. xi, 216. 5 fr.

Hegel, sa Vie et ses Œuvres. Par P. Roques. Paris, Félix Alcan, 1912.—pp. 358. 6 fr.

Introduction à L'Esthétique. Par CH. LALO. Paris, Libraire Armand Colin, 1912.—pp. ix, 343. 3 fr. 50.

Pédagogie Expérimentale. Par J. J. VAN BIERVLIET. Paris, Félix Alcan, 1911.—pp. xii, 335. 7 fr. 50.

Il Materialisimo Storico in Federico Engels. Da RODOLFO MONDOLFO. Genova, A. F. Formiggini, 1912.—pp. vi, 355. Lire 5.

SUMMARIES OF ARTICLES.

[ABBREVIATIONS.—Am. J. Ps. = The American Journal of Psychology; Ar. de Ps. = Archives de Psychologie; Ar. f. G. Ph. = Archiv für Geschichte der Philosophie; Ar. f. sys. Ph. = Archiv für systematische Philosophie; Br. J. Ps. = The British Journal of Psychology; Int. J. E. = International Journal of Ethics; J. of Ph., Psy., and Sci. Meth. = The Journal of Philosophy, Psychology, and Scientific Methods; J. de Psych. = Journal de Psychologie; Psych. Bul. = Psychological Bulletin; Psych. Rev. = Psychological Review; Rev. de Mét. = Revue de Métaphysique et de Morale; Rev. Néo-Sc. = Revue Néo-Scolastique; Rev. Ph. = Revue Philosophique; Rev. de Ph. = Revue de Philosophie; R. d. Fil. = Rivista di Filosofia e Scienze Affini; V. f. w. Ph. = Vierteljahrsschrift für wissenschaftiche Philosophie; Z. f. Ph. u. ph. Kr. = Zeitschrift für Philosophie und philosophische Kritik; Z. f. Psych. = Zeitschrift für Psychologie und Physiologie der Sinnesorgane, I. Abtl.: Zeitschrift für Psychologie. — Other titles are self-explanatory.]

Morality as Inter-personal. E. W. HIRST. Int. J. E., XXII, 3, pp. 298-321.

This essay is intended to be, first of all, a criticism of the usual view of ethics as being too individualistic; secondly, it is a plea that morality is no form of merely uni-personal activity, but is rather an inter-personal relationship. We can only conceive of a good in some form of desirable conscious life. We find that most moralists have regarded conscious life as belonging to the mere individual, considered in abstraction and isolated from his fellows; and have further increased the artificiality of their treatment of the ethical problem by abstracting some element of conscious life and identifying goodness with the perfection of such element. Even consciousness itself, when it is regarded as that of the individual considered in abstraction, cannot possess ethical quality. Since a self is not active except among other selves, morality, being some attitude of the self as a whole, must be inter-personal. The problem is now to determine the relation between selves which is ethical. Whatever form of activity we decide to be morally valid, must have its psychical antecedents. There is disagreement among psychologists as to the beginnings of sociality. Professor Baldwin finds the beginnings of sympathy in imitation; but it is one thing to feel 'like' others, quite another to feel 'for' others. The latter cannot evolve from the former. Accordingly, many psychologists try to find the origin of ethical love in the maternal instinct. Here, too, we find difficulties in evolving ethical love from a mere instinct. Regarding philanthropy as a form of the maternal instinct, we do not even here get rid of that automatism and narrowness of range aforementioned. But a true 'philanthropy'-that love of man which is ethical-will seek for others a 'good' which one judges highest for oneself. This coherence of selves is life's consummate achievement. The ideal is a 'love of love' rather than the desire for the mere happiness of another. However, there is no meaning in the statement that love alone is good, it is only in its manifestation in various human activities that we prize it. Granted that there are no deeds right in themselves, we may well expect that

love will modify our deeds in respect to such matters as time, place, and circumstance of performance, frequency or infrequency of action, together with abstention on occasion. The 'goods' of life are but the tools of love. Equality of opportunity is of real value only as opportunity is ethically interpreted and improved. The ultimate rationale of 'love' appears to be connected with the view that finite selves are dependent upon a common ground alike for their existence and apparent independence, as for the possibility of their interaction. The proper ethical union of men requires not only a metaphysics for its justification, but a religion for its realization.

HENRY MAYER.

Die Anamnesis. Ernst Müller. Ar. f. G. Ph., XVIII, 2, pp. 196-225.

The forms of thought in Plato have a two-fold aspect: (1) centers of extended connection, (2) bridges and ways which lead to those possible connections and to unification. Reminiscence is a bridge from plurality to unity, from werden to sein, and is thus the ground of the possibility of transition of thought from the unconscious to consciousness. If the question be raised as to the possibility of error, the answer is, it is not possible on the basis of rationalism, but only from the psychological point of view, where the distinction is made between perception and the idea of reminiscence, and the possibility of error lies in the relation between these. Here similarity is the criterion of determination. But to use this criterion is to think, and in this way, Platonism becomes closely related to Hegelianism. Reminiscence is, therefore, immanent in every act of the soul as the organizing element, and is connected with the doctrine of ideas. Knowledge consists of right opinions united by reminiscence, and hence thought leads from the subjectivity of right opinion to the reality of the idea and thus to the security of knowledge. But similarity is not only a function, it is also a content of experience. Whoever compares two things does so as if he applied the concept of similarity to the two things compared, even though he cannot comprehend this concept as such. Hence similarity becomes identity. But reminiscence is also a developing notion. It is the temporal rememberance of a non-temporal thing, and signifies the endlessness of thought. It is the bond which, conscious of itself and its own activity, takes up its past and links it with the future. Memory is a passive principle which continues the past and itself. Reminiscence is the active principle corresponding to memory. It arranges the contents of memory in an orderly way. It first appears in sense perception as the awakener of desire but the purifying activity of reminiscence transforms the impure into the pure. Memory causes us to live again psychic experiences. Reminiscence is the starting point for the transformation of the soul which pure thought makes possible for the philosopher. MARK E. PENNEY.

The Problem of Knowledge. NORMAN KEMP SMITH. J. of Ph., Psy., and Sci. Meth., IX, 5, pp. 113-128.

The writer of this article undertakes to show that a satisfactory theory of knowledge must be at once realistic, phenomenalistic, and individualistic

This he does by an analysis of Kant's epistemological writings and by comparing them with the position of Bergson. Traditional idealism, both subjective and objective, is either erroneous or inadequate. Kant stops short with phenomenalism and natural science, and pronounces any attempt to go beyond these as futile. He does not even show the relation between the two. Bergson's fundamental divergence from Kant consists in this, that he cherishes the hope, and supplies a wealth of detailed argument in support of the assertion, that by empirical circumstantial reasoning, based upon the fundamental characteristics of natural existence and of human life, we may penetrate to the noumenal sphere. The really critical issue in the present-day problem of knowledge would seem to be the question whether awareness or consciousness may legitimately be regarded as an event, and, therefore, as having a place in the single continuous causal series that constitutes the objectively real. This may be true of sensations, but not of the knowing process, of awareness or consciousness as such. Consciousness cannot be described as an event in any sense which would set it as an integral element into the single causal time and space series. The knowing process may be described, therefore, as a unique and non-natural type of relation. We may judge of man either from the point of view of his animal organism or from that of his inner life. It is upon the basis of the latter that the problem of knowledge must be solved. The problem of perception is for philosophy uniquely important, and cannot be solved by any conceivable advance either of physiology or of biology upon their present lines. With a physiology or a biology fundamentally different from those actually existent we are not, of course, concerned; in regard to such no prophecy, positive or negative, can be made.

MARK E. PENNEY.

Some Misconceptions of Moral Education. Henry Neumann. Int. J. E., XXII, 3, pp. 335-347.

A great deal of the present-day controversy on the subject of moral education springs from certain misconceptions as to the nature of the schooling proposed in this subject. That moral instruction is necessary is true without question; though some argue that because of the predominance of other elements than reason in morality, that such instruction is valueless or harmful. Intelligent insight is necessary in order to make moral experiences of value, or to regulate the mere instinctive side of the pupil's nature. Instruction is often opposed on the ground that pupils at the school cannot think well enough to grasp important theoretical distinctions, but what is proposed to be taught is not abstract scientific ethics, rather it is concrete applications of it. Another objection raised against moral instruction is based on a popular but nevertheless fallacious theory of character. It is argued that because of the poor moral environment such instruction is of no value. But the aim is to overcome obstacles of environment; besides the environment is not altogether bad. However, instruction alone is insufficient. Inspiration and training are necessary. It is in this triple sense that the term 'moral education' should be employed.

HENRY MAYER.

Sur la structure logique du langage. L. COUTURAT. Rev. de Mét., XX, 1, pp. 1-24.

Logic and grammar should prove mutually helpful, for, on the one hand, an understanding of logical principles makes possible a more accurate analysis of the structure and function of the elements of language; and, on the other hand, the discovery of common ways of expressing ideas in language points to common logical forms. From the standpoint of logic there are only two general classes of words, verbs and nouns. Verbs express a fact or event, and imply an assertion; nouns refer to a thing or object, and express a general notion. The verb is the essential part of the proposition. Logically speaking, all the terms of the proposition except the verb constitute the subject, and the verb asserts their relation. Certain facts about the logic of language can be learned from the study of the derivation of words. A noun derived from a verb-root is like an infinitive, that is, it is a verb stripped of its determinate and assertive character. On the other hand, in a logical language, a verb cannot be derived from a noun-root except by the aid of suffixes. Strictly speaking, the class of particles includes only prepositions and conjunctions, but more loosely taken, it includes adverbs. Adverbs are circumstantial complements, and often take the place of a preposition and noun in the expression of relation. Conjunctions express the relation between whole propositions instead of between the elements in a proposition. In the logical international language Ibo, there is much greater conformity to logical principles than in the natural languages.

KATHERINE EVERETT.

Le "volontarisme intellectualiste." A. LALANDE. Rev. Ph., XXXVII, 1, pp. 1-21.

The author, before taking up the more specific review of Fouillée's La Pensée et les nouvelles écoles anti-intellectualistes, calls attention to the fact that Fouillée is a very early exponent of the later voluntarism and that this book is in accord with the general position taken in his previous works, that we must add to the 'will to live' the 'will to believe,' and to the 'will to power' the 'will to know.' This doctrine is that things present fundamentally the double aspect of idea and of energy, neither side of which can properly be neglected. Then the author considers the criticism, given in the work, of pragmatism as the right of each to his own individual interpretation devoid of any possible general test of its universal truth. This one-sidedness appears, too, on the epistemological side, for there is no way of distinguishing between the idea that works because it is true and the idea that works though it is false; for there are errors that are useful for life, as Nietzsche has said, and there are truths that are of no use for life, such as that of universal mortality. In addition, the doctrine of utility implies that of truth, and the reduction of truth to agreement with our ends is to imply the existence of law independent of our particular ends. The author then treats of Fouillée's criticism of intuitionism or, more specifically, of Bergson. In the first place, the doctrine

of the mere sense of life is insufficient as an explanation of reality, and in so far as it is unique, it is useless as a means of communication but rather makes all communication impossible. Moreover the immediate datum of consciousness does not exist, but is rather the extremely rapid resultant of a complex process. With regard to the theory of uniqueness, Fouillée declares that this is not necessarily a proof of freedom. The doctrine of Bergson concerning the influence of the spatial and scientific upon our language is, too, contrary to the actual history of language itself. The author then passes to the development of the doctrine of idées-forces. This starts from the immediate knowledge of the individual self, the will to be conscious. This expresses itself not only in the conservation of the activities of life but also in their increase and thus includes both the changing and the changeless in its development. But, says Lalande, is this then a monism, if we can thus include so great a variety of factors? Moreover, the essential nature of the 'will to know' is rather the possibility of community of individuals than the mere subjective immediacy given by Fouillée. Further, in the immediacy of Fouillée's starting-point, the same fault is inherent as in Bergson's intuitionism. This throws us back to certain assumptions, and these are founded not on proof but on the general consent of mankind, that is, on the fact of the common nature of our experience. This, for Lalande, is both the ultimate fact of our experience and the explanation of the alleged circle in pragmatism.

F. R. PROUT.

The Consciousness of Sin. Edward L. Schaub. Har. Theol. Rev., Vol. V, No. 1, pp. 121-139.

Nowhere else is the kinship of the human race more apparent than in the religious expression of different peoples. The Hebrew, possessing neither the æsthetic spirit of the Greek, nor the imaginative tendency of the Hindoo, has a genuine poetic insight, the import of which is distinctly ethical. The consciousness of sin, though more definitely expressed by the Hebrew than others, has its place in all religions. As a thinking being man can never resolve the 'ought-to-be' into the 'is.' A golden age in the past is sometimes conceived. Here principle is interpreted in terms of historical fact. The deeper significance of the story of Paradise was formerly expressed as fact, rather than as principle. The story of the fall interpreted as historical fact denies world progress. Any researches on the subject of religion which leave out a consideration of the consciousness of sin invalidate themselves. true significance of the consciousness of sin is not revealed in myth nor logical formulations of the doctrine of degeneration. No account of experience can be true that recognizes only pessimistic elements. Latent in every experience there is a basis for optimism. A man identifies his real nature with an ideal. Consciousness of sin is a first step towards overcoming sin. The price to be paid for selfconsciousness is a strife between the spiritual and natural elements. True freedom must be achieved. Man is sent into the world with a spiritual mission. Sin came into the world only that grace might the more abound.

Through consciousness of sin, we are led to a truer conception of God, to a higher kinship of man to man, and man to God.

M. W. PAXTON.

Notes on the Philosophy of Henri Bergson. RALPH BARTON PERRY. J. of Ph., Psy., and Sci. Meth., VIII, 25 and 26, pp. 673-682, 713-721.

The first of these papers deals with Bergson's attack upon intellectualism. For Bergson, intellect separates reality, giving only abstract and partial aspects of it. Its method is analysis. In opposition to this, Bergson proposes a reality which abides not in fixity, discreteness, and space; but in fluidity, continuity, and time. But (1) the anti-intellectualist misunderstands the intellectualist method; (2) he confuses a symbolized relation with a relation of symbols; (3) he assumes that whenever concepts are used they must be used 'privatively'; (4) in putting forth his positive views he makes an unfounded claim to the immediate apprehension of reality. For Bergson, determinism is a device of the intellect. Will is the author of the principle. This supports indeterminism only under two assumptions: (1) that the agency which employs a category is not subject to that category, and (2) that laws are artificial. Bergson's objection to the intellectualist version of time rests upon a mistaken conception of the analytical method. Again, he fails to represent correctly the determinist's position in such a case as "Paul's ability to predict Peter's choice." His positive version of freedom follows from the postulate of 'dynamism,' which is the sole support of his metaphysics and philosophy of religion. Criticism must then challenge the postulates: (1) the origin of the idea of causality is irrelevant; (2) 'dynamism' depends on the error of 'pseudosimplicity.' Proof of the creative power to do requires the abandonment of every tried method of knowledge.

E. JORDAN.

Modern Liberalism and that of the Eighteenth Century. EDWARD CALDWELL MOORE. Am. Jour. Theol., XVI, 1, pp. 1-19.

Theologically conservative minds are convinced of the religious inefficiency of liberal movements. They fear the lack of the enthusiasm and of the cooperation which characterize institutional religion. On the other hand, the liberal feels himself trammeled by any institutional forms and states his claims through the appeal to life. But under the efficiency test conservative forms are often more successful than liberal forms. In the liberal movement of the twentieth century, how can earlier mistakes be avoided? One of the great gains of the nineteenth century is the acknowledgment that religion is not a system of doctrine, not identifiable with any particular statement of religious truth. Following the rationalism of the eighteenth century, the liberal movement of the nineteenth had a devastating effect, and the reason for it is neither restatement of doctrine nor readjustment to life. Contention for liberal theology may fail because it is a contention for theology at all. Orthodoxy and heterodoxy may both fail on this point, because it is intellectualism. Lib-

eral movements are often characterized by intellectualism, a prevailing negative quality, and excessive individualism, which latter is not freedom in religion but freedom from religion. Such were the traits of eighteenth century liberalism. It implied revolt against all authority, the assertion of the unqualified right of pure reason. It was opposed by Pietism in Germany, by Evangelicism in England, and by the Great Awakening in America. From the coil of contradictions formed by this opposition, Kant's new theory of the universe, which was formulated in opposition to the dualistic theory, has set us free. But only now the reconstruction, as a whole, in its coherent quality and in its aspect as a positive faith, is beginning widely, in all portions of our country, to possess the minds of men. This reconstruction has taken the foundations away from both the old orthodoxy and the old heterodoxy, yet each, in part, survives and is potent.

E. JORDAN.

The Meaning of Mysticism as seen through its Psychology. W. E. Hocking. Mind, 81, pp. 38-61.

Philosophers, such as Royce, have attacked mysticism as a metaphysical theory; psychologists have analyzed it as an experience. Mysticism is not so much a metaphysics or an experience as an art, the art of worship. It is necessary to give primary attention to the motive of the mystic as an active individual, attending in only a secondary way to the phenomena of passive ecstasy. The mystic does not try to define anything, but to tell us that there is possible a practical cognition of the absolute unattainable by philosophical knowledge. The words unitary, immediate, ineffable, have been wrongly used in a metaphysical sense in application to the mystic doctrine, while they are really a psychological report of the mystic experience. Though the experience of the mystic is an alternation of states, it is not analogous to any simple physiological or psychological system. Delacroix represents the alternation of states as something to be overcome by a final synthesis which unites previous stages of expansion and depression on a calm and elevated level. It seems truer to regard the alternation between concentrated worship and attention to other affairs, as continuing throughout the mystic's life. In analogy with the function of sleep in the physical life, the state of contemplative self-abandonment is a condition of maintenance of spiritual integrity on the part of the mystic. Though many phenomena of mysticism are social in character, the true mystic is he who attains strength in solitude; and yet this very entrance into infinite subjectivity intensifies the power for social service. The mystic's purpose is not to effect a spiritual retreat from the world but to make a spiritual journey to the heart of it. The impulse of worship is an impulse toward integrity in one's relation to his absolute. The true elements of this impulse, ambition and love, are not incompatible, as Leuba holds, but both, when transmuted by the true mystic experience, point in the same direction. Mysticism, in its highest form, does not annihilate the impulses but envelops and transforms them all.

I. R. TUTTLE.

Does Moral Philosophy rest on a Mistake? H. A. PRITCHARD. Mind, 81, pp. 21-37.

When, on reflection, we ask why we should perform the irksome duties which we have formerly accepted without question, moral philosophy tells us that we should do so and so, either for our own happiness, or because of the goodness of something involved in the action. The former answer appeals to our interest, but does not convince us that we ought to live up to moral rules. The latter answer may, firstly, tell us that any one's happiness is a good and therefore should be sought by us. This position errs in that it presupposes the thesis that what is good ought to be; also in that it does not correspond to our actual moral convictions. But, secondly, we may be told that the working for happiness is itself good, and that the intrinsic goodness of such action is the reason why we ought to do it. An action of this kind may spring from a feeling on the agent's part that he ought to do it, or from some good emotion. The former alternative presupposes the recognition that the act is right, the latter, that we can feel an obligation to do that which is prompted solely by the desire to do it. To base the rightness of an act upon its intrinsic goodness implies that goodness is that of the particular motive, whereas rightness is independent of the question of motives. The sense of obligation is underivative or immediate. While we may come to appreciate an obligation by an argument, that is, a process of non-moral thinking, moral thinking is the immediate and direct perception of an obligation. On the above view, when we act from a feeling of obligation, we have no purpose or end, though we have a motive, in that the sense of obligation moves us to act. Again, this view necessitates a sharp distinction between virtue, which refers to acts which arise from some intrinsically good emotion; and morality, which refers to acts done from a sense of obligation.

J. R. TUTTLE.

Essai de démonstration purement a priori de l'existence de Dieu. A. BOUYS-SONIE. Rev. de Ph., XII, 2, pp. 113-132.

An attempt is here made to present a rigorous proof of the existence of God, based on rational principles without making any direct demands on experience. Above all, various objections which still prevent some thinking persons from admitting the value of this purely a priori proof are here discussed. It will be asked, to begin with, that reason be granted objective validity where it affirms first principles, or when in the form of rigorous logical steps deduced from premises which are certain. The proof bases itself on two sets of arguments; the first, on the principle of 'identity and contradiction,' in the form of the ontological argument; the second, on the principle of 'sufficient reason.' The first proof is presented in six steps the general conclusion of which is, that it is absolutely necessary that the mind reject all ideas that appear contradictory; it is absolutely necessary that the mind hold to the principle of identity; it must then affirm a Being, the greatest possible, the most perfect, infinite, necessary, and which must exist; that Being exists. The argument

based on the principle of 'sufficient reason' instead of directly applying a principle to an idea, applies a principle to a principle, in the form: all that is not contradictory is possible. All possible objections to each argument are presented and answered. If the analyses have been exact and the reasoning logical, it is necessary to grant the ontological proof in particular, among the a priori proofs, a value equal to that of all other proofs of God. It can never be a popular proof; but if it convinces the metaphysicians, that suffices.

HENRY MAYER.

Discussion: Professor Dewey's Action of Consciousness. Evander Bradley McGilvary. J. of Ph., Psy., and Sci. Meth., VIII, 17, pp. 458-460.

In connection with Professor Dewey's statement that the "action of consciousness means the organic releases in the way of behavior, which are conditions of awareness and modify its content," Professor McGilvary proposes the following questions: (1) What effect does this have on questions concerning the relation of body and consciousness? (2) How does Professor Dewey make out the aim of knowledge as distinct from and conditioned by those organic releases? (3) What is Professor Dewey's contact with 'Program Realists' in regard to changes made in Knowledge as distinct from organic releases? (4) After distinguishing between consciousness and organic releases, what is the justification for asserting that knowledge can be only of the effects of the conditions of knowledge?

MATTHEW W. PAXTON.

NOTES.

Professor A. S. Pringle-Pattison has just delivered the first course of his Gifford Lectures at the University of Aberdeen. The subject of the course was, "Contemporary Thought and Theism," and the ten lectures had the following titles: "Hume's Dialogues Concerning Natural Religion;" "The Idea of Value as Determinative;" "The Philosophical Problem in the Latter Half of the Nineteenth Century;" "The Emancipating Influence of Biological Science;" "The Lower and the Higher Naturalism;" "Continuity of Process and the Emergence of Real Differences;" "Man as Organic to the World;" "Ethical Man, The Religion of Humanity;" "Positivism and Agnosticism;" "Retrospect and Provisional Conclusions."

Dr. Alex. Meiklejohn, professor of logic and metaphysics in Brown University, has been appointed president of Amherst College.

In Brown University, Professor S. S. Colvin, of the University of Illinois, has been called to a newly established chair of education and Dr. Alfred Jones, instructor in Cornell University, has been appointed assistant professor of logic and metaphysics.

Professor E. C. Wilm has been called from Washburn College to the chair of philosophy and psychology at Wells College, Aurora, N. Y.

Dr. R. A. Tsanoff has been appointed instructor in philosophy in Clark College and University.

We give below a list of the articles, etc., in the current philosophical periodicals:

MIND, No. 82: F. C. S. Schiller, Relevance; D. C. Macintosh, Representational Pragmatism; R. M. MacIver, The Ethical Significance of the Idea Theory; E. D. Fawcett, "Matter and Memory;" Discussions: A. W. Moore. Thought and Its Function; H. S. Shelton, Dr. Alexander and the a priori; Critical Notices; New Books; Philosophical Periodicals; Notes.

THE JOURNAL OF PHILOSOPHY, PSYCHOLOGY, AND SCIENTIFIC METHODS, IX, 8: Karl Schmidt, Studies in the Structure of System, I; George R. Montgomery, A Simple Method for the Study of Entoptic Phenomena; Discussion: Edgar A. Singer, On Mind as an Observable Object; Reviews and Abstracts of Literature; Journals and New Books; Notes and News.

IX, 9: Roy Wood Sellars, Is There a Cognitive Relation?; Discussion: Karl Schmidt, Inversion; Societies: H. L. Hollingworth, New York Branch of the American Psychological Association; Reviews and Abstracts of Literature; Journals and New Books; Notes and News.

IX, 10: H. M. Kallen, Beauty, Cognition, and Goodness; M. E. Haggerty, Imitation and Animal Behavior; Reviews and Abstracts of Literature; Journals and New Books; Notes and News.

IX, 11: W. H. Sheldon, Chance; J. E. Wallace Wallin, Experimental Oral Orthogenics; Discussion: Professor Poulton, Letter; Evander Bradley McGilvary, Professor Dewey's Awareness; Reviews and Abstracts of Literature; Journals and New Books; Notes and News.

IX, 12: Walter T. Marvin, Dogmatism versus Criticism; Karl Schmidt, Studies in the Structure of Systems, 2; Discussion: Bernard Muscio, Miss Calkins's Reply to a Realist; Reviews and Abstracts of Literature; Journals and New Books; Notes and News.

THE INTERNATIONAL JOURNAL OF ETHICS, XXI, 4: C. Lloyd Morgan, The Garden of Ethics; Paul S. Reinsch, Energism in the Orient; Alfred W. Benn, Milton's Ethics; Ramsden Balmforth, The Influence of the Darwinian Theory on Ethics; S. Radakrishnan, The Ethics of the Bhagavadgita and Kant; Ada Eliot Sheffield, The Written Law and the Unwritten Double Standard; Book Reviews; Books Received.

THE PSYCHOLOGICAL REVIEW, XIX, 3: Edward L. Thorndike, The Curve of Work; C. E. Ferree and Gertrude Rand, Colored After-Image and Contrast Sensations from Stimuli in which no Color is Sensed; Knight Dunlap, A New Laboratory Pendulum; Discussion: Eliot P. Frost, Can Biology and Physiology Dispense with Consciousness.

THE PSYCHOLOGICAL BULLETIN, IX, 4: General Reviews and Summaries; Adolph Meyer, Pathopsychology and Psychopathology; S. I. Franz, Experimental Psychopathology; Trigant Burrow, Conscious and Unconscious Mentation from the Psychoanalytic Viewpoint; E. B. Huey, The Present Status of the Binet Scale of Tests for the Measurement of Intelligence; Special Reviews.

IX, 5: R. P. Angier, Cutaneous, Kinæsthetic, and Miscellaneous Senses; A. H. Pierce, Synæsthesia; J. F. Shepard, Affective Phenomena—Experimental; H. N. Gardiner, Affective Phenomena—Descriptive and Theoretical; W. B. Pillsbury, Attention and Interest; Knight Dunlap, Time and Rhythm; Special Reviews; Discussion; H. L. Hollingworth, The Psychology of Advertizing; Books Received; Notes and News.

THE AMERICAN JOURNAL OF PSYCHOLOGY, XXIII, 2: E. B. Titchener, Description vs. Statement of Meaning; L. R. Geissler, Analysis of Consciousness under Negative Instruction; Raymond Dodge, The Theory and Limitations of Introspection; E. E. Southard, Psychopathology and Neuropathology: The Problems of Teaching and Research Contrasted; A. H. Munsell, A Pigment Color System and Notation; H. P. Weld, An Experimental Study of Musical Enjoyment; J. S. van Teslaar, Psychoanalysis: A Review of Current Literature; C. E. Ferree and Gertrude Rand, A Note on the Determination of the Retina's Sensitivity to Colored Light in Terms of Radiometric Units; Book Reviews; Book Notes.

KANT-STUDIEN, XVII, I u. 2: R. Eucken und B. Bauch, Worte der Erinnerung an Otto Liebmann; R. Eucken, Ansprache bei der Bestattung; Bruno Bauch, Nachruf, nach den am Sarge im Namen der Kant-Geschell-

schaft gesprochenen Worten; Bruno Bauch, Immanuel Kant und sein Verhältnis zur Naturwissenschaft; R. Hönigswald, Zur Wissenschaftstheorie und -systematik; J. Schulz, Über die Bedeutung von Vaihingers "Philosophie des Als Ob" für die Erkenntnistheorie der Gegenwart; G. Misch und H. Nohl, Das Handschriftenmaterial zur Geschichte der nachkantischen Philosophie in den deutschen und österreichischen Bibliotheken; Rezensionen.

Logos, III, 1: A. Meinong, Fur die Psychologie und gegen den Psychologismus in der algemeinen Werttheorie; Georg Simmel, Die Wahrheit und das Individuum; Max Frischeisen-Kohler, Wilhelm Dilthey als Philosoph; Herman Graf Keyserling, Das Wesen der Intuition und ihre Rolle in der Philosophie; Ernst Bernhard, Die Struktur des Französischen Geistes; Marianne Weber, Autorität und Autonomie in der Ehe; Notizen.

ARCHIV FÜR GESCHICHTE DER PHILOSOPHIE, XVIII, 3: Hubert Röck, Aristophanischer und geschichtlicher Sokrates; Wilhelm Nestle, War Heraklit "Empiriker"?; Josef Dörfler, Die Kosmogonischen Elemente in der Naturphilosophie des Thales; J. Halpern, Philosophiegeschichtliche Arbeit in Polen von Anfang 1910 bis Mitte 1911; H. Gomperz, Einige wichtigere Erscheinungen der deutschen Literatur über die Sokratische, Platonische und Aristotelische Philosophie 1905–1908; Rezensionen; Die neuesten Erscheinungen auf dem Gebiete der Philosophie; Zeitschriftenschau; Zur Besprechung eingegangene Werke.

ZEITSCHRIFT FÜR PSYCHOLOGIE, LXI, 1: Walther Poppelreuter, Nachweis der Unzweckmässigkeit die gebrauchlichen Assoziationsexperimente mit sinnlosen Silben nach dem Erlerungs- und Trefferverfahren zur exakten Gewinnung elementarer Reproductionsgesetze zu verwenden; Maximilian Rosenberg, Zur Pathologie der Orientierung nach rechts und links; Literaturbericht.

REVUE DE PHILOSOPHIE, XII, 4: J. Bonnifay, La démonstration a priori de l'existence de Dieu; A. Bouyssonie, Réponse à M. Bonnifay; H. Cotin, La crise du Mutationisme; F. de Grandmaison, Les grandes nevroses et leur traitement moral; M. de Wulf, Les courants philosophiques du moyen âge occidental (Deuxième article); J. Bulliot, Les deux idéalismes; Analyses et Comptes rendus; Recension des Revues et Chronique.

XII, 5: M. Gossard, Sur les frontières de la métaphysique et des sciences; M. Monsaingeon, La part du physique dans les psychonévroses et la cure physique; A. Diès, Revue critique d'histoire de la philosophie antique; P.-A. Le Guyader, Les Morales positivistes et la morale thomiste; Analyses et Comptes rendus; Recension des Revues et Chronique.

REVUE DE MÉTAPHYSIQUE ET DE MORALE, XX, 1: L. Couturat, Sur la structure logique du langage; C. d'Istria, Les formes de la vie psychologique; A. Padoa, La logique deductive (suite); P.-G. La Chesnais, La Nature et l'Homme d'après Sigurd Ibsen; H. Norero, La socio-psychologie de W. Wundt; M. Djuvara, La théorie électromagnétique; M. Leroy, Les obligations des ouvriers syndiques; Livres nouveau; Revues et Periodiques; Correspondance; Nécrologie; Erratum.

REVUE PHILOSOPHIQUE, XXXVII, 4: A. Rey, Les idées directrices de la physique mécaniste; N. Kostyleff, La psycho-analyse appliquée a l'étude objective de l'imagination; A. Berrod, Le raisonnement par l'absurde et la méthode des résidus; Analyses et Comptes rendus; Notices bibliographiques; Revue des périodiques étrangers.

XXXVII, 5: J. de Gaultier, Identité de la liberté et de la nécessité; Dr. Jankélévitch, Essai de critique sociologique du darwinisme; A. Rey, Les idées directrices de la physique mécaniste (2^e et dernier article); Analyses et comptes rendus; Revue des périodiques étrangers; Notices bibliographiques.

REVUE DES SCIENCES PHILOSOPHIQUES ET THÉOLOGIQUES, VI, 2: A. D. Sertillanges, La Sanction morale dans la Philosophie de Saint Thomas; M. D. Roland-Gosselin, Les Méthodes de la Définition d'après Aristote; M. Jacquin, Le Magistere Ecclésiastique Source et Règle de la Théologie; R. Coulon; Jacobin, Gallican, et "Applean," le P. Noël Alexandre (suite); Note; Bulletins, Chroniques; Recension des revues.

THE

PHILOSOPHICAL REVIEW.

PHILOSOPHY IN GERMANY IN 1911.1

THE first decade of the twentieth century has its intellectual physiognomy, as does every century and indeed every year. If, however, we desire to comprehend the basic movements that dominate contemporary intellectual life, we must extend our survey and interpret these movements in relation to the past.

Taking this larger historical area into account, contemporary philosophy is an attempt to reconstruct on a new foundation the universalism of antiquity. The ancient philosophy, Indic as well as Greek, was essentially universalistic, i. e., the opposition between subject and object, between psychical and physical, disappears in the ultimate unity of the world. Its point of departure is neither the ego nor its counterpart, the non-ego, but the totality, which comprehends in itself both ego and non-ego. The Christian middle-ages established the fundamental dualism of subject and object, and the modern philosophy of nature is based on this antithesis; one of its essential aims is to exclude from the conception of the object every factor originating in the subjective sphere, i. e., all anthropomorphism. The physical world is a completely self-contained, independent system, explicable by its own laws, a pure mechanism. Reaction against this extreme objectivism appeared as early as Leibniz and Berkeley, whose ideas threatened to modify the notion of psychical and intellectual. When, on the one hand, the Kantian philosophy brought the objectivistic, purely naturalistic point of view to its extreme expression, it prepared the way, on the other hand, for the transition to a new stage of development through its critical determination of the insuperable limits of the mathe-

¹ Translated from the German by Professor Wm. A. Hammond.

matical-mechanical area. This movement was furthered by Rousseau and especially by Goethe and the Romantic theories. A profounder principle of union between subject and the external world was sought. Nature is not regarded in contemporary thought, as a naïvely anthropomorphized system, but as a living, intrinsically active whole, not a mechanism but an organism; and here it is that we find the kinship between contemporary thought and ancient universalism. The rigid dualism between subject and object is resolved in a higher, universal unity. Undoubtedly Goethe went too far in his condemnation of the mathematical, mechanical, analytical method, which had established this dualism and had converted it into an absolute. The legitimate, permanent content of his philosophy finds expression in philosophical romanticism, especially in the philosophy of Schelling. The centre of gravity is here placed in the objective Fichte's world-ego had already burst the individual's shell and expanded it into a cosmic principle. Schelling and. later, Hegel take as their starting point the absolute, which generates out of itself the whole of reality, subjective as well as objective. Their concept of the absolute is, to be sure, a notion with essentially differentiated implications, a notion that does not eliminate the distinction between physical and psychical, but permits them to persist in undiminished significance.

The establishment of a world-formula, which shall be neither one-sidedly subjective nor one-sidedly objective, adapted to include within itself all kinds and degrees of being, continued to be the great problem of the 19th century. The solution of the problem was not sought exclusively in philosophical romanticism. While this solution had its origin in Kant, another method, that of positivism, is traceable to Hume. The world-formula of positivism says: "Everything is appearance and there is nothing beyond sensible appearance." There is no metaphysical distinction between the physical and the psychical; both are phenomenal complexes which differ from one another exclusively in composition and grouping. Mach and Avenarius have developed this doctrine with the greatest consistency. Under positivism, in the wider sense, is to be classified neo-Kantianism,

in so far as it undertakes to eliminate the notion of the thing-initself and to establish a pure phenomenalism. A distinction, however, is to be noted in the fact that neo-Kantianism aims at the establishment of an absolute, which it seeks not in a metaphysical but in a logical principle. Neo-Kantianism sets a limit to the principle of relativity in constant, unambiguous, intellectual values. In this philosophy of values we see again an universalistic trend, for values are ascribable neither to a subjective nor to an objective reality. They represent a higher, a 'third' realm of self-contained postulates, independent of all reality. This is the fundamental trend of modern logicism, which has acquired significance and currency not merely by its narrower relation to Kant.

The interest in metaphysics is constantly on the increase. The most recent philosophy has returned to the problem of being and to the search for a comprehensive, an universal concept, especially in a spirit akin to romanticism. The ultimate union of things is not to be sought in the fact that all sensible reality is phenomenal, but in the fact that everything flows from the same metaphysical source. We note this tendency in the most recent and distinctive philosophical movements, in neo-Hegelianism and in the intuitionalism of Bergson; a cross-section of contemporary thought would show the constant shifting of the centre of gravity from the logical to the metaphysical.

One of the most notable philosophical events of the past year was undoubtedly the fourth International Philosophical Congress, which held its sessions in Bologna from the sixth to the eleventh of April, under the presidency of Professor Enriques. The part taken by German scholars in this congress was relatively small. Külpe, Leonard Nelson and Graf Keyserling were prominent. Külpe gave a careful, finely analyzed, presentation of the doctrine of the real in its several stages of development. The tendency in the development of the concept of the real is gradually to eliminate the metaphysical in favor of concrete penetration into the sensibly given. Nelson's address on *The Impossibility of Epistemology* was a condensed presentation of the main theses of his published work on *Das sogenannte Erkenntnisproblem*. The

positive outcome of his discussion was insistence on immediate knowledge, i. e., of the real, as the knowledge of logical truth, a position which he opposed to the theories of mediate, reflective thought, thought vested in judgment. In this respect Nelson approximates in a definite way the standpoint of intuition, represented by Losskij and Bergson. Keyserling's address on Metaphysical Reality offered nothing beyond an extract from the main chapter of his work Prolegomena to the Philosophy of Nature, published in 1911. The address was nevertheless interesting, because of its noteworthy difference from the views of the other German philosophers. Keyserling stands entirely aloof from the transcendental movement; he is a biological metaphysicist. His central concept is that of life. In this respect he approximates on the one hand pragmatism, and on the other hand the doctrine of Bergson. According to Keyserling there is no 'third realm' of values; metaphysical reality is life, which eludes all physical explanation, especially all mechanistic explanation. If logical values, and in general all intellectual values, are only the products of ceaselessly generative life, then they must be subject to the relativity of Becoming, and the conceptual structure of philosophy must lack all fixed and absolute criteria. Consequently Keyserling's theory, as every other theory of this type, lacks all stable foundation. One can very well hold to the transcendental point of view and nevertheless avoid the blind alley into which modern logicism, with its doctrine of the exclusively conceptual character of being, has strayed. One can, as a matter of fact, unite an intuitive epistemological doctrine with transcendentalism, as demanded in Bergson's masterly address on The Spirit of Philosophy. I would even say that the fundamental problem of the philosophy of the future lies just in the reconciliation of the transcendental and metaphysical points of view. Most of the advocates of pragmatism make the same mistake as Keyserling. At the Bologna Congress, Schiller of Oxford defended pragmatism with the same arguments employed by him at the Heidelberg Congress three years earlier. Schiller's address on Error was, therefore, mainly a repetition of the controversy awakened by his paper at the earlier Congress. He has

brought his main theses together in a volume entitled Humanism,1 which has been translated into German as a contribution to the philosophy of pragmatism. When Schiller maintains that the primary criterion of falsity is annulment of presupposition by consequences, extreme pragmatism is justly exposed to the charge of absurdity. Does his theory lay claim to merely conditional epistemological value? Does it not at least presuppose the unconditional validity of the laws of logic? It does, as a matter of fact, make quite specific and unambiguous predications regarding reality, which cannot be refined away without throwing the theory itself overboard. It postulates that there is a world of objects and a world of subjects which react upon objects by a uniform law; one of these fixed and purposive forms of reaction is what we call truth or knowledge. One sees the evident circle in which the theory moves, when it undertakes to account for ultimate truth and knowledge. If pragmatism or humanism is a philosophy of orientation, it must assume that there is a uniformly established reality, for orientation is possible only in a real world of such uniformity. The transformation of axioms into postulates, demanded by Schiller, is limited at least by those axioms whereby the logical process of such transformation is accomplished. Furthermore, the concept of biological adaptation is employed by the pragmatists in varying senses, sometimes in a narrow, material sense, and at other times in much wider, ideal senses. The application of the category of ideality to sensible phenomena is regarded by Schiller as a vital necessity, no less than is belief in personal immortality and a moral worldorder. Between what the Darwinian theory of selection characterizes as postulates of conduct and Kant's postulates of the practical reason, there is a tremendous interval and the philosophy of pragmatism must measure this with critical precision, if it is to lay any claim to a strict epistemological basis.

One must mention here the address, presented in a section of the Congress by the distinguished Indologist Paul Deussen, concerning his complete edition of Schopenhauer's works in ten

¹ Philosophisch-soziologische Bücherei, Vol. XXV, translated by R. Eisler, and published by W. Klinkhardt, Leipsig, 1911, pp. xv, 400.

volumes. In connection with the address, prospectuses were circulated regarding Deussen's monumental work: Allgemeine Geschichte der Philosophie,1 giving an outline plan of the entire work, including the unpublished parts. The first part, in three volumes, now complete, contains the philosophy of India. The second part, to be published in three volumes, will treat of the philosophy of Europe. Of this second part, the first division, covering the philosophy of the Greeks, has already appeared. The last division will cover biblical-mediæval and modern philosophy. Deussen's fundamental view-point is clearly seen in his discussion of Greek philosophy. Epistemology recedes into the background; the primary interest is metaphysics, and the bias of the Indian doctrine of Atman is apparent. Nevertheless, Deussen is just in his treatment of the peculiar genius of Greek philosophy, the systems of which are more sharply differentiated than in the Indian philosophy.

Closely connected with Kant and neo-Kantianism is a series of articles in the Kantstudien. Amongst these I wish to call attention to Cassirer's essay on Aristoteles und Kant, which is a criticism of Görland's work on the relation of Aristotle and Kant to the notion of theoretical knowledge. Two fundamental tendencies in philosophy are evident here: Aristotle starts with the fact, with the substantial, and proceeds from this to relations: Kant pursues the opposite course; relation is the factor of primary importance in the critical philosophy; things are merely bearers of relations,—a mode of thought which corresponds with the idea of a complete system. This explanation and evaluation of the critical philosophy is evidently closely connected with the views which dominate Cassirer's work on Substanzbegriff und Funktionsbegriff.

In a later part of this report I shall discuss the article of Driesch on the Category of Individuality and Ebbinghaus's essay on Benedetto Croce's *Hegel*.

A very important undertaking of the Kant-Gesellschaft is the publication of reprints of such writings as have affected the development of intellectual life in the last two centuries, and which

¹ Munich, The Pipera Co.

in spite of their indispensability have become obsolete in the book trade. In this series there has been planned the publication of twenty-five volumes. The first volume to appear is the well-known work of E. G. Schulze entitled Aenesidemus oder über die Fundamente der vom Professor Reinhold in Jena gelieferten Elementarphilosophie, edited by Dr. Arthur Liebert. The arguments adduced in this work against the critical philosophy and not merely against Reinhold's exposition of the same, are worthy of careful consideration today because of their profound insight. It is here apparent, a fact remarked upon by Vaihinger in his Commentar, that many questions which confront recent Kantian study, had been thrashed out long ago, and as a matter of fact, so far as orientation in the subject is concerned, frequently better and more clearly than in later writings.

Skepticism, as held by the author (Schulze), does not negate the postulate of a primary point of departure for philosophy. He finds, however, such a point of departure exclusively in the immediate facts of consciousness and in the principles of formal logic. Predication concerning the nature of things in themselves, on metaphysical reality, and on the absolute competency of the human epistemological faculty is, on the contrary, impossible, and constantly leads astray into the blind alley of dogmatism. Kant's fundamental mistake is held to be a violation of his own principle: the transition from what must be thought to what must be real. From the fact that the necessary synthetic judgments can arise only from the mind, is deduced in an over-hasty fashion the conclusion that the mind is also in reality the source of the same. This conception of criticism is evidently psychologistic, and, as a matter of fact, Reinhold never got beyond the standpoint of psychology. Within this narrow compass, one must, however, admire the keen insight with which the inadequacies of the new doctrine, which in many quarters was then fanatically advocated, were exposed.

The work of Bruno Bauch entitled Studien zur Philosophie der exacten Wissenschaften¹ is closely related to the philosophy of criticism. There are five important studies combined in the volume: (1) on the relation of philosophy to natural science; (2)

¹ Heidelberg, Winter's Universitätsbuchhandlung, 1911, pp. viii, 262.

on the problem of universal experience; (3) experience and geometry in their epistemological relations: (4) criticism and natural philosophy in the system of Otto Liebmann; (5) the analysis of the problem of substance and the logical arrangement of the points of view. The several studies concern chiefly epistemological and methodological problems. In the first study the relation between the inductive and deductive methods is investigated, an inquiry which aims to show that the distinction between induction and deduction is not an absolute one, neither is it rejected as conventional and artificial. As factors of 'resolution' and 'composition,' they supplement and interpenetrate one another in the analytical method. Especially in the investigation of nature, this reciprocal relationship is apparent. "If we have regard not merely to the external procedure, but to the internal structure of the inductive method, it will be seen that this procedure acquires its significance and its possibility only through a rigid, logically uniform, articulation; it will be seen that induction does not proceed merely from particular to universal, but that it does and can do this only under the presupposition of an universal, which has for the method the significance of a general internal law, and this internal law makes the external procedure possible. One must, therefore, observe that induction has an universal not merely for its end, but, quite as much as deduction, has an universal for its presupposition. This presupposition of an universal in induction may be characterized as the deductive factor in induction." One could not make the transition from particular to universal, unless from the very start one were in possession of a fixed notion of orientation, in terms of which the separate examples are classified. Thought expresses in this subsumption and arrangement, indeed, its most peculiar property. It rediscovers itself in nature, so that the problem presented in inductive investigation comes back in the last analysis to the problem of the harmony between being and thought, i. e., to the problem of the interpretability of nature. Bauch undertakes to solve the problem by postulating the empirically given, i. e., the factor independent of the subject, as itself a logically necessary presupposition, through which alone the objectivity of the investi-

gation of nature is guaranteed. The uniformity of form is thus made to include the uniformity of content. extension of a priori form to content, which characterizes the most recent phase of neo-Kantianism, represented by Cassirer, Cohen, and Natorp, is employed also by Bauch, in a manner, of course, that bears a more empiristic stamp. This position is also evident in the other essays, a position which is polemically opposed no less to a vague positivism, a philosophy of pure factuality, than it is to an exaggerated dialectic of the concept. The second essay aims to show that experience is in no wise to be regarded as a given, but as a problem. Not even is the ultimate sensible substrate of experience, the manifold, absolutely given, as if it stood outside of relationship to logical activity. On the contrary, experience demands this logical factor in order thereby to unfold. The last essay discusses the historical and systematic bearings of various viewpoints on the evolution of the problem of substance. Development proceeds from the naïve realism of the copy-theory to mechanism and materialism, from this to dynamism and the philosophy of energy, then to spiritualism, to positivism, and finally to criticism, in which the abrogation of metaphysics is complete. One scarcely needs to say that Bauch decides for the critical solution of the problem, a fact evident from his general position and particularly from his monograph on the notion of substance, to which I referred in my last year's report. Substance is regarded neither as an external nor as an internal reality, nor as merely reciprocal relation between sensible qualities, but purely as a concept and fundamental postulate. Positivism is decisively rejected. doubt, however, whether the transcendental investiture of the problem is sufficient to clothe entirely its metaphysical Between Bauch and Cassirer there is a good deal of common ground, but also a number of differences.

As a convincing sign that the methodological principles of modern epistemology are beginning to find their way into other fields of inquiry, may be cited Kelsen's work *Hauptprobleme der Staatsrechtslehre*.¹ It is an attempt, carried out with logical rigor and energy, to apply the principles of transcendentalism to the

¹ Tübingen, Mohr, 1911, pp. xxvi, 709.

philosophy of law. The author takes as his starting point the distinction between norm and law of nature, between what ought to be and what is, between the normative and explicative methods. in order to develop the peculiar factor that determines the principle of law. This factor is not discoverable at the level of what is (sein), but at the level of what ought to be (sollen). It is falsely characterized as teleological. The causal and teleological viewpoints are not mutually exclusive; on the contrary, in every idea of purpose the causal principle is so far included, as its realization is a part of the scheme of cause and effect. Both belong to the sphere of being; both equally lack the characteristic features of the norm, which mark the principle of law. The notion of responsibility is derived from a comparison of the norm with empirical facts, in so far as these facts can be related to a subject. Here the question is not what the subject has done or left undone, but merely what he ought to have done. In the problem of responsibility, the will plays a rôle which is in no wise completely commensurate with its psychological meaning. Will is interpreted here not as a concrete real process, but as a notional construction; it represents the reference of final responsibility to the inner man. It is closely related to the concept of will developed by Cohen in his Ethik des reinen Wollens, a fact readily understood, because Kelsen's method is also anti-psychologistic and transcendental. The introduction of these principles into a territory, which had hitherto been partially closed to them, and rigorous adherence to them, constitute the great merit of the book, for which one could wish a far-reaching influence on the development of the philosophy of law.

Reininger's *Philosophie des Erkennens*¹ is also inspired by the spirit of criticism. Although this extraordinarily solid work presents the chief movements of epistemology in historical sequence, its purpose is systematic and critical. This is evident from the introduction on the concept of knowledge and epistemology. The characteristic mark of knowledge is its relation to object (*Gegenstandsbeziehung*). While in unreflective experience, idea and object are given as undifferentiated unity, knowledge tends constantly to sunder itself from its object and seeks to

¹ Leipsig, Barth, 1911, pp. iv, 164.

regain the object by copying it. This differentiating factor in knowledge, which establishes at once its dualistic character, is, in its fundamental significance, clearly grasped by Reininger, and is brought into immediate relation with the analysis of consciousness into subject and object. Three factors must be distinguished here; the content of the idea, the feeling of trans-subiective necessity, and the reflection which objectifies this feeling and relates it to something outside of the field of the idea. The examination of this trans-subjective factor is the peculiar problem of epistemology. Epistemology may not, therefore, proceed from definite results of knowledge, inasmuch as it aims in a transcendental, regressive sense to unmask its presuppositions. This tendency is historically developed in the systems of rationalism, empiricism, and criticism. Every epistemology that lays claim to completeness must reckon with these systems. Reininger does this in a thorough and stimulating way. The valuable element in his investigation is its restriction to the central factor of the problem: what is meant by knowledge and by what means is it realized?

The first attempt to solve this problem is found in rationalism, especially in the rationalism of Descartes, which Reininger explains with fine insight, although he interprets Descartes and the other exponents of rationalism too much through the medium of the critical philosophy. Descartes's epistemology is characterized as an attempt to interpret the possibility of rational knowledge through the relation of human thought to the creative cosmic reason. This standpoint is maintained by the rationalism of Spinoza and Leibniz, the latter of whom prepares the way for the critical philosophy by discovering the origin and justification of the highest rational truths no longer, as Descartes did, in the will, but in the understanding, of God, consequently not in an alien but in a kindred sphere of absolute intellectuality. In a similar way Reininger presents the chief outlines of empiricism, in which he distinguishes a dogmatic and a skeptical element. The empirical philosophy proceeds on a realistic basis to idealistic consequences: that is its inner contradiction, which transcends the system. Bacon, Hobbes, Locke, Berkeley, and Hume mark the several stages of this process. Hume adopts a platform,

already outlined by Bacon, which aims at the maximum objectification of knowledge, involving, however, the dissolution and annihilation of the subject. The result of this is to split up the objective world into a chaos of unrelated fragments. The reduction of the real to the immediately given signifies at once the abandonment of all order and, consequently, of all knowableness of the actual. Hume finds himself, therefore, confronted with the need of a recourse similar to that employed by Descartes, in order to rescue the possibility of knowledge: i. e., he finds anchorage in a transcendent principle which he calls the 'wisdom of nature.' If this principle is logically carried out, it develops into what in Kant is called the 'might of reason,' so that both movements, the empirical and the rationalistic, of themselves, issue in the In his exposition of the Kantian philosophy, Reininger shows himself to be a strict transcendentalist. The most important thing here is the way in which Reininger delimits the transcendental from the metaphysical. The fundamental question in every theory of experience and knowledge: How is it possible to apply the rational laws of thought to empirical reality and through their application prepare the way for the understanding of reality? is answered through the notion of transcendental apperception. This is a higher viewpoint, above the duality of subject and object, which makes intelligible the fact that the laws of nature are the laws of the understanding. calls this transcendental consciousness, in which everything real, subjective and objective, finds its ultimate logical unity the world-reason, one must nevertheless constantly emphasize the fact that no metaphysical significance is to be conjoined with it. It is merely the expression of the perspective character of the ego, of consciousness. It is the impulse to objectify the self as well as external things, the attempt to discover beneath the plane of empirical subjectivity an universal ego, a completely universal consciousness, which in the last resort is nothing but the absolute unity, the universal synthesis. We have here that Bewusstsein überhaupt, which takes its bearings from Kant and Fichte, and which in recent epistemology has played an extraordinary rôle.

Whether this abstraction is capable of solving the problem of being, of rescuing reality from the consequences of subjective idealism, is another question. It is at least controverted in the most determined way by Victor Kraft in his work Erkenntisbegriff und Weltbegriff.1 The book is a violent protest against every sort of immanence of consciousness, every type of positivism. The notion of positivism, particularly in reference to the problem of the external world, is so broadly defined that it includes not merely the empiristic phenomenalism of Mach and Avenarius, but also transcendental idealism, in so far as being is resolved into knowledge. That the knowledge of nature involves a transcendent, extra-conscious principle, a principle of being, is the fundamental idea of the book. In every system of idealism, reality is conditioned by the factor of consciousness, which clings to it. and this, according to Kraft, contradicts reality. Reality becomes an attenuated web of phenomena, whose interconnections exhibit no inherent law, but merely rules for the sequence of subjective processes. Kraft is never tired of pointing out this result, and of bringing it into the light from the most varied angles. Whether the arrangement of phenomena is variable, as empiricism maintains, or constant, as the neo-Kantian apriorism maintains, in neither case do we get true objectivity, so long as we move in the plane of consciousness. Kraft goes so far as to emphasize the position, in which I am unable unconditionally to follow him, that every idealistic position, if logically developed, is condemned to solipsism. In the feeling of absurdity which the latter view awakens in us, we have the surest criterion for the necessity of transcending realistically the sphere of consciousness in the philosophical conception of reality. In the further development of this idea, Kraft is a decided dualist. His dualism is metaphysical, a dualism which implies differentiation between the thing-in-itself and phenomena. He rejects recent attemps to revive naïve realism as the natural world-view, attempts which include the philosophy of immanent consciousness, empirio-cricitism, extreme phenomenalism, and also intuitionalism. Things are not themselves present in our perception. In what sense then they are present is not apparent, inasmuch as every individual content of perception is different from every

¹ Leipsig, Barth, 1911, pp. xii, 232.

other. The duality between knowledge and being is one which cannot be bridged. It is quite as certain, however, that knowledge itself acquires meaning only through its reference to a transcendent being. The reality of the external world is not merely a practical postulate or a content of faith. It occupies an entirely different logical position; it is the expression of a theory. The meaning of a theory lies in the fact that it arranges given phenomena in a rational system. In this sense realism is a theory which alone can construe the subject matter of experience into an orderly complex. And just for this reason it cannot be logically proven. Proof is possible only when reasoning is concerned with the analytical knowledge of conceptual relations. The error in the interpretation of reality has consisted in the fact that only two possibilities have been considered: either, knowledge of the real is a predication concerning perceived facts. or it is a derivative from such facts by means of deductive proof. The knowledge of the external world and of its reality-value is attainable in neither of these ways. It cannot be made intelligible as a logical result, but only as a presupposition on which rational explanation of perceptual processes must be based, that is, it is a theory. The ultimate presupposition remains, therefore. the conviction of the logically rational character of reality, so that the theory itself finds its anchorage in the principle of faith.

Vaihinger's extraordinarily interesting and important work Die Philosophie des 'als ob,' goes far beyond the limits of neo-Kantianism. That the work shows numerous relationships with criticism is almost self-evident, when one considers the personality of the author; and these relationships are emphasized. Their nature and tendency will be most clearly understood by bearing in mind that Vaihinger takes his points of orientation less from the Æsthetic and Analytic than he does from the Transcendental Dialectic. The doctrine of 'necessary semblance,' with which reality is stamped, is Vaihinger's point of departure and at the same time the central idea toward which all his observations gravitate. The complete title of the book, which, regarded more precisely, contains his entire program, reads: Die Philosophie des 'als ob,' System der theoretischen und praktischen

Fiktionen der Menschheit auf Grund eines idealistischen Positivismus.¹ Idealism and positivism are, as a matter of fact, the two fundamental principles of the work. These principles are of such nature that at first sight they seem to involve a contradiction, which disappears only when the principles are carried out to their logical conclusion. On the one side, Vaihinger's work has a decidedly idealistic character, for it sublimates the most objective knowledge-values into mere symbols or even 'fictions.' On the other side, a realistic positivism, properly speaking, a biological principle, furnishes the basis of this metamorphosis into symbol, i. e., in so far as the fictions are conceived as vital necessities, as means of self-preservation, in so far, in other words, as the living processes of organic beings are regarded as the real substrate underlying knowledge. Let us follow up these trains of ideas, which at first sight appear difficult to harmonize.

In philosophical logic the rigid alternative between truth and error has been too persistent. That there is a third possibility, which has played an influential rôle in the history of human thought, is not sufficiently recognized. This is the notion of fiction, which in a peculiar way reduces the apparently absolute contradiction between truth and error to a matter of relativity, and has the power some how or other of uniting the false with the true, of making the false serviceable to truth. What Vaihinger here means by 'fiction' is something which is not less distinct from error than it is from truth, and yet it is closely connected with both. It is the employment of such concepts as correspond with nothing in the real world, which indeed often contradict reality, and which nevertheless promote the understanding of the real world and orientation in it. Fiction has always played a very great rôle in the history of mankind and in the most diverse fields,—in science, art, jurisprudence, and in religious thought. The problem of fiction in this sense appears clearly first in Kant. In reference to transcendental ideas, Kant introduced the point of view that these are not to be regarded as realities, neither are they for this reason to be eliminated from philosophy as worthless phantasms. They are

¹ Berlin, Reuther and Reichard, 1911, pp. xxxv, 804.

rather to be treated as if (als ob) they were realities, a mode of regard which is to be characterized neither as illusory nor as imaginative, but as fictional. Kant employed them wittingly and as part of his program, but only in a limited field of knowledge, the field of metaphysics. They penetrate, however, his whole concept of knowledge, through and through. It awakens no astonishment, therefore, when a thinker like Vaihinger, who is so thoroughly oriented in Kant, carries this conception to its extreme consequences. The most important question raised by him is: How is it possible to attain truth with consciously false ideas? The circle of such ideas receives here an extraordinary expansion. Included among them are not merely transcendent notions such as the infinite, atom, matter, energy, the unconscious, but also such categories as substance and causality. This is an interesting turn which gives one pause. one considers the matter more closely, one will discover that neo-Kantianism, wherever it is at once positivism and phenomenalism, is forced to develop a similar view of the categories. If the categories mirror no longer any metaphysical reality, whether subjective or objective reality, if they are merely lines of orientation drawn by thought, not of course absolutely constant lines, then in the last resort they have only a symbolic character. We think the world causally, i. e., we think it as if (als ob) it were causally planned. We think the world in terms of substance, i. e., we think it as if phenomena severally were referable to a substance as their essential bearer. In calling these concepts 'symbols,' we must bear in mind that they are not symbols of determinate things, but symbols of intellectual activity, which stamps itself on their creation.

But how is it possible that such notions, originating as they do without reference to reality, are capable of mediating reality? This is possible only on the presupposition that a meaning different from the ordinary is associated with the function of knowledge. And that is actually the case with Vaihinger. Knowledge for him is in no wise an image of the cosmos, because it is itself an integral part of the cosmos. "The logical processes belong within the series of cosmic events and their primary purpose is

merely to preserve the life of organisms and to enrich them. Their purpose is to serve as instruments in the perfection of the existence of organic beings; they serve as mediating members between organic beings. The world of ideas is a construct adapted to the fulfillment of this purpose, but for this reason to call it an image is an over-hasty and unfitting comparison." Vaihinger here takes the position of biological epistemology, and points out its relationship with recent theories of moderate pragmatism and voluntarism. This conception presupposes, to be sure, a great deal, which, if the theory is to maintain its significance, must not be dissipated in the cloud of fiction. It presupposes that there is a world in which organic beings originate and are developed; it presupposes consequently a relationship of temporal sequence, as well as of definite order and uniformity in this sequence; that is, it presupposes the reality of time and of causality. It even presupposes the reality of space, for in what other medium could these processes take place? Finally, it presupposes the reality of the notion of purpose. For this is immediately contained in the assumption, that organic beings react in the interest of self preservation to external stimuli with purposive ideas. We find that a real ego is here silently assumed; for whatever aims to preserve itself, whatever realizes a purpose with definite means, can only be a self, an ego. Consequently, it estranges one from the author when he includes these notions for the most part amongst fictions. He seems thereby to destroy the foundation on which his own theory of fiction is based. There would appear to arise here a contradiction between idealism and naturalistic positivism which cannot be otherwise removed than by treating the principle of biology, in which positivism finds its expression, as itself fiction. Thereby we would draw the ultimate consequence of this procedure: we would arrive at a standpoint which might be best characterized as perspectivism, a standpoint advocated by Nietzsche and Simmel. Perspectivism is the extreme opposite of every dogmatism. But biological epistemology is dogmatic in the extreme, for it presupposes an entire outfit of notions, which need, first, to be critically examined in reference to the existence

of their objects. In this sense every relativism, which seeks a constant, fixed point of relation, whether in the ego or in the organic substance, is also dogmatic. It is only when one gives up this centripetal tendency and conceives the world as a totality of perspectives, instead of an unambiguous reality.—each perspective may represent within itself a closed system but cannot be employed for the explanation of the whole—that dogmatism Such perspectives are especially the fictions can be escaped. which shift according to the selection of the point of view, even though they may possess sufficient constancy for one and the same standpoint. In this view of the world there is no unitary and unambiguous center of being, either in the ego or in the non-ego, in the physical or in the psychical. On the contrary, all things are definable merely in reference to one another. there is no absolute space, then there can also be no absolute point of orientation in reality; from every point, however, orientation concerning the whole is possible in such wise as to cause this orientation to mirror the relativity of the point of survey. By an intentional paradox one might characterize this theory of the world as absolute relativism. Most systems of philosophy conceive the notion of being, however differently they may think it, always as substantial and unambiguous. Ambiguity, on the contrary, lies in the essence of perspectivism. In my opinion, the final outcome of Vaihinger's work is a perspectivism of this sort, and this is attested by its position between Kant's and Nietzsche's doctrine of 'necessary semblance.' The radical abandonment of the doctrine of substance here announced, marks, perhaps, not merely a fundamental tendency in philosophical thought, but also in artistic creation,—one might say, indeed, in the entire spirit of contemporary culture. As a special instance, we might cite the relativism of the doctrine of Becoming which has recently found pregnant expression in the philosophy of Bergson.

The numerous references made by Vaihinger to related ideas and movements show how deeply the problem raised by him has penetrated into contemporary thought. It might be of especial value to refer to the close kinship between Vaihinger's 'fiction' and the peculiar 'psychological field of facts,' which Meinong in his work Über Annahmen¹ takes pains to clear up. An assumption is something midway between idea and judgment. What distinguishes judgment from idea, is, on the one hand, the factor of conviction, and, on the other hand, its mediating position between the definitely positive and negative. An assumption lacks the element of conviction, the mental attitude toward reality; on the contrary, it has the attributes of affirmation or negation. The circumstance that assumptions can also be negative in character distinguishes them completely from mere idea, whose content can never be a negation. Assumptions apply to the most various fields and not merely to the intellectual. This characteristic is common to assumption and fiction, which, on closer scrutiny, turns out to be a particular kind of assumption. The relation of assumption to play and art is a very interesting part of Meinong's investigation. It corresponds to the 'beautiful semblance,' which is as much removed from the reality of being as it is from nothing. The phenomena of the lie and the question are also brought into the purview of this problem. Meinong investigates further the significance of assumption in the intellectual and emotional spheres. Its bearing on the psychology of desire and of value is of more than theoretical significance. At the basis of desire, where the concern is with the content of motive, it is not idea or judgment, but an assumption, that is found. The author also attempts to show an analogy in æsthetic feeling. As assumption lies between idea and judgment, so æsthetic feeling is a mental attitude between an affective state and idea. As assumption shares with judgment the opposition between affirmation and negation, so the æsthetic attitude shares with feeling the opposition between pleasure and displeasure. This peculiar condition of related association, which is fundamentally a projected feeling, is called by Meinong a feeling of phantasy (Phantasiegefühl). For the concept of assumption, as for the concept of fiction, the determining mark is the fact that the most varied phenomena are included under it, so that off-hand no fixed specific meaning can be assigned to it. The

¹ Leipsig, Barth, pp. xvi, 403.

particular content of the concept is, therefore, a matter for detailed phenomenological inquiry. From this standpoint it is certain that psychological and epistemological implications of the greatest moment may be brought to light.

We have seen in the course of our observations that the relation of the rational to the irrational, of the conceptual to the manifold of experience, the delineation of the two spheres, plays an extraordinary rôle in modern German philosophy. A subtle investigation by Rickert, published in Logos, and entitled Das Eine, die Einheit und die Eins, concerns this problem in its most peculiar sphere, the sphere of number. The logical, as Rickert points out, appears to be threatened in its peculiar sphere through confusion with the mathematical. The differentiation of the spheres is consequently of the greatest importance. Kant kept them rigorously distinct; his successors obliterated the boundaries in their attempt to deduce the principle of manifoldness from the unitary principle of reason, and neo-Kantianism in that degree in which it has absorbed Hegelian motives, is disposed to repeat this deductive procedure. The most recent works of Cohen and Natorp prove this. Rickert does not unqualifiedly identify the manifold, as such, with the irrational. Only in so far as the manifold is more nearly defined in terms of number, does it disclose essentially alogical factors. The empiristic theory of number is, of course, rejected by Rickert; as transcendentalist he scarcely gives it serious attention. The ideality and apriority of mathematics are unquestioned. At the same time rationalism is wrong in treating number, as it does the notion of identity, from the standpoint of logic. In order to disprove this method, Rickert analyzes in the first place the nature of the logical, an analysis the subtlety of which recalls the fine conceptual determinations of Hegel. It is impossible here to reproduce all the shades of his thought; we must confine ourselves to its most essential results. Identity is not the sole basic category in logic. Difference, 'otherness,' is equally fundamental and implied by identity, just as it is of the nature of form to imply content. The 'one' exists, as such, merely in its relation to the 'other.' Otherness is not the mere negation of identity; it is just as positive as

is the 'one,' and is underivable from the one. Rickert characterizes this relationship not as antithesis but as heterothesis. Thought cannot move thetically in the form of identical unity, but only heterothetically in the reciprocal action of identity and otherness. The notion of the purely logical is not, however, completely exhausted in this description. Thesis and heterothesis become isolated factors only through analysis of the original synthesis. Consequently, the logical ultimate is not absolutely simple, but is at the very start a manifold. But this manifoldness is not a numerical manifoldness, neither is it possible to derive number from it. Above all, the logical 'one' is not the mathematical 'one.' For the mathematical one we have the fundamental equation, one equals one; on the other hand in the realm of logical objects there is no identity at all. For here one cannot, as in the case of numbers, exchange the one with the other, and therefore equate the one with the other. The 'one' is not only different from the 'other,' but at the same time it is only different. To difference there must be some common factor added to provide a ground for sameness. That which is only different can never be the same. The logical medium is different from the medium of number. The former is a heterogeneous medium, which makes possible merely rigid identity and rigid differences; the latter is a homogeneous medium which is the only medium that can be made the basis of sameness. Such a homogeneous medium is that of time, and also space. Here we have given the possibility of an infinitely extended manifold, a mass, and here we find the first alogical factor, which is indispensable for the establishment of number. A further alogical factor becomes evident when we pass from mass to quantity and to arrangement. It is here that one first arrives at the notion of a series and thereby at a system of numbers. The structure of a series rests upon the quantitative unlikeness of numbers. The two alogical properties of number, homogeneous medium and quantitative unlikeness, accordingly delimit unequivocally the mathematical from the logical. distinction is explained by Rickert in the following way: The logical is not something that is but something that is valid; the mathematical, on the contrary, possesses no empirical being, but it does possess ideal being,—it is unreal, but it is.

Lask, in his investigation entitled Die Logik der Philosophie und die Categorienlehre¹, gives space to the discussion of the irrational. Everything that is subsumed under a category is, in so far as it is irreducible to categoric statement, per se irrational, and this is a larger sphere than is commonly supposed. The principle of the Kantian concept of knowledge must, if it is logically applied, be extended beyond the limits assigned by Kant. Not only does the sensible fall under categoric forms, but this is also true of the non-sensible. If being were known only through its reduction to definite categories, then a knowledge of these categories, such as transcendentalism aims to attain, would not be possible otherwise than by bringing them in turn under higher categoric forms. Not only the sensible world, but also philosophy which masters and interprets it, has its own logic, with the investigation of which the author is primarily concerned. The material which in itself is irrational must, however, in both instances, in the sensible as in the non-sensible spheres, be sundered from rational form. What is timelessly valid is merely the form; the content is perishable, temporally conditioned. If, for example, we take the notion of yellow, and clothe the content 'yellow' with the category of identity, the yellow is not for this reason raised to the sphere of ideal timelessness. It acquires no ideal content, as it might in the case of the Platonic doctrine of ideas and in many recent theories; it remains empirical material, which is merely comprehended under the aspect of pure form. The union of form and content, the totality, in which the form (itself empty and in need of supplementation) is joined to the content, is what Lask calls meaning. It is in every case the chief business of logic to separate from given complexes their sum of pure form, and so sunder the logical from the alogical. That this duality is found in the non-sensible, is shown by mysticism, which is a struggle toward the non-sensible, at the same time, however, toward the irrational. The categoric form of the non-sensible is validity, with which, in the sensible sphere, being corresponds. One must mention as a further merit of this work, that in the realm of the non-sensible, it makes a dis-

¹ Tübingen, Mohr, pp. viii, 276.

tinction between the valid, or in the wider signification of the term, the logical, and the metaphysical. If it is true that in the earlier philosophy there prevailed a one-sided tendency to hypostatize all non-sensible reality, for example, even logical values, a tendency whose highest expression is found in Platonism; it is also true that modern philosophy is threatened with lapsing into the opposite extreme, and of causing the metaphysical, supersensible to evaporate in mere words and validities. In opposition to this, Lask rigorously maintains the distinction between the separate spheres, and in an universal interpretation of the doctrine of the categories, prepares the way for a logic of metaphysics.

The increased interest which contemporary philosophy shows in Hegelianism, prompts me to call attention to its classical presentation by Kuno Fischer in the eighth volume of his Geschichte der neueren Philosophie.1 This exposition is all the more interesting because it follows closely the historical Hegel, and does not interpret him in the spirit of modern adaptations. Hegel's life and development are set forth in great detail. Hegel's relation to Goethe might be noticed here as of especial importance, because it shows that between these two men apparently so different in personality, there was no lack of intellectual intercourse. Both of them rejected the abstract logic of the analytical understanding and the mechanistic philosophy that rests upon that logic. Hegel emphasizes, in opposition to it, the claims of concrete reason, which restores to unity artificially isolated opposites; Goethe emphasizes rather the immediacy of intuition and empathy (Einfühlung). Both of them, therefore, by different paths proceed toward the goal of synthesis. The difference between them is, in the last analysis, due to the fact that Goethe aims to construct the world after the artist's fashion; Hegel aims to comprehend it in terms of concepts. The opposition to abstract analysis, expressed in Goethe's attack on the mathematical treatment of the doctrine of color, remains, after all, the common measure of the lives and philosphies of both men. Kuno Fischer's exposition is admirable because of its transparent form, especially in view of subject-matter so difficult and stubborn.

 $^{^{1}\, \}rm Heidelberg, \,\, Karl \,\, Winter's \, [Universit "atsbuchhandlung, 1911, pp. 1265, second edition.$

Even the involved ideas of the *Phänomenologie des Geistes* and of the *Logik*, are placed here in high relief and become completely intelligible to minds trained in different ways of thinking.

In this connection one must mention an essay by Julius Ebbinghaus, published in the Kantstudien, entitled Benedetto Croce's Hegel. Ebbinghaus is an Hegelian of strict orthodoxy. He complains of Benedetto Croce that in his attempts at reform, he has revived the old dualism of the individual and the universal, the real and the notion, whose overthrow was Hegel's greatest work. There is nothing purely individual, nor is there anything purely conceptual. The application of dialectic to the individual and the empirical is, consequently, not merely permissible, but seems demanded by the innermost spirit of philosophy. And here we see that the separation of the rational from the irrational, which we found effective in the case of other thinkers, is rejected by the neo-Hegelians as a false abstraction, and for this separation there is substituted the doctrine of the persistent rational penetration of all reality.

The controversy between the mechanistic and organic interpretations of nature is no less violent today than it was in the age of Schelling and Hegel. The solution of the problem of reality is still sought in terms of the organic. In Germany, Hans Driesch is endeavoring to establish this point of view epistemologically. His essay *Die Kategorie Individualität*, is written in the interests of this viewpoint and seeks by a sort of immanent criticism of Kant's doctrine of the Categories to amend them. Driesch thinks that the category of 'community' should be supplemented by the category of 'individuality' or be completely supplanted by it. The entire aim of the paper is to lay bare the weakness and one-sidedness of the mechanistic view of the world, which moves dogmatically within Newton's concepts and to substitute for it an organic view.

For this turn of thought the works of other philosophers, to whom we must now call attention, offer important citations. The writings of two French philosophers, Boutroux and Bergson, which we have in German translations, must be especially mentioned here.

Boutroux's works Über den Begriff des Naturgesetzes1 and Die Kontingenz der Naturgesetze² contain an original exposition of the laws of nature from the standpoint of universal voluntarism. While earlier theories were satisfied with safeguarding the freedom of the human subject in a closed system of mechanism, Bergson aims to universalize the attribute of freedom and make it commensurate with the totality of being. The concept of freedom thus explained is, however, not at all identical with the contingent. The meaning assigned by Boutroux to the contingency of the laws of nature differs as much from the extreme of chaotic arbitrariness as it does from that of absolute necessity. To interpret the world in terms of absolute necessity would mean, in the last resort, to interpret it in terms of the proposition A = A. addition to this analytical necessity there is, to be sure, a synthetic necessity, which finds expression in the principle of causality. Neither the one nor the other can be authenticated in the sphere of the real. The higher we ascend the scale of reality, the more the principle of unconditional necessity recedes into the background. This scale is characterized by the transition from logical to mathematical, thence to mechanical, physical, chemical, biological, psychological, and sociological uniformity. These various forms of ordered being are not referable one to another, in the sense that the higher forms are deducible from the lower. Their interrelation is not due to the fact that the lower principle determines the higher, but, conversely, that the higher principle, in realizing itself, calls forth the conditions for its own realization. We have here the rejection of the mechanical interpretation of nature, whose leading motive is the reference of the highest power of being, viz., life and mind, to the comparatively simple scheme of mathematical quantitative relations. Boutroux's principle of contingency is in many respects related to the principle of the irrational, which plays so large a rôle in modern German philosophy, especially in the determination of the relation of the logical to the real.

Bergson has further developed his doctrine of universal volun-

¹ Jena, Diederichs, pp. 131.

² Ibid., pp. vii, 166.

tarism, especially in his work, Évolution creatrice and, at an earlier date, in another work, Zeit und Freiheit, which we have in German translation. He draws here lines of demarcation between corporeal and psychical being, which he attempts to fix more precisely in his work Materie und Gedächtniss. The unique and interesting thing here is the analysis of time, which differs widely from all earlier discussions of the subject. Epistemologists are accustomed to regard time as the analogue of space: they regard the sequence of phenomena as completely parallel with contiguity. Bergson protests against this parallelism. Time constitutes an entirely different manifold from that of space. The manifoldness of space is quantitative, numerically expressible. Number, in Bergson's philosophy, has its origin in a series of contiguous elements in an ideal space. The manifoldness of time is qualitative, most readily comparable with the manifoldness exhibited by the tones of an overture. We do not count these tones, in so far as we enjoy their musical effect; their meaning is not exhausted by the fact that they constitute determinate members of a series. It consists rather in the peculiar interpenetration and organization which they undergo. This essential nature of time is revealed to us in psychical life, which is purely temporal extension. The error here consists in regarding psychical life as spread out in imaginary space, in which separate elements are disposed like isolated things, clearly separated from one another. We are led into this error by the abstract analytical understanding, which takes its points of orientation chiefly from space and the physical world, because it (the understanding) serves the practical aims of biological self-preservation. From this fact is explicable the tendency to fix modes of thought, once attained, and to transfer them to a realm like the physical, which, from its own nature, is alien to them. Bergson regards time as a fourth dimension of space, in which phenomena are not contiguous but sequent. He is fond of representing time as a line whose points, the separate moments, lie apart from one another. The investiture of psychical life with space has the effect of causing us to read into the hidden depths of consciousness that which characterizes only the upper sensible strata; it causes us to isolate from one another the several experiences in these depths as we do single perceptual objects; it causes us to shift the will to an imaginary space and thus to arrive at a false conception of the problem of freedom, an error common both to determinism and indeterminism. The freedom of the will consists in the fact that it is pure temporality; that is, like concrete time it is nothing fixed, self-repeating, but is rather a creative energy, which renews itself without cessation. The freedom of the will is that inner penetration of motives which we attain in constantly higher degree the farther we recede into ourselves, and the less the rigid separateness of space is taken as the form and standard of the psychical. In applying this conception of time to the characterization of the world-process, Bergson arrives at his doctrine of creative development which, fundamentally in agreement with Boutroux, is a philosophy of voluntarism on the grand scale.

This detailed account of the philosophical literature in Germany during the past year confirms my introductory observations. The synthesis between epistemology and metaphysics is still undiscovered. Thought continues its stubborn separation from Being. The study devoted to reality, because of its too immediate surrender to the subject-matter, threatens to neglect the indispensable means for the attainment of its end. The two chief opposing movements, now struggling for the hegemony, transcendentalism on the one hand, and pragmatism and intuitionalism on the other hand, have been unable to discover any means of mutual adjustment and this is a sign of small cheer. Attempts are not lacking, as in Lask's neo-Hegelian Logik der Philosophie, but these attempts are characterized by intention rather than execution; they are inadequate to pave the way to a reconciliation of the opposing positions. This confusion in ultimate presuppositions is witnessed in the divergent interpretation and evaluation of the logical. For transcendentalism the logical is not merely a closed sphere; it is regarded as a power so sovereign and self-adequate, that all reference to Being can be dispensed with. The world-concept is completely defined as the expression of a norm, a postulate, a value. For pragmatism the logical has a significance so subordinate that it is regarded merely

as a variable function of determinate elements of reality, especially of the will, whose concern is self-preservation, but pragmatism furnishes no very adequate justification for this way of thinking. For *intuitionalism* the logical is subordinated under practical, voluntaristic points of view, as is the case with pragmatism, with this difference, however, that the procedure of intuitionalism is much more cautious and critical. For intuitionalism the logical is also biological, but just for this reason it is not the source of true knowledge, which is to be sought exclusively in intuition.

There are corresponding variations in the concept of truth. The transcendentalist regards the logical, whose criteria are immanent, as unconditioned truth, without relating it to Being. The pragmatist also regards the logical as truth, but only in so far as it subserves biological ends, i. e., in so far as it is serviceable in the reality of life. Pragmatism recognizes no absolute notion of truth. The intuitionalist rejects the logical as the instrument of truth, because its purpose is biological; from premises similar or identical with those of pragmatism, intuitionalism arrives at opposite conclusions. Both systems share in common the effort to transcend the logical,—a metalogical tendency, which on closer examination shows itself to be metaphysical. From this it would appear to be the problem of the philosophy of the future to get rid of rigid formalistic logic, to give it content, without diminishing the independence or peculiar value of the logical. fact that the metalogical and irrational can be treated and known only by logical and rational means, destroys its irrationality as little as it does its knowableness. The discovery of the profound point, in which the logical and the real are no longer two-fold but coincident, awaits, perhaps, the philosophy of the future. For the real task of systematic philosophy is to stretch the Heraclitean bow, whose opposite tensions produce the harmony of Being and Thought.

OSCAR EWALD.

VIENNA.

THE PROBLEM OF TIME IN RECENT FRENCH PHILOSOPHY.

III. TIME AND CONTINUITY: PILLON, JAMES.

In the decade between 1880 and 1890 three French philosophical writers devoted especial attention to the task of analyzing the idea of time and of describing the phenomena of time-perception. These three were Pillon, Guyau, and Bergson. All reached at least one common conclusion, in the expression of which M. Pillon had by some years the priority. This conclusion was that our ordinary notions of time are deeply infected with imagery derived from our experiences of space; and that the fact points to inferences of philosophical importance.

To Guyau this fact was of significance mainly as the clue to a theory¹ concerning the genesis of time-perception in the individual and the race. In opposition to Spencer, who had represented the time-concept and the experiences which it makes possible as the earlier-evolved, Guyau sought to explain the notion of time as a complex gradually built up out of elements chiefly furnished by the idea of extension. To Pillon and to Bergson the mind's tendency to represent time under a spatial form had a more fundamental significance; it gave the clue for the distinctive and decisive metaphysical doctrine of each. Both agreed in regarding the intrusion of spatial attributes into the notion of time as a falsification of that notion; and both accordingly found Guyau's genetic theory inadmissible.² It is precisely the non-temporal elements in the representation of time that can be derived from the idea of space; the essentially and irreducibly temporal, both philosophers held, is to be reached only by expurgating from the uncritical concept of duration all the alien categories of spatiality. And in this rectification of the notion of time both, as they conceived, found a method

¹ La Genèse de l'idée de temps; written before 1888, published posthumously, 1890.

² Cf. Bergson's review of Guyau's Genèse, Rev. philos., 1891, p. 189; and Pillon's, Ann. philos., 1890, p. 248.

by which might be solved those antinomies first brought to light by the ancient dialectician, and never hitherto satisfactorily disposed of, in spite of the long succession of logicians who had flattered themselves upon their refutations of the 'Eleatic sophisms.'

That this was the starting point of Bergson's characteristic doctrine has been sufficiently noted in the previous paper of this series. But Pillon had already argued repeatedly and at length that, on the one hand "by reason of the predominance of the idea of space in our intellectual constitution, our other ideas tend to take on a spatial form and to appear inseparable from it"; but that, on the other hand, this tendency is a fruitful source of philosophical error, and that "the idea of time, envisaged as a continuum similar to space and represented under the form of a straight line" is an idea which does not correspond to the true nature of duration and succession, as they are actually known in experience. And in this observation, which had escaped Renouvier, Pillon offered what he regarded as a fundamentally important modification in neo-criticism, and a satisfactory way of dealing with those difficulties which, as we have earlier seen, Renouvier had overlooked. Thus far, then, Pillon and Bergson are absolutely at one. But beyond this point their doctrines singularly diverge. For the specific nature of the falsification of the idea of time which is brought about by the intrusion of spatial imagery is described by the two analysts in terms which appear exactly contradictory. Pillon's finding is that succession as experienced is not a continuum, but a sequence of discrete states, and that it is through our habit of thinking in spatial

¹ Especially in the Critique philosophique, 1883. This series was in reply to articles by MM. L. Dauriac and G. Noel (id., 1882 and 1883), in which those writers had separately defended the premises upon which Bergson's view about "real duration" in the Essai of 1889, was to be based; viz., that to number a series of phenomena is to think its units as coexistent; that the idea of coexistence, in turn, is inseparable from that of spatial juxtaposition; that consequently a purely temporal being, one which had experience only under the form of time, would be destitute of the idea of number; and "the notion of discrete quantities cannot be applied to facts of the psychic order" (Dauriac). By 1884, in short, the essence of Bergson's doctrine of time had, by different neo-criticist writers, been clearly presented and (in my opinion) clearly refuted. The citation which follows is from Pillon's review of Bergson's thèse de doctorat, Ann. philos., 1890, p. 228.

terms that we have come to imagine that the time which we perceive is, in the mathematical sense, continuous. "It is only in appearance that time, with its two relations of coexistence and succession, takes on the character of continuity.—only by borrowing that character from space, by being externalized and, so to say, spatialized, by the sensibility and the imagination." But Bergson, as we have already seen, declares that the misrepresentation of the durée réelle brought about by the influence of the idea of space consists precisely in the improper transference of the attribute of discreteness from space to time. "Duration," he writes, "in its absolute purity is the form which the succession of our states of consciousness takes when our Ego . . . abstains from setting up a separation between the present state and anterior states. . . . It is a succession without distinction. . . . But, obsessed as we are by the idea of space, we unwittingly introduce it into our representation of pure succession; in short, we project time into space, we express duration in terms of extension, and succession assumes for us the form of a continuous line, or of a chain of which the links touch but do not interpenetrate." "It is only the projection of our psychic states into space" that makes them appear as a discrete multiplicity.2

Here, clearly, our problem has worked itself out historically in—if I may be forgiven the pun—a curious contretemps. Two philosophers, starting from the same premises and employing the same methods of introspection and conceptual analysis, offer us obviously antithetic accounts of what "real" or psychological time is, and of the nature of the transformation of our notion of it which results from our unfortunate habit of thinking sub specie spatii.

It is true that the antithesis is not quite what it at first seems to be. The diversity and self-contradiction which characterize Bergson's expressions about time are such that to many of those expressions no precise and stable meaning can be attached; and it is not easy, therefore, to set them in wholly clear-cut antithesis to any view whatever. It seems, however, that when he asserts that it is only "objects in space that form a discrete multiplicity,"

¹ Ann. philos., 1905. p. 115.

¹ DI., pp. 76-7 and 68; Pogson's tr., pp. 101-2 and 90.

he does not mean that "real duration," when not confused with space, is a continuum. For, of course, a continuum is a quantity and is infinitely divisible; but what Bergson really maintains with respect to duration is that it is not a quantity and is not divisible at all. Yet, as we have already seen, he assumes that when the time of inner experience is regarded as a quantity, it must be regarded as a continuous quantity, and accordingly as infinitely divisible; and upon this assumption and the antinomies in which it results, he rests one of his principal arguments for the non-quantitative nature of time. He therefore still agrees in fact with Pillon in holding that 'spatialized' time is a continuum; and that because it has this character it can not be 'real' time, since the notion of a real continuum, when analyzed, issues in absurdities. Bergson's appearance of dissent from Pillon upon this point is chiefly due to his peculiar use of the terms 'discrete' and 'discontinuous.' He tells us, for example, that it is "of the discontinuous alone that the intellect can form a clear idea," while he at the same time tells us that spatial extension constitutes the only realm in which the intellect can securely operate. The two propositions taken together would seem to imply that space is not a continuum. Yet it is clear that Bergson does not mean to assert this. As the context shows, all that he means is that the continuum of space is made up of discriminable parts external to one another, that "externality is the distinguishing mark of things which occupy space." Even this, to be sure, is obviously not exactly true; points in space are necessarily 'outside of' one another, but parts of space are not. The notion of inclusion or interpenetration, which Bergson so freely applies to 'real duration' is, as Perry, I believe, has remarked, just as deeply infected with spatial imagery as is the notion of exclusion or "reciprocal externality." Upon this confusion, however, it is not now needful to dwell. The point which here concerns us is merely that, for Bergson, 'discrete' is usually antithetic, not to 'continuous,' in the proper sense, but to 'reciprocally inclusive'; and it tends to become simply a synonym of 'quantitative.'

Thus it is that the opposition between Bergson's view and

¹ This REVIEW, XXI, pp. 335-6.

Pillon's, if it is to be rightly understood, requires restatement. It is not that the one denies, while the other affirms, that inner duration, under the perverting influence of our spatialized imagination, appears as a continuum. Both affirm this. The difference between the two concerns solely the mode of correcting this misrepresentation and of thereby avoiding the paradoxes to which it gives rise. Pillon declares that it suffices merely to eliminate the attribute of continuity from our idea of time; what is left when this is done, he finds, is a true account of the nature of duration and succession as we actually experience them. Bergson deems it necessary to go further, and to eliminate from the idea of time all attributes of quantity and number.

The preceding article has shown that Bergson has presented no convincing arguments in favor of his conclusion upon this point. Can we, on the other hand, accept Pillon's conclusion? It is manifestly in conflict with assumptions still widely current even among philosophers. So familiar is the idea that time is continuous that one of the most careful of our dictionaries defines "continuity" as "a connection of points (or other elements) as intimate as that of the instants or points of an interval of time." Before attempting to judge finally of the tenability of Pillon's view, it will be worth while to inquire somewhat more fully than (so far as I can recall) Pillon himself does into the meaning and implications of that view.

What is first needed, for this purpose, is a translation of the proposition that time consists in a succession of discrete elements into psychological terms. And here it becomes needful to note a distinction which, though obvious, is too often neglected. A single representation may, namely, have three different time-aspects. One may, in now thinking of the representation, have in view the 'objective' time (whether an instant or a duration) in which the representation exists as a psychic fact; or the experienced time—i. e., the duration or succession directly perceived as a part of the experience; or the time referred to by, but not directly experienced in, the representation—e. g., the past experiences, whether momentary or perduring, which are at a given moment remembered. If this distinction be provisionally

accepted, it is evident that the three 'times' of the representation can not all be assumed to have the same attributes. For example, it is conceivable that an experience may cover a succession of seconds of 'objective' time, and yet be itself (if there be no change of content of consciousness) no experience of a succession. It is, so far as yet appears, equally conceivable that, in a single instant, both of objective and of experienced time, I may represent—that is, refer to, and clearly apprehend the temporal nature and magnitude of,—a period of past or future time of considerable length.

Now, the assertion of the discreteness or discontinuity of our temporal experience refers, of course, primarily to the second of these times; and what it implies is that as a directly perceived datum succession as such does not occur. In other words, it amounts to a denial of the possibility of a direct experience of the transition from any given moment to the next moment. For if we experience time as a succession of discrete units, and only as such, of what can these units be composed? Obviously, not of more experienced time; if the moment, as given, is made up of smaller moments, we are back once more in the wilderness of the continuum. If time has no taint of continuity, its units must be temporally simple or indivisible. This does not of itself mean that, in terms of objective time, they can have no magnitude; it is, as we have seen, conceivable that they may do so. Neither does it mean that they may not be highly complicated in their non-temporal content or even in respect of the third time-attribute; for example, the single representation may contain a manifold of perceptual material and may refer all at once to vast reaches of past, present and future time. What our proposition must mean is that each of the discrete units of the sequence is simple with respect to its 'experienced-time' character; i. e., that in it no succession or transition is directly given or intuited. Similarly, of course, these moments must succeed one another with no interval of experienced-time between them; else we should vet again find our discrete series of moments deliquescing into a continuum. Neither within any one of the moments, nor yet between it and its nearest neighbor, can there be any immediate experience of transition *from* one moment to another, if time's discontinuity is to be maintained. Only by conceiving of succession as made up of units in some sense static can we conceive of it as made up of discrete units.¹

This will, no doubt, at first appear to many not less paradoxical than Bergson's conception of a non-quantitative duration. Yet, so far as I can see, the view contains, in fact, nothing whatever of paradox. Only, it is needful to bear in mind certain distinctions, especially the three already mentioned. Each of the moments, though it will not contain an experience of succession, will contain a representation of succession, in which representation it will represent its own temporal locus; in the language of the neo-criticists, the representation will be informed by the category of time; and the category of time, as Pillon is fond of insisting, "comprises the relation of coexistence as well as of succession." Past content, the recognition of its pastness, present sensory data, a distinction between memory images or anticipatory images and immediate sensory content, vague pointings 'forward' and 'backward'—these will all enter into the make-up of the single moment of representation. It will be succeeded by another moment of like internal constitution. though of different specific content. These moments, in Bergson's words, will "touch but will not interpenetrate"; there will be an unbroken, though not, in the proper sense, a continuous replacement of one by another. When so much is said we have, so far as I can see, enumerated all that can actually be shown by introspection to be essential to our time-experience, and all that is requisite to render it philosophically intelligible.

"All," some readers may hereupon exclaim, "save the two things needful! How can there be a representation of succession without a direct experience of succession? And how, whereby, in what medium, does the replacement of one moment by another occur, or how is a replacement possible without a transition between one and the other?" Both questions are natural. But the first is one which nobody is called upon to answer; it is not

¹ In the foregoing discussion I have avoided the term 'specious present' for these units, since it does not seem clear that that term always connotes freedom from apprehended change within the specious present's own limits.

at all self-evident that the representation of succession must presuppose a direct experience of succession. To the second, one can only answer that all who do not believe that succession is a pure illusion—who admit that we actually live temporally or discursively—have on their hands the same difficulty of understanding how certain experience which for a moment exists in the complete and perfect sense of present immediacy can lapse into the inferior status of what our expressive American slang calls a 'has-been,' and be replaced by a newcomer. But the difficulty is not alleviated in any degree by interpolating between one immediacy and another a transition; rather, it is thereby transformed into a sheer self-contradiction. Present existence becomes really past and a new present existent begins: if time is a reality, that is the kind of reality that it is; so our minds are compelled to represent it. Its nature remains to us opaque and irreducible, but not absurd.

The descriptive psychology of time-perception which is implied by Pillon's view of time as a discrete quantity we have now, in outline, seen. But it may perhaps seem to some readers that the view when thus explicated is at variance with another doctrine of the neo-criticists, namely, their idealism. It is worth while, therefore, to point out here the bearing of temporalism, as its proper import has now been interpreted, upon the old quarrel of the idealists and realists.

It is clearly impossible for any one who believes in the reality of time to accept one of the premises—or supposed premises—of subjective idealism strictly construed. Towards the idealism which is inferred from the superior certainty which we feel in applying the existential predicate to the immediate "data of consciousness," the temporalist must be as hostile as the most naïf of realists. He absolutely affirms existences external to and independent of the state of representative consciousness which at any moment he regards as then existing; the fuisse of a thing may perhaps, for him, be the same as its perceptum esse, but it is certainly not the same as its perceptum. He must regard each cognitive moment as affording more or less genuine representations of moments other than itself,—of content whose date of original and complete existence is not identical with the

existential date of the cognition or of the present representation of that content. He will thus be opposed to any thoroughgoing 'epistemological monism' whether of the idealists or of the 'new realists.' But though no partisan of the short and easy idealism of the subjectivist, nor yet of the egocentric predicament, -though, in short, methodologically a dualistic realist-the temporalist who regards the time-process as a discontinuous series may be—and most naturally will be—opposed to physical realism. He will naturally be so chiefly because the paradoxes of the continuum do not seem capable of elimination from the idea of space in the manner in which he has eliminated them from the conception of time. And if he is in this sense an idealist he will, of course, regard the first of the three time-aspects above mentioned—so-called 'objective' time—as an ideal construction. The motive for its construction it is easy to see. Things do have real or factual dates, defined primarily as loci in the temporal sequences of individuals. But the temporal sequences of individuals do not seem to match; e. g., between two distinct representations, A and D, of a given person, X, there may intervene only one distinct representative state, B, while another person may be found to have, between the same two termini of X's experience, two distinct states. Chiefly from these differences between the minuteness of the sub-division of different persons' experiences, within the limits defined by any two given points in the temporal experience of any given person, arises the convenient but metaphysically misleading idea of a purely objective, 'evenly flowing,' time. If such a truly objective time existed, it would indeed necessarily be thought as a continuum; to it our paradoxes would accordingly apply: there would be for us no escape from them through the observation that 'psychological' time consists merely in a succession of distinct changes of content of experience, occurring always in finite number between any two given points in anybody's expe-

¹ What seems to me a curious but instructive example of the confusion of the existential date of a representation with the dates represented or referred to therein, may be found in the arguments whereby, in this Review, XXI, pp. 170-171, Professor McGilvary attempts to reconcile the knowledge of past existences with the new realism. But to this issue I hope to return at another time and place.

rience. For in that case psychological time would not be real time.

We are now prepared to understand how Pillon's doctrine of the non-continuity of time affords a solution of the three prima facie difficulties of temporalism set forth in the previous study. (1) From the paradox of the simultaneity of the successive there is no escape possible except through this doctrine. Succession involves the before-and-after relation; and if that relation is given in direct perception, both its terms must be present together, while not less evidently they must temporally exclude one another. But according to the view now reached, there is no such thing as a direct perception of succession, and therefore, no paradox. Yet the idea of succession is accounted for: that idea is made possible by the contrast, within each present moment, of the fresh and vivid perceptual datum with the remembered and the anticipated, the 'no-longer' and the 'not-vet.' And the reality of succession is affirmed. It is a reality inferred and never given in immediate experience; here is the realistic side of temporalism. "To wish," as Strong has said, "to apprehend succession or change or the lapse of time directly and not through memory, is as foolish as to wish to apprehend the past directly and not through memory;" and it is foolish for the same reason. A direct apprehension of succession would be equivalent to a direct apprehension of the past. To this solution of the first paradox, however, objections are drawn from introspection. There are those who assure us that they experience time as continuous and that they experience succession directly. It is not at all clear, however, that those who say these things mean to assert anything denied by our doctrine. To assert the 'discreteness' of the moments of experience is not, of course, to say that they are separated from one another by some intervening stuff of a non-temporal kind; it is to say merely that they do not, as existences, overlap, that "reciprocal externality" is of their essence. One ought, perhaps, to distinguish three categories, 'continuity,' 'discreteness,' and 'unbroken sequence of distinct units.' It is the third—a mode of existence having in it something of continuity as well as of discreteness—which is attributable to

time, according to our view. Again, those who profess to have a direct experience of succession either do or do not mean that, in the second of two moments of experience defined as really succeeding one another, the first is not merely represented, but is *existentially present* in exactly the same sense as the second moment. If they mean this, they appear to me to be uttering gratuitous nonsense; if, as is probably the case, they do not mean it, they are affirming nothing which is here denied. ¹

The two remaining prima facie difficulties about time similarly vanish, if the account of time-perception here offered be accepted. That account, for example, denies (2) that we have any experience of pure transition. The apparent "absurdity of supposing a change to be composed of states," of which Bergson makes so much, arises wholly from the assumption that B can not replace A in existence, unless between the two there takes place some mysterious, yet actually experienced, transit, entirely distinct from the existence of A and the subsequent existence of B. But this is simply to hypostatize the before-and-after relation, and then to falsify psychology in the interest of that hypostasis. Again, (3) our version of temporal experience disposes of the third difficulty by pointing out that any given duration empirically consists of a series of concrete, present states of consciousness, each of which is itself temporally simple or indivisible, while the series as a whole is composed always of a definite number of such units. Thus, since a duration is no continuum, it does not involve the paradox of the summation of an infinite series.2

At this point I turn to examine the accounts of the nature of time-experience offered by William James, in the two late

¹ Strong, as previously noted, urged in 1896, in opposition to James, approximately the view here taken. Yet he weakened his position by speaking of the present moment as "a moving point" which contains within itself "actual duration." The best psychological statements known to me of the theory here adopted are to be found in Volkmann's Lehrb. der Psych., ed. Cornelius, 1895, II, pp. 11–18, and 32 and in Cornelius's Psych., 1897, pp. 129–143. Both writers describe the "subjective-time-series," as "discrete," and made up of presents without inner duration; and point out that the idea of it as continuous arises through its "projection" or objectification.

² Upon this third difficulty the bearing of Pillon's doctrine of the non-continuity of time has often and fully been pointed out by neo-criticists—notably by M. Henri Bois, Ann. philos., 1909, pp. 114-115

writings of his—A Pluralistic Universe and Some Problems of Philosophy¹—in which he especially addressed himself to our problem. James agrees with Pillon and Bergson in regarding our common way of thinking about time as a falsification of the reality; he too finds the evidence of its falsity in the antinomies into which it brings our reflective thought; and he shares, also, with those philosophers an absorbing preoccupation with the problem of finding an escape from the Zenonian paradoxes, especially the paradox of the continuum.

But the agency by which real time is 'denatured' is, for him, not the idea of space merely, but "conceptual thought" in general; the fundamental antithesis which gives rise to his antiintellectualism is that of "the perceptual flux" vs. the "static concept." The critique of mere intellect thus engendered, it ought to be said, proves when analyzed to be of a somewhat indeterminate and ambiguous sort. James seems to have treated as virtually equivalent three quite different charges against conceptual thought: first, that concepts can not "completely cover," and do not themselves possess, all the attributes of the perceptual flux they represent; second, that conceptual thought introduces into the representation of the flux certain positive attributes which the flux can be known not to possess; third, that the perceptual flux is inherently self-contradictory, from the 'conceptual' point of view. The first of these charges, as I have intimated earlier in these studies, seems to me to be a truism which by no means compels one to accept extremely despondent views of 'the intellect.' It has seldom been supposed that concepts ought themselves (as psychic existences) to have all the properties of the objects which they represent; the concept of a deafening noise is not proven to be meaningless or absurd, merely because it is not a deafening concept. And the fact that a concept can represent a concrete particular "only in spots and incompletely" is a common-place of which logic has always shown its knowledge by calling concepts 'abstract.' It is not, then, with the first charge, but with the second and third, that we are here concerned.

¹ Hereafter referred to as PU and SP.

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But upon both of these, also, James's position in his latestwritten books was instructively equivocal and uncertain. That conceptual thinking gives a positively false picture of the flux he maintains, in some sense, throughout, but he can be shown to give three different and incompatible accounts of the properties of this flux as actually experienced, and at least two different accounts of the nature of the falsification of it wrought by the intellect. So, likewise, he constantly and clearly maintains that somewhere about the common notion of time there are contradictions which must be faced. But he wavers elusively between the view that these contradictions inhere in the real time of experience—and that time is thus radically incongruous with the assumptions of the intellect,—and the opposite view, viz., that the contradictions are due wholly to the attributes falsely introduced into the idea of time by our habitual, but not wholly incorrigible, way of conceiving of it, whereas in itself, and when these alien elements are left out, the true idea of time remains sufficiently "acceptable to our understanding and congenial to our imagination" (SP, 187).

James's later doctrine concerning our problem was thus a singularly tangled one; and the reader must be prepared for a certain amount of involution in the exposition. But the logical motivation of the tangle, in James's mind, will, I think, become sufficiently clear if we begin by noting the three natural but inconsistent observations which he makes concerning the real properties of the perceptual flux.

In the first place, then, James is impressed by the consideration that in the time-flow each moment must be absolutely *next* to the moments before and after; and this utter nextness, if one may so call it, he interprets—clearly under the influence of Bergson—as a sort of "compenetration." "No part in the sensational stream is so small as not to be a place of conflux. No part there is not really next its neighbors; which means that there is literally nothing between; which means again that no part goes exactly so far and no farther; that no part absolutely excludes another, but that they compenetrate and are cohesive; that whatever is real is already telescoped and diffused into other reals" (PU, 271).

This is equivalent to the express acceptance of the paradox of the 'simultaneity of the successive.' "Past and future," says James, "conceptually separated by the cut to which we give the name of present, are to some extent, however brief, co-present throughout experience. The literally present moment is a purely verbal supposition; the only present ever realized concretely being the 'passing moment' in which the dying rearward of time and its dawning future forever mix their lights." There is a tendency to similar language in SP, though there it is far less marked, and is curiously mingled with the other accounts of time presently to be noted. "Perception," we are, for example, told, "changes pulsewise, but the pulses continue each other and melt their bounds" (SP, 87); this might or might not mean "interpenetration."

Now, so long as he holds this view about the nature of the experienced time-process, James necessarily implies, and also fairly broadly declares, that reality, qua temporal, is paradoxical, and that, judged by intellectual or "conceptual" standards, it is bound to "sound self-contradictory" (PU, 272). James accordingly abandons his old objections (due to a rigorous, Renouvierist application of the principle of contradiction) to the Hegelian dialectic and the Hegelian Absolute; though he finds new objections. The reality of time, when the nature of time is understood as he now understands it, convinces him that "every minutest thing is already its hegelian 'own other' in the fullest sense of the word." Already "inside of the minimal pulses of experience is realized that very inner complexity which the transcendentalists say only the absolute can genuinely possess"—and which James in his earlier days had been wont to hurl as a fatal reproach against the transcendentalists. The charge of illogicality no longer seems to him fatal to other philosophies, since he has

¹ This view, as noted in the previous paper, was already expressed by James in 1894; cf. Psych. Rev., 2, 1895, p. III. The reader will, I trust, note how incongruously this consideration comes in here. It is presented as a reason for asserting the compenetration or simultaneity of what are called successive moments. Yet it incidentally negates the possibility that there should be any such simultaneity. This will be brought out more fully below. It was, if I am not mistaken, only after he had in some degree come under Bergson's influence that James fell into these confusions, and began to draw from his early account of the time-experience anti-intellectualist consequences. Cf. PU, 214.

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learned to call all temporal reality without exception, "if not irrational, then at least non-rational, in its constitution." James, it is true, never, so far as I can recall, goes the full length of Bergson's paradox; he does not say that time is a pure interpenetration, a succession without distinction, a thing non-quantitative and indivisible. While time's pulses "compenetrate," they apparently are not said to do so completely. Yet one who goes so far as James goes upon this road ought seemingly to follow it to the end. If every present moment is a fusion of past and future, and if past and future, in turn, are composed of similar moments, all moments of all time appear to be completely fused or 'telescoped' together. If every minutest thing is in the fullest sense identical with its own 'other,' there would seem to be no room left in the universe for a real "reciprocal externality."

Yet side by side with these expressions concerning the properties of time, we find in James a second class of utterances, apparently regarded by him as synonymous with the first, yet in fact essentially different in logical import. According to this way of putting the matter, the perceptual flux is a continuum which conceptual thought converts into a sequence of discrete elements. "All these abstract concepts are only moments dipped out of the stream of time, snap-shots taken as by a kinetoscopic camera at a life that in its original coming is continuous" (PU, 235).2 We are "inveterately wedded to the conceptual decomposition" of "a universe which is continuous." Now, of course, continuity and compenetration are not the same thing; true compenetration would preclude precisely that divisibility, that endless inner cleavage, which is the essence of the continuum. James, however, evidently was led to confuse these two attributes, in the case of time, because of the fact that the idea of continuous transition appeared to him to involve them both. "The essence of life is its continuously changing character," he reiterates with Heraclitus; the flux of experience is pure flux and contains no

¹ The distinction is not defined. Though James hesitated before the word 'irrational,' the proper consequence of this first view of time—a consequence which in other phrases he fairly plainly discloses—is a radically anti-intellectualist position.

³ Cf. also PU, 253, 186.

"states." But "our concepts are all fixed and discontinuous, and the only way of making them coincide with life is by arbitrarily supposing positions of arrest therein. When we conceptualize we cut out and fix, and exclude everything but what we have fixed, whereas in the real concrete flux of life experiences compenetrate each other so that it is not easy to know just what is excluded and what not."

These sentences are instructive, for they show us the notions of continuity and compenetration in the very act of getting confused, through the mediation of the idea of pure transition. A compenetration, to be sure, seems to afford as little room for transition as for continuity: for if two things are said temporally to 'compenetrate,' the expression surely must imply that they coexist. But a pure transition is precisely the kind of thing whose elements—if it can be said to have any—never coexist. How, then, can James have found in the idea of an absolute transition a means of confounding compenetration with continuity? The answer will be seen if the reader will but recall one of the grounds upon which James maintained the compenetration of moments: namely, his early psychological view that there is in experience "literally no such datum" as a present moment. With no real present for any content (even past and future) to exist in, there is obviously no way in which any two moments of past and future could be copresent. Compenetration, therefore, can not (when you add other contentions of James's which he himself often forgets) be construed as meaning coexistence. In point of fact, it cannot, when these other assertions are remembered, be construed as meaning anything intelligible. It would be a compenetration of units which by definition have no point of coexistence. But such a compenetration is not distinguishable from an absolute transition.

Properly stated, then, James's second view,—which 'interpenetrates' his first—is that time-experience is a pure flux, and that a flux is a kind of continuum. "My complaint,' he accordingly writes, is "that the intellectualist method turns the flowing into the static and discrete" (SP, 186). This not only means that this method misrepresents the reality; it also should

mean, in accordance with certain other express statements of James's, that the *reality* (not the false version of it) contains self-contradiction. For chapters X and XI of SP repeatedly declare that in order to assert the reality of a "mathematically continuous growth . . . we must stomach logical contradiction," and that in the realm of the temporal (though not of the static) it is only discrete and discontinuous magnitudes that are free from antinomies (SP, 186, 187, 170, 172).

Finally, in the same two volumes, there may be found yet a third account of time which is (though James remained curiously oblivious to the fact) formally antithetic to the second, and clearly irreconcilable with the first. And in the chapters which came last from his pen this third account, which is identical with Pillon's and with that maintained in these studies, is expressed with much emphasis and reiteration, and is all but completely dominant over the other two; we may fairly regard it, therefore, as the conclusion to which his long reflection on this favorite problem was finally settling down, when the unresting activity of that eager and candid mind was ended by death.

This third doctrine is that the sequence of changes in consciousness which constitutes the perceptual flux and grounds our idea of time, is a discrete sequence; that conceptual thought falsifies it by representing it as a continuum; that only through this falsification does it come to seem self-contradictory or otherwise alien to our understanding; and that even thought, by making explicit its own methods and limitations, may cease to be troubled by the antinomies of the continuum. This version already appears in PU, along with the two other versions with which it conflicts. "All our sensible experiences," James more than once observes even in that volume, "as we get them immediately, change by discrete pulses of perception, each of which keeps us saying 'more, more,' or 'less, less,' as the definite increments or diminutions make themselves felt. Fechner's term of the 'threshold' is only one way of naming the quantitative discreteness in the change of all our sensible experiences. They come to us in drops. Time itself comes in drops." Always, some actual amount of change, or else none, is given. "This amount is the datum or gabe which reality feeds out to our intellectual faculty, but our intellect makes of it a task or aufgabe, . . . and insists that in every pulse of it an infinite number of minor pulses are ascertainable." ¹ Here the contradiction of the doctrines both of the compenetration and of the continuity of moments is as categorical as possible, though James now appears so completely to forget those doctrines that he contradicts without disavowing them. In SP he insists again and again that we reach the limit of a succession always by "finite and perceptible units of approach—drops, buds, steps, or whatever we please to call them, coming wholly when they do come, or coming not at all. Such seems to be the nature of concrete experience, which changes always by sensible amounts or stays unchanged." But the intellectus sibi permissus at first assumes that this numerically definite sequence of discrete units has the properties of an infinitely divisible or "continuous quantum"; thus, and thus only, do the paradoxes of Zeno and the antinomies of Kant arise. One may, however, avoid all these contradictions simply by giving up the assumption, by treating "real processes of change no longer as being continuous, but as taking place by finite not infinitesimal steps." This, says James, "is the radically pluralist, empiricist, or perceptualist position," which he "adopts in principle" himself.2 He adopts it, as he makes quite clear, for two reasons. The first is that he is unwilling to "stomach logical contradiction," to affirm that reality has a character subject to the criticisms which, as "Leibnitz, Kant, Cauchy, Renouvier, Evellin and others" have shown, "apply legitimately to all cases of supposedly continuous growth or change" (SP, 184). The other reason is that this account of the matter is "simply that which the face of perceptual experience suggests" (SP, 166). In short, a faithful report of the deliverances of introspection, with regard to our time-experience, shows us there a reality entirely harmonious with the requirements of logic.

Thus in his last philosophizing James came back to a true neo-

 $^{^{1}}PU$, 231, 238-9; cf. for other expressions of the same ideas SP, chaps. X and XL, passim, especially pp. 154-5, 166 n., 184-6.

^{*} SP 170-172; cf. 184-188, and PU, 230-231 and 239.

criticist position; 1 finding his thought involved in the problem neglected by the teacher from whom his pluralism and temporalism were learned—Renouvier—he reached, after much wandering in the wilderness, the same way out which had long since been taken by Pillon. And in doing so (though he apparently never fully realized the fact) he flatly contradicted the Bergsonian account of the nature of our time-experience, and repudiated all the grounds of that radical anti-intellectualism with which, under Bergson's influence, he had dallied in A Pluralistic Universe. In this he was, as it seems to me, merely returning to the true way of temporalism. To the genuine believer in the doctrine of real becoming, Bergson's singular conception of the nature of duration, together with the anti-intellectualism implicit in that conception, must appear an unfortunate episode in the history of the general doctrine. For the conception in question, as has been here sufficiently shown, is in conflict not merely with logic, and with a correct descriptive psychology of time-perception; it is not less deeply in conflict with the essence of temporalism itself. Of the recovery of temporalistic philosophy from this aberration, the outcome of James's latest reflection on the problem of time was happily prophetic. Fortunately, Bergson's philosophy is also deeply in conflict with itself; so that there, too, one may find something of the same prophecy.

ARTHUR O. LOVEJOY.

THE JOHNS HOPKINS UNIVERSITY.

¹ But only with respect to the time-problem. For reasons which he sets forth in SP, James believed that the antinomies of the concept of infinity do not apply to "things conceived as standing, like space, past time, existing beings" but only to "things conceived as growing, like motion, change, activity." Thus he kept a way open towards physical realism, which is forbidden the consistent adherent of the loi du nombre.

PROFESSOR BOSANQUET'S *LOGIC* AND THE CONCRETE UNIVERSAL.

DROFESSOR BOSANQUET'S Logic has now been before the philosophical public for over twenty years and it has been generally recognized as one of the most important products of English neo-Hegelian idealism. No book probably has done more to show experimentally, so to speak, the vitality of the idealist conception of logic and none has been more valuable in bringing to light the full implications of the idealist point of view. Nor does it seem likely that anyone in the future will do better the work which neo-Hegelian logic sets itself. The presentation of the judgment as a self-developing function for the removal of contradiction from experience, the conception of knowledge as a process of inherent rationalization whereby experience passes from the abstractness of disjecta membra to the concreteness of systematic organization, is as carefully and completely worked out by Professor Bosanguet as it is likely to be. Professor Bosanquet has now published a new edition of this important work¹ in which he has discussed at considerable length the philosophical movements that have especially marked the two decades since the work first appeared. These additions are especially interesting and important because the discussion of these years has brought to light a variety of objections against the validity of the method which Professor Bosanquet and other idealists have employed. Little fault has been found with Professor Bosanguet's elaboration of his own principles, but the principles upon which a dialectical logic is based have themselves been widely called in question. Realism, Pragmatism, Pluralism, the anti-intellectualism of Bergson and James, criticisms of the coherence theory of truth, and attacks upon the theory of the Absolute have occupied the principal places in the philosophical writing of the last twenty years and in practically every case it

¹ Logic, or the Morphology of Knowledge. By Bernard Bosanquet. 2 volumes. Second edition. Oxford, The Clarendon Press, 1911.—pp. xxiv, 384; xi, 327.

was idealism that was under fire. In every case the issue turned upon some principle of idealist logic, and in the new edition we have Professor Bosanguet's reaction upon these rival points of view. Perhaps the very perfection with which Professor Bosanquet had worked out his own point of view contributed to the attack. It is as if philosophy had its fashions no less than art, or as some may prefer to say, as if historical development had a logic deeper than systematic completeness. No sooner is a certain point of view sufficiently elaborated so that it seems as if hereafter criticism must confine itself to matters of detail, than the philosophical interest changes its direction and cuts in behind what seemed to be the solid foundations of earlier investigation, requiring a reconsideration of first principles. Something of this sort seems to have happened in logic. The additions that recent logical discussion has required Professor Bosanquet to make in his new edition concern the principles on which logical theory, and ultimately metaphysical theory also, must be based. It is the purpose of the present article to consider some of these principles, especially as they appear in Professor Bosanquet's criticisms of philosophical points of view other than his own.1

The central principle of Professor Bosanquet's philosophy, and of idealist logic generally, is the concrete universal, a caption under which may be summed up a number of closely related conceptions all characteristic of neo-Hegelian idealism. The position may be summarized briefly as follows. The test of truth is logical coherence or consistency. No proposition is true in itself, but its truth can be determined only by its logical relations to other propositions in a system. In general, a proposition is true when its assertion produces an organization of knowledge greater than its denial. The total truth is nothing less than the completed whole of experience. The untrue is the fragmentary or the one-sided, that which suppresses or distorts some phase of the total experience. The construction and maintenance of a total, unified experience is the special work of thought, or, to avoid the implication of externality in this way

¹ The work was begun as a review of the new edition of the *Logic*, but owing to its length and the importance of the subjects discussed it was made into an article at the Editor's suggestion.

of putting it, the impulse of experience to its own completion and unification is thought. Accordingly, thought is wrongly conceived if it is regarded as a process of abstraction from a given, concrete experience. On the contrary, the purpose of thought is always to produce ultimately a more concrete experience. The abstractions which thought undoubtedly uses are instruments only, and the complete act of thought includes the reconstruction of the concrete on a higher plane of organization; it issues in an experience which is at once more systematic and more inclusive and therefore more concrete.¹ Hence also experience is essentially dialectical. Its own abhorrence of a contradiction drives it toward its own completion; every partial experience is a contradiction and can be relieved of contradiction only if it finds its place in an experience more complete than itself. Thought is the progression of experience toward its own completion. By the agency of this dialectic there arise degrees of truth, for truth is realized only in the process by which contradiction is suppressed. There are different stages of achieved organization of experience and therefore different degrees of truth. It is the business of thought to construct progressively coherent and inclusive systems of experience; and these systems, by virtue of their greater and greater coherence and inclusiveness, become progressively individual and concrete and therefore progressively true. These, if I understand him, are the most general principles for which Professor Bosanquet stands and which his Logic is intended to elaborate and prove,—hence the proposition to which he so often reverts, 'The truth is the whole.' In his most recent work, the Gifford Lectures for 1911, he has made use of the term 'concrete universal' and has devoted one of his longest and most careful lectures to the discussion of this conception.2

Now the theories which Professor Bosanquet criticises adversely in the new edition of his *Logic* all, in his judgment, constitute failures to grasp this principle; all take the process of cognition in some abstract, truncated form and therefore fall

 $^{^1}$ Cf. an article entitled "The Concreteness of Thought" by the present writer in this Review, Vol. XVI, 1907, p. 154.

² The Principle of Individuality and Value, Lecture II.

short of a complete logical theory and end in a fallacious metaphysics. Thus the so-called genetic logic,1 with its sharp antithesis of imitation and invention, and its attempt to explain thought as imitation plus selection, fails to see, on the one hand, that imitation is only a part of relevant response, which depends upon the recognition of unity in difference; and, on the other, that selection is accomplished not by the need for external change, or by a social sanction, but by the 'systematic necessity of reason, rooted in the principle of non-contradiction, in virtue of which some judgments are pronounced true and others false.'2 Again, Pluralism and most objections against the theory of the Absolute rest upon a false notion of individuality, viz., that it must rest upon the given and that it can only be expressed by designation and not by predicates.3 But this involves a confusion of individuality and particularity. In so far as so-called individuals rest upon designation, they are imperfect individuals, for true uniqueness comes from filling a definite place in an ordered whole. Both Pragmatism and Realism represent phases of a modern tendency to over-emphasize the philosophical value of feeling, the one depending on the immediacy of satisfaction and the other on that of apprehension.4 Pragmatism represents an imperfect form of the coherence theory of truth which, because of its creation of a dualism between thought and its occasions, has failed to grasp the autonomy of thought and its essential totality. Realism, by considering only examples drawn from a low grade of knowledge, regards as typical those judgments of fact in which there is seemingly no room for degrees of truth; it thus fails to see that in all the higher stages of knowledge the fact becomes indistinguishable from its significance and therefore cannot be appealed to as a datum to which judgment can be said to correspond. The more naïve form of realism (represented by Prichard's Kant's Theory of Knowledge), which contends that objects are known as apart from mind, is based essentially upon a distrust of the totality

¹ Vol. II, pp. 238 ff.

² Vol. II, p. 240.

³ Book II, Ch. VIII, especially Section 2.

Book II, Ch. IX.

of experience.¹ The attempt to determine the real by deducting all the contributions of the mind is impossible in practice and fallacious in theory, because it substitutes abstraction for concreteness. "The significance of judgment and knowledge as of experience in all its forms lies always on ahead and not behind."

Certainly in the hands of so accomplished a philosopher as Professor Bosanquet the concrete universal is no mean critical weapon. His criticisms are penetrating and complete and always thoroughly in accord with his own general theory, and if they sometimes seem rather unsympathetic, this is perhaps no more than is to be expected from a philosopher who has stated his own point of view so completely and who has been so eminently identified with the development of a systematic and highly evolved logical doctrine. In discussing Professor Bosanquet's criticisms, therefore, one may assume that they represent the consistent reaction of the coherence theory toward its opponents; and so far as the present article is concerned, I cannot pretend to discuss these criticisms from the point of view of a logical theory that might be regarded as in any sense the rival of Professor Bosanquet's own. My aim is really much less ambitious and, if one chooses, is on a lower philosophical plane. It is merely to compare the results of the coherence theory, as exhibited in Professor Bosanquet's criticisms of points of view other than his own, with certain facts about the reasoning process as it occurs in ordinary experience. These facts seem to me to be well founded and also to present problems which the coherence theory has not solved. It is not unreasonable, perhaps, to insist upon them, even though one cannot profess to have theorized them for himself. The positions which Professor Bosanquet rejects as imperfect statements of the concrete universal appear to me to be really ways of attacking logical problems that throw emphasis upon phases of the reasoning process that are minimized by his own doctrine of coherence.

Let us begin with Professor Bosanquet's treatment of realism. Realism he regards as bound up with the correspondence theory of truth, and this theory originates by the exclusive consider-

¹ Book II, Ch. X.

ation of knowledge in one of its lower stages,—the seemingly isolated truth of fact. Truth is to be tested, according to the realist, by the factual existence of the things and relations asserted by the proposition. From the point of view of a dialectical logic. such factual propositions must be regarded as abstractions whose isolation from a system is logically arbitrary, and they can be tested only by bringing them explicitly into relation with other propositions with which they are implicitly coherent (or the reverse). The status of such propositions as facts, therefore, without their systematic connections being developed, indicates their low stage of logical evolution. Doubtless many such propositions are thus accepted, because for practical purposes it may not be worth while to develop their implications, but this limitation upon the logical process cannot rightly be regarded as an essential aspect of it. Now the difficulties which Professor Bosanquet finds in the correspondence theory are undoubtedly real difficulties. It is not at all clear how it can deal successfully with cases such as those to which he has called attention, where knowledge cannot be pinned down to definite factual data. If the realist places his whole reliance upon correspondence, it is no doubt true that his theory, as an explanation of the reasoning process, breaks down, as Professor Bosanquet maintains. In certain cases, at least, the conclusion draws its premises after it in such a way that the knowledge has to be dealt with as a system and not as a datum. No doubt, as Professor Bosanquet says, immediacy is a relative term; it applies not to a special kind of contents of our experience but to a phase of it. And this fact, if granted, certainly stands in the way of abolishing unity in difference and of substituting for it a world of simple things and relations, as Mr. Russell proposes to do.1

The conception of immediacy is an ancient enemy of idealism and one cannot but wonder whether the attitude of idealist logicians toward it has not been determined in part by the historical circumstances under which idealism developed, that is, by the fact that idealism in its inception was so largely taken

¹ Cf. the quotation from Mr. Russell, Vol. II, p. 277.

up with the criticism of the classical English empiricism. The permanent value of that criticism for the development of logic is not to be doubted, but it often happens in such cases that the refutation of a vicious conception obscures the truth imbedded in it. That which was given, for the empiricist, was a sensuous quality whose nature was supposed to be fully determined by the specific energy of the sense organ. These data were absolute and indefinable—ultimate mental existences which the mind must either possess or not possess. If it possessed them, it had them entire; if it did not possess them, it could acquire them only by placing itself in the right external conditions for receiving them, the reception being conceived as purely passive; and if it did not possess the proper sense organs for receiving them, their absence constituted merely a lacuna in the make-up of that mind. Now it would be universally agreed, I presume, that idealism has been completely successful in its criticism of this point of view. Even the psychologist, however committed to sensationalism, would reject any such description of what he calls a 'mental element'; and on all hands it would be agreed that these bare mental existences are not the meanings with which the logician is dealing. And certainly, in ordinary experience, such impenetrable, atomic qualities are the one thing which never is given. But the idealist interprets his criticism of the given in this sense as a discrediting of the whole conception, whereas it is clear that thinking as it actually occurs in human life is dependent upon the 'givenness' of certain facts which, in a particular case, are assumed for the time being at least. facts may very well be the product of other thinking, but at least they are not mediated by the process in which they stand as data. The presence of such data is a general characteristic of the thought process, and empiricism was quite right in calling attention to this phase of the process, even though it misinterpreted its discovery.

After all necessary admissions have been made to the criticisms of immediacy, it remains a fact that in every process of reasoning something always is given. If the given is only an aspect of experience, it is still an invariable aspect of it and

need not necessarily be regarded as a mere limitation upon the reasoning process which logic can overlook. Some factors of the experience within which the reasoning process works always stand fast and do not seem to require further analysis. No doubt these factors themselves, as Professor Bosanquet often says, may have been mediated by thought, but for any given logical process there are always some elements which do not call for mediation in that case. Some relations, as the realist insists, are external. In all reasoning there comes a point where it is not necessary to understand any further terms in order to understand the two or more actually under consideration.1 Analysis ad infinitum would make reasoning as impossible as a failure to find any analyzable terms whatever. Now this seemingly obvious fact that every problem does have its solution is the fundamental fact on which the realist rests his case against the coherence theory. For why, it might be asked, should the process of eliminating contradictions ever end if, as is the case from the point of view of the concrete universal, there is no thoroughly non-contradictory system short of the Absolute? In fact, the solution and settlement of a definite problem does not seem to be a phenomenon which the coherence theory even professes to explain, for externality and partiality are referred to the imperfections of the finite mind and the haste which attends the pursuit of practical ends.² But surely this is an issue which needs to be discussed. In fact, Professor Bosanquet's opponent is now in a position to cast back his criticism of the correspondence test. If there is a vast logical difference between a fact incorrectly inferred and one correctly inferred, is there not an equal logical difference between an inference that stops because the reasoner grows weary and one that stops because the problem is solved? This, I take it, is the point involved in the realist's objection to the phrase 'in the end.' Certainly the realist is well within the ordinary usage of language when he insists that judgments may be true not 'in the end' but now, and this con-

¹ Cf. Professor Bosanquet's statement of what he calls the relevancy of relations, Vol. II, p. 278.

² Vol. II, pp. 280 and 285.

⁸ Cf. Vol. II, pp. 279 ff.

tention seems to be strengthened rather than weakened if, as Professor Bosanquet insists, the phrase has no special reference to the passage of time. It is hard to believe that a criterion of truth is not seriously handicapped by being unable to recognize, or at least by being able only half-heartedly to recognize, the vast number of judgments (surely the majority of all we make) which neither in time to come nor at any time are thought by anybody to need revision.

The difficulties here suggested regarding the coherence theory of truth, however, can better be discussed in connection with Pragmatism and Professor Bosanquet's criticism of it. The pragmatist too rejects the correspondence theory but, as Professor Bosanquet believes, has only partially grasped the coherence theory. Pragmatism has restricted the meaning of coherence to the 'coherence of adaptation with external action.' and this has vitiated its whole understanding both of its own position and of the more adequate use of the coherence theory by other philosophical systems.1 Hence it issued (in Professor Dewey's Studies in Logical Theory) in three connected misconceptions: the dualism of thought and its occasions, the limitation of thought to the satisfaction of a specific purpose, and the refusal to recognize thought as more than a process of adaptation to environment. From the point of view of Professor Bosanquet, these aspects of Pragmatism are merely misconceptions of the true coherence theory because they are tantamount to a denial of the concrete universal. They neglect the fact that "Thought is essentially the nisus of experience as a world to completion of its world."2

Now the difficulties which Professor Bosanquet brings to light in certain of the conceptions of Pragmatism ought frankly to be admitted. Such conceptions as 'action' and 'practice' have been fundamentally ambiguous and have been justly attacked by the critics of Pragmatism, with the result that, granting Professor Bosanquet is right in conjecturing that these terms were first used in their normal and everyday sense, all open-minded pragmatists would probably now agree that they must be further

¹ Vol. II, pp. 269 ff.

² Vol. II, p. 272.

defined. But if the force of the criticism is so far granted, even then the pragmatist will probably not be willing to give up his case and come over forthwith into the camp of the coherence theory. For what appeals to Professor Bosanquet as merely a defective use of coherence must appear quite otherwise to the pragmatist. The point at issue with him is precisely the adequacy of coherence itself as a logical category, and his attitude toward Professor Bosanquet's theory is directly analogous to the latter's attitude toward the correspondence theory; as coherence transcends correspondence, so in turn coherence must be transcended, and the pragmatist has been trying, more or less unsuccessfully no doubt, to show how this can be done. The question is this: Are such conceptions as system, coherence, noncontradiction, identity in difference, organic unity,—in a word, the conceptions which Professor Bosanquet sums up in the principle that 'the truth is the whole,'-really to be regarded as logical ultimates? That they are an improvement over correspondence the pragmatist is ready to admit; what he denies is that they are the last word that can be uttered in the description and explanation of reasoning. If they are ultimate and constitute a complete organon for such explanation, then of course Professor Bosanquet's charges of dualism, occasionalism, and adaptationism make up a destructive criticism; if they are not, these characteristics of Pragmatism are not terms of reproach but merely the recognition of aspects of thinking which Professor Bosanquet has neglected.

The weak point which most critics have found in the pragmatist's armor is the vagueness of the conception of practice and Professor Bosanquet has a comparatively easy task to show that there is no very clear relation between thinking and the production of external action.¹ The real heart of the divergence between pragmatism and the coherence theory, however, is laid bare when Professor Bosanquet charges the pragmatist with dualism and occasionalism, that is, with making a distinction between thought and the occasions for its exercise.² For this constitutes a violation of the continuity of experience, as con-

¹ Vol. II, pp. 244 ff.

² Vol. II, pp. 268 ff.

tinuity is conceived from the point of view of the coherence theory. According to Professor Bosanquet, thought furnishes its own occasions.—the contradictions which come to light in an experience only partly organized,—and again thought removes these contradictions, while for pragmatism thought is a function for the removal of 'tensions' that occur in experience, each of which is sui generis and not merely a case of contradiction. Now if I am not mistaken, the pragmatist position does insist upon a vital element of our thinking which is not so clearly brought to light by the coherence theory. The vital point in the pragmatist's analysis of thinking is the emphasis which he lays upon the rôle of the problem in the guidance of thought. Without a definite and specific problem to be solved there is no thinking; for thinking is essentially the solution of problems. Without the 'tension,' the 'felt need,' the task (what the German experimenters upon the thinking process have named Aufgabe), there is nothing for thinking to do and nothing by which to judge of the success of its activity. Whether this task involves the rearrangement of physical objects is really not a matter of special importance. What is necessary is that the task shall be specific and that it shall involve an element of novelty which makes the situation not amenable to habit. For, as James long ago showed in his remarkable chapter on Reasoning, the differentia of thinking as a mental process is its capacity to utilize the old in dealing with the new.

Now the problem, the end to be reached, really plays a determining rôle in the guidance of the other processes in the total complex of thought. What is essential or relevant in any given set of phenomena is determined by the nature of the difficulty that thought has to solve. This is not to say, of course, that any object may be regarded as possessing any qualities, according to the predilection of the thinker, for an object is by definition, I suppose, something which has a determinate nature of its own. But the way in which an object is conceived in any given case depends upon the relation between the nature of the object and, broadly speaking, the purpose for which it is being used. More specifically, in the case of thinking, the way in which an object

is 'taken' depends upon its significance or relevance for the problem in hand, and significance is indeterminable if no problem exists. The coherence theory, on the other hand, certainly has the appearance of minimizing the importance of the problem. For every problem is for it only a case of the all-inclusive logical problem,—the removal of contradiction. No doubt Professor Bosanguet would insist that he is perfectly aware that every problem as it occurs is a specific problem and that every solution is specifically an answer to the problem set. But after all does not a dialectical logic rest upon the proposition that every problem is of one kind-viz., a contradiction? It is the contradictory character of the situation that requires solution, whereas for pragmatism it is in every case the specific nature of the problem,—its character as a new and unique situation,—which demands solution. It is this unique quality in the problem, which, according to the pragmatist, prevents the assignment of a 'central cognitive interest as such,' 1—" The nisus of experience as a world to completion of its world,"-as the universal motive power of thought. This explains also the pragmatist's objection to 'epistemology' and his charge that idealist logic is mainly concerned with the impossible problem of the relation of thought as such to reality as such. The difficulty appears to be real, despite Professor Bosanquet's rejection of it.

There remains over the question of the continuity of experience, and this is really the essence of the idealist position; for the theory of coherence depends more upon the supposed need for maintaining continuity than upon any empirical evidence to show that all problems are phases of contradiction. This the idealist is accustomed to regard as his chief stronghold. Idealism does justice, as he believes, to what all other theories neglect,—the immanent principle of criticism and interpretation by which experience maintains its own integrity and the continuity of its own development. Certainly idealism ought to receive full credit for its recognition of this vitally important phase of experience. In this connection, however, there are two questions which the critic of idealism has a right to ask. In the first place,

¹ Preface, p. x; cf. also Vol. II, p. 266, and Individuality and Value, pp. 52 ff.

is it clearly made out that the maintenance of continuity has actually the paramount importance in our experience that idealist logic attaches to it, and on just what sort of evidence does this alleged primacy of coherence rest? In the second place, does the coherence theory really do justice to what we mean concretely by continuity?

As regards the first question, it is pertinent to remark that an historical circumstance cast the question of continuity into the foreground of philosophical theory. In origin, I suppose, this phase of idealism goes back to Kant's effort to supplement the absolute disintegration of Hume's mental atomism. The categories, and ultimately the transcendental unity of apperception, were the conditions by which the raw material of sense could be transmuted into an experience. The continuity of experience was therefore at once the work of thought, and the maintenance of it was essentially the function which thought had to perform. The efforts of the post-Kantian idealists and of the English Hegelians have been directed toward 'internalizing' the coherence standard, that is, toward removing Kant's arbitrary distinction between form and matter with its attendant difficulties, the concrete universal being the natural outcome, but the maintenance of continuity has still been regarded as the essential mark of thought. Now apart from this historical circumstance, what precisely is the evidence on which this proposition can be said to rest? Ample valid evidence against Hume is to be found in the observable coherence that obtains within experience. But experience admittedly shows discontinuity; and, what is more important, some experiences would apparently lose their significance if they were not discontinuous. Their novelty, their disrupting and revolutionary force, is just what makes us value them. Is there any good empirical evidence to show that discontinuity is necessarily an imperfection and an incident of finitude? In a word, has the last trace of rationalism quite departed from the idealist's conception of coherence, as for example when Professor Bosanquet says of the 'Laws of Thought,' "We class them not as principles of intelligence apart from experience, but as principles of science or of rational experience as such, discoverable by analysis in every minutest portion of its texture, and capable of being regarded by a very easy abstraction as essential to its *existence* as contrasted with its special *significance*." Is it quite made out that there are laws 'discoverable in every minutest portion' of experience? In general, is not the tendency of idealism to discredit one phase of experience as an imperfection of the finite mind and to exalt another as an approximation to absolute truth the lineal descendant of the rationalist's distinction between necessary and contingent truths?

This brings us naturally to the second question, viz., whether the idealist's coherence is quite the same as continuity concretely understood. It is no accident presumably that reality for the idealist is ultimately timeless, or that change and creation are concepts that must finally be superseded by metaphysics. On the contrary, it has been amply proved both by idealists and their critics that this is the true logic of the position. Professor Bosanguet accepts the position with the utmost frankness. Genetic logic can be for him only a history of opinion.2 "The formation of new reality, as a bona fide addition to the universe of what was not in it before, seems to me a contradiction in terms."3 "In working with it [teleology], we substitute the idea of perfection or the whole—a logical or metaphysical, nontemporal, and religious idea—for that of de facto purpose—a psychological, temporal, and ethical idea."4 And the 'great and ultimate test of a philosophy' is its ability to unite 'individual endeavour and the modification of things' with the belief in a perfect and timeless real.⁵ Reason itself he regards as creative.⁶ in fact the only strictly creative force in the universe,7 but what is creation precisely without novelty? Can even the most complete assimilation of identity and difference in a logical universal do justice to concrete experience if it has to dispense with temporal order? Throughout his discussion of this question, as well

¹ Vol. II, p. 216.

² Vol. II, pp. 243 ff.

³ Vol. II, p. 249.

⁴ Individuality and Value, p. 127.

⁵ Vol. II, p. 269.

⁸ Individuality and Value, Lecture IX.

⁷ Vol. II, p. 239.

as of the question of purpose, Professor Bosanquet regards the temporal discreteness of these experiences as obscuring their significance. The more perfectly their significance is conceived. the less the order of time is essential to them. But is this really the case? No one would deny that novelty without significance is barren, but it does not follow that novelty itself is therefore without significance and must ultimately be translated into terms of something which is not really novelty. Even so fundamental an experience as moral development has to be superseded, as Professor Bosanguet himself declares, and it is exceedingly difficult to see where metaphysics is to find any experience at all. that it can regard as typical of its timeless reality. The idealist really plays into the hands of the anti-intellectualist when he thus admits the incapacity of meaning to deal with time, and no 'true notion of identity' can remove all the sting from Professor Bergson's argument so long as this position is maintained.

We have now discussed at some length the consequences of the pragmatist's insistence upon the rôle of the problem in the guidance of thought. The question is really a phase of a still broader one,—the place of selective attention in our experience, and this question is closely connected with the problem of purpose. It is interesting to notice Professor Bosanquet's treatment of attention, or perhaps one should say his tendency to neglect it. His references to it are scattering because it presents no points of contact with the coherence theory. In fact, it might plausibly be maintained that the coherence theory can be regarded as a sufficient logical theory only so long as attention is omitted. But his view of selective attention is clear enough in his discussion of a special case of it,—the pursuit of an end. first the following passage from Individuality and Value, which is clearer perhaps than any that can be quoted from the Logic: "It is obvious that no such ascription of ultimate value to a particular class of creatures nor to a particular moment in time can be justified as an ultimate conception. It rests on the analogy of the choice of a finite being, compelled, because finite, to exercise selection within the universe. It is an attempt to

¹ Individuality and Value, Lecture IV.

apply the principle of subordination of means to end to a system within which we can recognize no necessity, and can conceive no clue, for the distinct being of ends or of means. A finite being selects a possible value, and out of the resources which he can find in his world further selects the instruments by help of which he proposes to make it actual. But we cannot conceive that a perfect reality is divided into ends which have value, and means which a limitation of resources compels to be employed to realize them. Such a conception is drawn from the analogy of the finite contriver."

The point to be noted here is the attitude toward selective attention. In any given human situation, the superior importance which characterizes one item of that experience as the 'end' is a mark of the partiality and imperfection of that experience. Selection is essential to the finite mind and the mark of its finitude. The fact that our interests are limited shows the contingence of our minds but, singularly enough, the interests that we have show our participation in reality,² a view of the matter that would be more plausible if the limitation of attention did not seem to be connected with the clearness of the things attended to. The plain fact is that not only is every experience selective but that the clearness and efficiency of consciousness depends upon this selection. Consciousness characteristically has its focus and its penumbra, its high lights and its shades, and surely the distinguishing between the clear and the vague is all one process. It cannot be regarded in one of its aspects as an evidence of strength and in its other as an evidence of impotence. And, moreover, so far from the elimination of selection being a sign of advance in experience, as Professor Bosanquet seems to believe, it is quite the reverse. The only consciousness which is not obviously selective is a state of semi-coma where all processes have relatively the same dead level of vagueness and lack of meaning. This capacity to neglect the unimportant, to distinguish the relevant from the irrelevant, to mark clearly

¹ P. 126. Cf. other passages of similar import in Lecture VIII, passim, and Lecture II, Part 7, Section iii, where a purpose is said to be "nothing but a want," "a partial element of a logical whole which is . . . drawn out in time."

² Individuality and Value, p. 300.

the significant by making itself impervious to, the insignificant, is one of the most fundamental characteristics of our experience, and one is tempted to hazard the conjecture that anything which does not possess this mark, such as the Absolute, for example, is not recognizable as an experience.

How, then, can it be a necessity of logical and metaphysical theory to minimize this selective process, as Professor Bosanquet says purpose must be transcended in a timeless system in which there is no distinction of means and end. For surely logical relevance itself is inseparable from precisely this fact of selective attention. An all-inclusive system is a contradiction in terms, because we have no criterion of system except just this subordination, this distinction of clearness, this emphasis of one part at the expense of others. Within itself the system is hierarchic: there are degrees of relevance between different parts. And likewise the system is circumscribed by positive irrelevance. The limits of the system are defined, so to speak, by the circle of things which 'do not matter' and which therefore do not need to be taken into consideration. Otherwise the conception of system is unusable and consequently unmeaning. The superior value of certain elements in any human situation, their relation to purpose and end, are at bottom the secret of that coherence and system on which Professor Bosanquet relies. Hence the pragmatist's reference to specific purposes. The question is not whether 'all experience aspires to be a whole,' but whether, apart from selection, emphasis, teleological interrelation, there is any way of conceiving a whole. If this is the case, it must then be true that the coherence theory, like the correspondence theory, is only partially true. Coherence holds within certain limits which cannot themselves be defined by coherence. If this means a dualism between thought and its occasions, then that dualism must be accepted as an element of our theory of knowledge.

The point may be further illustrated by a reference to Professor Bosanquet's treatment of purpose, which seems to show some change, of emphasis at least, between the earlier edition of the *Logic* and the two works recently published. It will be remembered that in his discussion of Concrete Systematic In-

ference 1 Professor Bosanquet regarded this class of inferences as having the 'unmistakable differentia' of ascribing real teleology to the content analyzed. The purpose is the essence, as in the tool or the machine. Here we have the true type of systematic inference, for here the real ground of the inference is explicit. Coherence replaces conjunction because the teleological unity of the subject, which is conjectural or obscure in less developed types of judgment such as analogy, in the higher type becomes absolute and explicit.2 All this, as will be seen from the reference, is reprinted without change in the new edition, as is also the section on judgments of value, which follows naturally here as a most important case of real teleology. But to the latter section Professor Bosanquet now appends a footnote³ which represents his later consideration of this question, the consideration which is to be found set forth at length in his Individuality and Value. Teleology is fatally defective because it requires the singling out of a part as the 'end,' a defect which must be removed at the expense of destroyingthe conception of teleology. The more ultimate conception is the idea of the whole or Individuality. In a word, then, the change which Professor Bosanguet has made in his theory since the publication of the first edition of the Logic is something like this. In the earlier work purpose was regarded as the essence of real system; the one case in which systematic inference in its highest form was possible was the case in which a purpose was so embodied in the content as to form explicitly the ground of the inference. The system depended on teleology. Now it appears, on the contrary, that teleology is merely an imperfect case of logical system and the development of the theory of the concrete universal requires the absorption of purposes in a system so complete that the specification of any part as end is impossible. The latter position may perhaps be the more consistent development of the coherence theory of truth, but is not, after all, the earlier position the more tenable? For does not the elimination of purpose mean also the elimination of system? The humanist, no doubt, will be con-

¹ Book II, Ch. VI.

² Second ed., Vol. II, pp. 185 ff.

³ Vol. II, p. 199; cf. also the notes on p. 99 and p. 200, and Vol. I, p. 222.

vinced that the almost naturalistic tone of *Individuality and* Value¹ is a reversion of idealism to its true type.

Finally, even after all its critics have been answered, the ultimate breakdown of the coherence theory is admitted. Professor Bosanquet denies, it is true, Mr. Joachim's charge that in the end the coherence theory falls back upon correspondence.² Truth never is tested by anything except truth and hence cannot be said to correspond to anything beyond itself, but nevertheless the coherence theory does break down. "The failure or limitation of the coherence theory of truth lies then, I urge, simply in the fact that judgment, to which it belongs, is an appearance of reality in relational form, doing its best to attain individuality in that form, which up to a certain point it achieves, but which, because it is relational and points endlessly beyond itself for completion, it can never thoroughly attain."3 And Professor Bosanguet now states his acceptance, with some qualification, of Mr. Bradley's view of the relation of thought to reality.4 Truth does not pretend to be the perfect and all-inclusive experience. At the last step, "to get away anything truer you would have to pass beyond truth into another form of reality." But is there not an element of improbability in this representation of truth as an eternal effort to do something which it can never quite do? If truth is the whole, and if totality is the ultimate principle of individuality and value, and if thought is just the nisus of experience toward its completeness, what is this more perfect experience to which judgment is not the key? Is it altogether perverse to suspect that the defect is not in the relational form of judgment but in the coherence theory of truth? Is it not really more probable that the concrete universal is an inadequate logical principle? And after all is Professor Bosanquet's admission of limitation so entirely different from the dualism of thought and its occasions which is set down to the discredit of pragmatism? The difference seems to be that the admission of limitation made

¹ Professor Bosanquet himself calls attention to this, p. 318.

² Book II, Ch. IX, Section 4.

⁸ Vol. II, p. 290.

⁴ Vol. II, p. 288, note b.

⁵ Vol. II, p. 292.

by Professor Bosanquet refers to ultimate failure, to failure at the point where thought seeks to transcend the finite and lead us to a non-relational experience, whereas the limitation of thought to occasions refers to an entirely commonplace occurrence, the seeming fact that any given thought process works within a circle of experience which it does not constitute. But in the latter case the limitation is not failure, because it is not supposed that the business of thought is to 'constitute a world.'

George H. Sabine.

LELAND STANFORD JR. UNIVERSITY.

HEGEL'S CRITICISMS OF FICHTE'S SUBJECTIVISM. I.

PHILOSOPHICAL systems are of a very complex nature and may consequently be regarded from many different points of view, varying with the interests of the individual and the particular problems and temper of the age. Ouite distinct from the question as to the exact meaning which thinkers may themselves have intended, is that regarding the light which their systems of thought throw on the formulation and solution of living problems. When we consider also the fact of an increasing knowledge of source material and of more perfect methods of attack and investigation, it is not surprising that the history of philosophy must, to a certain extent at least, be rewritten by every age. It is only natural, therefore, that even the account which Hegel has given is no longer regarded as entirely satisfactory. Its interpretations are determined by certain conceptions of the nature of philosophy which can no longer be accepted without reservation; they suffer, moreover, in many cases, both from an inadequate knowledge of facts and from the exasperating way in which these are forced into more or less artificial moulds. In spite of this, however, there is still much to learn from him who gave the first great impetus to the historical approach to philosophy. Particularly true is this in the case of his criticisms of the philosophy of Fichte.

Fichte's thought is again assuming a place of importance in philosophical discussion and his message finds an accordant response in the strenuous and moralistic age in which we live. Human life, it tells us, and our whole world of experience rest on the moral nature of man, on a system of ideals and of values. Back of all *Sein* is an eternal and transcendent *Sollen*; reality and worth depend on the degree of conformability to this imperative and the measure of usefulness in realizing its demands. This, in brief and stripped of certain inconsistencies, is Fichte's doctrine of the primacy of the practical reason—the doctrine which,

though frequently overlooked by his expositors, really constitutes the heart of his philosophy.

A more striking feature of Fichte's philosophy is the insistent attempt to exhibit the various principles and aspects of experience as interrelated parts of an organic whole and as logically necessary for the possibility of self-consciousness. Historical conditions, no doubt, were largely determinant here; besides, the man aus einem Gusz must have a philosophy aus einem Stück. The question regarding the nature of Fichte's ultimate principle, therefore, and the consistency with which the system is developed from it, is of fundamental importance, and critics still express the widest disagreement concerning it.

Hegel has taken account of both these aspects of Fichte's thought. Again and again in his most important works he recurs to a criticism of the doctrine of Sollen.1 His discussions of Fichte's fundamental principle and the rôle this plays in the construction of the system are, perhaps, less familiar. He touches upon the subject, of course, in his history of philosophy, but the more important and fuller treatment must be sought in his earlier treatises, Glauben und Wissen, and Differenz des Fichteschen und Schellingschen Systems. From these sadly neglected essays a better understanding may be gained of Hegel's conception of the nature and method of philosophy and of the history of philosophy, as well as of his views concerning the philosophical significance of the principle of contradiction, the important distinction between pure thought and absolute thought, the necessity of avoiding Formalismus and of regarding conception and thinking as essentially processes of concretion. The more direct discussions of Fichte are of particular value because Hegel does not hurl criticisms at random from some dogmatically assumed, external point of view, but attempts to trace faithfully the logical course of the system and to determine what difficulties are really immanent in it. Thus we are led on to the philosophical position which Hegel himself assumed, and are thus prepared to understand its true meaning and spirit as well as to estimate its shortcomings and its failures. Such a method of

¹ Cf. e. g., S. W., I, pp. 222 ff.; III, pp. 140 ff.; VI, pp. 11, 186; XV, pp. 633 ff.

treatment, on the other hand, cannot but prove helpful also for an understanding of Fichte, and had critics taken due account of it we might have been spared many of the expositions with which we are now afflicted. A brief survey of the various interpretations that have been given of Fichte will not only be of value on its own account but will also help us to see precisely what Hegel meant when he charged Fichte, as well as Kant and Jacobi, with subjectivism, and will define Hegel's criticisms in relation to the views of other expositors.

Fichte's own contemporaries offered the most divergent interpretations of his fundamental principle, and modern critics parallel all of these. Unable to understand by the ego anything but the empirical self or individual person, the humorists of the day ridiculed the bombast of the professor at Iena who regarded himself as absolute, and wondered how his good wife could tolerate such pretensions on his part. Even Schelling, though this statement is in contradiction to other things that he has said, asserts that in Fichte's earlier period the ultimate principle is found "in the ego and, indeed, in the ego of human consciousness";1 "the ego of each individual is the only substance" (for it). And when the enraged student societies raided Fichte's house, breaking windows and demolishing doors, Goethe, we remember, remarked that it was certainly a forcible demonstration of the existence of a non-ego. In recent times Sturt has expressed himself to the same effect. Fichte, he says, "is the great exemplar of a metaphysician who would create his own universe; and how unconvincing he is!" Even Pfleiderer has said: "The Wissenschaftslehre starts from the ego whose consciousness had been the object of Kant's criticism, i. e., from the empirical human ego, and makes the whole objective world a phenomenon of its consciousness, placed there by itself; and the human ego thus appears as the creator of the world."4

¹ S. W., Zw. Abt., III, p. 51.

² Ibid., p. 54.

⁸ Idola Theatri, p. 139. The same interpretation underlies Stirner's contention that Fichte's philosophy justifies us in behaving exactly as we like. "Cannot," he asks, "the ego which creates the universe do what it will with its own?" Quoted by Sturt, ibid., p. 143.

⁴ The Philosophy of Religion, I, p. 278. A similar view is advanced by Haym, Hegel und seine Zeit, p. 129.

A second group of writers, approaching Fichte with Kantian distinctions and Kantian terminology in mind, have found in him the doctrine that the formal element of experience alone is ultimately real, the material element being illusory, or phenomenal, or, at any rate, dependent on, and deducible from, the form of knowledge. Kant, for example, repudiated the Wissenschaftslehre of Fichte on the ground that a "pure Wissenschaftslehre is nothing more or less than mere logic which does not carry its principles beyond legitimate bounds to the material element of knowledge, but, as pure logic, abstracts from the content of knowledge." Reinhold too seems to have found in Fichte the doctrine of "absolute subjectivity." His interpretation, however, at least had the merit of having provoked Hegel's first essay on the subject. Nevertheless, the interpretation survived and still prevails in the works of neo-Kantian writers as a stock argument against the doctrines of post-Kantian idealism. In America this view is represented by Burt, who tells us, in summing up his discussion, that "the system of Fichte is a rationalistic" attempt at the union of the subjective and objective elements of experience by the deduction of the latter from the former."2

A third class of critics refuse to go to this extreme. They are inclined to believe that, in some of his works at least, Fichte does not pass beyond the legitimate bounds of the critical philosophy by attempting to derive the matter of experience from its form, but that his chief concern was to complete the work of Kant by exhibiting the necessary and systematic connection of the various categories and faculties of the mind, or, in the opinion of others, by developing certain important conceptions underlying the philosophy of history and the logic of the historical sciences. The former was the task which Reinhold had set himself some years earlier and therefore Fries writes: "We must concede to Reinhold the discovery of critical rationalism (as one might well designate his Elementarphilosophie and the Wissenschaftslehre) which Fichte only developed further. The great problem which both alike tried to solve is the discovery of a first, all-sufficient principle of human knowledge, and it is in just this respect that

¹ S. W. (Hartenstein ed.), VIII, p. 600.

² A History of Philosophy, II, p. 40.

Reinhold supplemented the Kantian Critique." It should be mentioned, however, that, in addition to this critical rationalism, Fries finds confusing threads of dogmatic rationalism in Fichte, but believes that in the course of the various expositions these gradually became disentangled.2 The spirit of criticism, he believes, prevailed as far as Fichte's own conception and account of the nature of the Wissenschaftslehre are concerned, but dogmatism came to predominate in the actual development of the system. Lask has recently attempted to prove that Fichte's system, so far from being unitary as many have urged³ against such positions as that of Erdmann,4 really manifests a radical change even in the so called first period. From a position very similar to that of Hegel, he holds, Fichte returned in 1797 to the critical standpoint of Kant, having come to a clear recognition of the absolute distinction and opposition of form and content within experience.5

In still other expositions of Fichte we are told that the fundamental principle which expresses the unity of the system is the ego of pure self-consciousness in its abstraction from the empirical consciousness of the individual. This ego is not pure subject but subject-object, such as we experience in introspection or intellectual intuition. As thus stated the principle does not really differ from the formal element of experience, being, in fact, but another expression for the transcendental unity of apperception which occurs as the *Ich denke* in all conscious experience. But other elements are fused with it so that, instead of being epistemological, it becomes metaphysico-psychological in character. For, it is identified with the principles of ration-

¹ Reinhold, Fichte, Schelling, p. 214. Cf. also pp. 72 f.

² Ibid., pp. 215 f.

⁸ Cf. particularly Loewe's classic work Die Philosophie Fichtes nach dem Gesammtergebnisse ihrer Entwickelung; Fortlage, Genetische Geschichte der Philosophie seit Kant, pp. 136 ff.; Kuno Fischer, Geschichte der neueren Philosophie, V, pp. 779 ff., 827 ff.; A. B. Thompson, The Unity of Fichte's Doctrine of Knowledge; Maria Raich, Fichte, seine Ethik und seine Stellung zum Problem des Individualismus.

⁴ History of Philosophy (tr. by W. S. Hough), II, pp. 496 f. Due to the influence particularly of Loewe, it should be noticed, Erdmann's position is here not as extreme as in the earlier edition of the work.

⁶ Cf. Lask's chapters on this period in the second part of his volume Fichtes Idealismus und die Geschichte, particularly, pp. 109 ff., 116 ff., 132 ff., 167 ff.

ality and of freedom in their conflict to subdue to their own ends a natural order of mechanical law; it is regarded as the moral activity which must strive to overcome all that is foreign to it and to attain to the ideal which practical reason demands. Fichte, in other words, has simply cast into philosophical form the deepest experience of his own life, the impulse to achievement and the pressing need for the exercise of moral activity. Adickes has given forceful expression to this view.¹ This is the way in which Fichte's philosophy appealed to his own students and is the basis of such remarks as that of Forberg that "Fichte really aims to act on the world by his philosophy."²

Fichte's ultimate principle is conceived by a fifth group of expositors not as the mere subject of knowledge but as subjective subject-object. Fichte's ego, that is to say, is an identity of subject and object, of thought and being, but of object or being only in so far as these exist for knowledge, that is, for the consciousness of the subject. Here again, as in the case of the other groups which we have mentioned, writers manifest certain differences of thought and emphasis. Loewe, for example, though finding certain similarities between the systems of Fichte and Hegel, contrasts them by saying: "The Wissenschaftslehre, indeed, not only fails ever to attain to true objectivity but one may even affirm, without doing it an injustice, that in reality this is not at all its intention. . . . The absolute activity of Fichte, how-

¹ German Kantian Bibliography, PHILOSOPHICAL REVIEW, Vol. III, pp. 714 f. Other writers insist that much of the confusion of Fichte's thought is due to the fact that he employs the ego now as an epistemological and again as a metaphysical or an ethical principle without attempting to reconcile the two views or even perhaps being conscious of the difficulties. Two critics particularly have attempted to prove that the ultimate principle of thought from which a system of purely logical principles is deduced, shifts in character without warning or explanation and becomes the source of moral principles and moral postulates which are then themselves confused with that which is logically or theoretically necessary. Cf. Guehloff, Der transcendentale Idealismus J. G. Fichtes, pp. 16 ff.; Fuchs, Vom Werden dreier Denker, pp. 88 ff. Even though one might hesitate to accept this view in just the form that it is presented, it must be said that Fichte did not always distinguish clearly between the relation of form and content within experience, that of the absolute principle of the Wissenschaftslehre to the remaining principles, that of the practical ego to the world in which it lives, and that of the empirical ego to forces in nature that seem hostile to it and to defeat its ends.

² Fichtes Leben u. l. Briefwechsel, I, p. 220.

ever its designation may change, is and ever remains productive imagination and, accordingly, never emerges from the field of presentation, and thus of subjectivity; being is for it merely self-appearance (Sicherscheinen) and so a continuous reflection of itself in and to itself." Other critics state the case somewhat differently. Besides the 'ideal' aspect of objects, they insist, there is a 'real' aspect, their an sich, and this lies wholly external to the ego of Fichte. Or, expressed otherwise, Fichte does not "break through to nature." A non-ego, an Anstoss, a thing in itself, in some form or other, be it only as the "abstract form of opposition," ever remains foreign to the ultimate principle; the ego can never overcome the condition of limitation; for it there is ever an infinite beyond.²

Schiller hints at still another thought when he refers to the Wissenschaftslehre as subjektivirter Spinozismus. The meaning of this expression is brought out clearly among other things in a passage from Schelling. "Fichte's true significance consists in his having been the antithesis of Spinoza in so far as absolute substance, for the latter, was mere lifeless and inactive object. This step of having defined infinite substance as ego and accordingly, in general, as subject-object (for only that is ego which is subject and object of itself), this step is in itself so important that one is led to forget what resulted from it in Fichte's own treatment. In the ego is contained the principle of necessary (substantial) movement; the ego is not a static thing but is necessarily and continuously self-determining. Ficlite, however, does not employ it in this way. For him the ego itself does not proceed through the various steps of the necessary process by which it attains to self-consciousness, passing through the stage of nature whereby alone this can become truly posited in the ego: it is not the ego which moves but, on the contrary, everything is attached to the ego in a purely external way through subjective reflection, the reflection of the philosopher; it is not secured by the immanent evolution

¹ Die Philosophie Fichtes nach dem Gesammtergebnisse ihrer Entwickelung, pp. 238 f.

² Readers of Hegel will be familiar with this line of thought. Bensow points out the similarity of Fichte's non-ego to the thing in itself of Kant in his monograph Zu Fichtes Lehre vom Nicht-Ich, pp. 27 f., 32 f., 37 f.

of the ego, that is, not by the movement of the object itself. And this subjective process of attaching things to the principle occurs through a reflection so capricious and accidental in its nature that it is difficult . . . to recognize the thread that runs through the whole." In spite of this external procedure, however, Schelling maintains that Fichte's "great and immemorable service will always remain that of having been the first to have grasped the idea of a completely a priori science." Finally, we notice a seventh interpretation. Passing over

1 S. W., Zw. Abt., III, p. 54. Classifications of philosophical views must inevitably purchase their sharpness of outline and their definiteness at the cost of a certain artificiality. Critics, moreover, are not always self-consistent. This, as we have already noticed, is the case with Schelling; and Fries, it may be said, suggests at times (cf. op. cit., p. 54) our fifth interpretation as well as that which we have described above. With reference to Schelling it should perhaps be stated that he has been ascribed a view which would place him in our second group of expositors. Thus, Miss Talbot says: "There can be little doubt, indeed, that many of his [Fichte's] contemporaries interpreted him as teaching that the ultimate principle is the formal or subjective aspect of experience. Schelling, e.g., apparently understood him in this way," etc. (The Fundamental Principle of Fichte's Philosophy, p. 26.) The present writer would challenge this statement. In so far as Schelling has expressed views other than those we have already quoted, he would incline to the fifth mentioned interpretation of Fichte. In support of her position Miss Talbot quotes the following passage from the Darstellung: "But now it may very well be that the idealism, e. g., which Fichte at first worked out and which even now he still defends, has a significance quite different from mine. Fichte, e. g., seems to have regarded idealism in a wholly subjective sense, whereas I regard it in an objective sense. Fichte in his idealism seems to have remained at the standpoint of reflection, while I, with my principle of idealism, have placed myself at the standpoint of production. Idealism in the subjective sense might say, 'The Ego is all'; idealism in the objective sense would reverse this and say, 'All is the Ego." (Ibid., p. 26, n.) But will this passage bear the interpretation which Miss Talbot puts upon it? The second and fourth sentences indicate our fifth interpretation as well as the second. Referring to the original we find that the second and third sentences of the translation are there separated merely by a semicolon and the next follows after a colon, introduced by the remark (omitted in the translation), "To express this distinction in the most intelligible way, idealism," etc. It, therefore, does not seem unreasonable to regard the distinction between the standpoints of reflection and production as a key to Schelling's meaning in this case, and what he intends by this we have just heard in his own words quoted from a somewhat later work. If this contention is not granted, we might refuse to lay great stress on the passage in the Darstellung since it speaks throughout only in hypothetical terms (Fichte könnte gedacht haben) and adds in the sentence following those quoted: "I do not say that this is actually true but state it only as a possibility."

² Ibid., p. 51.

the earlier writers who discerned in Fichte (and in Kant) a genuinely speculative principle, let us turn at once to one who spoke without their reservations. In the preface to his father's works, the younger Fichte writes: "Thus, this pure, all-creating, absolute unity which posits all things both subjective and objective in itself, is evidently the same principle which Schelling, with the same designation, indeed, called the identity of the subjective and the objective and which also constitutes the content of Hegel's logic." Fichte is "the originator of the principle . . . in its complete determinateness, not merely, as has been supposed, of the expression or word for it."2 Of recent writers no one has accepted this interpretation more unreservedly than Miss E. B. Talbot. Her monograph throughout emphasizes the similarity of Fichte's doctrine to that of Hegel. "It is perfectly true that the doctrine of the transcendental Ego suggests to us the way in which its fundamental defects may be corrected, but it is equally true that Kant himself refuses to make the correction. We know that someone, coming after him, conceived the idea of trying to show that human experience, in its inmost essence, must be that very unity of form and content which is the ideal of all its striving. This is what Fichte and Hegel attempted to do, but it is precisely in this direction that they went beyond anything that Kant ever dreamed of."3 In Fichte are found "the germs of Hegel's conception of the Idea which realizes itself through successively higher stages, the universal which develops by becoming more concrete";4 furthermore, the "dialectic nature of thought, which Hegel makes the basis of his system, is thus recognized by Fichte, though he does not work it out so fully as his successor did."5

Thus we have the widest imaginable divergence of interpretation in which the philosophy of Fichte ranges from mere *Schwärmerei* to the highest level of speculation. And all of these views except the last would justify a charge of subjectivism. The first

¹ S. W., I, xix.

² Ibid.

⁸ The Fundamental Principle of Fichte's Philosophy, p. 136.

⁴ Ibid., p. 41.

⁵ Ibid., p. 32.

one mentioned is, sad to say, the one most frequently expressed. We may now proceed, however, to rule it summarily out of court. Its status was determined as decisively as anyone could wish five decades ago when Loewe cited refutations from Fichte's own pen, dating from his pre-Jena period to his latest works.1 To add other quotations or to submit the proof which the principles and the logic of the system afford, would be an easy though an unnecessary task. The quotations that have been urged as making for the view are first torn from their context and then seen through other eyes than those of Fichte. And yet the present writer is not inclined to deal harshly even with this interpretation in view of certain extenuating circumstances. The word 'ego' inevitably suggests any one of a number of things; Fichte's terminology, moreover, constantly changes, shifting even in the course of a single page;2 he employs in his metaphysical and epistemological discussions terms whose significance is derived from empirical consciousness and which, in the absence of definition, therefore, naturally suggest the most extreme subjectivism; he approaches his subject from starting points which vary from the highest abstraction of the Grundlage to the conscious experience of the individual in the Einleitungen; he, of all great philosophers, most lacks technique and the mental discipline that comes from sympathetic contact with, and study of, other thinkers: and, finally, let us admit it, his own thought was involved in most serious confusions and perplexing entanglements against which he continually struggled but from which he never entirely succeeded in freeing himself.

Rejecting, then, the first interpretation as false, we still have the claims of six others to adjudicate. Let us here call Hegel to our aid. "The pure thinking of itself, the identity of subject and object, in the form ego = ego, is the principle of the Fichtean system; and, if we limit ourselves to the immediate consideration of this principle, just as we might do in the Kantian philosophy with the transcendental principle which underlies the deduction

¹ Die Philosophie Fichtes, etc., pp. 238 ff.

² Fichte's statement is interesting, and it is characteristic of the man, that he sought "as much as possible to avoid a fixed terminology" (S. W., I, p. 87), "not wishing to explain everything but to leave something for the thought of the reader." (S. W., I, 89.)

of the categories, we have the true principle of speculation boldly expressed. As soon, however, as the speculation passes from the conception of itself which it sets up and forms itself into a system, it abandons itself and its principle and does not again return to them.) It delivers reason into the hands of understanding, and passes over into the series of the finite in consciousness. from which it does not again reconstruct itself into an identity. and true infinity. The principle itself, transcendental intuition, 1 thus attains the false position of something that is opposed to the manifold deduced from it. The absolute principle of the system reveals itself only in the form of its appearance, comprehended by philosophical reflection; and this determinateness which is given it by reflection, that is, finitude and opposition to another, is not annulled. The principle, subject-object, proves to be a subjective subject-object. That which is deduced from it hereby assumes the form of a condition of pure consciousness, ego = ego, and pure consciousness itself the form of something conditioned by an objective infinity, namely, an infinite temporal process. In this process transcendental intuition loses itself and the ego does not attain to an absolute intuition of itself; thus ego = ego is transformed into the principle ego ought to equal ego."2

This passage gives us an excellent epitome of Hegel's earliest essay on Fichte. On the one hand, credit is given Fichte for having discovered in Kant, and having then given original expression to the principle that underlies all true speculative philosophy. On the other hand, however, the charge is raised that this principle did not prove fundamental or genuinely operative in the construction of the system, which consequently never succeeds in transcending the standpoint of subjectivism. The principle of unity, that is, of the real identity of subject and object, is not to be found in Fichte's actual philosophical system. Here transcendental intuition is displaced by a principle (some-

¹ By this expression Hegel means the unity of thought and being, or of universal and particular. "In transcendental knowing both are united, being and intelligence. Thus, transcendental knowing and transcendental intuition are one and the same; the difference in expression merely points to the predominance of the ideal or real factor." (Hegel's S. W., I, p. 195 f.)

² S. W., I, pp. 163 f.

times itself called intellectual intuition) of which we can become conscious in intellectual intuition and this, as is clear, is never self-complete but occurs only in connection with empirical or sensuous intuition. The principle of intellectual intuition, therefore, is an abstraction and cannot be said to condition empirical intuition any more truthfully than the latter conditions it. The only 'absolute' of the system, therefore, is an object of philosophical reflection, and proves to be finite in character, since it is conditioned by a particularity and a reality that fall beyond it. Such an absolute is not a true subject-object, but a subjective subject-object; external to it is the real or an sich aspect of things which, Hegel sometimes insists, should be regarded as objective subject-object. It is the identity of these two, distinct and yet unified, which constitutes the fundamental principle of a speculative or an 'absolute' philosophy. To this principle, however, Fichte's system never rises. It attains only to a consciousness of its own impotence and its inability ever to reach its ideal, the absolute. The true principle of philosophy, ego = ego, occurs only in the form 'ego ought to equal ego.'

In his later treatise, Glauben und Wissen (which, however, stands first in the Werke) Hegel dwells exclusively on this subjective character of Fichte's philosophy and emphasizes it even more strongly than in the earlier essay. This probably does not indicate a change of heart so much as a difference in purpose suggested by the subjects of the essays. It should be noticed, however, that Hegel's discussion now centers particularly about the Bestimmung des Menschen, which brings certain ideas of Fichte's earlier writings to a sharper focus. We present the essential points of the criticism in Hegel's own words. "This critical idealism which Fichte emphasized . . . is formal in character. The universal aspect of the world opposed to the subject is posited as universal, as ideal, as thinking, and thus as ego; but the particular aspect necessarily remains . . . and thus the most interesting aspect of the objective world, the aspect of its reality, remains unexplained. . . . And it is immaterial whether this reality is an infinite number of sensations1 or of qualities

As held by Fichte. Cf. for example, S. W., II, pp. 200 ff.

of things. The practical part of the Wissenschaftslehre, indeed, pretends that the reality which is absolute from the theoretical point of view, things as they are in themselves, should have been constructed from the practical point of view of what we ought to make of them. But . . . nothing is done with this problem . . . except to analyze the formal conception of the ought. External to this formal principle, however, is feeling itself as a real system. . . . The manifoldness of reality appears as an incomprehensible, original determinateness and an empirical necessity. Particularity and difference as such constitute an absolute. The standpoint for this reality is the empirical standpoint of every individual. . . . The pure concept or empty thinking acquires its content or determinateness and, conversely, the determinateness acquires the indeterminateness in an incomprehensible manner. . . . If, according to Fichtean idealism, the ego perceives and intuits not objects but merely its own intuiting and perceiving, and knows only of its knowing, then pure, empty activity, purely free action, is that which is fundamental and alone certain; and the ego is absolutely nothing but pure knowing and pure intuition and the perception ego = ego. . . . Fichte's position, however, that we know only knowing, that is, only pure identity, itself prepared a way to particularity through its own formalism. is recognized that the only truth and certainty, pure self-consciousness and pure knowing, are incomplete and conditioned by something other, that is, that the absolute of the system is not absolute and that for this very reason it is necessary to proceed to something other. This . . . is the principle underlying the deduction of the sense world. The absolute emptiness from which we start, has, because of its absolute want, the advantage of containing an immanent and immediate necessity of completing itself, of being obliged to proceed to another and from this to other others into an infinite objective world. . . . In this way the principle plays a double rôle, now that of being absolute, and again that of being absolutely finite, in which capacity it can become a point of departure for the whole infinity of empirical experience."1

¹S. W. I pp. 118-121.

These criticisms, although not necessarily excluding the views held by the fourth and sixth groups, are essentially an elaboration of the fifth mentioned interpretation and, in the opinion of the present writer, they are fundamentally sound. That Fichteinsisted throughout on unity and on the necessity of basing our entire experience and therefore the whole system of philosophy on a single absolute principle, all, no doubt, are agreed. And various passages can be pointed out, particularly in his later works, which go to show that he conceived this fundamental principle as identity of subject and object, that is, of 'being' and 'thinking,' or 'consciousness.' Prior to Kant, he naïvely writes in 1813, all philosophers found the absolute principle of reality in being, "in the lifeless thing, as thing." But it must be clear to all who reflect that "absolutely all being implies a thinking or a consciousness of it; mere being, therefore, is always only one factor in relation to a second factor, the thinking of it, and thus a member of an original and more ultimate disjunction. . . . Absolute unity, therefore, is to be found in being no more than in the opposing consciousness, in the thing no more than in the presentation of the thing. It consists in the absolute unity and inseparability of the two . . . which also constitutes the principle of their disjunction." In his earlier period Fichte is far less definite and unambiguous with the exception perhaps of a few statements in the Sittenlehre of 1798. Here we are told that the problem of philosophy cannot be solved until there is found "a point of unity in which the objective and the subjective are not separated at all but are absolutely one." Such a point, Fichte maintains, his system establishes in its principle of "egohood, intelligence, or reason."2 "Knowing and being are not separated outside of consciousness and independently of it, but only within consciousness, since this separation is the condition of the possibility of all consciousness. . . . The unity which is separated and which thus lies at the basis of all consciousness and by reason of which the subjective and the objective elements in consciousness are immediately posited as one, is absolutely X, that is, can in no wise enter consciousness as a simple unity."3

¹ Nachgelassene Werke, II, p. 95 f.

² S. W., IV, p. 1.

¹ Ibid. p. 5.

These passages from the Sittenlehre are really not as unambiguous as they may appear to one who is not initiated in Fichte's thought, since, as we shall see, much depends upon the significance which is attached to the words 'objective' and 'being.' The meaning which the bare sentences suggest, however, finds a certain corroboration in other lines of thought in the same work. We conclude, then, that there is some ground for holding that Fichte has given original and, possibly, independent expression to the principle of identity with which the names of Schelling and particularly of Hegel are most frequently associated. But several things must be remembered. In the first place, these philosophers were in such close contact during their earlier years that it is difficult to say just how much one may owe to the other, either consciously or unconsciously. It is, therefore, not at all unreasonable to hold that Fichte did not himself realize the full import of those passages in his earlier writings which are not essential to the main course of argument. His statements, it should be noticed, grow both more numerous and more definite in his later writings. Indeed, it is difficult to find any unambiguous expression of the doctrine before 1798, which is three years after the publication of Schelling's Vom Ich als Princip der Philosophie, where there are unmistakable evidences of a more objective viewpoint than is offered in the Grundlage of 1794. The passages, furthermore, in which Fichte maintains the principle of identity to which we have referred, are much less numerous than is held by those who are inclined to read Hegel into Fichte. Let us consider, to illustrate this contention, the following footnote which Fichte added in the second edition of the Grundlage (1802) explaining the nature of his fundamental principle. this means, in other words in which I have since expressed it, that the ego is necessarily identity of subject and object, subjectobject; and it is this absolutely without further mediation."1 Statements very similar to this occur much earlier in the writings of Fichte and are quite frequent. But are we justified in identifying the ego referred to with the principle of the unity of form and matter as is sometimes done? The context, in the opinion of

¹ S. W., I, p. 98, n.

the present writer, certainly forbids, as we trust will appear in the case of the quoted passage when we come to discuss the procedure of the Grundlage. Here we can only point briefly to other evidence. Fichte often bids the reader to turn his gaze inward that he may become aware in his own experience of the nature of egohood and of self-consciousness. This principle, it is pointed out, differs from all others and from all mere being in that it not only exists but knows of its own being, is not only object but subject and object at once, or subject-object. Thus, the ego which he is describing is not an original principle of identity which is "absolutely X" and "can in no wise enter consciousness," not the principle which antecedes consciousness and from which the disjunction of consciousness and being proceeds, but it is the principle of self-consciousness itself such as it reveals itself in intellectual intuition. As early as 1795 Fichte writes: "The procedure of the Wissenschaftslehre is as follows: It bids everyone observe what he (in entire abstraction from all individuality) does, and is in general and of necessity obliged to do, when he says, I. It asserts that everyone . . . will find that he posits himself, or, what may be clearer to some, that he is subject and object at once. In this absolute identity of subject and object, egohood consists. The ego is that which cannot be subject without being object in the same undivided act. . . . From this identity and from it alone without requiring the addition of anything further, the whole of philosophy proceeds. . . . Through it critical idealism is established at the very outset, the identity of ideality and reality; this is neither idealism, which regards the ego only as subject, nor dogmatism, which regards it only as object." A thought very similar to this pervades all of Fichte's earlier writings. No reader who approaches the Grundlage without prepossessions can avoid the impression that the absolute ego is conceived as that principle or activity of selfconsciousness which reveals itself in introspection, or, to use Fichte's term, intellectual intuition.2 The Recension des Aenesidemus had emphasized this character of the fundamental principle

¹ S. W., II, pp. 441 f.

² S. W., I, pp. 96 ff., 243 ff.

even prior to the Grundlage,1 and intellectual intuition is made the organon of philosophical knowledge throughout the Einleitungen and the Darstellung of 1797 as well.2 In marked contrast to this are the suggestions of the principle of identity in the Sittenlehre to which we have referred.3 "Egohood," we are here told, "consists in the absolute identity of the subjective and the objective, in the absolute unity of being and consciousness, of consciousness and being. . . . Is it possible for anyone to think this identity as himself? Assuredly not. For, to think one's self. one must make the very distinction between the subjective and the objective which is not to be made in this concept."4 We must, to state the point briefly, discriminate carefully between Fichte's use of the word 'object' as denoting one aspect of the principle of self-consciousness, and as signifying that being or reality which is correlative to the subject of experience and the principle of self-consciousness; and, similarly, between the ego which is revealed in intellectual intuition and the absolute X or simple unity which "can in no wise enter consciousness." If we bear this distinction in mind, we will find far less evidence than is frequently maintained for the assertion that Fichte was the first to give expression to the principle of speculative philosophy.

In turning, now, to a more direct examination of Fichte's method and thought—and we shall confine ourselves to that period which was of importance for the historical development of philosophy—we should distinguish between two kinds of writings. In most of the expositions of the Wissenschaftslehre, the Grundlage is introduced by, and read in the light of, the later Einleitungen as though these simply paralleled the former and certain parts of them could be inserted almost bodily wherever the Grundlage seemed perplexing or hard to make consistent. This procedure may have a certain pedagogical justification but it is apt to prove misleading. Even though Lask's contention of a radical change

¹ S. W., I, p. 16.

² S. W., I, pp. 448, 458 ff., 522 ff.

⁸ supra, p. 579.

⁴ S. W., IV, p. 42.

in philosophical position, to which we have referred, does not seem warranted, yet the treatises of 1797 have quite a different point of departure from the earlier works. Furthermore, the Grundlage, Grundriss, Naturrecht, Darstellung, and Sittenlehre, in presenting Fichte's actual philosophical system, start from its fundamental principle and develop the various phases of theoretical experience by means of elaborate deductions, thus exhibiting the true character and the specific interrelationships of the various parts and principles of the system. The two Einleitungen. on the other hand, aim to explain in the simplest possible way the problem and the method of the Wissenschaftslehre and to ward off certain misapprehensions; they make no claims to presenting a philosophy—their purpose is similar to that of the Begriff which is a "philosophizing concerning the philosophizing in the Wissenschaftslehre." Fichte's philosophy, as all others, should be judged primarily on the basis of the actual system rather than by what the writer may himself have said concerning the nature of this system or the method it aims to pursue. Since, however, the Einleitungen and the Begriff have received so important a place in exposition and argument, no examination of the Wissenschaftslehre will be satisfactory which neglects to consider what Fichte has to say in these treatises.

Due to historical conditions and temperament alike, Fichte's particular bête noire, as is perfectly evident from these treatises, was the 'thing-in-itself.' He realized its difficulties for a theory of knowledge and felt that it made impossible the freedom of the individual and all morality worthy of the name. To free philosophy, therefore, from the 'thing-in-itself' was one of the principal incentives of his thinking, and the same motive explains, in part at least, the particular method which he adopted. He agreed perfectly with the results of the Kantian philosophy as he understood them, but realized that these needed careful and thorough restatement if the misapprehensions concerning things in themselves were to be removed. Kant had raised the question: How is experience possible? and sought the answer in a careful analysis of the experience in question. He thus arrived at certain a priori

¹ supra, p. 570.

² S. W., I, p. 32.

forms of the mind, supreme among them the unity of self-consciousness, which appeared entirely distinct from the matter of experience. Quite naturally, therefore, the data of sense came to be regarded as derived from things in themselves external to mind. Thus, it was brought forcibly home to Fichte that "until one allowed the entire thing to arise before the vision of the thinker, dogmatism will not be pursued to its last retreat."1 To accomplish this he simply reversed the procedure of Kant. His question might fairly be stated as, How is self-consciousness possible? and his contention is that any serious attempt to answer ' this question leads regressively from condition to previous conditions without halt until we have reached the bounds of that system of experience which, to the man who lives it, appears as given. Thus "for a thorough-going idealism, the a priori and a posteriori are not at all two distinct things but are one and the same, representing only two points of view and differing in their manner of approach."2 What is given as a totality in actual experience is by the philosopher exhibited part by part in their necessary interconnectedness.

Thus the last vestige of the thing in itself seemed to Fichte to have been destroyed and the whole of experience shown to have its ground in an original and absolute principle of self-consciousness. And it might also appear, at first sight, that the fundamental principle of such a philosophy could not be other than the concrete identity of subject and object. That this is not the case, however, either with regard to Fichte's own conception of the Wissenschaftslehre or to the system itself, it remains for us to show, and thus also to determine the force of Hegel's criticisms of the Sollen and the nature of his advance over Fichte.

EDWARD L. SCHAUB.

THE STATE UNIVERSITY OF IOWA.

¹ S. W., I, p. 443.

² S. W., I, p. 447.

REVIEWS OF BOOKS.

Body and Mind: A History and a Defense of Animism. By WILLIAM McDougall. New York, The Macmillan Company, 1911.—pp. xix, 384.

Among certain philosophers the temptation has been strong to treat slightingly the problem of the interrelation of mind and body, by declaring that these offer no problem, since body and mind are but one and the same reality differently viewed. Among certain psychologists also the temptation has been almost as strong to slight the problem, but in a different way. The question has been answered, but upon a priori grounds and not by a careful examination of facts in detail. And by adopting parallelism, all vitality to the relation of mind and body has been denied.

Mr. McDougall follows neither of these courses. He bears in mind a wealth of detailed observation, and would have theory wait upon experience. The observed facts, he believes, speak against parallelism and for interaction of mind and body. And mind and body are different enough, yet not too different, to make such interaction real.

But behind the question of the relation of mental and physical phenomena is that of the nature of mental action. The author believes that the facts all point to something more compact and stable than the mere stream of psychic phenomena; these are but the movements and expression of the soul. But the course of the argument should be given somewhat more fully, although its force can hardly appear where the supporting evidence must be omitted.

A considerable portion of the volume has to do with the history of animism. Features of savage belief in the soul are presented, and thereafter an account of the conceptions of the soul as it is represented in the critical thought of Greece, in the speculation of the Middle Age and the Rennaissance, and through modern European philosophy to the present day. This exposition, while useful, is—until modern times are dealt with—drawn almost wholly from secondary sources.

The decline of belief in the soul among the critical of our day, the author attributes to several causes, among which the following are prominent. The long and futile search during many centuries for the seat of the soul closes in the discovery that mental functions have a scattered localization in the brain. Observations upon reflex action

suggest that all cerebral action is reflex in type; and with a process absolutely continuous from sensory to motor nerves, no soul-action is needed to bind the two processes together. And to the same end works the psychology built upon association, which describes the mind as a complex of sensations and copies of sensations, until, as a result, the soul as an active source and bond has disappeared. Finally, in the theory of Darwin, especially as it is developed by the neo-Darwinians, natural selection is made to explain what had hitherto been ascribed to purpose, and mind ceases to have any causal office in evolution.

Now leaving aside crass materialism, which is unpalatable to the thoughtful of our day, we must accept (so the author contends) either animism or parallelism in one of its many forms—epiphenomenalism, panpsychism, or psychic monism, and the double-aspect theory. On the other hand the objections to animism are far less cogent than at first appears. Let me attempt to give some of the more important portions of his treatment here. It will be seen at once that the center of attention is now upon the doctrine of interaction, rather than upon animism pure and simple.

The objection to interaction, that it is inconceivable between processes so radically unlike as are the physical and the mental, is met by the argument so forcibly used by Lotze that every form of interaction, even between things physical, is absolutely unintelligible to us, is inconceivable. The more recent objection, that the admission of an influence of mind upon body would be opposed to the principle that the energy of the physical universe is a constant quantity, is met by showing that such mental influence would not necessarily involve an addition to the energy of the physical world. And farther, from actual observation the evidence is by no means strong that the principle of the conservation of energy holds in the organic realm. Were we inclined to suppose that psychic action upon the physical takes the form of minute increments of energy upon the physical side, our experimental tests are by no means so delicate as to exclude the possibility of such increments. Yet the whole embarrassment is greatly lessened when we remind ourselves that the process here is not properly represented by a chain, where the series of physical links ends and after an utter gap is renewed, the gap being filled with psychic links. The rather, since every event has a group of many causes, we need suppose no discontinuity whatever in the physical process, but simply the participation of the psychic in this group of causes; the psychic has merely contributed but not interrupted. The image

of single successive links in a chain, where at any cross-section we can find but one link—either a link wholly mental or a link wholly physical,—should be replaced by the image of links complexly interconnected, as in chain armor, where links of one character do not exclude the possibility of a different kind of link in the very same cross-section. For the soul, to use Lotze's expression, is where it acts; and for it to act, and therefore to be, in separate regions of the brain at once, does not after all belie its unitary nature.

In the idea of mind active and causative in the physical world as well as in its own particular sphere, there inhere no insuperable difficulties. On the other hand this idea is demanded because of the impossibility of explaining in any other way the occurrences of living nature. A purely mechanical theory of physiological processes proves quite inadequate—especially of such processes as those connected with the growth of the single cell into a mature animal body, with the potential presence in that cell of all those inherited traits which later become actual. The behavior of the embryo under experiment, as well as the facts of regeneration of parts destroyed—such things strain to the breaking point our purely mechanical modes of explanation. In the living body there are ways of behavior that do not seem mere extensions and complications of what we observe in the inorganic world; the trend of energy which in inorganic nature is toward more stable, more 'degraded' forms, is resisted and reversed in the animate world.

Continuing his criticism of a mechanistic biology, the author contends that only mental action of some kind can account for the facts of evolution. Behind natural selection there is assumed to be a struggle for existence, a desire and a will to live, which is *mental*. And in the introduction of that 'organic selection' urged by Baldwin and by Morgan, there is openly recognized a mental influence at work in the higher reaches of evolution.

Nor do mechanical principles provide a reasonable explanation of animal and human behavior. In its higher forms, behavior is a response not so much to the bare and literal impressions of sense as to the *meaning* of the impressions. Pleasures and pains, for instance, frequently spring from sights that, as mere sensations, are quite indifferent, but which are freighted with significance. Meaning, indeed, is the very web of the more developed mental world, and meaning cannot adequately be translated into physical terms or into terms of mere association, which has been the great resource of mechanists. There is in true consciousness a unity entirely lacking in mere associ-

ation and in those processes of the brain that are supposed to rur parallel to the acts of consciousness. For the brain-processes 'corresponding' to our unitary consciousness occur in more or less disjointed portions of the brain.

The association-psychology is at a loss, not only in the presence of 'meaning,' but also in the presence of many of the phenomena of pleasure and displeasure and of memory. Evidence is tellingly arrayed to show that in reminiscence the mind obeys a very different law from that which operates in mere habit and association, to which many would reduce memory. Moreover, in the phenomena of telepathy which McDougall considers established, and in certain of the more striking and exceptional instances of mental control of bodily states and in those strangely accurate estimates of time by the hypnotized the hope seems slight indeed of finding mechanical causes alone at work.

Toward the close of the volume, the author makes more definite the conception of the soul which he regards as reasonable. Negatively the soul is not extended, not ponderable; nor is it substance, in the sense of something distinct from its attributes. On the contrary the soul is the sum and system of certain attributes, namely, "o enduring capacities for thoughts, feelings, and efforts of determinate kinds." A soul is "a being that possesses, or is, the sum of definite capacities for psychic activity and psycho-physical interaction, of which the most fundamental are: the capacity of producing sensation in response to certain physical stimuli; the capacity of giving meaning to certain sensation complexes; the capacity of responding to sensations and meanings with feelings and conation; the capacity of reacting upon brain-processes so as "to modify their course in a way which we cannot clearly define, but which we may provisionally conceive as a process of guidance by which streams of nervous energy may be concentrated in a way that antagonizes the tendency of all physical energy to dissipation and degradation." So far as we know, these capacities of the soul become realized only in conjunction with some bodily organism. And while the soul is not a compound either of mind stuff or of lower souls, yet it somehow may come into possession, perhaps in quasi-telepathic manner, of the activities of other souls.

The thought of multi-personality, which in the reader's mind all the while casts a doubting glance upon McDougall's idea that the soul is unitary, the author finally confronts, interpreting the phenomena in two ways. In certain cases, of which Dr. Prince's Miss Beauchamp furnishes the best example, the subordinate conscious

activities are "activities of an independent synthetic center, a numerically distinct psychic being." In other cases, the subordinate 'personality' is really nothing but an automatic functioning of parts of the organism. That is, if I do not mistake the author, some multi-personal phenomena indicate that one body may be the habitat of two or more souls; while certain other 'multi-personal' phenomena are mistakenly so regarded: what seems to be the manifestation of another soul is a simulation, due to elaborate physical acts that have become automatic.

Behind this mere echo which I have attempted of the author's thought, there is evident on the one hand a strong influence of Lotze and of Leibniz; while in the more strictly biological chapters there runs as an important strain the vitalistic idea, for which Driesch is to-day protagonist. The strength of the book lies in its richness of presentation; it does not pin its faith to some narrow thread of reasoning, as though it would demonstrate a proposition in geometry. The intellectual motives for the author's conclusion are many, working cumulatively, and he trusts to empirical evidence rather than to metaphysical proof. For him the outcome is, as I have indicated, that the mind, while complex, is a unit and not an aggregation or composition. It is not a mere sum of phenomena; it is these phenomena together with their hidden source which is a system of dispositions and capabilities. In it lie powers active and powers latent; it guides, controls, upbuilds its more immediate physical habitation. In the marshalling of fact and consideration by an author familiar with empirical psychology and with physiology and biology, the book possesses a unique interest and strength.

If one were to speak of the less convincing features of a book for whose skill and power the dominant feeling must be high appreciation, the query might be raised whether there is so direct and intimate a relation as the author holds between the existence of the soul and the idea of psycho-physical interaction. That the phenomena of mind are inexplicable without an immaterial something lying unobserved within and behind each consciousness,—this idea is essential to the author's argument; but such a thought is quite overshadowed by the argument against parallelism and in favor of interaction. Now the proof of interaction, I believe, is not vital to establishing the existence of the soul; at least it is not logically vital. For the changes of our conscious life might be a welling-up from immaterial depths, and yet in all logical consistency effect nothing save in the psychic realm. Over in the physical order, these psychic movements might, as the

parallelist holds, be ineffectual, although fully reflected and represented there at every instant. While the evidence in favor of interaction to the reviewer's mind is strong and daily strengthening, and while the establishment of interaction is doubtless emotionally important for animism, yet the soul-theory does not seem logically to require this. Nor, on the other hand, does interaction, once proven, carry with it the existence of the soul. In a system where all is flux and composition and mere appearance, there might nevertheless be a direct intercourse of mental phenomena with physical, a causation over the border.

But conviction does not always go by strict logic; and McDougall is tactically right in regarding interaction as an important part of the soul-theory, even though he may perhaps have given it undue importance. We are so constituted that the belief will more readily come if we see that mental things are not inefficient in the body and should be given a greater prominence even in physical theory. If the mind plays an active part in physical nature, then we are encouraged to do still farther justice to mental phenomena, not leaving them hanging in mid-air as mere phenomena, nor explaining them by matter which they independently influence, but assigning them to an underlying reality having a nature especially fitted to account for them. We become more tolerant of the idea of the soul as we see some scope and scientific use for it, as we become aware that it will assist us over intellectual difficulties rather than increase them.

In his effort to show that psychic factors must be assumed as part of the cause of certain physical events, the author has perhaps at times been precipitate. He has, I believe, made out a strong case for the non-mechanical character of much that goes on in living nature. But in arguing that the unity of consciousness has no brain-process that can serve as its correlate he is possibly over-confident. It is true that any such unity as the various brain-processes display is never precisely the same as the unity of our mental processes. But this hardly touches the core of the parallelist's theory. What parallelism requires is not similarity between brain-process and mind-process, but mere correlation or correspondence. In the American flag, for instance, the stars stand for the several states, and the presence of these stars in a common 'field' represents the embracing unity of the federal power. To this extent there is parallelism, although a bare spatial juxtaposition upon a ground of uniform blue is totally unlike the social and political unity of purpose which is the national bond. But the one is a symbol or parallel of the other, and by the changes in the symbol—by the addition of stars upon the erection of new states,—the correspondence remains fairly adequate. So elastic a theory as that of parallelism, changing its form with almost every exposition, really requires nothing more, I imagine, than such distant correspondence between physical and psychic. To take a specific instance, the qualitative differences in color sensation find a satisfactory 'parallel' in the quantitative and local differences of the neural process, even though a change of quality is radically unlike a difference of quantity or of position. And, futhermore, McDougall seems at times inclined to over-state the degree of opposition between neural and psychic. In contrasting the unity of consciousness with the separateness of brain-processes, he seems to me to heighten the mental unity and depress the neural interconnection beyond what the facts themselves fairly viewed would warrant.

McDougall accepts the objective validity of the principle of causation, as against Kantian and other supporters of the purely phenomenal view; for only by its acceptance, he believes, can we escape solipsism. The moral escape which Kant offers, seems to McDougall unavailing and due to Kant's profound ignorance of human nature. But while the precise form of the argument may be unsatisfactory, Kant was moving in a deeply true direction. The real basis for the conviction that there are other minds than mine, is not the belief in the objective validity of causation, as McDougall holds, but rather the inexorable compulsion of social feeling insisting on the worth and reality of companionship. Only when we attempt to state and justify this conviction according to the usual scientific postulates does the principle of causation seem the bridge by which I may pass from my own mind to others'.

In the historical account of animism more might have been made of the frequent savage belief that in a single person there are many souls. McDougall dwells upon the belief in a single ghost-soul, and has but a passing statement that "some savages, for example, agree with certain philosophers of classical antiquity in assigning to each man two, three, or even four souls of different functions." He might have gone farther than this; for the Caribs believed that each man had seven souls, the men of Borneo that each had an indefinite number, while the Laos put the number as high as thirty! His account, moreover, might well have made use of the wealth of material now available to the English reader for the study of cultured Oriental thought. Among minor slips, our E. B. McGilvary is given the title of "Miss."

But in considering a book of such sterling qualities it is more fitting that the final word should be upon its virtues, which overshadow all defects. The volume is conceived in a large way, and its plan is carried through with learning and with sharp and forceful reasoning. The entire discussion furthers the great idea of the soul's existence, and helps to make the denial of the mind's efficiency in the physical world seem a high-handed attempt to limit its causal action, not in the interest of a broad empiricism, but under the influence of a programme set by those narrowly interested first and foremost in physical science. The book thus takes a welcome part in that wide movement of our day toward a science less cumbered by a priori restrictions, a science in which the importance of the mind itself is not minimized when forming our critical view of the world.

GEORGE M. STRATTON.

THE UNIVERSITY OF CALIFORNIA.

Kant und Marx. Ein Beitrag zur Philosophie des Sozialismus. Von Karl Vorländer. Tübingen, Verlag von J. C. B. Mohr, 1911.—pp. vii, 393.

Marx und Hegel. Von JOHANN PLENGE. Tübingen, Verlag der H. Laupp'schen Buchhandlung, 1911.—pp. 184.

Socialism in Germany undoubtedly grew up first in the soil of idealism, and no later attempts at transplantation can alter the facts. This is recognized by both the writers whose work is before us. Both maintain that the soil of idealism is its proper and congenial home, though whether indeed the leaves of the growing tree are for the healing of the nations is a matter on which they would probably disagree. But on the historical question there is no difference. By widely different methods, Herr Vorländer by comparative and comprehensive study of socialistic thought, Dr. Plenge by a psychological study of the central personality of Karl Marx, they both bring forward new evidence of the essential indebtedness of socialism to idealistic philosophy.

Can Kant himself be called in any sense a socialist—not the transcendental philosopher of the critiques, but the shrewd and practical man of the world of the Rechtslehre and still more of such minor writings as the Ideen zur einer allgemeinen Geschichte and Zum ewigen Frieden? This is Herr Vorländer's first question. Of the answer to it there can be no doubt. We may say broadly that Kant's political writings are animated by a two-fold spirit, on one side the republican spirit with its ideal of freedom and self-government, the individualism that makes every rational being an end to himself

and demands for him autonomy whereby to realize that end, on the other the spirit of reverence for objective law and all constituted authority. Where the two are in conflict, where the practical question arises, he leaves us in no doubt of his attitude. He unmistakably gives priority of claim to established authority. "It is indeed pleasant," he said in the Streit der Fakultäten, "to devise for oneself forms of constitution that correspond to the claims of reason, but it is rash to propose them and penal to instigate the people to abolish the constitution which actually exists." From such passages it is plain that the socialistic attitude is not the Kantian; and it is no less clear, in respect to doctrine, that Kant's individualism is not to be squared with the socialistic ideal. Herr Vorländer, who writes from the socialistic standpoint, reviews the main features of Kant's political doctrine and rightly comes to the conclusion that Kant himself was no socialist.

That however is only a preliminary question to the author of Kant und Marx. His object is to show, not that Kant was a socialist of the Marxian or any other type, but that the Kantian method may be and has been fruitfully applied by socialistic thinkers, that the 'critical' methods of Kant and the 'dialectical' method of Marx may be effective, unified. The author's way of proving his contention is to trace the development of socialistic thought from the days of Marx down to the present year. After devoting a chapter to the development of the dialectical method in the socialism of Marx and Engels he passes in review, beginning with Lassalle and Dietzgen, practically all the socialist writers who have been influenced by German idealistic philosophy and more particularly by the 'critical' spirits.

What value the book possesses lies, it seems to me, altogether outside the fulfilment of the intention of its author. The question of the applicability of the Kantian method to the socialist solution of social problems is at best an abstract one. 'The critical method' is a vague enough expression for any preliminary epistemological enquiry, or at least it is not explained by Herr Vorländer to be more. It is no definite scientific principle or mode of investigation. We do find in Dietzgen and his successors a strong desire, perhaps inspired by Marx, to establish a special epistemology to complete the socialist doctrine. But the attempt has been neither successful nor philosophical, and indeed it is not easy to see how such an epistemology would if established prove of special service to socialism. Dietzgen said that "he who would be a true social-democrat must improve first his way of thinking," but that is equally the case in respect of every man's

attitude to every form of problem. Dietzgen may have meant that epistemological enquiry furnishes special evidence for the truth of socialistic doctrine, but this is a proposition of which no demonstration is offered. Kantian terminology, the least valuable thing in Kant, is much resorted to by the neo-Kantian socialists, but it is easy to see that the problems expressed in terms of Kant are quite different from Kant's own. When, e. g., Bernstein, one of the leaders of the "Backto-Kant" movement, asks "How is scientific socialism possible?", the form of the question is 'critical,' but the answer is not, and could not possibly be found in that most negative part of philosophy—epistemology. It is not too much to say that there is more talk of epistemology in the neo-Kantian successors of Marx than any real understanding of the epistemological problem.

The more successful neo-Kantian socialists have been in fact those who base their doctrine rather on deduction from Kant's ethics than on application of his critical method, and it is a relief to turn from the sometimes rhapsodical and always indeterminate utterances of the Bernstein school to the clear and definite statements of these latter, as represented, e. g., by Hermann Cohen and Paul Natorp. It is admitted that Kant's ethic is not socialistic, but it may be held that its fundamental principles can be pressed into the service of socialism. Thus Cohen declares that socialism is founded in ethical idealism and that Kant, in his idealistic opposition to that "base Aristotelian principle of aristocracy which would reconcile the slave-machine with the divine ordering of the world", is the true and real founder of German socialism (Vorländer, p. 124). Thus again the Russian socialist Tugan-Baranowsky finds in socialism the logical fulfilment of the Kantian kingdom of ends, of the Kantian doctrine of the absolute worth of rational personality and that alone. Only under a socialistic constitution, he maintains, can that ultimate principle of Kant's, that kingdom in which the freedom of each consists under universal law with the freedom of all, be realized.

Here at any rate is a more meaningful enquiry. Though Kant was no socialist, it is permissible to enquire how far his fundamental ethical principles may furnish a basis for socialism. But with this question Herr Vorländer is not concerned, and the abstract question of the possibility of reconciliation between 'critical' and 'dialectical' methods—neither being very clearly defined—seems, like so many questions of method, merely futile.

The value of Herr Vorländer's book lies in the fact that it gives a good conspectus of recent socialistic thought on the continent. The

characteristics are clear and concise, and the work, as one might expect from the author, is a result of thorough-going and extensive study. The account of Marx's own development is perhaps the least satisfactory part of the book. No account is given of Lorenz Stein whose writings probably played a great part in Marx's early development, and no mention is made of the English socialists whose thought undoubtedly influenced the later form of Marx's doctrine.

When we turn to Dr. Plenge's book we enter a different atmosphere. Marx und Hegel is a suggestive and brilliant little study, a kind of psychology of Karl Marx. It is at once a racy criticism of Marxism, not without appreciation of Marx's historical importance, and a lively appreciation of Hegelianism, not without perception of the grave dangers besetting its author when—der hohe Traum einer Weltanschauung von beweisbares, völliger Einheitlichkeit reisst ihn fort. The book falls into three parts, an account of Hegel's political thought, a sketch of Marx's development, and lastly an exposition of the dependence of Marx on Hegel.

To Hegel the state was both the necessary organization of society and the fulfilment of ethical freedom, from which it might not unreasonably be inferred that ethical freedom is realized so far as stateorganization extends. It is an easy step to a definitely socialistic position, and one might say that Marx turned Hegel's state-theory into a definite scheme of state-practice. The application perhaps shows the defects of the original doctrine, and especially the defect of narrowing social development down to political development. Terms like Volksgeist and, still more, Staat are surely too narrow to be adequate expressions of an ethical system. Hegel renders too much unto Caesar, when he gives him unreservedly the principle of freedom. Marx's theory is only a very partial application of that doctrine. Marx began his career as a follower of Hegel, and though he came to regard him, with characteristically Marxian pugnaciousness, as a "deutscher Spiessbürger," he was to the end all unawares dominated by the mightier spirit of the master. This is the conclusion at which, though by a rather different line of thought, Dr. Plenge arrives.

Hegel regarded himself on the whole as the philosopher who comes at the end of the social development and sees it all. There is little in Hegel to suggest that the time of "gray in gray" is not already come, and that the revelation of the final form of society is not contained in the *Rechtsphilosophie*. It was his fate to find a seemingly ultimate

social reality in that contemporary world which was crumbling under his feet, transforming itself through those very industrial factors which find so small a place in his social logic, with its almost contemptuous account of "bourgeois society." "Hegel's final conclusion consisted herein, that the age where reason rules was come, where mankind has outlived the turmoil of its shaping and has attained the knowledge of that which was shaped, and where the spirit, grown old, finds rest in itself and enjoys a short time of ripeness ere it begins to fail. The experience of the 19th century demonstrated the error of that view. The world renews its youth in a creative process.—In this new world stood Marx" (Marx und Hegel, p. 146).

Marx the Hegelian was driven by circumstances into the midst of this new world, the world of labor and capital and class-interests. He speedily found therein, thanks to his "great spiritual energy and inner elasticity," a new social principle. There was no intermediate period of new study. He found awaiting him the doctrines of men like Stein and Engels, and without hesitation, aus der Not seines Herzens, he set forth to realize in the new world they revealed the old ideal of "freedom in the state," to show how industrial conditions must be reformed, and were indeed reforming themselves, so that each member shall have the state's freedom and not be a mere piece of mechanism in the working of the great industrial machine. But it is for Marx in his impetuoisity, "first a conception of history, then political economy."

Thus he passes from extreme to extreme. To Hegelian idealism succeeds 'reality' and the "materialistic conception of history," the famous doctrine that all social life, culture, and development are wholly determined by economic conditions. Dr. Plenge submits Marx's "reality" and "materialism" to a searching analysis. Social "reality" is no ready-given objective fact. There are indeed two perspectives of society, undistinguished by Marx. There is first the individual perspective of each as he views the whole from his self-centre, and for each of us, in relation to our own society, that reality is richer or poorer, higher of lower, simpler or complexer, according to his individual experience of and insight into life. But beyond that necessarily incomplete view there is the "microscopic" perspective of the sociologists, the recognition of "super-individual" processes, never contemporaneously to be attained. Marx makes no such distinction. For Marx it is "the imperious passion of the prophet of liberty" that determinates what "real" men shall be: Menschen das wären geistige Wesen, freie Männer. But for Hegel too were not men geistige Wesen? So, Dr. Plenge holds, the kernel of Marx's doctrine is found in a "radicalization" of Hegel's doctrine of spirit (Geist).

It is therefore not in any way 'materialism.' That term also is with Marx only a 'pathetic' gesture. Dr. Plenge denies Marx any right to the term. Marx used the language of natural science in the explanation of society as Hegel had used the language of theology. But neither is Hegel a theologian nor Marx a materialist on that account. One might however maintain against Dr. Plenge, that Marx was quite entitled to speak of his doctrine as a "materialistic conception of history." Marx's characteristic idea is that the form and character of economic production and distribution constitute the one source, not only of social distinction, but of all political and intellectual development. This might not inappositely be called by him a "new materialism," though the conclusion of the doctrine contradicts the premisses in a way unrealized by Marx. If the prophet of freedom speaks the words of materialism, it was because in fact his own achievement was, in however one-sided a fashion, to show the abiding importance for the "free spirit" of those economic facts so neglected by the preceding idealistic "state-philosophy."

But for all this materialism Marx is Hegelian at heart, a Krypto-hegelianer. There are, as Dr. Plenge maintains, three distinct factors in the Marxian ethic: a doctrine of determinism and necessity, a social psychology, and an ideal of emancipation. "But in all three parts it is the resonance of Hegelian notes that gives to the voice of Marx that fulness and might which is able to overpower the hearer" (Marx und Hegel, p. 115). The demonstration of this statement fills the latter part of Dr. Plenge's book.

For Marx one principle of development alone rules in society, the principle of class-war. One class alone has ultimate right, the proletariate, and the ethical end of this chosen class alone is the end of society. The labor of this class alone is 'value' and the source of values. So an absolute economic-industrical society succeeds the absolute state. Marx has passed from absolute to absolute.

"How comes it to pass," Marx had asked in his younger days, "that not only does thought press forward to reality but reality also presses forward to thought?" To answer this question, rightly understood, would have been to fulfil Hegel. We may start from the side of "universal spirit" and trace its realization in social forms, but can such a method tell us how individual interests and warring individual claims, arising out of physically-determined needs, work out

the social or universal end? If Marx had sought to answer the whole question he would indeed have fulfilled Hegel, but the passion of the prophet was stronger than the universal-mindedness of the thinker in Marx, and he forgot the first part of the question, forgetting that the economist alone can no more explain the face of society than the geologist alone can explain the face of the earth. But that he did formulate and go some way towards answering the second part of the question remains his no small achievement.

The argument of Dr. Plenge's book, very inadequately sketched above, is not new, but it has seldom or never been put in so brilliant and suggestive a form. The brilliance of argument is no superficial rhetoric but the free expression of a thorough study of Marx and Hegel, by a writer who is both philosopher and economist.

R. M. MACIVER.

King's College, Aberdeen.

The Philosophy of Bergson. By A. D. LINDSAY. Hodder and Stoughton. New York, George H. Doran Company, 1911.—pp. ix, 247.

A Critical Exposition of Bergson's Philosophy. By J. M'KELLAR STEWART. London, Macmillan and Co., Limited. 1911.—pp. x, 304.

Mr. Lindsay has "endeavoured to bring out the unity and systematic nature of Monsieur Bergson's thought, and to show something of its connection with the historical development of philosophy, and more especially with the philosophy of Kant. The book does not pretend to be an account of all Monsieur Bergson's work." "Further," he tells us, "as I have wished to examine certain problems with which modern philosophy is especially concerned in the light which Monsieur Bergson throws upon them, rather than to make a critical study of his writings in great detail, I have not been careful to distinguish when I am merely giving a résumé of what Monsieur Bergson says and when the arguments are my own. For the same reason I have ventured to criticise the details of Monsieur Bergson's arguments when they seemed to me to obscure what I take to be the main results of his thinking" (pp. vi-vii).

Such a treatment of a philosophy like Bergson's has its dangers as well as its advantages. The value of certain elements of Bergson's thought is brought out in a way which would be impossible in a volume of this size, if other elements were also exhibited. The positive contributions of Bergson to the solution of the philosophical problems of

the present are thus presented in high light. On the other hand, the student of Bergson gets very little help in trying to understand how these elements thus emphasized are related to other elements which seem to contradict them, and how in view of all these elements he can still believe in "the unity and systematic nature of Monsieur Bergson's thought." The unity thus gained seemed suspiciously like 'the unity and systematic nature' obtained for a wrangling and jangling family by divorce. As a result of Mr. Lindsay's treatment of Bergson, we have what might perhaps be called an appreciative and somewhat critical commentary on an unpublished Bergsonian anthology. The result is further that statements are made that are likely to be misunderstood and therefore to be seriously misleading. One example will suffice. "In the first chapter of Time and Free Will Bergson examines our ways of estimating differences between psychical facts of all kinds. He is not concerned to deny either that certain psychical facts are related to external phenomena which can be measured, or that others can be placed in an ascending scale of degree" (p. 64). The last words, which I have italicized, are apt to suggest to the unwary reader that Bergson would not deny that two sounds 'of different pitch' may be directly experienced as differing in pitch. Now this seems to me just what Bergson does deny in toto. The scale in which different sounds are placed and the relation of higher and lower in which the two sounds stand to each other in this scale are for Bergson the result of spatialization. "But the sound would remain a pure quality if we did not bring in the muscular effort which produces it or the vibrations which explain it" (Time and Free Will, p. 46). Mr. Lindsay does not point out that Bergson thus denies everything but the purely qualitative character of each sound, and asserts that any comparison of one sound with another as differing in intensity in a scale is the result of spatialization. Mr. Lindsay does not agree with Bergson, for he says, speaking for himself: "We can, in certain cases at least, arrange qualitative differences in a series, as we do notes of music or shades of a colour, and this series can be constructed without any measurement of extensive quantity" (p. 59). "The fact that we can give some kind of degree to almost all our psychical states leads to the assumption that they all have the first kind of intensive quantity and are therefore measurable, and if measurable to be regarded as in quantitative relations to one another; whereas psychical states are only measurable by means of their relation with measurable external phenomena, and the differences between them which can be directly observed are not differences of quantity" (p. 62). In other words, Mr. Lindsay

believes that when we arrange sounds in a scale of degrees of intensity we are not making them measurable. But he does not tell us that in this matter he differs point-blank from Bergson. Bergson, speaking it is true of the 'order of succession,' says: "We could not introduce order among terms without first distinguishing them and then comparing the places which they occupy" (T. & F. W., p. 102). And he says in effect the same thing about the order of intensity. Intensity as order in a scale is spatialized intensity. Any scale is a spatial device. This radical position of Bergson is ignored in Mr. Lindsay's treatment, with the consequence that Bergson's position is made to appear much more plausible than it really is; for most of us, I suspect, would say that Mr. Lindsay is right in his account of the facts; and when we are led to believe that this is also Bergson's account, we find Bergson acceptable in this matter. But when we are thus led to believe, we are led to misunderstand entirely the Bergson of Time and Free Will. This sample of the treatment of Bergson by Mr. Lindsay shows that either Mr. Lindsay has himself misunderstood Bergson or that he is more interested in saying what he thinks about the subject than in expounding Bergson's thoughts. It would have been better if the book had been given another title, something like "Certain Problems of Modern Philosophy," with perhaps a subtitle indicating that these problems are examined in the light which Kant and Bergson has thrown on them. It may be a service to Bergson to make him plausible at the expense of accurate representation of his views; it is real service to philosophy to have Mr. Lindsay's views so clearly stated on the subjects discussed—the discussions are clarifying and very helpful-but it is not a service to the history of philosophy to confuse Mr. Lindsay's views, which in many cases many of us would regard as true, with Bergson's views on these same points, which cannot be true if Mr. Lindsay's views are.

The purpose of Professor Stewart's volume is "not exposition, but criticism. Professor Bergson's thought is elaborated only to such an extent as to ensure that the criticism shall be intelligible. . . . My aim has been to present clearly the root ideas of his philosophy, so far as they appear in the work which he has made public; to examine their validity; and to consider their value as a contribution to modern philosophic thought" (Preface). This purpose is carried out in a way that calls for the highest admiration. The "Exposition" occupies nearly one half of the book, and this part of the work is as far as possible nothing but pure exposition, careful, clear, concise,—in a word, masterly. That every student of Bergson or even Bergson himself

would agree with the expositor in all details is perhaps more than can be expected, especially when the exposition is the exposition of Bergson. But no one familiar with Bergson can fail to be impressed with the conscientiousness and the ability shown in the performance of the difficult task. The only objection that could well be made to the presentation as a whole is that it has stripped Bergson's ideas "of the brilliant metaphorical dress in which Bergson himself has clothed them, and divorced them from the charm of a peculiarly flexible and graceful literary style" (Preface). But every one who is not Bergson or a Bergsonian will perhaps accept the defence "that metaphor is not always conducive to clearness, and that illustration is apt to be confused with argument" (ibid.).

The "Criticism" which occupies the larger part of the latter half of the volume shows the same power as the "Exposition." Mr. Stewart's philosophical sympathies are apparently with Professor A. S. Pringle-Pattison, and like every other critic he must in examining what he undertakes to examine take his own point of view. But his own views are not obtruded on the reader; and he has succeeded in presenting his results in such a way that even those who do not sympathize with the philosophy Mr. Stewart has up his sleeve may still find clearly set forth some of the profoundest difficulties in Bergson's philosophy.

The "Conclusion" of some twenty pages gives an "Estimate of the Value of the Intuitive Method," and is naturally the least 'objective' part of the whole work. After pretty effectively smashing the philosophy of Bergson, so far as it is what Mr. Lindsay would call "the unity and the systematic nature of Monsieur Bergson's thought,"here of course the reviewer is merely expressing his own evaluation of the critical performance,-Mr. Stewart proceeds to take some of the fragments and estimate their value. Bergson himself cannot but feel flattered,—if he is susceptible to flattery,—at this estimate. "This consideration of Bergson's philosophy may be brought to a close by applying to Bergson himself the words, full of eloquence and admiration, which he used concerning M. Felix Ravaisson-Mollien towards the close of an address delivered before the members of the Academie des Sciences Morales et Politiques: 'The history of philosophy brings prominently before our minds an unceasingly renewed effort of reflection which labours to attenuate difficulties, to measure, with a growing approximation, a reality incommensurable with our thought. At intervals a soul arises which seems to triumph over these complications by dint of simplicity—the soul of an artist or a poet, which, remaining near its source, reconciles, in a harmony appreciable by the heart, terms irreconcilable by the intelligence. The language which it speaks when it borrows the voice of philosophy is not comprehended in the same way by everybody. Some judge it vague, as indeed it is in its expression. Others feel it precise, because they experience all that it suggests. To many ears it bears only the echo of a past which has disappeared, but others apprehend in it, as in a dream, the joyous chant of the future. The work of Ravaisson will leave behind it. then, very diverse impressions, as every philosophy must do which addresses itself to feeling as much as to reason.' The poet, the artist, the seer, are the men who, more than the professional philosophers, have preserved alive the inmost soul of humanity, and their work may be addressed primarily to the heart." Without doubt Mr. Stewart spoils all this tribute in Bergson's eyes, when he goes on to say: "But it is always to the heart of a rational being, and the ultimate bar at which philosophy, poetry, art, morality, and religion must stand, when their truth is to be judged of, is reason. Knowledge, in any of its degrees, is not and cannot without self-extinction become identical with being; it is being reflected in and for a rational mind: and philosophy is not life, but the attempted interpretation of life by means of reflective intelligence" (pp. 303-4).

Next to Bergson's own works, it is perhaps safe to say that nothing could more profitably be put in the hands of a student of Bergson than Mr. Stewart's *Critical Exposition of Bergson's Philosophy*. In addition to its philosophical value it has the by no means low value of being a volume easy to handle and pleasing to the eyes. It is marred by only a few typographical errors, such as the omission occasionally of French accents, illustrated in the last passage cited.

Both the volumes we have just reviewed are however marred by a serious and inexcusable defect: there are no indexes. Mr. Lindsay seems to think that a table of contents which contains only fourteen words is a sufficient help to any one who may wish to consult him. Mr. Stewart has given an analytical table of contents of a little more than three pages, and has thus helped his reader somewhat; but the great value of his work is seriously reduced by the absence of a detailed index.

EVANDER BRADLEY MCGILVARY.

UNIVERSITY OF WISCONSIN.

Formal Logic: A Scientific and Social Problem. By F. C. S. SCHILLER. London, Macmillan and Co., 1912.—pp. xviii, 423.

Dr. Schiller's latest book is a vigorous attempt to account for the

manifold futilities of Formal Logic in terms of some false initial principle. This vitiating kernel he finds in the traditional assumption "that it is possible to study the formal truth of thought irrespective of its truth in point of fact" (p. viii). It is because of this fundamental abstraction that Formal Logic is such an "incoherent, worthless, and literally unmeaning structure" (p. ix). To make good his contention, Dr. Schiller makes an inventory of the complete stock-in-trade of the professional logician: Terms, Categories, Predicables, Judgments, Propositions, Laws of Thought, Theory of Inference, Syllogisms, Forms, and Fallacies. Everywhere he finds Formal Logic leading to "self-contradictions and absurdities," abstracting from actual thinking, ignoring personality, dehumanizing thought (p. 11).

Inasmuch as a Judgment or Proposition is "the minimum vehicle of truth (or falsity)" (p. 12), Dr. Schiller rules the Term or Concept out of court. But Judgment itself is variously misconceived by the Formal logician. Dismissing the notion of Judgment as Compound, we may take the truth-claim of Judgment as evidence of real truth, or else admit Judgments as true-or-false. In either case the Formal definition breaks down. And "if the formal reference to reality in the Judgment is interpreted metaphysically, it is a downright blunder and a prolific parent of absurdities; if it is understood logically, it is inadequate and misleading; while if it is understood in a common sense way as meaning 'reality' in the physical world, it is emphatically false" (p. 102). "Throughout its discussion of the 'forms of judgment,' Formal Logic has exhibited a deplorable incapacity either to penetrate beyond the verbal form or to hold fast consistently to its its own abstractions" (p. 151). In the study of Inference, the Formal logician cannot avoid the antinomy that while, logically, novelty is inadmissible, psychologically it is demanded, unless inference is to be mere verbal transformation. The Syllogism is "either a Petitio Principii or a tautology," according as it does, or does not, claim novelty for its conclusion (p. 220). Instead of setting doubts at rest, for which purpose it was invented, the Syllogism, in Dr. Schiller's view, should be used to bring out what points are doubtful, and in this capacity it may still retain an important critical function (p. 222). Dr. Schiller's "formal verdict on the Methods of Induction . . . inevitably is that they are impossible, if the relevance of the facts they use is not established, or superfluous, if it is" (p. 271). Indeed, "the distinction between Deduction and Induction . . . is merely Formal, and has no significance in real reasoning" (p. 336). In a similar way, the great lesson of the Formal treatment of 'Fallacies'

is: "the formal analysis everywhere reveals its inadequcy, and leaves us a choice between verbalism and 'psychology'" (p. 373).

"All the problems of real knowing, therefore, which Formal Logic deigns to mention, it eviscerates of their meaning and casts aside" (p. 378). Altogether, Formal Logic is a disgrace to civilization. "For over two thousand years it has lorded it unopposed over the submissive human mind, and played the 'Old Man of the Sea' to the 'Sinbad' of Science, and has never encountered any serious questioning of its principles" (p. 386). Such a state of things must seem to be as strange as deplorable to one who pragmatically regards truth and falsehood alike as merely current entries in the diary of human needs and wishes, and at the same time accepts Dr. Schiller's account of Formal Logic. That a body of thought pragmatically so worthless should for twenty centuries have dominated the human mind, is surely a paradox, which Dr. Schiller does not recognize as he should. Moreover, it does not seem to occur to him that his own pragmatist construction of truth need not be the only one left after the demolition of the tottering Formal structure. The 'Psychologic' which he proposes as a substitute for the older discipline could never attain scientific stability, if it scorned the thought that is at the very heart of Logic, the ideal of truth which Dr. Schiller has cast aside along with the admittedly fatuous Formal husk, against which he has contented himself to direct all the ardor of his attack.

It is doubtless time to free Logic from the unmeaning abstractness which has so often vitiated its effectiveness in the past. But Dr. Schiller is at once too drastic and too generous a critic, when he treats the old science with joyous contempt and is at the same time willing to tolerate it, even at Oxford, as "a fairly harmless game," the playing of which "will not make the world either appreciably wiser or sillier" (p. 389). His book does full justice to his keenness and directness of attack, but it lacks the sympathy of reinterpretation which his subject demands; and its frequent lack of fairness to the older point of view, as well as its neglect of all the more concrete modern discussions of Logic which do not adopt the pragmatic formula, go far towards destroying the seriousness and usefulness of the undertaking.

RADOSLAV A. TSANOFF.

CLARK UNIVERSITY.

NOTICES OF NEW BOOKS.

Roscelin Philosophe et Théologien d'après la Légende et d'après l'Histoire. Par François Picavet, Alcan, Paris, 1911.—pp. xv, 157.

Picavet is well known as a careful and painstaking investigator in the history of mediæval philosophy. He lays great stress on *comparative* mediæval philosophy, thus introducing the term into philosophy from science and literature. The term comparative is particularly applicable to the mediæval epoch in philosophy, as during that time the three dominant religions, Judaism, Christianity, and Mohammedanism, while having each its own belief, revealed documents, language, and mode of life, were engaged in a similar task of harmonization of their revealed truths with the philosophy handed down by the Greeks and the independent efforts of the human reason generally to get a rational insight into traditional dogma. These three parallel attempts to work out a *Wellanschauung* in the course of time met and reacted upon each other, hence the importance of the comparative treatment for a proper understanding of mediæval thought.

Another great virtue of Picavet is his rigorous impartiality. The mediæval period must be understood, and in order to do that it must be studied, not praised or blamed. The historian must be constructive, it is true, but the bricks inserted in his edifice must be real and not imaginary. Conspicuous men are apt to be surrounded with a growth of legend, which threatens to bury the original personality as known to his contemporaries. So there is a legendary Alexander, Aristotle, Vergil, Averroes, Abélard; and so there is a legendary Roscellinus, the Roscellinus of the older text books on the history of philosophy. This legendary Roscellinus as finally rounded out by Cousin is, like Abélard and Descartes, a Breton by birth, the father of nominalism and free thought, who carried over his philosophy into theology and by denying the real existence of Unity in Trinity taught Tritheism in order to avoid the heresy of Patripassianism, that the Father became incarnate with the Son and suffered like him—a necessary consequence of Unity. For this, and because he attacked the immorality of the English clergy, he was condemned by the Church and exiled from France as well as England. Having the courage of his convictions, he does not yield, and we suddenly lose sight of him.

Picavet, by a re-examination of the known texts and the discovery of some not used before, comes to the conclusion that a great deal of the picture outlined by Cousin on the basis of Anselm and Abélard is unhistorical. Roscellinus was not born in Brittany, but in Compiègne, as is proven by the designation Roscellinus Compendiensis found in the earliest and best documents, and Roscellinus de Compendio, which he calls himself in signing a chart of the year IIII. That he was a nominalist is true, but he had no system and there is no evidence that he carried over his nominalism into his theology. Not knowing that the intelligible world cannot be treated in the same way as the

world of sense, he applied the Aristotelian categories and the law of contradiction to the mystery of the Trinity and the Incarnation and he landed in a difficulty, but he did not teach a Tritheistic doctrine. This accusation is due to an exaggeration on the part of Anselm, who felt free to carry Roscellinus's dilemma to a conclusion for which the latter was not responsible. All that Roscellinus is known to have done is that he raised the question, if the Godhead is a strict unity and does not consist of three things (res) which are nevertheless one in will and power, then it follows that the Father and the Holy Spirit became incarnate with the Son. This was his dilemma and he claimed that Anselm and others believed likewise that a solitary Unity must be avoided. The conclusion that there are three Gods was drawn for Roscellinus by Anselm and does not represent the former's view.

It also appears that Roscellinus was not condemned and never excommunicated. At the council of Soissons he was asked whether he preferred the doctrine of three Gods and he repudiated it and was cleared of the charge. His attack on the English clergy was not in any way opposed to the policy of the Papacy, and his constant wanderings from France to England and back again was not due to official banishment but probably to popular animosity aroused by the rumor that he was the exponent of a theological heresy. In short Roscellinus was neither a hero nor a martyr, neither a free-thinker nor a heretic, but an unusually strong character given to dialectic analysis and zealous for the maintenance of purity among the clergy. He was desirous of being in good standing with the Church and defended himself against the untruthful aspersions of Abélard.

All these results are proved by means of a critical and impartial discussion of all the available texts in the mediæval documents, which are appended at the end of the volume and add a great deal to its usefulness and value. If there is any fault to be found in this exemplary treatise it is that of repetition. This was somewhat necessitated, it is true, by the author's method. The work is divided into four chapters. In the first he gives the history of the formation of the legend as he calls it. Here he has to speak of the mediæval chronicles, of the texts of Anselm and Abélard and others and in modern times of Cousin, Hauréau and Rousselot. In the second chapter he gives a critical list of all the historical documents bearing upon Roscellinus. Naturally there is some repetition here of matters discussed in the first chapter. And when in chapter three he finally gives us his own construction of the historical Roscellinus the same matters are again discussed a third time. But the reader learns so much from the author's learned analyses and criticisms that he is reconciled to the inevitable repetitions. The last chapter is then devoted to giving Roscellinus his place in comparative mediæval philosophy. accomplished by giving a brief sketch of the men and their works from the 9th to the 13th centuries in Christianity, Mohammedanism and Judaism. The book is to be commended as a model of clear, conscientious, and dispassionate historical criticism coupled with a vast store of erudition that is master of its field. ISAAC HUSIK.

University of Pennsylvania.

Hegel; sa vie et ses œuvres. Par P. Roques. Paris, Librairie Félix Alcan, 1912.
—pp. 358.

This is not a critique of the Hegelian philosophy. It is rather an attempt on the part of the author to put in brief compass the principal facts of the life of Hegel, to present all of his writings in their chronological order, and to summarize their content. Apart from the preface, in which the author expresses his conviction that the fundamental principles of the Hegelian point of view will ultimately have to be accepted, and in which he essays to indicate what some of those principles are, the book is purely historical. The author's aim is simply to play the rôle of historian of the life and thought of Hegel. The work is scholarly, and is based upon intimate acquaintance with both the published works and the manuscripts of the philosopher. It is written in a clear and fascinating style, and, in the opinion of the reviewer, is true to the spirit of the Hegelian philosophy.

There are ten chapters in the book. The first three deal with Hegel at Tübingen, at Berne, at Frankfort, and at Jena. Interesting summaries of the Jugendschriften are to be found here, summaries which throw very illuminating sidelights on the more mature thought of the philosopher. Here are found also summaries of the five articles published by Hegel when he was laboring in conjunction with Schelling. The fourth chapter is devoted to a consideration of the Phenomenology of Mind, Hegel's first work of fundamental importance. The summary here given of this difficult work is quite exhaustive, and may well be read by every one who would appreciate the real meaning of this introduction to the Hegelian point of view. In the fifth chapter we find an interesting account of the sojourn of Hegel at Bamberg and Nuremberg. It was during this period that Hegel wrote the Propaedeutik, which is much more interesting when read in the light of Hegel's later thought. The Logic is summarized in the sixth chapter. A summary of this desperately difficult work, which gives to the reader a fairly adequate conception of its contents, is certainly not easy to write. But M. Roques has succeeded very well in his attempt. The seventh chapter deals with Hegel at Heidelberg. In this chapter are to be found summary discussions of the Encyclopaedia and of the article on Jacobi. Chapters eight and nine follow the fortunes of our philosopher to Berlin and present to us summaries of the Philosophy of Right, Philosophy of History, Philosophy of Art, Philosophy of Religion, and History of Philosophy. These chapters cover one hundred pages of the book, and are not as sketchy as it might appear. The Philosophy of Right, especially, is dealt with very fully and the summary of its contents is quite illuminating. The last chapter tells us of the closing years of the philosopher's life, describing to us his journeys into France and about Germany, summarizing for us his later and little known scientific and political writings, and introducing us to the discourses that he delivered as rector of the University of Berlin. A short reference to the so-called Hegelian school concludes the volume.

To the mind of the reviewer, this is an important work. It supplies a real need. Too little is known, generally, concerning the growth of Hegel's

thought: much concerning that development may be learned from the present volume. Furthermore, there are current caricatures of Hegel's views which too frequently are mistaken for his real views: this work will doubtless do much to destroy these phantoms and to emphasize what it is that Hegel really teaches That this ignorance and misconstruction should be done away with, every one, regardless of his personal opinion concerning the value of the Hegelian philosophy, will readily admit. The author states that his primary aim is to introduce Hegel to his fellow-countrymen, continuing the work begun by Vera and Bénard. But he has done more than this. He has added to philosophical literature a book that is of permanent value, one that deserves to be, and doubtless will be, widely read.

G. W. CUNNINGHAM.

MIDDLEBURY COLLEGE.

The Evolution of Educational Theory. By JOHN ADAMS. London, Macmillan & Co.; New York, The Macmillan Company, 1912.—pp. vii, 410.

This is the initial volume of a series entitled "The Schools of Philosophy" which has been undertaken under the editorship of Sir Henry Jones of the University of Glasgow. After pointing out the indispensable character of the historical approach in philosophy, the editor says in his General Preface: "The literature of this country is rich in many respects; but it contains no History of Philosophy which is based on this conception or which presents with even approximate adequacy the evolution of the central conceptions of human experience. . . . It is the aim of the present series to remove this defect and to give to English readers of philosophy a history of the movement of philosophical thought whose appeal is more intimate than any which can be transmitted through a foreign medium." It is announced that The History of Greek Philosophy from Thales to Aristotle by Professor John Burnet, and of Modern Philosophy from Hobbes to Reid by Professor Stout, will be published shortly. Other volumes announced in this series are: From Descartes to Kant by Professor Latta; Hegel and his Idealist Successors by the Editor; and Political Philosophy by Dr. R. A. Duff of the University of Glasgow.

The volume before us, by the professor of Education in the University of London, scarcely fulfils the expectations aroused by the emphasis on the importance of the historical method in the Editor's General Preface and by the title of the book itself. It is rather a classification and discussion in the light of philosophical principles of certain fundamental theories of education. As the author states his own method of procedure "In view of the prevailing conflict between classification and chronology, it will be well not to pay too much attention to the chronological element, and certainly not to adopt it as a guiding principle after the Renaissance. Instead of taking the period at which each of the post-Renaissance theories was at its height and giving a cross-section of educational thought at that time, the better plan will be to take up each of the theories, and show its relation to the development of educational theory, as a whole. . . . This will always imply a to and fro movement

in the discussion of any theory. . . . This book does not profess to be a history of educational theory, and makes no pretence of giving a chronological account of all the happenings that mark the process by which our present stage of educational theory has been reached" (pp. 103-104).

It is obvious that this is a difficult program to carry through, and the impression which one receives from the book as a whole suggests the question whether some other plan of arrangement would not have been more satisfactory. The frequent "to and fro movement" obscures the unity, the relation of the theory under discussion to "the development of educational theory as a whole." This impression is strengthened, I think, by the overloading of the discussion through references to a multitude of subordinate topics. The result is that the reader has difficulty in discovering and following the general direction and relations of the evolutionary movement. This criticism, however, applies to the book as a whole rather than to its discussion of individual problems and theories. Professor Adams treats in an admirable way the most fundamental problems of current educational theory, and often succeeds in overcoming the oppositions and contradictions of the old formulations by the employment of a more concrete logic and more modern principles of analysis. This is especially evident in the discussion of the relation of Formal Discipline and Specific Education, which forms in a sense the central topic of the volume. The author always shows his acquaintance with the most recent literature on educational problems, particularly the experimental investigations which have been carried on in this country. The idealistic philosophy on which he bases his theory of education is hospitable to the results of all kinds of physical and experimental inquiries. Indeed even an experimentalist might be inclined to criticise Professor Adams for the somewhat unquestioning faith which he places in mental tests.

The volume has the following chapter headings: The Nature and Scope of Educational Theory; The Data of Education; The Historical Aspect of Educational Theory; The Prehistoric Stage; The Social and the Individual Aim in Education; Specific Education; The Educational Organon; Humanism; Naturalism; The Idealistic Basis of Education; The Mechanical View; The Educational Outlook.

J. E. C.

Immanuel Kants Leben. Dargestellt von Karl Vorländer. Leipzig, Verlag von Felix Meiner, 1911.—pp. xi, 223.

This volume is a supplement to the edition of Kant's Complete Works which appeared a few years ago under the general editorship of Vorländer as a part of the well-known "Philosophische Bibliothek." As Vorländer points out, the usual accounts of Kant's life are drawn from Schubert's biography which was published sixty years ago, and which is now quite inadequate in the light of the results which the investigation of recent years have brought to light. It was therefore an important service to bring together these scattered results, and from them to give in brief compass a new account of Kant's life. Only

in the case of a few of the least generally known writings is any attempt made to give an analysis of Kant's thought. Moreover, the author reserves, as he tells us, for a future volume an estimate of Kant's character and a detailed account of his attitude towards Politics, Religion, Art, etc. The account of Kant's life is clear and interesting, and is based upon the most authoritative sources of information, an account of which is given at the end of the book.

I. E. C.

La Philosophie de William James. Par Th. Flournoy. Saint-Blaise, Foyer Solidariste, 1911.—pp. 219.

In the spring of 1910 the Christian Association of Swiss Students invited William James to address them at their conference in St. Croix. Mr. James accepted the invitation on condition of an improvement in his health. That he did not go to St. Croix is a matter of history. The officers of the association then turned to M. Flournoy to fill the vacant place on their program. "Mes circonstances particulières me firent longtemps hésiter; mais quand arriva la désolante nouvelle de la mort de James, il ne me parut pas que je pusse me soustraire à la tâche douloureuse qui m'était proposée; je vis comme un devoir sacré à ne pas laisser échapper cette occasion d'évoquer devant mes jeunes auditeurs le souvenir du penseur de génie, du caractère splendide, du véritable ami qui venait de nous être si brusquement enlevé."

This book is the fulfilment of that sacred duty. And it has been well fulfilled, nor could a better man have been chosen to fulfil it. William James himself had said of Flournoy that there was a man who walked with him shoulder to shoulder, and the book shows it. I have had occasion to read, since the master's death, well-nigh everything that has been written about him and his work, but this is the first treatise I have seen in which the personality and opinions of the writer have been suppressed in the interests of his subjectmatter. The reader from time to time gets the feeling that James himself is here speaking, that such is his very trick of expression, such the cadence of his phrase. The inevitable refraction of a foreign tongue, the special conditions of a special audience, are as if they were not. The very word and spirit of the great American thinker hover near and shine through. Almost each sentence has, as it were, the whole of James's philosophy for its fringe.

Yet that this should not be altogether so, is inevitable. A patriotic Swiss, speaking to youthful countrymen, would be apt to stress a little too heavily the influence on James of Agassiz, a Swiss; the pragmatic character of the philosophies of such Swiss thinkers as J. J. Gourd and Ernest Martin. And a Christian and spiritist might claim for James more intimate connection with his cherished beliefs than actually existed. But these overemphases, all of them, are as slight as they are natural. The chief thing is that the portrait here drawn is really the portrait of the philosopher William James, and drawn with a faithfuless and intimacy unprecedented.

It would be supererogatory to reproduce for the readers of this Review the details of that portrait. They are skilfully and dramatically marshalled, and

the analysis of the master's character and of the influences earliest at work on him already foreshadow the final expression of that character in its ultimate vision. One point, however, is worth special mention—the relations between James and Bergson. Although he makes light of the question of priority which had been raised by certain over-enthusiastic followers of Bergson, Flournoy thinks it wise to point to the fact that the essential doctrine which both James and Bergson have in common was formulated by James in Mind, in the article "on some omissions of introspective psychology," in the year 1884, some five years prior to Bergson's first book in that field. Beyond the conception of being as a flux, and concepts as utilitarian extracts therefrom. James has not much in common with Bergson. "... On ne voit pas très bien comment il aurait pu, sans se renier lui-même, accepter pour son compte la conception foncièrement moniste impliquée dans l' "élan vital original" d'où M. Bergson fait sortir tout l'univers par évolution divergente. Rien n'est plus opposé qu'une telle vision des choses à celle que Iames a toujours eue de l'univers: un chaos primordial sans trace d'unité, ni d'ordre, ni d'harmonie, ni de lois; pur assemblage de principes ou d'êtres séparés et indépendants, que leurs relations fortuites finissent par organiser en un monde d'harmonie et d'union croissantes, quoique peut-être jamais complètes" (pp. 183-4). The difference could not have been better formulated. Its statement is another evincement of the intimate adequacy of Flournoy's presentation of the philosophy of William James.

Comparisons of this sort are, however, only incidental. Flournoy's chief concern is with the *life* of James's philosophic vision. That life, he finds, has not been crystallized into complicated deductions and precise formulas which might be the bible of a school. It consists rather of an attitude which spreads by sympathetic contagion, and generates and sustains the freedom of thought and the spontaneity of action. It is to be hoped, for the benefit of the public who want a right account of William James's philosophy of life, that the book will be speedily translated and will have the widest circulation possible.

HORACE M. KALLEN.

THE UNIVERSITY OF WISCONSIN.

The Process of Abstraction: An Experimental Study. By Thomas Verner Moore. The University of California Publications in Psychology, Vol. I, No. 2. Berkeley, The University Press, 1910.—pp. 73-197.

This monograph describes an experimental investigation, performed partly in Leipzig and partly at the University of California, of the mental processes involved in the formation of abstract ideas. It falls into four general divisions, dealing respectively with the literature of the problem (the author summarizes the results only of experimenters in this field, particularly the work of the Würzburg School and some investigations along the same line in the Leipzig Laboratory), the method of his own experiments, the results which he obtained, and his general conclusions regarding the product of the process of abstraction.

The experiments were performed as follows. A variety of geometrical

figures were drawn upon a disc in such a manner that by rotation groups of five figures could be exposed successively to the reagent, each exposure lasting one-fourth of a second. In the successive exposures one figure was common to all the groups and all the others were different. The reagent was instructed to look for the repetition of a figure and to stop the experiment as soon as he was certain that some figure had appeared twice. This repeated figure, then, was the common quality to be abstracted from the total presented complex.

The statement of results falls under four headings: The breaking up of the group as the common figure is discovered, the process of perception, the process of memory, and the process of recognition. It was found that the elements of a group have a different mental value before and after the discovery of the common figure. If no common element is discovered, several figures can usually be recalled with ease, but once the common element has been perceived, the other figures disappear from consciousness. The process of perception was found to pass through several stages, varying from the mere general idea that some figure has been repeated, through a more or less definite idea of what the figure was, to an accurate idea of the figure and its orientation. Frequently there is no imagery at all in the memory of the figure and the author concludes that "the mental image forms no essential part in the apprehension of a figure" (p. 134). In many cases the residuum of the abstracting process is merely the memory that the figure belongs to such or such categories, e. g., has certain angles or is like some familiar objects, and this type of memorizing is found to be much more efficient than memory by either visual or motor imagery. The process of recognition, also, is shown to be entirely independent of imagery. The recognition may be a mere intimation of repetition or a probability or a certainty, and certain recognition does not depend upon perfect perception. The basis of recognition is found to be not merely images and feelings, but the mental categories that couple the perception to the train of memory. "That which is the chief factor in perception, that by which we recall figures, is also that by which we recognize them. And this is the figure's series of associated concepts" (p. 178).

The general conclusion regarding abstraction is that "there exist imageless mental contents representative of a visible object," whatever the nature of these imageless contents may be, and second, that "perception is a process of assimilating the data of sense experience to their appropriate mental categories" (p. 180 f.). These categories are qualitatively distinct from sensations or images and cannot be identified with feelings or will. "We must therefore recognize the existence of another division of mental processes to which our thoughts and mental categories must be relegated" (p. 187). This element is the bearer of meaning and may be called the concept or thought.

GEORGE H. SABINE.

LELAND STANFORD JR. UNIVERSITY.

The Learning Process. By STEPHEN SHELDON COLVIN. New York, The Macmillan Co., 1911.—pp. xxv, 336.

"The point of view that is held to throughout the following discussion in

the interpretation of the learning process, and the states of consciousness attendant on it, is a thoroughgoing functionalism and pragmatism."... The existence of consciousness is "conditioned on its service to the organism, this service being that of adequately adjusting the organism to its environment" (pp. xxi-xxii).

From the general point of view indicated by these quotations, the author discusses the various problems of the theory and practice of education, drawing his materials "principally from the results of experimental psychology and pedagogy," and making use from time to time of "theoretical considerations in the fields of psychology and biology" (p. vii). The main problems involving psychological theory discussed in this book are those arising in connection with reflex action, instinct and habit; sensation and perception; imagination; memory and association; attention and interest; the higher thought processes. The more strictly pedagogical considerations have to do with the nature of, and the principles involved in, the learning process; the transfer of training; the educational problems of rational thinking.

Taken as a whole, the book represents a praiseworthy attempt to ground educational practices upon sound psychological theory, and what is most sound and rational in psychological theory perhaps becomes more evident through the author's treatment. Thus the author throws the whole weight of the concept of evolution in consciousness in favor of the functional as opposed to the structural psychology, in this way recognizing continuity in progress, instead of quantitative disparateness, as the essential quality of consciousness. It is true that the functional view leads more directly into the more serious problems of philosophy, but this fact may, after all, count in its favor. As an instance of such a problem which, by the way, the author does not follow up, but which is very significantly put by his discussion, there may be mentioned the nature of the functional relation itself, or the nature of the relation of a function to that of which it is a function; in other words, what, essentially, for consciousness, is a relation or function? If such a relation cannot be objectively described but only 'functionally' recognized, then there would be difficulty in insisting that it could be held to or discarded, supported or disproved. The same question would, of course, develop into that of the relation of body and mind, and become, ultimately, the problem of mechanism versus purpose. As was said, the author avoids the technically philosophical aspects of his problems, since these need not directly appear in connection with the pedagogical interest. It is not clear, however, that in the absence of such considerations full justice can be done the higher thought processes; and it is, perhaps, in this latter point that the book is most seriously open to criticism. For example, it does not clearly appear how, from the author's point of view, it would be necessary to proceed in order to explain the case of the ideals which thought may have as the object of its own processes and purposes, after it has been laid down as a principle that "the existence of consciousness is conditioned on its service to the organism" by way of adjusting the latter to its environment. Whatever the logical status of this question may be, what it is most

likely to result in practically is a narrowly materialistic and 'commercial' interest in education. It is but one step from successful adjustment to success of adjustment at any cost, and the cost is to be counted in terms of character. There is no doubt that adequacy of adjustment is the end of training for technical skill, and it is just as true that the burglar or political crook is as adequately adjusted to his environment as the person of scholarly character. To take a less extreme example, the graduate of the business 'college' acquires expert control of instruments which enable him to command a neat salary, but in his course of training his character may never have been involved. Adjustment to environment is a valid end of education; but it is such only after an ideal of human character has operated selectively in defining what is to be the environment. With the environment defined with reference to the ideal of a symmetrical and coherent conscious life, adjustment becomes merely a means, and a means invariably misused except as the ideal is kept constantly in mind.

In addition to its suggestiveness for philosophical theory, the book is valuable in view of the insight which the author shows in his treatment of the more specifically educational problems. The discussion of the transfer of training is a case in point. Although the possibility of securing the transmission of acquired modifications from one individual to another through inheritance may be seriously questioned, yet, "the transmission of modification produced in one generation by environmental conditions to succeeding generations by means of the social milieu is one of the striking differences between brute and human societies" (p. 2). This is the conclusion from the theoretical consideration of the problem. From the point of view of educational practice, "the fact of transfer cannot be doubted. The factors involved in such transfer, . . . and the best methods of securing such transfer will long doubtless remain questions for investigation and discussion" (p. 241).

E. JORDAN.

CORNELL UNIVERSITY.

Outline of a Course in the Philosophy of Education. By JOHN ANGUS MAC-VANNEL. New York, The Macmillan Co., 1912.—pp. ix, 207.

Education "as a fact of experience is concerned with the relation of an individual to his environment" (p. 56). These two presuppositions of education, personality and environment, are discussed at some length in chapter iv of the book under consideration, which is an attempt to formulate in their mutual interrelations the principles underlying the process of education (p. 88). The first three chapters are concerned with certain general philosophical and scientific problems of education. The remaining chapters (v to xi) present "an analysis of the concept of civilization, its content and implications" (p. 75). Regarding personality and environment as the two presuppositions of education, educational theory has to do with the nature of these two concepts and their relations to each other. Accepting the integrity of the self, and postulating as its essential quality 'activity' (p. 61), the author finds function

alism to be the doctrine most adequately representing the relation of the self to the environment. The environment is interpreted as civilization (p. 74), and is regarded as social and therefore moral (p. 113). The ideal or purpose of education is self-realization or human perfection (p. 115).

The general plan of the book as an 'outline' imposes restrictions upon it which make review particularly difficult. The statement of principles is often so brief and compact as to leave the impression of vagueness, and it is with one or two instances of this kind that this notice is concerned. In the first place, after recognizing the theoretical integrity of the self, it is questionable whether the author can consistently hold to the doctrine of the functional nature of mind, in the sense of that doctrine as accepted by pragmatism. As generally accepted by this view, mind is constitutively determined as a function: the description of a certain peculiar function is the definition of mind. Mind is a function or relation of certain organic or other processes to a certain other complication of processes represented as an end or purpose, and this end is objectified and the relation realized when the two terms are brought to adjustment. But in this view there is no place for a self regarded as conserved or developed by adjustment to an environment recognizable apart from the self. The relation or 'function' between the two absorbs them as terms, so that the possibility of distinction is precluded. The self and the environment are 'organic' to, and lost to distinction in, the homogeneity of the 'social.' Professor MacVannel's good will to pragmatism has not therefore been able to free itself from his idealistic presuppositions, to say nothing of the neighborliness which it bears to modern realism. That his doctrine is better than the name he gives it, is evident in what he finds as the ideal or end of education, viz., self-realization or human perfection. The realization of the self would hardly be intelligible if the realized self were nothing more than the self adjusted to the totality of past self knowledge, or to the whole of man's consciousness of the world, as environment (p. 74). In such an equation one term or the other falls out and adjustment loses its distinctive character.

Professor MacVannel's book quite satisfactorily serves the end for which it was written. Exhaustiveness in this line would involve an adaptation of the whole of the history of philosophy, for it is here that we have a record of the development of the conscious life. The author has remained close to that history in its larger strides, and this fact makes it the more surprising that he should have accepted a point of view based on a category that is biological or at best psychological.

E. JORDAN.

CORNELL UNIVERSITY.

The following books also have been received:

Hegel's Doctrine of Formal Logic. By H. S. MACRAN. Oxford, The Clarendon Press, 1912.—pp. 315. 7/6 net.

The Science of Logic. By P. Coffey. Two Volumes, Vol. II. London, Longmans, Green & Co., 1912.—pp. vii, 359.

Introductory Philosophy. By Charles A. Dubray. New York, Longmans, Green, & Co., 1912.—pp. xxi, 624. \$2.60.

The System of the Vedânta. By Paul Deussen. Translated by Charles Johnston. Chicago, The Open Court Publishing Co., 1912.—pp. xiii, 513.

The Teacher's Practical Philosophy. By George Trumbull Ladd. New York, Funk & Wagnalls Co., 1911.—pp. viii, 331. \$1.25 net.

The Christian View of the World. By George John Blewett. New Haven, Yale University Press, 1912.—pp. xvi, 344. \$2.00 net.

The Philosophy of the Future. By S. S. Hebberd. New York, Maspeth Pub. House, 1911.—pp. 251. \$1.50.

The Composition of Matter and the Evolution of Mind. By Duncan Taylor. London, The Walter Scot Publishing Co., 1912.—pp. vi, 176. 3/6.

Speculative Psychology and the Unity of Races. By N. R. D'Alfonso. Rome, E. Loescher & Co., 1911.—pp. 20.

Psychic Phenomena, Science, and Immortality. By Henry Frank. Boston, Sherman, French & Co., 1911.—pp. 556. \$2.25.

The Uncaused Being and the Criterion of Truth. By E. Z. Derr. Boston, Sherman, French & Co., 1911.—pp. vii, 110. \$1.00 net.

The Day Approaching. By A. G. LILLICRAP. Reading, A. G. Lillicrap, 1912.—pp. 102.

Ethik. Von Wilhelm Wundt. Vierte umgearbeitete Auflage. Drei Bände, zweiter Band. Stuttgart, Verlag von Ferdinand Enke, 1912.—pp. iv, 306. M. 10.

Zur Analyse der Vorstellungen und ihrer Gesetze. Von K. KOFFKA. Leipzig, Verlag von Quelle & Meyer, 1912.—pp. x, 392. M. 12.50.

Wilhelm von Humboldts Forschungen über Ästhetik. Von Hans aus der Fuente. Gieszen, Verlag von Alfred Töpelmann, 1912.—pp. iv, 143. M. 4.40.

Wundts Lehre vom Willen. Von H. Schumann. Leipzig, Quelle & Meyer, 1912.—pp. viii, 97. M. 3.

Das Problem der Bewegung in methodischer Bedeutung. Von Jacob Klatzkin. Bern, Buchdruckerei Scheitlin & Co., 1912.—pp. 40.

Zur Kritik des Geniebegriffs. Von JACOB CAHAN. Bern, Buchdruckerei Scheitlin & Co., 1911.—pp. 64.

Versuch über Alison's Asthetik. Von C. Fedeles. München, Buchdruckerei B. Heller, 1911.—pp. 75.

Geschichte der Philosophie im Altertum und Mittelalter. Von August Messer. Leipzig, Quelle & Meyer, 1912.—pp. vii, 136. M. 1.25.

Kant und die Marburger Schule. Von PAUL NATORP. Berlin, Verlag von Reuther & Reichard, 1912.—pp. 29. M. 0.80.

Les Étapes de la Philosophie Mathematique. Par Léon Brunschvicg. Paris, Félix Alcan, 1912,—pp. xi, 591. 10 francs.

Schelling. Par Émile Bréhier. Paris, Félix Alcan, 1912.—pp. vii, 314. 6 francs.

L'Année Philosophique. Par F. PILLON, Directeur. Paris, Félix Alcan, 1912.—pp. 290. 5 fr.

Les Formes Elémentaires de la Vie Religieuse. Par Émile Durkheim. Paris, Félix Alcan, 1912.—pp. 647. 10 francs.

- Jean Jacques Rousseau et sa Philosophie. Par Harald Höffding. Traduit par Jacques de Coussange. Paris, Félix Alcan, 1912.—pp. xi, 164. 2 fr. 50.
- Le Rapport Social. Par Eugène Dupréel. Paris, Félix Alcan, 1912. pp. iv, 304. 5 francs.
- Une Philosophie Nouvelle; Henri Bergson. Par Edduard Le Roy. Paris, Félix Alcan, 1912.—pp. v, 208. 2 fr. 50.
- La Morale de Geuliucx dans ses rapports avec la Philosophie de Descartes. Par Eugène Terraillon. Paris, Félix Alcan, 1912.—pp. 224. 3 fr. 75.
- Premiers Principes d'une Théorie Générale des Emotions. Par MARIUS LATOUR. Paris, Félix Alcan, 1912.—pp. 300. 3 fr. 50.
- La Résonance du Toucher et la Topographie des Pulpes. MARIE JAËLL.
 Paris, Félix Alcan, 1912.—pp. xv, 161. 6 francs.
- Les Règles Esthétiques et les Lois du Sentiment. Par HENRI DUSSAUZE. Paris, Félix Alcan, 1911.—pp. 541. 10 francs.
- Le Verger, le Temple, la Cellule. Par CH. OULMONT. Paris, Librairie Hachette et Cie., 1912.—pp. x, 335. 3 fr. 50.
- Le Langage et la Verbomanie. Par Ossip-Lourié. Paris, Félix Alcan, 1912.

 —pp. 275. 5 francs.
- L'Honneur. Par Eugène Terraillon. Paris, Félix Alcan, 1912.—pp. 293. 5 francs.
- Conosci te stesso. Da Bernardino Varisco. Milano, Libreria Editrice Milanese, 1912.—pp. xxviii, 353. Lire cinque.
- Idee e figure moderne. Da Alessandro Chiappelli. Ancona, Giovanni Puccini e Figli, 1912.—pp. 175. Lire 3.50.

SUMMARIES OF ARTICLES.

[ABBREVIATIONS.—Am. J. Ps. = The American Journal of Psychology; Ar. de Ps. = Archives de Psychologie; Ar. f. G. Ph. = Archiv für Geschichte der Philosophie; Ar. f. sys. Ph. = Archiv für systematische Philosophie; Br. J. Ps. = The British Journal of Psychology; Int. J. E. = International Journal of Ethics; J. of Ph., Psy., and Sci. Meth. = The Journal of Philosophy, Psychology, and Sci. entific Methods; J. de Psych. = Journal de Psychologie; Psych. Bul. = Psychological Bulletin; Psych. Rev. = Psychological Review; Rev. de Mét. = Revue de Métaphysique et de Morale; Rev. Néo-Sc. = Revue Néo-Scolastique; Rev. Ph. = Revue Philosophique; Rev. de Ph. = Revue de Philosophie; R. d. Fil. = Rivista di Filosofia e Scienze Affini; V. f. w. Ph. = Vierteljahrsschrift für wissenschaftiche Philosophie; Z. f. Ph. u. ph. Kr. = Zeitschrift für Philosophie und philosophische Kritik; Z. f. Psych. = Zeitschrift für Psychologie und Physiologie der Sinnesorgane, I. Abtl.: Zeitschrift für Psychologie. — Other titles are self-explanatory.]

Representational Pragmatism. DOUGLAS C. MACINTOSH. Mind, No. 82, pp. 167-181.

The intellectualist holds that truth is identity with reality. This means identity of subject and predicate, and, since this is never found in practical life, the correspondence or copy-theory is adopted, which again is exchanged for coherence of idea with idea, and the problem then arises how to secure adherence of idea to reality. Hence there never can be complete identity, and the question How much identity is necessary for truth? is unanswerable for the intellectualist. Wishing to escape the agnosticism involved here, the intuitionist brings forward the doctrine of immediacy, but in his zeal in maintaining that concepts without intuition are empty, he overlooks the fact that intuition without concepts is blind. The difficulties of the intellectualist and the anti-conceptualist alike, arise from ignoring the practicality of ideas, and it is this which current pragmatism seizes upon. The intellectualist is right, however, in insisting upon identity, but the identity must be between idea and perception. The practical purpose subordinates the cognitive; the value or usefulness of an idea to a practical purpose determines its truth. What is taken as truth, then, is representation sufficient to mediate satisfactorily the purpose with which the judgment is made. What is really true, however, is representation sufficient to mediate satisfactorily whatever purpose or purposes ought to be recognized in making the judgment. This is neither intellectualism nor pragmatism, but a position intermediate between the two.

MARK E. PENNEY.

Dogmatism versus Criticism. Walter T. Marvin. J. of Ph., Psy., and Sci. Meth., IX, 12, pp. 309-317.

The true force center from which neo-realism derives its impulse is an attitude toward all philosophical problems wholly different from that of idealism.

The latter represents the attitude of criticism, while the neo-realistic movement is a return to dogmatism. Criticism maintains one or more of the following propositions: (I) that in general the theory of knowledge is logically fundamental or prior to all other scientific procedure: (2) that the theory of knowledge can ascertain the limits of the field of possible knowledge; (3) that it can determine ultimately the validity of science and of the methods of science, and can correct the results of science with the authority of final resort; (4) that it can give us of itself certain fundamental, existential truths usually called a theory of reality. In opposition to these claims, dogmatism maintains: (I) that the theory of knowledge is not logically fundamental, that it is simply one of the special sciences and logically presupposes the results of many of the other special sciences; (2) that the theory of knowledge is not able to show, except inductively and empirically, either what knowledge is possible or how it is possible or what are the limits of our knowledge; (3) that it is not able to throw any light upon the nature of the existent world or upon the fundamental postulates and generalizations of science, except in so far as the knowledge of one natural event or object enables us at times to make inferences regarding certain others; in short that the theory of knowledge does not give us a theory of reality, but assumes a theory of reality of which it is not the author. Neo-realism has further championed the following causes: (1) the giving up of the substance-attribute notion as fundamental; (2) the holding to logical pluralism and its companion doctrine, the defence of analysis as an ultimate method of research; (3) the complete elimination of psychology or epistemology from formal logic. Idealism is a vicious circle, and the idealist is temperamentally a psychologist. The neo-realist is a logician.

E. JORDAN.

Relevance. F. C. S. SCHILLER. Mind, No. 82, pp. 153-166.

One of the world's greatest discoveries is the notion of relevance. Of all the great languages, English alone has a vocabulary expressing the notion and its opposite: relevance, relevant, irrelevance, irrelevant, the nearest approach being the French à propos, mal à propos. It originated about the middle of the sixteenth century and its first recorded use occurs in Scotch laws. The advantages of the term relevance over its functional equivalents in English and the other languages are: (I) subjectivity, (2) selectiveness, (3) honesty, (4) disputableness of the relevant. The use of the conception of relevance is practical reasoning and in science means a repudiation of the logical ideal of all-inclusiveness, and therefore, if it is sound, will involve a complete reconstruction of logical theory. In ordinary thinking it is relevance and not truth that is the supreme controlling power in the making of judgments. The same thing is true in science, and although philosophy has made pretenses of all-inclusiveness it never has been able to escape the partial and the individual. Theoretical logic alone refuses to admit relevance, although logicians cannot, in fact, dispense with the notion.

MARK E. PENNEY.

The Concept of Immediacy. B. H. Bode. J. of Ph., Psy., and Sci. Meth., IX, 6, pp. 141-149.

The fundamental issue between objective idealism and its opponents is conveniently centered about Kant's treatment of the concept of immediacy. But in Kant's sharp separation of sense and understanding immediacy is necessarily identified with the material of sense. Kant, however, realizes the untenableness of this position of Hume, and postulates an immediacy of a totally different kind, namely, that part of a situation which is subjected to scrutiny, the "present-as-absent." These two conceptions of immediacy were confused by Kant, as they are by transcendentalists of the present day. A functional immediacy indicates that the situation in which it occurs is in a process of reconstruction, and its distinction is for the sake of a purpose or end. Under this interpretation of immediacy the 'real' is whatever we find, and the 'true' is that which leads or guides in the way that it promises to do, the true idea being subject to a test which it itself points out. With the immediate interpreted functionally, there is no distinction between 'reality' and 'appearance'; all experiences are equally real, though not all are equally true or serviceable. Objective idealism confuses the immediacy of historical empiricism with that of present-day functionalism, as is evident in the systems of Bradley and Royce.

E. JORDAN.

L'Énergétique et la Théorie Scolastique. D. Nys. Rev. Néo-Sc., No. 73, pp. 5-41.

One finds only a single idea common to both "energism" and "dynamism," i. e., the dynamic conception of the universe, according to which all material bodies are possessed of energy or of a power of action. The relative problems of the extension and the mode of activity of material agents, are not only strange to the pre-occupations of the "energists," but are capable of solutions opposed to that of the dynamist. From the view point of cosmology, the new theory appropriates several scholastic doctrines which had been disowned or even combatted down to recent times, by the majority of men of science. A case in point is the restoration of 'quality,' which has taken its place alongside of 'quantity,' and has become even the principle object of physics. Physics contracts its field of investigations leaving to other sciences the consideration of 'substance,' which it regards no more than as objective phenomena, so that a very sharp line of demarcation is drawn between natural science and cosmology. If energism presents important advantages, it has also its inconveniences and faults. The most serious of the latter is its presentation of the universe in the form of an absolute dynamism, which it would have been so easy to avoid without any sacrifice to method, construction or the scientific results of the new theory. Instead of attributing to all cosmic reality the unique rôle of constituting energy, it would have put the theory beyond the pale of any criticism by considering energy merely as a phenomenon or property of material bodies. In fact while certain properties reveal themselves as true energy elements, others are natural measures, others still, regulate their activity. Thanks to this correction the forms of energy remain unchanged, but with the added advantage of adaptation to reality. Among numerous of its partisans, energism is transformed into phenomenalism or monism. These philosophic conceptions have a triple fault: first, of being in contradiction with the characteristic method of the system, which excludes all hypothesis; secondly, of being added to the principal idea of 'energism' as strange and useless elements; thirdly, of being able to claim for itself neither science nor philosophy. It is therefore very desirable that the new theory rid itself of these compromising superfluities and return to a conception of energy more in conformity with experimental principles and one more fruitful.

HENRY MAYER.

What Kind of Realism? Durant Drake. J. of Ph., Psy., and Sci. Meth., IX, 6, pp. 149-154.

The type of realism to which one holds is determined by what one proceeds to do with the data of conscious perception. The "natural realist" identifies them with "real things." The atomistic realist refers them all to an arch-atom in the brain. The dualistic realist asserts that they are in the chain of causes with brain-perception-events, but gives them no place in the space world. Another type of realist puts them in the brain as epiphenomenal to the brain-perception-events. Finally, the panpsychic realist, to which class the author of the article belongs, identifies the data of conscious perception with brain-perception-events.

E. JORDAN.

Identité de la liberté et de la nécessité. J. DE GAULTIER. Rev. Ph., XXXVII, 5, pp. 449-475.

Every philosophical system, with the exception of Spinoza's, has tried to tell us what reality ought to be, rather than what it is. This attempt has led to a desire for an unattainable sort of freedom. It is as serious an error to demand a special realm where freedom reigns supreme, as it is to give over the whole world to a rigid causal series. The case for ethical freedom is not affected either way by arguments pertaining to the causal connections of the phenomenal series. Bergson, who attempts to introduce freedom under the category of the unpredictable, and Boutroux, who brings it in as the contingent, are both arguing beside the point. The notion of an incalculable or unpredictable motive in human consciousness has no connection with the problems of merit or demerit, responsibility, reward and punishment. This conception of the unpredictable does not operate in the interest of freedom but actually implies a blind necessity. Boutroux shows that it is a species of dogmatism to treat causality as something more than a methodological principle. He holds that while we can know phenomena only in orderly series, this does not mean that reality is a closed mechanical order. In this way he introduces the conception of contingency. This notion, however, as applied to the moral motive, is no more relevant than is that of the unpredictable. The addition of such an unknown factor does not touch the moral facts which give rise to the notion of freedom. If freedom is to have an intelligible meaning, it must not be taken as referring to a set of facts out of relation to the causal series. It must be conceived as referring to a different aspect of facts which are thoroughly determinate in their relations.

J. R. TUTTLE.

Essai de critique sociologique du darwinisme. Dr. JANKÉLÉVITCH. Rev. Ph., XXXVII, 5, pp. 476-492.

The aim of the present article is to indicate the method and results of Rudolph Goldscheid's work, Hoherentwicklung und Menschenökonomie. Sociologists, wishing to preserve certain human values, have drawn the most diverse conclusions from Darwinian principles, and have erred also in not subjecting Darwinism itself to a sufficiently rigorous criticism. A cardinal error of Darwinism and of neo-Darwinism has been an overemphasis on the environment. The notion that natural selection is an immanent law, which ever leads to the production of higher types, results in an unfounded optimism. In reality, natural selection and adaptation are dependent upon complex and variable conditions of the organism as well as of the environment, and instead of leading to more complex types, may lead to degeneration. Progression, when it takes place, is the result, not merely of selection but of the active adaptation of organisms. Instead of adopting a fatalistic attitude toward the power of natural selection, the sociologist should study the active forces and faculties of man. Darwin's application of the Malthusian law is questioned, since some creatures persist in an unfavorable environment, while others die out in a highly favorable one. The rate of reproduction is held to be. not a constant, but a highly variable means of adaptation. A great overproduction of off-spring is a sign of unfavorable conditions and faulty ability to cope with them. The possession of varied resources for dealing with the conditions of life is followed by a loss of reproductive power, hence the human species has nothing to fear from a danger of over-population.

J. R. TUTTLE.

Description vs. Statement of Meaning. E. B. TITCHENER. Am. J. Ps., XXIII, 2, pp. 165-182.

It has been recognized in recent studies of the processes of thought, that the observers' reports contain material of different kinds: introspective description, and information or communication. There is no general agreement as regards (1) the line of division between the two modes of report, (2) the nature of the conscious processes underlying information, or (3) the attitude which finds expression in information. Jacobson required his observers to distinguish between description of process and statement of meaning. He secures a line of division in their reports and he finds that there are no specific meaning processes underlying the statements of meaning. On the basis of new experiments the attempt is made to characterize the attitudes implied in, or demanded by,

the two modes of report; the one attitude turns out to be that of descriptive psychology, the other that of logic or common sense. Facts brought out in the course of these experiments indicate that there is a rich field for introspective study in the consciousness underlying "conflict of meanings," "the gradual dawn of a meaning," "misunderstanding," "the inability to make oneself understood," and so forth.

JAMES S. JOHNSTON.

The Theory and Limitations of Introspection. RAYMOND DODGE. Am. J. Ps., XXIII, 2, pp. 214-229.

This article raises the question of the subject-matter of psychology. Psychology should not be limited by the "fundamental assumption that non-introspective facts are non-psychological." "It may be that after all it would be better to surrender the name psychology to those who believe that it applies only to a description of the findings of introspective consciousness. If so then let us candidly confess allegiance to another science—a science of the conditions of human experience, conduct and personality. Every fact that will throw light on conduct, experience, or personality, whether from pathology, neurology, introspection, or the behavior of animals, will find itself at home not merely a stranger's welcome." The name for this science should be psychology, the science of the highest principle of organization of human life. The author gives a brief discussion of introspection in an effort to show its limitations.

JAMES S. JOHNSTON.

The Retina and Righthandedness. H. C. Stevens and C. J. Ducasse. Psych. Rev., XIX, 1, pp. 1-31.

The authors attempt to show by their experiments, which are characterized by their rigor of technique and method, that very essential differences in the space sense, exist between symetrical positions upon non-corresponding halves of the two retinas. The following are their results: (1) the right half of an extent in the field of vision is usually overestimated. (2) This overestimation holds good for both eyes. (3) The extent which is overestimated forms its retinal image upon the left corresponding halves of the two retinas. (4) The left corresponding halves of the two retinas are connected exclusively with the left hemisphere of the cerebrum. (5) By reason of the fact of a marked difference in the space sense of the two halves of the retina, those objects in the right half of the field of vision, by appearing larger, attract the visual attention which in turn lead to grasping movements of the right hand. The hand thus favored by earliest experience acquires a special skill which causes it to be used in all manual acts requiring the greatest precision.

JAMES S. JOHNSTON.

Competition, Natural and Industrial. IRA WOODS HOWERTH. Int. J. E., XXII, 4, pp. 399-419.

As opposed to the large capitalists on the one side, and the socialists on the other, the classical economists maintain that competition is a law of nature

basing their belief on the biological struggle for existence. The struggle against the physical conditions of life is not, properly speaking, competition at all. Competition, in its proper sense, as signifying the struggle between individuals or groups, is admittedly a conspicuous feature of life among those creatures who have not sufficient intelligence to appreciate its wastefulness, to restrain their increase, and to practice a higher economy. That competition does not necessarily produce the highest type is shown by the artificial selection which man constantly practices upon plants and animals. In human society, the survivor in competition may not be the most efficient producer, nor does competition benefit the consumer, principally because of the enormous waste it entails. Again, competition appeals to only one of a number of possible incentives, and is an essentially selfish principle. Coöperation has a biological basis as deep-lying as that of competition and is a more significant fact in human evolution, exerting a stronger socializing and moralizing influence.

J. R. TUTTLE.

Les grands courants de l'esthétique allemande contemporaine. V. BASCH. Rev. Ph., XXXVII, 1, pp. 22-43, and 2, pp. 167-190.

Since the time when Kant first erected the science of beauty it has never ceased, for German thought, to be an independent philosophical discipline, though its methods and instruments of research have been borrowed from the prevailing science and metaphysics of the time. So from a logic, a normative science with Kant, when the main question was the universality of the æsthetic judgment, it has passed (1) to an idealism which asked what was the reality to which the judgment applied, (2) to a formalism which seeks to investigate the immediately pleasing æsthetic forms, (3) to a consideration of the feeling for beauty, and finally to an empirical psychology of æsthetics. From this historical introduction, Basch passes to the consideration of the present method of æsthetic study. As the æsthetic attitudes are primarily attitudes of the self, whether they be creative or appreciative, they are generally admitted as amenable to psychological treatment. The experimental work is best outlined by Külpe and based on Wundt's classification of the methods of impression and of expression; the former basing itself on the judgment passed by the subject of the experiment and the latter on the recorded bodily expressions. But with the exception of Meumann there is no general idea that this purely experimental psychology will be sufficient to solve the æsthetic problems; most German workers in the field hold that its importance is capable of overestimation and that we must supplement it by observation and introspection. Moreover, it appears that this further work must be descriptive and even normative in character. Such a doctrine is very definitely held by Volkelt and Lipps who represent the second main trend of our question with the doctrine of Einfühlung, as Wundt, Külpe, etc., represented the first, i. e., the psychological method. This doctrine of Einfühlung, infusion, autoprojection into an object other than self, is not new in German æsthetics; it goes back as far as Herder. There is a division of schools on the question

of the primary nature of the Einfühlung; the one holding that it reduces to association, as Fechner declared, the other claiming the impossibility of explaining it by any associative process. Lipps, representing the second school, asserts the impossibility of explaining its presence by association in certain cases, as the association has had no chance to become formed and can hardly attain the high degree of close fusion to be found in certain cases of Einfühlung. The question then arises whether the Einfühlung is a specifically æsthetic phenomenon or if it is also present in other conscious activities; and it appears that this is rather the very basis of all consciousness in general, but that the æsthetic Einfühlung is distinguished by its greater purity and intensity. Volkelt tells us that the characteristic of Einfühlung is the union of intuition and emotion; the intuition itself takes on the character of the emotion. and the expressive organic movements are not the most essential part of the complex. For symbolic Einfühlung on the other hand the organic sensation is of greater but not of the greatest importance. This second type is the more interesting from the point of view of psychology, for here we have not a single fusion but a double, a fusion of the perception, at once with its own meaning and with its symbolic meaning; this takes place in the case of infusion into non-human objects. According to Lipps, beauty is the power in an object to give rise to a pleasure on our part to which we accord an æsthetic value. This pleasure arises from the presence in the object of the principle of unity in variety and of monarchical subordination. In addition to form, however, the æsthetic object has also a content, and Einfühlung is the way in which we animate the form with its spiritual content. For Lipps this Einfühlung is precisely the identity of the tendency of the self with that of its object which tendency is projected there by that self; i. e., the identification of the self and the object. Basch then passes to his third and last division of the subject. the science of art. This is the question of what art is in itself as an objective fact; in other words, the history and observation of art as a particular technique. The first man to consider the question from this point of view was Semper, whose influence began about 1890 though his works are dated about 1865. His doctrine is evolutionary, sociological, and pragmatic. Art is for him a universal social product and derives its various forms from the particular uses to which it is put by the primitive originators. This method of Semper's was taken up by Grosse but confined mainly to the consideration of the primitive artistic activity and is in this distinctly inferior to the work of Semper. Grosse, however, passes beyond Semper in making the general laws of art and its particular varieties depend on modes of economic production, on forms of division of labor. In his Völkerpsychologie, Wundt maintains the social nature of art as had Semper and Grosse. He adds an analysis of the artistic faculty of fancy which appears in two great forms, spatial and temporal; and consists in the fusion of three factors, the objective impression, the reproduced elements, and the feeling which oscillates between tension and relaxation. This fusion is the Einfühlung. Wundt divides arts into the plastic and the musical, and then subdivides these further from the evolutionary point of view.

Another trend in the objective doctrine of art is the anthropocentric view of Schmarsow; it is our own organism which explains our connections with the universe and from this organism we can explain the three essentials of plastic creation: symmetry, proportion, and rhythm. The arts, too, rising from this unitary organism are themselves such another organism, and form as it were a cosmos with three continents: the world of movement, the world of rest, and the world of causality. On this he bases a classification of arts which he opposes to that of Wundt. In this criticism of the sociological school as mistaking its material and failing to explain existing art, he is at one with the psychological æstheticists, Lipps, Volkelt, and Meumann.

F. R. PROUT.

The Ethical Significance of the Idea Theory. R. M. MACIVER. Mind, No. 82, pp. 182-200.

The Idea theory of Plato was the expression of an ethical need. Plato could maintain the good in a world of Heraclitic flux only by adopting the way of Ideas. Under the fundamentally ethical activity of Plato's thought the method was reduced to the service of an ethical end. The real is found in the Idea, the idea is identified with the Good, hence all that is phenomenal and false and evil is unreal. Where value cannot be found existence is denied, so that reality is both One and Good. But this identity of metaphysics and ethics is only apparent. If the real is the Idea, evil has reality as well as the good. If the Idea is everything, then everything is explicable, evil as well as good, change and becoming, and the inconstancies of sense. So it is that in Plato's later doctrine the One, or the scheme of relations in which the world exists for thought, and the Good, or the purpose revealed in that scheme, are partially divorced. The difficulty of this divorce is never overcome. perhaps never can be for ethical thought. All we can say is that Plato moved nearer and nearer to the heart of the difficulty. But because he was not building a metaphysical system but seeking an 'explanation,' his work neither was nor could be completed. The work stopped not because the building was complete but because the builder was old. We can trace, however, the aim of the builder, and we can understand how the dominating ethical motive determined the work. From the ethical standpoint the development is consistent throughout. Only it is important to see that this very development was itself conditioned by the ethical postulate that metaphysical truth in its turn is the revelation of the system of being in and through which the good is realized. Hence the dilemma from which Plato has after all been unable to escape, the essential problem of reconciling teleology with any metaphysical construction, ultimately the issue between the ethical attitude with its insistence on a necessary antagonism and the metaphysical with its demand for unity.

MARK E. PENNEY.

NOTES.

PROFESSOR DE LAGUNA ON "THE CHICAGO SCHOOL."

In his review of *Pragmatism and its Critics* (No. 2 of the current volume of this Review) Professor de Laguna finds that the constructive part of the book, while possessing some commendable features, is seriously vitiated by the "loose thinking" and "inaccuracies" which he says are "symptomatic of what has been one of he chief weaknesses of the Chicago School as a whole" (p. 236).

Here let it be remarked that this segregating phrase, "The Chicago School", was not invented by nor has it been adopted or encouraged by any one who might be supposed to be a 'member' of the "School."

On reading the above statement of the reviewer concerning "the Chicago School," a friend dryly remarked that he fancied that if 'the Chicago School' or any other 'school' or person should confess to any 'weaknesses' whatever, "inaccuracy" and "loose thinking" would doubtless be considered the "chief" ones. And he imagined, therefore, that the statement did not quite accurately express the reviewer's meaning which apparently was that the 'members' of 'The Chicago School' are more seriously afflicted than others with these universal frailties.

As for the book, the author is keenly aware of its short-comings and might even accept the reviewer's estimate of the extent, if not the particular instances, of them. But he is loathe to believe that "The Chicago School as a whole" is so deeply stricken with 'loose thinking' and 'inaccuracy as Professor de Laguna believes.' And it may be that further scrutiny of some of the instances of the 'symptoms' noted by Professor de Laguna discovers ground for hope that he may be mistaken in his diagnosis of "the School as a whole."

First let me agree that the criticism (p. 237) of the phrase "wholly or merely," as a piece of "loose" writing, is entirely justified. However, the laxity has no such deep and dark design as the reviewer detects, namely, "to avoid the problem of the relation between mind and body." The word 'wholly' was here carelessly used pleonastically with 'merely' and should be deleted. The passage would then express the meaning intended and the subtle evasion which the reviewer finds would disappear.

Concerning most of the other "inaccuracies," in general one might question the accuracy of the application of the term 'inaccuracy' to statements involving issues about which there is as much room for difference of opinion as there is over the connection between Hegel's Absolutism and his Ethics; the relation of Plato's Metaphysics to his Psychology and to that of the Sophists; and the bearing of Darwin's work on Teleology.

Taking first the case of alleged historical 'inaccuracy,' Professor de Laguna

asks: "Can the reader think of any historical basis for the following statement?" "He [Socrates] was content to show that whenever the Sophist went to the shoemaker or tried to convert any one to his own view his doctrine of a merely individualistic truth was doubly refuted. (1) He refuted it himself in assuming that the shoemaker could understand his order; (2) the shoemaker refuted it in showing that he had understood him by filling his order."

Now if the 'reader' is still unable to think of "any historical basis" for this passage, (I) let him observe that the statement does not pretend to quote but to express only the spirit and result of the Socratic teaching; (2) let him recall that Socrates, as his opponents complain is forever talking of cobblers and cooks; and then (3) let him read the following: (Socrates speaking) "Oh Callicles, if there were not some community of feeling among mankind, however varying in different persons, I mean to say if every individual had a private feeling which was not shared by the rest of his species, I do not see how we could communicate our impressions to one another." (Gorgias, Jowett's Translation, marg., p. 481.)

"But the following", Professor de Laguna finds, "is if possible even more reckless": "This method (Plato's method of meeting the Sophistic individualism) is simply to oppose to the transient, shifting psychological consciousness of the individual a metaphysical world of universal and immutable realities"; and this: "Metaphysics might well be defined as the essence of all attempts to maintain a world of continuity and order in the face af an individualistic theory of human consciousness." Of these passages Professor de Laguna says: (1) "The truth, of course, is that from the Gorgias to the Timaus Plato's uniform point of departure is the assumption of a hard and fast distinction between knowledge and opinion. The existence of a world of reality different from the phenomenal world is an inference which he draws from the observed differences between these two types of cognition. . . . (2) So far from its being true that his metaphysical procedure consisted in an attempt to maintain a world of continuity and order in the face of an individualistic theory of human consciousness, that he assumes that world in order to account for the facts that human consciousness is not wholly individual."

In going over again the paragraph from which these "reckless" statements are taken, I am unable to see how anything but a recklessly "loose" reading of the paragraph, taken with the one preceding and the one following, could have achieved the misunderstanding upon which the criticisms are based. The first sentence of the paragraph in which these statements occur reads: "To Plato then fell the task of supplying the 'how' [the explanation] of Socrates 'that' ('that' social interaction exists in contradiction of the Sophistic theory of consciousness). And the second sentence before the reviewer's first citation speaks of Plato's method as "explaining [the fact of] social interaction."

What other meaning could these statements have than that Plato's metaphysical world was an "inference" in explanation of the fact of 'knowledge' [as against mere 'opinion'] as evidenced in social interaction? But the point urged in the book is that this sort of 'inference' did not meet and defeat on its own ground the Sophistic theory of consciousness which 'remained to plague the inventors,' as well as others, even to this day.

Again it is difficult to see how the inversion of "the truth" which Professor de Laguna portrays in his statement beginning: "so far from its being true, etc.," can be anything but another case of 'loose' reading. The inversion is obtained by making the phrase, "a world of continuity and order," refer to Plato's Metaphysical World of Ideas, whereas in conncetion with what precedes, parts of which I have quoted above, it would seem obvious that it could not refer to anything but the world of social continuity and order.

There is not space to go over all the allegations of "looseness" and "inaccuracy." So far as I can see these terms have no more warrant in the other cases than in those here discussed. It is enough if the examination of these instances suffices to call in question Professor de Laguna's sweeping and surprising characterization of "The Chicago School" as a whole.

A. W. MOORE.

THE UNIVERSITY OF CHICAGO.

Jules Henri Poincaré, the eminent mathematician and scientist, died on July 17. He was born April 29, 1854, at Nancy.

Dr. Shadworth H. Hodgson, Honorary Fellow of Corpus Christi College in Oxford, and president of the Aristotelian Society, has recently died in London at the age of 79.

Dr. L. R. Geissler, formerly research psychologist in the physical laboratory of the National Electric Lamp Association of Cleveland, O., has been elected professor of psychology at the University of Georgia. In connection with the School of Education there will be organized under his direction a new psychological laboratory, occupying the new George Peabody Hall which is at present in course of construction.

The chair of philosophy in Dalhousie University, made vacant by the appointment of Dr. Robert Magill to the chairmanship of the grain commission of the Dominion government, has been filled by the election of Mr. John Laird, a graduate of Edinburgh, 1908. Mr. Laird served during the past year as assistant in philosophy to Professor Taylor at St. Andrews University.

Dr. Raoul Richter, professor to philosophy at the University of Leipsic, died at Wannsee on May 14 at the age of 41 years.

Mr. William McDougall, Wilde reader in mental philosophy at Oxford, has been made an extraordinary fellow of Corpus Christi College.

Oberlin College has secured the services of George R. Wells, Ph.D. (Johns Hopkins University, 1912), as instructor in psychology.

Professor Wilbur M. Urban has leave of absence from Trinity College for the coming year, and will spend the time partly at Graz in work with Professor A. Meinong. During his absence the chair of philosophy in Trinity College will be occupied by Dr. Carl Vernon Tower.

We give below a list of the articles, etc., in the current philosophical periodicals:

THE JOURNAL OF PHILOSOPHY, PSYCHOLOGY, AND SCIENTIFIC METHODS, IX, 13: A. C. Armstrong, The Progress of Evolution; Pierre Bovet, The Feeling of Oughtness: Its Psychological Conditions; Discussion: Evander Bradley McGilvary, Professor Dewey's "Brief Studies in Realism"; Societies; Reviews and Abstracts of Literature; Journals and New Books; Notes and News.

IX, 14: Max Meyer, The Present Status of the Problem of the Relation between Mind and Body; Discussion: A. K. Rogers, Some Aspects of Professor Fite's Individualism; Societies: H. L. Hollingworth, New York Branch of the American Psychological Association; Reviews and Abstracts of Literature; Journals and New Books; Notes and News.

IX, 15: Theodore de Laguna, Opposition and the Syllogism; George H. Mead, The Mechanism of Social Consciousness; Discussion: James H. Leuba, Religion and the Discovery of Truth; Reviews and Abstracts of Literature; Journals and New Books; Notes and News.

THE AMERICAN JOURNAL OF PSYCHOLOGY, XXIII, 3: Edmund Jacobson, Further Experiments on the Inhibition of Sensations; G. Stanley Hall, Why Kant is Passing; E. B. Titchener, Prolegomena to a Study of Introspection; C. E. Ferree, Description of a Rotary Campimeter; F. M. Urban, A Remark on the Legibility of Printed Types; E. B. Titchener and W. S. Foster, A List of the Writings of James Ward; W. T. Shepherd, The Discrimination of Articulate Sounds by Cats; Book Reviews; Book Notes.

THE BRITISH JOURNAL OF PSYCHOLOGY, V, 2: Edward Bullough, 'Psychical Distance' as a Factor in Art and an Æsthetic Principle; E. M. Smith, Some Observations Concerning Vision in Dogs; Godfrey H. Thomson, A Comparison of Psychophysical Methods; Publications Recently Received; Proceedings of the British Psychological Society.

The Psychological Bulletin, IX, 6: General Reviews and Summaries: F. M. Urban, Psychophysical Measurement Methods; F. N. Freeman, Tests; J. B. Miner, Correlations; V. A. C. Henmon, Reaction Times; C. E. Seashore, Apparatus; H. P. Weld, Report of Meeting: The Clark Meeting of Experimental Psychologists; Special Reviews; A Note on Apparatus; Books Received.

IX, 7: General Reviews and Summaries: G. M. Stratton, Visual Space; Daniel Starch, Auditory Space; R. P. Angier, Tactual and Kinæsthetic Space; Harvey Carr, Space Illusions; W. M. Urban, Values; G. M. Whipple, Psychology of Testimony and Report; W. D. Scott, Suggestion; H. M. Johnson, Psychotherapy; Special Reviews; Books Received; Notes and News.

THE INTERNATIONAL JOURNAL OF ETHICS, XXII, 4: Sophie Bryant, The Many-Sidedness of Moral Education; Ira Woods Howerth, Competition, Natural and Industrial; A. K. Rogers, The Rights of Man; William A. Ross, The Ethical Basis of Calvinism; F. Carrel, The Present Altitude; Book Reviews.

THE PRINCETON THEOLOGICAL REVIEW, X, 3: William Brenton Greene, The Church and the Social Question; Louis F. Benson, Dr. Watts' "Renovation of Psalmody"; J. Rilchie Smith, The Authorship of the Fourth Gospel Reviews of Recent Literature.

Kant-Studien, XVII, 3: Paul Natorp, Kant und die Marburger Schule; Albert Görland, Herman Cohens Systematische Arbeit im Dienste des Kritischen Idealismus; Ernst Cassirer, Herman Cohen und die Erneuerung der Kantischen Philosophie; Walter Kinkel, Das Urteil des Ursprungs; Walter Kinkel, Vereinzelte Bemerkungen zu B. Bauch: Studien zur Philosophie der exacten Wissenschaften; Rezensionen; Selbstanzeigen.

ZEITSCHRIFT FÜR PSYCHOLOGIE, LXI, 2: F. Schumann, Herausgeber. Untersuchungen über die Wahrnehmung der Bewegung durch das Auge; I. Woldemar Lasersohn, Kritik der hauptsächlichsten Theorien über den unmittelbaren Bewegungseindruck; Literaturbericht.

LXI, 3 u. 4: Max Wertheimer, Experimentelle Studien über das Sehen von Bewegung; K. Koffka, Ein neuer Versuch eines objectiven Systemes der Psychologie; Literaturbericht.

REVUE DE PHILOSOPHIE, XII, 6: P. Gény, Critique de la Connaisance et Psychologie; M. de Wulf, Les courants philosophiques du moyen âge occidental. III. Le choc des idées; G. Jeanjean, Revue critique de Pédagogie; Enseignement philosophique; Analyses et comptes rendus; Recension des Revues; Chronique.

XII, 7: A. Huc, Névrose et Mysticisme. Sainte Térèse relève-t-elle de la la pathologie?; S. Belmond, L'univocité scotiste. Ce qu'elle est, ce qu'elle vaut; A. Diès, Revue critique d'Histoire de la Philosophie antique. II. L'Orphisme et la question Hippocratique; R. van der Elst, Les Invalides moraux; F. Chovet, Les éléments constitutifs de nos sensations. Leurs rapports; Analyses et Comptes rendus; Recension des Revues et Chronique.

REVUE DE MÉTAPHYSIQUE ET DE MORALE, XX, 3: E. Boutroux, Remarques sur la philosophie de Rousseau; Harald Höffding, Rousseau et la Religion; D. Parodi, Les idées religieuses de Rousseau; B. Bosanquel, Les idées politiques de Rousseau; C. Bouglé, Rousseau et la Socialisme; M. Bourguin, Les deux tendances de Rousseau; J. Jaurès, Les idées politiques et sociales de J. J. Rousseau; R. Stammler, Notion et portée de la "Volonté générale" chez J. J. Rousseau; E. Claparède, Rousseau et la conception fonctionnelle de l'enfance; L. Lévy-Brühl, Quelques mots sur la querelle de Hume et de Rousseau; V. Delbos, Rousseau et Kant; J. Benrubi, Rousseau, Goethe et Schiller; G. Dwelshauvers, Rousseau et Tolstoï; Supplement: Livres nouveaux; Revues et Periodiques; Informations.

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CONSCIOUSNESS AND OBJECT.

ROM Professor Thilly's article in a former number of this REVIEW¹ I take the following extract: "Starting out with a naturalistic metaphysics, these philosophers naturally end with a naturalistic metaphysics: consciousness is an epiphenomenon, inhering in the objects. The object figuring in a conscious perceptual situation differs from the object out of it in the possession of consciousness. The nervous system, in Woodbridge's view, connects the sensations in a relation of implication; consciousness as a relation of implication appears as a kind of unnecessary adjunct; why it appears no one knows; the connections are not conditioned by its existence; its existence is conditioned by them. Consciousness looks on; there is nothing else left for it to do" (p. 429). There are two propositions in this extract on which I wish to comment in the hope of making clear the sense in which they appear to me to be sound. They are (1) "The object figuring in a conscious perceptual situation differs from the object out of it in the possession of consciousness;" and (2) "Consciousness looks on; there is nothing else left for it to do."

Τ.

The first proposition appears to me to be self-evident if it means anything. I suppose that the only assignable difference between an object and consciousness of it is consciousness. The proposition means nothing, if there is no difference to assign. But if the proposition is intelligible, if we do distinguish between an object and consciousness of it, it would seem that this distinction is what it purports to be. If so, it does not appear to

 $^{^{1}\,\}text{Vol.}$ XXI, page 415. "The Relation of Consciousness and Object in Sense-Perception."

be debatable whether the distinction in question is the distinction consciousness. We face, rather, a question of fact. Do we or do we not distinguish between an object and consciousness of it? If we do, we ought to be able to tell what the distinction is. If we do not, we ought not to discuss the question, in spite of our wonder that it should, nevertheless, be asked.

For my own part, I do not doubt that we can and do distinguish an object from our consciousness of it. I am conscious of the words I am now writing, but my consciousness is something different from the written words. And as for the reader, I suppose that he is conscious of the printed page before him, and that he does not identify his consciousness with the printed page itself. What, then, I would ask, is the difference between the printed page and his consciousness of it, if it is not the difference of his consciousness? Just what the difference is specifically, I have elsewhere tried to define. I may not have succeeded in stating accurately what the difference specifically is, but that is just now immaterial. At present, I am interested only in an attitude toward a question of fact. I am insisting that, for my part, I take it for granted that we make a certain distinction and that it is no other than just the distinction we make. first proposition, thus understood, appears to me to be selfevident and not debatable. We may debate only the question whether we make the distinction.

Taking it for granted that the only difference between an object and consciousness of it is the difference of consciousness, I should like to emphasize two considerations which have been important in my own study of the problem of consciousness. These considerations appear to me to be so obvious that I can do little more than state them.

I. The distinction between an object and consciousness can be defined only in a situation where that distinction exists. Of course there may be many objects of which I am not conscious.
The difference between them and my consciousness of them does not exist. Yet it would appear that the demand is often made of those who claim to distinguish between objects and our consciousness of them, to define that distinction before they have

discovered it. Of course, I may attempt to tell what objects are like when I am not conscious of them, but this attempt is not the same as that instituted in the interest of telling how they and my consciousness of them would differ if I had it. The former attempt may be impossible without the latter, but the two attempts are different. So I repeat, the distinction in question can be defined only where it exists, but not where it does not exist.

2. If, now, the distinction is defined, it is, as I have already said, just that distinction and no other. If I do distinguish between objects and consciousness, the objects are not the consciousness. Their characteristics, behavior, and laws, if they are distinguished from consciousness, are not consciousness. Furthermore, their characteristics, behavior, and laws are not determined by consciousness, except in so far as I discover them so to be determined. They are otherwise determined in so far as I discover that to be the case. If, for instance, I discover that the reason why the color-blind do not discriminate between certain colors is the structure of their eyes, and if I do not identify their eyes with their consciousness, I may not properly claim that the reason is their consciousness. If, in general, I discover that what objects are as distinguished from consciousness of them is due to certain features of their own or to certain relations to one another, or, if you will, to "the interaction between the real world and the organism," I ought not at the same time to conclude that it is due to consciousness. What they are as distinguished from consciousness, —that they are as so distinguished.

These points have been fundamental in my own studies. I am aware that it may be claimed that I am avoiding the real issue. For, one may say, the issue is not whether objects as distinguished from consciousness are what they are so distinguished to be, but whether as so distinguished they can also exist apart from consciousness. This issue, as the discussions

¹ It seems to me to be improper to say, as Professor Thilly and others do, of the color-blind man who does not discriminate red, that "his sensory content will be blue or yellow." It looks too much like saying that the sensory content of beings, without eyes will be black, or of beings without ears, will be silence.

of it have shown, has led not only to different conclusions regarding it, but also to fundamentally different conceptions of the way it should be defined. To a reviewer of the discussion it is apparent that the participants are arguing to cross purposes, that although they employ the same terms, they do not employ them with the same meanings, and that, as yet, they can form no common platform for the discussion. I do not discuss the issue here, but simply state that as I understand it, it appears to be disposed of by the two considerations I have already emphasized. I may, however, comment on this statement.

Objects as distinguished from consciousness do not exist apart from consciousness in the situation where the distinction between them and consciousness exists. A fish in the water, although different and distinguished from the water, does not at the same time exist out of the water. So also with objects in consciousness: while in it, although they are different from it, they are not also out of it. There would appear to be nothing debatable here, but the situation constitutes a difficulty in some minds because while a fish may leap out of the water and be still a fish, who can possibly follow in consciousness the disappearance of objects out of it? No one, apparently, unless it be some of the anti-intellectualists. For my own part, I do not attempt such a flight. I seek no other road to a knowledge of objects than that which my consciousness affords.

But I am interested in knowing what the objects of which I am conscious are, what their history has been, and what I may reasonably expect from them. In pursuing this interest, I am led to conclude that my consciousness once began in a world composed of the very type of objects, with their connections, behavior, and laws, which I discover the objects of which I am conscious to be. I discover that my thinking is concerned with much that I cannot possibly call thinking. In our stock phrase, my ideas are wofully dependent on my experience, and my experience has had a history which I can trace back approximately to its birth. I find it, therefore, quite impossible to believe that whenever there are objects of the type I discover mine to be, there also is consciousness. Of course, if one defines an object as always

"of consciousness," there is no room for dispute. But if one does not so define it, if one defines it in terms of discovered characteristics, behavior, and laws which are different from a discovered consciousness, I must believe that I live in a world where consciousness, so far as I can distinguish it, exists only now and then. Consequently when I speak about that world apart from consciousness, I speak about the world I have discovered minus the consciousness I have discovered.

As I said, I am not discussing the issue. I am rather trying to define it as I see it. Since we do talk about objects apart from consciousness, I have been interested in trying to find an intelligible basis for our conversation. I find it necessary, first to distinguish consciousness from objects; secondly, to define what that distinction is; and, thirdly, to subtract the consciousness thus distinguished and defined. The result is the objects less the consciousness. "Ah! But you are still conscious of them," the philosophy which stops here may cry. But the philosophy which goes on from here will ask, "Is your consciousness of them the reason why objects are as they are and behave as they do?" To any one who answers, he cannot tell, the reply may be made, "When you need to name a reason why objects are as they are and behave as they do, do you name your consciousness?" If one starts out with a naturalistic metaphysics, he will naturally, unless he falls by the way, end in a naturalistic metaphysics.

II.

"Consciousness looks on; there is nothing else left for it to do." This appears to be a conclusion from what I have said above and from what I have said elsewhere, but I should like to alter it, because, in its present form, I can not subscribe to it. I should say that consciousness does not look on, not because it does something else, but because there is nothing for consciousness to do. It doesn't even look. Yet we may not say that it

¹ Professor Thilly says: "To decide what consciousness adds to the status of the unperceived object, we must have some notion of what is meant by the unperceived object." But surely we must also have some notion of what is meant by consciousness.

is impotent, unless, in denying that it is potent, we refer it, after the manner of formal logicians, to the class 'non-potent.' Then we may say that consciousness belongs to the class of things that do nothing, not because it is impotent, but because the 'do nothing' class contains other members besides the 'impotent' and it is among these other members that consciousness is to be found. This formal statement is worth notice, because from the assertion that consciousness does nothing, the conclusion is so frequently drawn that it must be, therefore, a passive spectator of objects, and from the assertion that it is not a phenomenon, the conclusion is drawn that it is an epiphenomenon. And these conclusions are used to end an argument or refute a statement.

Now the claim that no efficiency belongs to consciousness directly, that, in other words, consciousness does nothing, is by no means new, but has been made again and again by many inquirers. It may be admitted that the claim is still in dispute, and, so far, one who believes that consciousness does something may urge his belief as against a theory which claims the contrary. But I take it that the recent theories of consciousness which Professor Thilly has under review are not primarily significant for claiming that consciousness does nothing, but rather for attempting to make that claim contribute to a better understanding of the nature of consciousness itself. They have recognized that the discovery that consciousness is not to be defined in terms of efficiency, is not a conclusion in which to rest, or a discovery which at once falsifies their analysis, but a discovery which should be followed up and which provokes further inquiry. And following up this inquiry, they have been led to conclude that one of the basal misconceptions in nearly all modern theories of consciousness has been the unanalyzed assumption that consciousness belongs to the class of existences of which efficiency They have felt that so long as consciousness is is predicable. assumed to be a thing which can interact with other things, that affects other things, and is affected by them, that it would do something if it could, or could if it would, so long it remains a thing which analysis steadily pushes out of nature, and of which

even the existence may be seriously questioned. They have all felt, however, that consciousness is something natural, that it is something of which it cannot be truthfully said that it is an 'unnecessary adjunct.' They have tried not to let this conviction carry them back again into the habit of assuming that consciousness is a term among other terms, or a thing interacting with other things. They have tried to define it in terms of other categories than those which have led to confusion and an unconvincing philosophy.

I am not claiming that they have as yet succeeded, but I do claim that their attempt is fundamental to any appreciation or criticism of their point of view. With others, I have held that consciousness is not a term, but a relation. I am aware that such a contention needs a good deal of clarification, but I am also aware that an attempt to work out a theory of sensation, perception, and thinking under the general supposition that consciousness is a relation, is not greatly affected by criticisms directed at its details from the point of view that consciousness is a term. It would be quite sufficient to show that consciousness is a term and not a relation. It is not convincing to criticize what in a relational theory of consciousness is said about perception, or about the relation between the organism and its environment as if in that theory consciousness were still functioning as a term. Consequently to discover that consciousness has nothing to do under a theory which starts with that conviction as a datum. is not to have seen that theory's end, but only to have glimpsed its beginning.

To put the matter a little more concretely, Professor Thilly appears to represent the theory as if it proceeded as follows: Consciousness is a by-product of the interaction between organism and environment; therefore, it is a harmless looker-on, it does nothing. It would have been more consonant with the spirit of the theory to have said: Consciousness does nothing, but it is by virtue of the interaction between organism and environment that all we do is done; how, then, must consciousness be construed if its natural place and significance are to be defined? The attempt to answer that question has not led those who are making it to any suspicion that to be conscious

is to be something wholly superfluous in this world. It is leading them to discover in the fact that the conscious situation is mediated problems of vital interest and importance. The efficiency which others impute to consciousness they discover to belong to the being who is conscious; and they find no contradiction in affirming that there belongs to conscious beings an efficiency which unconscious beings do not possess.

It should be apparent, I think, that the particular problem with which Professor Thilly deals, namely, "The Relation of Consciousness and Object in Sense-perception," will take on a different look when approached from the point of view of a relational theory of consciousness than it does when approached from the point of view of a term theory. If these expressions 'term' and 'relation' are too objectionable, or, in this context, too obscure, it may be said that the inquiry in question will not appear the same to one who is looking for something which consciousness does and to another who, convinced that it does nothing, is asking, "What then is its nature?" In other words, I should say, as I suggested in the first part of this paper, that the question, what difference, if any, consciousness makes in objects, is not a question to be asked to-day without first defining the conception of consciousness employed in the question. If consciousness interacts with its objects, I do not see how the question can be answered. If consciousness is mediated, the exhibition of the manner of this mediation disposes of the question at once: the question is irrelevant.

I have written these comments, not in answer to Professor Thilly's argument, but with the desire of emphasizing two particular problems: (I) What difference, if any, is there between consciousness and objects in terms of which consciousness may be defined? and, (2) Since our life so manifestly appears to be an interaction between organism and environment, and not an interaction between consciousness and objects, how is consciousness to be construed as something mediated in that interaction? These problems seem to me to be important, not as reminiscent of the past of philosophy, but as suggestive of its future.

Frederick J. E. Woodbridge.

IMPLICATION AND EXISTENCE IN LOGIC.1

ODERN logic has done much, both by precept and example, to inculcate fresh habits of exact and clear thinking. It urges an explicit setting forth of all the premises of your conclusions—a putting into separate categories of those which you can prove and those which you are obliged to assume, a sharp distinction, also, between the terms which you can define and those which you cannot define. The doctrine which stands at the beginning of its method is that (as I have lately pointed out)2 of "explicit primitives." Modern logic would also highly recommend, to whatever extent it may prove to be convenient, a simple and appropriate symbolism, as a sure cure for the ingrained habit of many reasoners—Euclid, our great exemplar, was not free from it-of letting fresh assumptions slip in surreptitiously. It is in philosophy especially, as the most difficult and perplexing of the sciences, and that in which pure reasoning plays, after mathematics and logic itself, the greatest role, that these good habits ought to prove peculiarly beneficial.3 But while this more formal Formal Logic is destined, without doubt, to a speedy and wide extension among exact reasoners, it may safely be affirmed that some of the aspects in which it is presented

¹ Read, in brief, before the meeting of the American Philosophical Society of December, 1911.

² Journal of Philosophy, etc., VIII, p. 708.

^{*}Thus in the admirable representation of propositions by the symbols SeP, MiP, etc., to be read "No S is P," "Some M is P," etc., which begins to prevail, not only are the terms symbolized (as has been done since the time of Aristotle), but so is also what I have called the "figured copula,"—i. e., not the simple copula is, but the copula with all the quantity and quality of the proposition incorporated within it,—'a is-wholly b,' a is-not-wholly b,' etc. This represents a vastly important advance in the right direction, and ought to prepare the way for something more carefully thought out and more detailed. It is a pity that symbol-logic in general is in danger of becoming identified with the system of Peano, in which everything is sacrificed to the modes of thought of the mathematician. For example, the variable, that bugbear to the non-mathematical student, has no proper place in the non-mathematical part of logic, no matter how symbolic that may be.

in the voluminous work of Bertrand Russell leave much to be desired in the way of saneness and sobriety. In particular, there is a phrase to which all those who have read the imposing first chapter of his Principles of Mathematics are inclined to attribute a cabalistic meaning, a significance as a picture of the type of reasoning that takes place in the hypothetico-deductive fields of thought, which it does not, in fact, possess,-I mean the phrase 'p implies q.' There are several objections to using this phrase as the diagrammatic representation of reasoning; and that it has so caught the fancy of the outside world is, I believe, much to be deplored. There are many good reasons for dropping it. The word itself, implies, is a badly chosen word, for it has, as a word in common use, too strong a connotation of 'implies more or less but not exactly nor rigidly,' and this sense is especially strong in the substantive form, implication. better not to wrest words from their actual meaning for technical purposes when that can easily be avoided. There are many other words that would answer the purpose better. For the present, however, I shall continue to say 'implies.'

This choice of a term, however, is, to a certain extent, a matter of taste or convenience; the other objections to the formula are of a more fundamental kind. In order the more briefly to discuss them, I permit myself to make use of a simple sign to stand for the logical relation here involved,—namely, the sign \leq , and I shall write $p \leq q$. Bertrand Russell uses the semi-ellipse of Peano, who objected, very naturally, to the awkward form introduced by Schroeder. My own form has now been adopted by Mally, and I shall hence (on account also of its many advantages) hereafter make no apologies for using it.

There are several objections to making this relation 'p implies q' typical of pure mathematics (and of other subjects of the same kind) which I shall try to set forth. In the first place, it represents a conclusion as following from a premise. It happens, it is true, that a conclusion does, upon occasion, follow from a premise; but the main characteristic of reasoning is that a conclusion follows from several premises,—two, or more. Reasoning may

¹ Die grundlegenden Beziehungen u. Verknüpfungen der Gegenstände. Graz, 1912.

be defined as putting This and That together and extracting something Other,—something which has been asserted by the two premises together, but which contains, in the case of the syllogism, only half of what they assert.1 It may be regarded (in its simpler forms) as the elimination of a common term (or terms) from simple propositions in is, or from any of the other transitive relations, as: is-an-ancestor-of, is-a-successor-of, is-anantecedent-of, is-an-intermediate-between,—the last three being fundamental relations of mathematics. Drawing conclusions from a single premise occurs, it is true, but it is subsidiary to the main work of logic; it has been fully considered by the logician under the name of immediate inference, an existing, but a relatively unimportant, part of the subject. The reasoningrelation then, should rather be written: $p_1p_2 \dots \leq q$, or (to give the conclusion its proper distinctiveness) $p_1p_2 \ldots \leqslant c$. But as soon as we have changed our mystic formula to this extent, it has become nothing more than the common view of the reasoning process,—the premises entail the conclusion. Nothing novel, either, is added by insisting upon the fact that the sequential relation holds (when it does hold) even though the premises are not true, that it has nothing to do with the truth of the premises. This is an old story in logic; there is nothing that all modern logicians have more constantly insisted upon than that the elements of the particular proposition, simple or compound, are affirmed to exist (or to be true), while the universal proposition, in whatever form it is given, is always strictly equivalent to a simple assertion of non-existence, or of non-concurrence, or of incompatibility, we use different words, in language, according as the elements are terms or propositions (and in the latter case according as the relation is empirical or logical), but the relation continues to be the same. (If the terms or propositions of a universal sequence are, as matter of fact, known to exist, or to be true, and if the fact is relevant, it must be asserted in a separate statement.) But this, as I have said, is an old story in logic, and involves nothing of mystic value.

Bertrand Russell takes up, in a later chapter, this simplifica-

¹ Journal of Philosophy, etc., IX, p. 398.

tion, which he admits will appear objectionable to the logician (this singularity of the premise), and gives his reasons for holding to this procedure. He says that the premises (though consisting of several propositions) can be stated as one,—instead of uttering them separately we can say 'if p_1p_2 . . . are all true, then c (the conclusion) follows,' and 'if p_1p_2 ... are all true' is one statement. This is true.—it can be done. But what is his motive for doing it? It is an amusing one,—he says that the type-phrase looks more symmetrical this way than if we put several propositions into the antecedent while there is only one in the consequent. But surely to give your formula an appearance of symmetry where no symmetry is, is the most fatal of errors; we should do everything in our power to guard the unwary reasoner against the ever-lurking danger of wrong reasoning instead of enticing him into it. It is exactly for the purpose of preventing such confusions as this that symbolic logic was devised. In the inconsistent triad, of course,—pqr < 0, 'the constituent propositions cannot possibly all be true at once' (see p. 648),—perfect symmetry is obtained at no cost of incorrectness,—this, indeed, is the purpose for which this mode of reasoning was invented.

But this aspect of the use of $p \in q$, while a very dangerous procedure, tempting, perhaps, to the error of Wrong Conversion, is of far less consequence than the error which is involved in setting up this one type of statement as the form of the primitive logic-relation. There are many forms of this relation, and whatever the mathematician may think, in his haste to rush on to mathematics, the logician is bound to study them all, and to choose only after mature consideration the one, if there should be only one, which he will adopt as type. There are eight distinct types of simple statement (all of which can be represented symbolically by modifications of a few simple straight lines), as can readily be seen by noting that there are four possible combinations of two terms,—

$$ab$$
, $\bar{a}b$, $a\bar{b}$, $\bar{a}\bar{b}$,

and that each combination can be stated either to exist or not to exist, and that no statement regarding these two terms (in any

form of the simple relation is) can be made that is not equivalent to one of these,—'e. g., nothing but a is b and not everything but a is b are equivalent, respectively, to $\bar{a} \nabla b$ and $\bar{a} \vee \bar{b}$. By properly chosen relation-words (and by their equivalent symbols) these may all be expressed in terms of positive elements only.1 For instance, corresponding to the relation $p \le q$ (p is a sufficient condition for q) we shall also have $p \leq q$, 'p is an indispensable condition for q,'—that is, 'if p occurs, q occurs' and 'not unless b occurs does q occur' (the latter relation is a negative one). The lack of the common and facile use of the phrase indispensable condition is the cause, I am convinced, of a sad amount of bad reasoning. Thus we cannot infer, from the truth of a state of things, that whatever can be shown to be a sufficient explanation of it is a true state of things, but only that what can be shown to be an indispensable explanation of it is true. It is only when we can say 'no other explanation is possible' that we have any ground for assuming that a given explanation, though it fully explains, is a true occurrence. We do not infer that a certain noise is made by a railroad train because that would be a sufficient ground for it, but because there is nothing else which could conceivably happen in my quiet neighborhood which could explain it. I do not infer that the noise in my nursery is being made by my children, unless I know that my neighbor's mischievous children have not come in. I am convinced that a great deal of loose reasoning is due to the fact that we have not these correlative phrases, 'sufficient and indispensable,' 'sufficient but not indispensable, 'indispensable but not sufficient,' etc., in common use. These conceptions the mathematicians make constant use of, and they would find it very hard to carry on their exact trains of reasoning without them. But the name which they give to conditions which have both these characters is 'necessary and sufficient'; sufficient and indispensable is a far better pair of words, for, in the first place, the more important of the two (in practical and also in theoretical matters) is the sufficient condition, and it should therefore stand first,-it is more impor-

¹ See Baldwin's *Dictionary of Philosophy and Psychology* for this complete scheme of Propositions—articles "Syllogism" and "Proposition."

tant that a man should know that a given occupation is sufficient to gain him a living than that nothing else would do, and it is more important to know that we have got a sufficient proof of a thesis than to know that no other proof can be found. In the second place, the second condition is really of the nature of a negative (the Latin language expresses it correctly in the phrase conditio sine qua non), but its negative characteristic is better expressed in indispensable than in necessary. I therefore strongly recommend the introduction, as a fluent form of speech, of the correlative terms 'sufficient and indispensable.' When I said to my little girl, "I will take you down town this afternoon if you are good," she said "And only?"—meaning: That is no doubt a sufficient condition, but is it also indispensable?

The relations just named and their negations (which are particular propositions) are both non-symmetrical; from 'not unless p is true is q true' it does not follow that 'not unless q is true is ptrue.' But the remaining four relations in 'is-implies' are symmetrical. As soon as we have expressed our propositions in any one of these good forms, all difference between subject and predicate, between antecedent and consequent, between premise and conclusion, has vanished. We have, for example, an inconsistency, an incompatibility (if the elements are propositions),—a non-occurrence, if they are terms. In either case, the fatal error of Wrong Conversion is eliminated automatically, —it is practically impossible to make it. You may inadvertently infer from p < q that also q < p,—as who has not done upon some occasion?—but who would infer from the fact that $p \nabla q$, that $\overline{p} \nabla \overline{q}$,—from the fact that p and q are incompatible that their negations are incompatible? But this is what false conversion is, in terms of the negative relation. You see at once that it is impossible to commit this error. From 'no dancing is moral' it does not follow that 'nothing which is not dancing is immoral,' and it almost makes one dizzy to try to believe that it does. But what it would have meant in the long history of bad reasoning in this world, if we had always been warned against Wrong Conversion by a feeling of dizziness, as we literally should be, if we tried to commit it in terms of the negative

copula! The one error in reasoning that people are actually in danger of falling into is this, and a sure safeguard against it ought to be heartily welcomed. The practical rule of reasoning is then: think always in negatives, if you are dealing with universal statements (but in affirmatives, if you are dealing with particular relations). Thus, take the saying of Kant,—"there are no classical philosophical authors," or, what is doubtless just as true (and will give us a b for our symbolic term instead of a p) 'there are no classical biological authors,'

We can say, at once, 'no authors are both biological and classical,' 'no biologists are classical authors,' 'no classical biologists are authors,' or any other arrangement you please,—it is impossible to get it wrong no matter what you do, wrong conversion has been eliminated, there is nothing possible but right conversion,—unless, indeed, you drag in statements about non-authors, or non-classicists, or non-biologists, which you are not in the least tempted to do. Compare the simple reversibility of this relation with what we find in the ordinary relation in is. Take the familiar judgment of the poet regarding astronomers,—'the undevout astronomer is mad,'

$$\bar{d}a \leqslant m$$
.

Try to transpose the terms correctly,—you get

$$a \leqslant d + m$$

$$\infty \leqslant \bar{a} + d + m,$$

any astronomer is either devout or mad, all are either not astronomers or else devout, or else mad,—and so on, eight forms in all—all these are legitimate transpositions,—all these statements are absolutely equivalent, each to each,—but how difficult they are to effect! You must constantly change from and to or, and from the positive to the negative term,—the rules for procedure are decidedly intricate,—so much so, in fact, that in laying them down we have already passed beyond the field which the ordinary logic ever has attempted to cover. But the transpositions in $abc \ \nabla \ \infty$, on the other hand, are so easy to make that we feel

that we are uttering platitudes when we enunciate them. Such are the advantages of the symmetrical copula! Exactly the same state of things holds, of course, when the elements related are premises and conclusion, instead of simple terms. Express everything symmetrically, and temptations to wrong reasoning have practically vanished.

In particular, the syllogism, with its numerous modes and figures, becomes one single form, with one simple rule for validity, when once it is expressed in this way. This 'Inconsistent Triad,' or 'Antilogism' (to use a term which suggests its connection with, and its antitheticalness to, the ordinary syllogism),¹ is the form in which all reasoning-in-transitive-relations should be conducted, so soon as that reasoning becomes at all difficult. (See Schroeder, Algebra der Logik, Bd. II (20), § 43, and Baldwin's Dictionary, "Syllogism".) Instead of all the complicated rules for testing the fifteen valid modes of syllogism, one has simply this, for every case: express universal propositions with negative copula and particular propositions with affirmative copula, deny the conclusion, and then note conformance to the one simple type,—

(A). No a is b, no c is non-b, and some a is c cannot all be true at once.

If any two of these statements are known to be true, the contradictory of the third is a valid conclusion. The advantage of this type-form—the Antilogism, (A),—is that not only is the order of terms in the propositions wholly immaterial but so also is the order of the propositions themselves in the triad. Such is the beauty of symmetrical forms of speech!² That this is a perfectly natural mode of reasoning, my favorite illustration will show; a mother, reproving her child at the table, said, "Nobody eats soup with a fork, Emily," and Emily replied, "But I do, and I am somebody." With this 'but' she said in effect: Here

¹ Royce has adopted one name for it, and Keynes the other. *Formal Logic*, 4th edition, p. 332. I had not yet named it at the time Schroeder wrote his § 43.

² Professor de Laguna, in the last number of the *Journal of Philosophy, etc.*, IX, p. 399, recommends for regular use this Inconsistent Triad, but he seems to think that it is desirable to reduce all propositions to the existential form—there is no ab, there is some ac. There is, of course, no need of this transformation, and they will seem more natural, for practical use, if left in the original subject-predicate form.

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is an inconsistent triad of statements, and since mine are patently true, yours must certainly be false. And Emily was four years old! The antilogism (instead of the syllogism) is the natural, the inevitable, form of reasoning in cases of controversy, rebuttal,—in fact, in all cases of discussion between opponents. It is singular that it is yet to be admitted into the logics. (The case of Emily is special, on account of its containing both existence-terms and individual-terms, but by this it is made more difficult, not easier.) Before applying the test of validity, viz., propositions of like quality must have common terms of unlike quality, and conversely,—thus, in (A), b occurs twice, with unlike quality, a and c twice with like quality,—it is of course necessary to remember to make universal propositions begin with no and particular propositions begin with some.

I add another example to show the naturalness of the Antilogism (which is somewhat obscured when expressed formally), an example which is also taken from real life: 'It is impossible that none of these birds which you shot should be alive, when some of them are breathing and nothing that breathes is dead.' And here is one for the logician who still clings to his s, m, and p: 'No priests are saints.' 'But some priests are martyrs, and there are no martyrs who are not saints.'1 When propositions have suffered this apotheosis into symmetrical forms, they have lost, as premises, all their right-and-left-ness,—that remains only as a psychological aspect. In speech, it is not possible to preserve this lack of order, but the eye can be trained to take in $a \lor b$, $a \nabla b$, as a whole, without precedence of either term; so also in the propositional elements of the Antilogism.

In view, then, of the immense advantage, for actual reasoning, of a symmetrical mode of expression, why should we give it up, at the beginning, without any reflection or consideration, in favor of the difficult and dangerous 'p implies q'? I maintain that there exists no even apparent excuse for throwing away, untried, this most useful form of speech.

But there is still another objection to singling out 'p implies

¹ Note that this is something which the traditional logicians have not before devised—a seeming-sensible syllogism in terms of s, m and p.

q' as the sole type of compound (and simple) expression,—two more objections, in fact; one I mention briefly, and one I shall dwell on more fully. To make this one form, which is universal, so exclusively typical of the reasoning relation,—to ignore particular propositions, which are affirmations of existence, of concurrence, of compatibility,—is one-sided in the extreme. When people meet together to discuss things, there is constant occasion on the part of one side to the debate to deny the validity of conclusions drawn by the other side. We need the form of statement

$$p \vee q$$

'p is-compatible-with q,' or 'p and q are not inconsistent,' they can occur together, with which to combat the assertion $p \nabla q$; or, if we are using the dangerous affirmative form of speech, in order to deny that $p \leq q$. This corresponds, in propositions, to the particular statement in terms. It is one of the crimes of the recent mathematico-logicians to ignore the existence of the particular, or at most to give it very inadequate discussion. I have given, in Studies in Logic, the rules for its treatment; Whitehead (alone among recent writers) returns to the subject (Universal Algebra, pp. 83-98). There is no ground whatever for its ever having been neglected; it is one face, or aspect, of logic, and of quite equal voluminousness and importance with that which deals with the universal relation.

My remaining objection to $p \le q$ is a more important one still: to take the typical proposition as of this form is fatally to obscure the existence of the existence-term,—an effect which is much to be deplored. I have just used my substitute-relation in the form

$$pq\bar{c} \nabla \infty$$
,

or

$$pqr \nabla \infty$$
,

'pqr is-not a possible combination' or 'the concurrence of p, q and r is-excluded-from possible states of things.' I have introduced here an existence term,—and I have, for the moment, represented it by the mathematician's sign for infinity.\(^1 In the

 1 When writing more voluminously, I use $_{\bigoplus}$ and θ for the logician's everything and nothing; they enable one, when rows and columns are used to represent products

case of terms, this would read

$$apc \nabla \infty$$
,

'Classical philosophical authors are-not existent.' This term means 'existent things' or 'things which exist.' As the subject of a proposition it will be read, in words, denotatively, as things; in the predicate of a proposition it will be read connotatively, as existent; but for *logic* the full meaning is exactly the same in both cases. (See my doctrine of the four-fold implication of the judgment, *Mind*, October, 1890, pp. 361–2, and Keynes, *Formal Logic*, 4th edition, p. 179.) Thus if a stands for acid things, b for blue things and c for cold things, then

will be read, 'no things are at once acid, blue and cold,' but its fully equivalent form,

will be read 'whatever is at once acid, blue and cold is not existent,' or (if we like to put the tautologous 'things' into the predicate also) 'is-excluded-from all existent things.' And in the particular statement we shall have $ab \lor \infty$, 'acid-blue things exist,' and $\infty \lor ab$, 'some things are at once acid and blue;' and either of these statements says no more than has already been said when we say $a \lor b$ and $b \lor a$, 'some acid things are blue' and 'some blue things are acid,' or, more fully expressed,

$$\infty a \lor b$$

 $\infty b \lor a$.

'some things which are acid are blue,' and 'some things which are blue are acid.' The point is that an existence-term is always involved, in every possible statement, and it is entirely at our discretion whether we make it explicit or not. The usual view is that there are certain 'existential' propositions, as 'diamonds

and sums, to read off all dual forms of statements by rotating the paper through 90°. The terms themselves I have called the Special Terms of logic; unlike the logician's a, b and c, they are never without fixed significance.

¹ I make it a point to make up my illustrative examples out of all nouns or else all adjectives, in the effort gradually to disabuse the mind of logicians of the belief that subjects are necessarily nouns and predicates necessarily adjectives.

exist,' namely, those which contain only one significant term, and that all other propositions have nothing to do with existence. But the true state of things is that *every* proposition is an *existence*-proposition, in the sense of being concerned with existence,—that is, of having existence for one of its terms, and that propositions are of two classes according as they are affirmations of existence or denials of existence,—that is, according as they are particular or universal. When there is only one significant term involved, since every proposition is a relation between two terms, the existence term *must* be present explicitly, as 'some things are accidents,' 'mistakes occur,' ∞ \vee α , m \vee ∞ ; but in all other cases it is matter of preference whether the existence-term is explicit or implicit.

Now one of the bad consequences of giving to $p \le q$ such fictitious prominence as some logicians have done is that the existence of the existence-term is obscured by it. This statement is equivalent to $\infty \vee \bar{p} + q$, and here its true character and import are apparent,—a circumstance which may become of great consequence. Whitehead and Russell say that they have found little need to use propositions in this form. But this is purely a matter of taste. If anyone has a liking for existence rather than for non-existence, these forms of speech are perfectly open to him,—and reasoning will proceed in absolutely parallel courses, whether you use the one form or the other. The only reason for their preference for non-existence over existence is the mathematician's inborn liking for zero.1 To the philosopher, existence ought to be, of the two, the preferred concept. Keynes, in the admirable last section of his Formal Logic, has shown how easy and natural it is to state your premises in the form 'everything is.' And this personal idiosyncrasy of Bertrand Russell's has not been without its consequences; it has led him to develop a theory of types which, if his universe-terms had been more explicitly in his mind, and on his paper, he would doubtless have seen to be (as Dr. H. C. Brown has shown, I believe correctly, Journal of Philosophy, etc., VIII, p. 85) nothing but the good old doctrine of the variable domain of thought.

¹ In the remaining pair of my eight copulae, significant statements are made in terms of the non-existent,—as $o \lor m_1 + m_2$, 'all but mind and matter is non-existent.'

This, then, is the correct and simple function which an existence-term fulfils in logic: it doubles, at once, the number of transpositional forms which a given proposition can appear in, but it changes in no whit the signification which is essential to every judgment. It is always virtually present,—you cannot introduce a fresh existence-term into any statement, because there is always one already there. But its purport, its bearing, its exact extent, remains to be defined. Logic can therefore throw no light upon the particular meaning to be attached to such terms as reality, existence, occurrence, 'things,' They mean, all of them, occurrence within a given domain of thought, and only the character and limits of that domain of thought are not fixed by the proposition. As a general thing, it is something the meaning of which is taken for granted between the interlocutor and the hearer,—just as is the meaning of words. One says: there are criminal actions, there are infinite numbers, there are heroes of novels, there are stones, there are (for purposes of logical discussion) round-squares,—all can be referred by the hearer to the proper domain of occurrence without farther explicification. The term existence (or reality) is the very type and model of the ambiguous, or as Whitehead and Russell say, it is of ambiguous type. While it is a term which is virtually (when not explicitly) present in every sentence which you utter, while its general character is exactly this,—that it makes no difference whether you say it or not (the definition of the term in symbolic logic is $\infty a = a$, as the definition of nothing is a + o = a,—that is, that which is limited by being existent is not limited at all, and that which is increased by the non-existent is not increased at all,-no matter what sort of existence you are talking about), nevertheless its special character in any given sentence depends wholly upon the context. If I am talking about ripe apples which exist, I may be thinking simply about existence within my own garden; if I am in the mood of the philosopher, the range of meaning of my existence-terms will have a much wider circumference. The meaning of the term will always depend upon the state of mind of the 'utterer' of the proposition. The one care which logic must have constantly in mind,

if it would avoid all the tangle of paradoxes which overwhelm the unthinking reasoner, is not to mix up its domains of thought, —and this it will find distinctly easier to accomplish if its existence-terms are explicitly present in its premises than if they are only implied. They can, in fact, then be tagged with a plain indication of the limits to be kept in mind, in the form of a subscript letter attached to the ∞ or the o. But to keep them obscure is to invite unnecessarily the fallacy of 'mixed-up fields of thought.'

The several theses that I am here maintaining (I) that $b \in a$ has no cabalistic and newly discovered significance, and that as the single representative of all the manifold relations of logic it is a very poorly chosen one; 1 (2) that the symmetrical forms of speech are the only safe ones if one wishes to avoid the fatal danger of wrong conversion, (3) that the 'necessary and sufficient' condition of the mathematician ought to become current with the philosopher (and in common speech as well) under the better name of 'sufficient and indispensable' condition, (4) that the concepts 'existent things' and 'non-existent things' are already existent in every statement that can be made, not simply in the so-called existential proposition, and that therefore the proposition $p \leq q$ cannot possibly be used as the source of their definition,—all this will have seemed very much in the air,—both very self-evident and very unimportant. But it is a mistake to suppose that errors of this simple kind do not occur among philosophers. It happens that I have at hand a single article² which will serve to illustrate more than one of these misconceptions. This article of Professor Marvin's consists in an effort to obtain a definition of the concept 'existence,' or 'reality' (i. e., the totality of all existent things—it is a pleasure to see that Professor Marvin apparently uses the terms as practically synonymous, p. 477). It has been shown by Professor Lovejoy,

¹ Since this was written Dr. Karl Schmidt has advocated the same view, and more; he maintains vigorously that "logic could be developed altogether without even mentioning implication." *Journal of Philosophy, etc.*, IX., p. 436.

² "The Existential Proposition," *Journal of Philosophy, etc.*, VIII, pp. 477-490. This term is not taken in its usual signification,—it means here a proposition about terms which are actually existent things.

very acutely, that the effort is unsuccessful, and that any such effort is foredoomed to failure.¹ But there is still room for something more in the way of comment upon the article as an illustration of the many sources of error that lie in wait for the unwary follower of the concepts of Bertrand Russell. I shall mention some of them, without holding to any particular order.

The phrase $p \le q$ has no secret significance beyond the fact that the human mind is capable of reasoning. Instead of using the phrase you may just as well make use of the one word, reasoning, or of the two words, drawing conclusions,—all that p < q means is that this world is such that conclusions follow upon premises—that reasoning occurs. And non-affirmation of truth or existence for the constituent simple-terms or propositionterms is nothing that has not always been noticed. What logician has failed to mention that in 'if a is b, c is d', it is not said that a is b is true? To digress for a moment, however, I must say that I cannot pretend to be able to attach a consistent meaning to the 'p implies q' of Bertrand Russell. For instance, in the Principia Mathematica the authors regularly speak of p as a premise and of q as a conclusion, but it is also said that 'every man is mortal' states an implication (formal), though it would not seem that being mortal is a logical conclusion from being a man, unless the proposition is taken as being a verbal proposition,—and this, in fact, is the interpretation of it which is adopted by Dr. H. C. Brown; but 'every man is mortal' seems to be taken as merely typical of any relation of inclusion between 'classes,' and surely not every universal proposition is purely verbal? This particular proposition is, no doubt, near the border line between the verbal and significant: the distinction is, in any case, a relative one,—what is verbal to the chemist will be informational to the common man. It is a pity that this is the only example in simple (non-propositional) terms that Mr. Russell ever makes use of. In my corresponding logic-form, x < y, x entails y, which I call a sequence (to distinguish it sharply from the mysterious 'implication') the elements (argu-

¹ Journal of Philosophy, etc., VIII, p. 661.

² Journal of Philosophy, etc., VIII, p. 87.

ments) may be either simple terms or propositions, a, b, c, . . . or p, q, r, . . . (I use x and y to cover explicitly both a, b, . . . and p, q, . . .,—they are not variables). The difference which is supposed to exist between the two forms is wholly removed if one notices that the propositional terms correspond to individual (i. e., during the given discussion indivisible) terms. The definition which I have given of 'x is an individual' (written as a capital, X) is

$$(x \equiv X) \equiv (x \lor m . \lessdot .x \lessdot m)$$

where m is anything whatever,—that is, whatever x can be said to be in part it can be said to be wholly if, and only if, it is The relation $p \leq q$ covers, of course, not only the relation of logical sequence, but also that in which the truth of p entails the truth of q simply as matter of empirical observation, as in 'wherever the soil is poor, the inhabitants are of low stature,' a truth which, as matter of fact, was noticed before the intermediate effect-cause (effect of one state of things, cause of the other), 'nutrition is inadequate,' was discovered. But after that we have two logical relations (together with that which results from eliminating the middle one). That is to say, the relation which was at first empirical has become logical. Take also the case of the orphan asylum (well known in the logics): the boys were bad and broke the windows, the girls were good and did not; upon the inset of an epidemic, the girls all died, the boys did not. This coincidence, which was at first purely empirical, became (after science had made farther progress), by the insertion of an intermediate effect-cause, a logical relation. It must be remembered that Bertrand Russell uses formal and material as applied to implication in totally different senses from those which they bear in logic. Thus (Principia Mathematica, p. 22) he says that "every man is mortal" (still his only example of the proposition in simple terms) states a formal implication, and again that "the relation in virtue of which it is possible for us validly to infer is what I call material implication" (whatever this may mean.—Principles of Mathematics, p. 338). It appears that this last (formal implication), although it is "the relation in virtue of which it is possible for us validly to infer" is very unimportant, though not so much so that we are justified in completely neglecting it (*Principia Mathematica*, p. 22). A correspondent of mine thinks that formal implication may be identified simply with the universal proposition, in general,—and that the material implication is the same thing as the proposition with an individual subject, in the writings of Bertrand Russell.

After this long digression, I return to the subject of Professor Marvin's article. I shall use, for the moment, the relation 'p implies q' (as he does) as standing simply for the relation 'premises imply conclusion,' or 'the following-relation holds.' Now this relation would not seem in itself to be a particularly hopeful ground on which to look for light upon the nature of existence, and, in fact, no unforeseen results will be found to have been discovered by means of it. But the danger which I have adverted to as possibly resulting from turning the very unsymmetrical relation

 $p_1p_2 \ldots \leqslant c$

into the seeming-simple

p < q

has not been escaped. The phrase, in fact, is used in this article without due regard to its characters of absolute non-convertibleness. Professor Marvin says in plain words, speaking of chemistry, for instance; 'We know q to be true, we discover that p implies q and we therefore assert p as true.' That is, we know the facts of chemistry to be true, we devise a theory to account for them, and straightway we know that theory to be descriptive of a true state of things. Again he says, explicitly, "q being true, p is true, since it implies q." This form of transposition, when p and q stand for terms, is known quite simply as wrong conversion; when p and q are propositions, it is exactly the same thing in form,—it may be described in words as a confusion between the sufficient condition and the indispensable condition. It would add much to safety in reasoning if we could bring

ourselves to use freely a simple symbolism for these two relations,

 $p \leqslant q$,

 $p \leq q$.

The second of these statements, it is true, is strictly equivalent to q < p, and to $\bar{p} < \bar{q}$ (there are, in all, sixteen different forms in which it can be expressed,—see, "The Complete Scheme of Propositions," in article "Proposition," Dictionary of Philosophy and Psychology, and "Some Characteristics of Symbolic Logic," Am. Jour. of Psychology, Vol. II), but there is only one way in which it can be affirmed directly, i. e., without the transposing or the negating of terms,-viz., in words (these are all the same thing), 'only if p is true is q true,' 'not unless p is true is q true,' 'the truth of p is the conditio sine qua non for the truth of q,' or, 'p is the indispensable condition of q.' If we wish to deduce the truth of p from the truth of q backwards, it is not sufficient that we establish the truth of p < q,—that has nothing to do with the case,—it is 'indispensable' that we should have proved that p is the *indispensable* condition for q. Suppose we have established it beyond doubt that the atomic hypothesis is a sufficient explanation for all the facts of chemistry. Professor Marvin will say that the atomic hypothesis is then known to be both true and existential. But this is not the case,—we are still forced to speak of it as the atomic hypothesis. But if we could prove that there is no other conceivable conception that can account for these facts, then and only then could we believe in it as an actually existing state of things, and our ground would then be, not that it thoroughly explains, but that nothing else can explain. When I say: 'This noise is surely made by a railroad train,' to use another illustration of Professor Marvin's, I base my judgment not upon the fact that a railroad train is sufficient to account for it, but upon the fact that nothing else could, under the given circumstances, be its cause. Language is often elliptical in real life, and we may really mean this condition of things when we do not exactly say it, but in the foundations of philosophy we cannot get on with any safety unless our statements are exact. We can, for instance, imagine a pupil of Professor

Marvin's reasoning in this way: 'He certainly looked cross. Fifty reasons occur to me which would have accounted for it,one is that he had an indigestion. Consequently, I am convinced that he had an indigestion, that the indigestion which could have accounted for his crossness really occurred, was a really existent thing; but also all the other forty-nine things that might have caused it,-for we have learned that our definition of existence "must not imply that the real is unique." But it is in any case a foregone conclusion that you cannot (even though you reason correctly) use the judgment p < q to define the nature of existence (which is Professor Marvin's contention), because existence is a term which any judgment is already engaged in describing. (This is also Bosanquet's view of the nature of the judgment, but for different reasons.) The meaning of p < q is $\infty < \overline{p} + q$, —that is, existence, or the possible, is characterized by the fact that p is false or else q is true; but also it is characterized negatively by the fact that $\infty \nabla p\bar{q}$, that p true and q false does not occur in it,—whether it be reality, or truth, or a physical world, or experience, or even that world which the logician has as good a right to as the mathematician has to his domain of the non-Euclidean—the world in which the laws of thought are one and all transcended. In any case, an existence-term is already present,—the conception is so ingrained in the very nature of the judgment (whether simple or compound-in terms or in propositions) that to seek for a philosophical (though nonontological) definition here is to invite the 'circle-in-definition.' Professor Lovejoy considers that this effort of Professor Marvin's is foredoomed to failure for the reason that logic does not deal with existences. But this, I take it, is because Professor Lovejoy himself has been hypnotized more or less by the Bertrand Russell school into believing that the universal proposition is everything. I should prefer to say the reverse: it is because logic is all compact of existences, because the concept existence is already a part of the warp and woof of logic (and not of the particular-the 'existential'-proposition only, but of the universal as well), because it already exists as one of the terms of every conceivable statement, that no statement (not even p < q) can be made use of to define it, if one would avoid the circle in definition.

I am sorry to say that Dr. Bernstein, of the University of California, also takes this view. He writes me, with reference to my brief paper on the Foundations of Philosophy,1 that it will be impossible to carry out my plan of insisting upon "explicit primitives" for philosophy, because philosophy deals with existences, and Logic has "nothing to do with existences."2 One might as well say that logic has nothing to do with any real meanings for its symbolic terms, a, b, c, etc.,—that these cannot mean, upon occasion, Absolute, Begriff, consciousness, etc. Dr. Bernstein also has probably been hypnotized by Mr. Russell's p < q, and forgets the existence of its denial p < q. or $p\bar{q} \vee \infty$. The universal proposition, especially when in the form 'everything is \bar{a} or b,' or ' $a\bar{b}$ is not existent' would already seem to be concerned with the concept existence, but surely the affirmation of existence is so. When you are reasoning about real things, it is necessary that your symbolic terms, your a's, b's, p's, q's, etc., should preserve the same meaning throughout a given discussion,—your b's cannot mean prunes, prisms, and electric particles all at once. And the same precaution must be observed in regard to your existence-term,—your domains of thought must not be mixed up. But the precaution requires no more acuteness in the carrying out in the one case than in the other.

There is also a material error in the argument of Professor Marvin which does not come exactly under the topic of symbolic logic. He fails, I believe, to distinguish sharply enough between the proposition as true and the proposition as "existential." (By the latter he means a proposition dealing with actually occurring things, and even, in this paper, things occurring in a physical world—'physical objects,' to use the undefined term of the Six Realists, chemical substances, for instance.) Thus Bertrand Russell's definition of pure mathematics does not simply involve (p. 478) that the constituent propositions of p < q need not be true, but also that they need not deal with existent objects—that they need not be 'existential.' (This is not a bad sense in

¹ Journal of Philosophy, etc., VIII, (1911).

² And this in spite of the fact that Dr. Bernstein attended my lectures in Baltimore!

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which to use the term existential; to denote 'existential proposition' in the usual meaning—'there are occasions,' 'whatever is, is right,'-it is better to say: propositions with only one nonspecial term, or uni-terminal propositions.) This is all that is involved when Bertrand Russell introduces, to the confusion of the general reader, in the very first sentence of his Principles of Mathematics, that uncanny term, the variable (and, more terrorstriking still, the real and the apparent variable). Professor Marvin would seem to have forgotten for the moment that for a proposition to be true it is neither sufficient nor indispensable that it should be existential. (Professor Lovejoy has pointed out this oversight, p. 661). The final form of his definition is: 'The existent is the asserted sufficient condition of any true proposition,' that is, of p, when p implies q, and q is known to be true,—e. g., the atomic hypothesis, if the facts of chemistry have been correctly collected, and if the hypothesis really explains them. But, waiving the non sequitur of this,1 Professor Marvin forgets that before you can devise your existential explanation of the facts of chemistry, you must know that your facts themselves are 'existential.' We cannot give physical-world explanations of imaginary states of things. What then is his test for the actuality of the facts which are to be explained by a given theory? Curiously enough, he takes an unexceptionable view of the criterion, in the last analysis, of existent things (in a physical world)—they are the things that can be pointed at; what I express in my doctrine of Histurgy by saying that they are experiences which have the one-time one-place coefficient attached to them. (See Report of the Congress of Philosophy, Heidelberg, 1908.) But surely emotions, indifferences, feelings of admiration and of contempt, are quite as 'real' as colors,-Professor Marvin gives no criterion for recognizing them; he speaks as if only the physical world 'existed.' Limiting ourselves, then, to the physical world, not only the truth but also the

existentiality of q must be known before you can infer (back-

¹ Our author says, indeed, in one place, p. 479, "As far as logic is concerned, q does not imply the truth of p"; what I object to is that he immediately ignores the fact that every case of reasoning about material occurrences even must always continue to be the anxious concern of logic.

wards!) that those qualities are to be found in p; hence you must know what existence is, and be able to apply your knowledge, before you can define it. This is doubtless the curious circle-in-definition which Professor Lovejoy divines to exist in this argument of Professor Marvin.¹

The real state of things then is this: if q is true—and if p accounts completely and uniquely for q, then p is true, but also if the truth of q has been got by empirical observation, and hence deals with real objects ("has been experimentally ascertained"—we cannot experiment with imaginary test-tubes) then not only is p true, but also it deals with really existing objects. That is, if balls made of negative corpuscles enclosed in a positive electric sheath will fully explain matter (with all its qualities thick upon it), and if nothing else will, then these positive-negative balls are really existent objects. But it is so hard to prove that no other conception will explain matter,—so many conceptions in the past have had to be given up for better ones, that the right-thinking individual will be very loath to give these conceptions any very firm lodgment in his mind,—he will be more inclined to continue to regard them as hypotheses.

What Professor Marvin accomplishes in the end (if anything) is to add to those real existences which are forced upon us by immediate experience all the hypothetical, ingeniously conceived, objects and events which have been devised to explain them (e. g., side-chains, corpuscles of negative electricity, hollow spheres of positive electricity, vortices, the twisted rubber tubes of Sir William Thomson, etc. It seems to me that we may well hesitate to accept these as existences in the same sense as the sticks and stones which are well known to us,-that we shall do better if we continue to hold, as we have always done, that the figments of the active brain of the scientist are rather inhabitants of the world of hypothetical physical existences than of any world more substantial. Why not continue to preserve the distinction? In any case, far from giving us the distinguishing mark of existent objects, which we must first have learned to recognize elsewhere, these hypotheses at most enlarge their field,—but

¹ Loc. cit., p. 663.

that by new objects whose right to admission is certainly questionable. It is true that many of the commonly accepted properties of the world are, in the beginning, of this sort, more or less, but they have acquired their firm lodgment in our thoughts by the fact that they have so long 'held together,'-that interweaving which takes place between the innumerable products of empirical induction, in the way of piecing together, again and again, pairs of fitting premises and deriving fresh conclusions which can then be put to the test of experiment, strengthens enormously the validity of the whole closely connected structure: this is what I have called the doctrine of Histurgy. I have found it necessary to give a distinctive name to this doctrine, in order to mark it out sharply from the vicious doctrine of pragmatism its nearest foe; things that are unnamed can hardly be said to 'exist.' The erroneous reasoning of Professor Marvin is peculiarly deserving of study because it is the very same fallacy as that upon which pragmatism is built up. Those who desire to see philosophy enumerated among the sciences—that is, among the domains native to those thinkers who strive for truth, not, like Bergson, for romanticism (Professor Lovejoy has called him, very happily, the last of the romantic philosophers) will do well to strive together to exterminate what may be called the Fallacy of the Compound Wrong Conversion.

The question has lately been discussed (in the Journal of Philosophy, etc.) by Professor Perry and Dr. Brown whether symbolic logic is likely to be of value to the philosopher,—whether it is calculated to assist him in the tangled mazes of thought through which he is forced to make his way; Professor Perry maintains the affirmative of this question and Dr. Brown the negative. In view of the considerations which I have set forth, I am myself strongly on the side of both of these disputants; a good symbolic logic, kept simple, sufficiently elementary, and thoroughly sane, would be of really incalculable value to the philosopher,—it has become, in fact, an indispensable tool,—but the one-sided and amorphous form of logic which Peano and Russell make use of as prolegomena to mathematics is certain to be terribly injurious to him—as the example of it which I am

here discussing will illustrate. A little symbolic logic is a dangerous thing, and the more so if that little is entirely unadapted to its purpose. The great advantage which symbolic logic ought to secure for the actual reasoner is that his premises and conclusions, his equivalences and his under-statements, would be set down so sharply and definitely before him that it would be difficult for him to fail to keep their relationships exactly in mind,—it would be quite impossible, for instance, for him to lay down, at the beginning of his philosophy as two principles. what is really only one principle together with the same thing re-stated in its contrapositive form, as some one has lately done in the program of the six realists. Besides exactness, this form of speech secures extreme conciseness, in a material sense, you can overlook so much of your argument with a single sweep of the eye that obscure odds and ends of error are not likely to escape you. Again, the mere mechanism of the various transpositions that you are constantly called upon to perform,— (especially if you give preference, in your language, to the symmetrical forms of speech, no a is b, etc.) will become an ingrained habit, and hence a great aid to exactness. But the overloaded and excessively cumbrous symbolism of Mr. Russell —as $\mathfrak{F}!\alpha$ for ' α exists' and $(\mathfrak{F}(x))$ for 'x exists' (instead of a simple copula and existence-term for both, $\alpha \vee \infty_1$, $x \vee \infty_2$, if it is necessary to distinguish the types of existence)—obscures many things that are really very simple. Consider, for instance, the "very difficult" (!) logical problem discussed in § 38, Principles of Mathematics. The limitations to the usefulness of this form of logic are evident, and I shall not dwell upon them here no unimportant one is the smallness of the number of letters in the alphabet, even when the Greek alphabet has been added to our own. It may become necessary to annex the Chinese alphabet in order to have at hand a greater number of symbols for terms! But besides the difficulties that are inherent in the subject, there remains the fact that the symbolism of Peano and Russell is a badly chosen one,—it is impossible that any one who is not going to make logic his life work should take the trouble to learn to distinguish between \cap and \cup , as signs for and and or,

and between \supset and \subset , as signs for the two senses of implies.¹ But with the aid of a symbolism which should be chosen for the needs of the non-mathematician, and which should take proper account of the inertia of the human mind, much advantage might be had from these devices. The habits of exact thought which the discipline entails, the custom of setting out your complete chains of deduction all the way back from your explicitly undemonstrable propositions and your explicitly indefinable term, of guarding rigidly against the slipping in of postulates and axioms which have not been distinctly enumerated, would certainly be a gain in any field of intricate reasoning—and especially in philosophy, where foundations are so much in evidence. The chemists would have been sadly handicapped if they had balked at an intricate symbolism. And who knows how long it took the early logicians before they were willing to trust argument to the letters of the alphabet instead of to really significant terms?

CHRISTINE LADD-FRANLKIN.

COLUMBIA UNIVERSITY.

No. 6.1

 $^{^1}$ I shall use, for the logic-relation, following Mally, $\stackrel{\textstyle \prec}{\prec}$ when it is necessary to distinguish them.

HENRI BERGSON: PERSONALIST.

THE object of this brief paper is to protest against the abstractness of the current interpretations of Bergson's teaching. He is claimed, or criticized, as pragmatist or temporalist when, as a matter of fact he is, first and foremost a personalist, an idealist of the renaissant spiritualistic school.¹ To assert with one of his critics that "the fundamental principle" of his whole philosophy is duration is to take his statements out of their context. For Bergson's teaching is that the reality. with which we are in immediate contact is—not duration, but the self which endures (le moi qui dure).2 Nor is this the statement of a single isolated passage. The earliest of his books treats duration and freedom as characters of the 'fundamental self,' the living, concrete I;3 Matière et Mémoire plunges at once into the study of 'myself'4; and finally in L'évolution créatrice, the latest of his books, Bergson begins with the statement that "the existence of which we are surest is incontestably our own" and then proceeds, as will appear, to base his whole philosophy of nature on this truth and its implications.

To the claim that Bergson is a personalist two objections will at once be made. It will be urged that he incessantly opposes idealism; and from *Matière et Mémoire* will be quoted his definite statement: "we do not accept idealism." Stress will be laid also on the fact that *L'évolution créatrice* throughout asserts the existence of 'brute matter' as an essential factor in evolution. Bergson's definite disclaimers of idealism need not long detain

¹ The very title "Time and Free Will" which is given (with Bergson's approval) to the translation of the book entitled *Les données immediates de la conscience* is an evidence of the tendency to lose the forest for the trees—'big trees,' though they are.

^{2 &}quot;Introduction à la métaphysique," in Revue de Métaphysique et de Morale, 1903, XI, p. 4; Les données immédiates de la conscience, p. 164².

³ Les données immédiates de la conscience, pp. 95, 128 ff., 135 ff. et al.

^{4&}quot;Me voici donc en presence d'images" Matière et Mémoire, page I, second sentence.

⁵ Chapter III, p. 199. Cf. pp. 12, 22, 252, 256.

us. For the careful reading of the passages, in *Matière et Mémoire*, in which Bergson criticises idealism discloses the fact that the idealism which he opposes is often qualified by the telltale term 'subjective,' and that while he sharply criticizes associationism, representative idealism, and dualistic spiritualism, he never argues against that humanistic or personalistic form of idealism which, in truth, is the background of all his teaching.

The conception of matter as contained in L'évolution créatrice offers a greater difficulty. This will be discussed as the concluding section of a brief analysis of Bergson's teachings which aims to bring his personalism into clear relief. Bergson's characteristic doctrines may be summarized under two main heads: his doctrine of self and its environment, and his doctrine of nature, the universe in its totality. The first is the topic of Bergson's earlier works and includes his discussions of duration and freedom, of mechanism, and of body and mind. His conception of nature is the theme of L'évolution créatrice.

I. (a) It has already appeared that Bergson conceives duration in personal terms. He refers to "our feeling of duration, that is to say, of the coincidence of our ego with itself (de notre moi avec lui-même)" and says: "To touch the reality of spirit one must place oneself at the point at which an individual consciousness prolongs and preserves the past in a present." Duration is here conceived as the creation of spirit. In still another passage it is thus defined: "Pure duration is the form which the succession of our states of consciousness assumes when our ego lets itself live (quand notre moi se laisse vivre)." 'Time," he elsewhere says, "coincides with my impatience." These expressions, which might be multiplied indefinitely, show clearly that Bergson

¹ Matière et Mémoire, p. 12.

² Les données immédiate de la conscience, Chapter III, pp. 122 ff.; Matière et Mémoire, chapter II, pp. 123 ff. Cf. L'évolution créatrice, Chapter IV, pp. 302, 306.

² Matière et Mémoire, Chapter I, p. 61; Résumé, pp. 252 ff.

⁴ Ibid., Chapter I, pp. 66-67.

^{6&}quot; L'évolution créatrice," Chapter III, p. 218.

⁶ Matière et Mémoire, p. 263.

⁷ Les données immédiates de la conscience, p. 76.

L'évolution créatrice, Chapter I, p. 10.

conceives time as a form of personal experience. Indeed, the fundamental argument of L'évolution créatrice is based on the fact that change is introspectively known as reality. "We perceive ourselves," Bergson argues," and what do we find? . . . I find that I pass from state to state. I am hot or cold, gay or sad, I work or I do nothing. . . . Thus, I change unceasingly.¹ . . . We seek," he continues, "the precise sense which our consciousness gives to the word 'exist' and we find that for a conscious being to exist is to change, to change is to mature, to mature is indefinitely to create oneself. May we," he asks, "say the same of existence in general?" Bergson's affirmative answer to this question will later be discussed; at present it concerns us to notice that duration is defined as self-creation, and that the whole of Bergson's nature-philosophy is erected on the foundation of this conception of change as personal.

Obviously, Bergson's doctrine of freedom³ is the direct outgrowth of this view of the self as changing, as forever creating itself. It is needless to argue that in this teaching Bergson is openly personalistic. What he asserts is genuine indeterminism, an "evolution" in which "something absolutely new is added." "Consciousness," he says, "is essentially free; it is liberty's very self (elle est la liberté même);" to act freely is to re-take possession of oneself."

(b) The changing, freely developing nature of the self as immediately realized by intuition, or instinct, is sharply contrasted by Bergson with the mechanical nature of the physical world as known to the intellect. In brief, his teaching is the following: We immediately experience both duration—change, movement—and extensity. Extensity is not (as Berkeley taught) exclusively tactile: it is a character of all our sensational experi-

¹ L'évolution créatrice, p. I.

² Ibid., p. 8.

⁸ Cf. especially Les données immédiates de la conscience, Chapter III.

⁴ Matière et Mémoire, Chapter III, p. 205.

⁵ L'évolution créatrice, Chapter III, p. 293.

⁶ Les données immédiates de la conscience, Conclusion, p. 178.

⁷ On the important distinction between instinct and intellect cf. especially L'évolution créatrice, Chapter II.

ence.¹ But we are active willing beings; and for our practical purposes, for the sake of making better use of the sense-complex which we directly perceive, we arrest (by attention) the flux of this sensational experience; we create discontinuity in this originally continuous, sensational complex. After this fashion, individual selves, Bergson teaches, constitute and distinguish first their own bodies, then other organic bodies (which they regard as sources of their own nourishment), and finally inorganic bodies. And after thus creating, for practical purposes, discrete, spatial things, they speculatively interest themselves in artificially dividing and subdividing these discontinuous units. Hence arises the discontinuous, measurable space of physicist and mathematician and, at an even farther remove from experienced reality, mathematical time.

It is thus perfectly evident that Bergson regards the human body, all other external objects, mathematical space, and measurable time as the constructions of individual selves. "Our needs," he says, "are thus so many lighted torches which directed toward the sense-continuum outline upon it distinct objects. These needs can be satisfied only by distinguishing a body within

¹ Matière et Mémoire, Chapter IV, pp. 237-242 ff. Les données immédiates de la conscience, chapter II., pp. 73-74. It is curious that Bergson does not realize that this admission of a qualitative space-consciousness destroys his cherished antithesis between space and time. The truth is not, as Bergson states it, that space is quantitative, homogeneous, and measurable, whereas time is qualitative, heterogeneous, and incapable of being measured or divided. Rather time and space alike may be regarded either qualitatively or quantitatively. On the one hand, there is spatial as well as temporal quality (as Bergson here admits). On the other hand, time as well as space may be abstractly, artificially and mathematically regarded. Bergson's assertion that time, thus conceived, is really space is a mischievous metaphor utterly overlooking the qualitative aspect of space.

A second difficulty in Bergson's doctrine is perhaps over-emphasized by Professor A. O. Lovejoy ("The Problem of Time in Recent French Philosophy," II, Philosophical Review, 1912, XXI, pp. 323, 327 ff.). According to Lovejoy, Bergson combines with his teaching of the heterogeneity and the succession in time the denial of its 'internal plurality.' I am, however, inclined to think that Bergson is mainly interested, in the passages quoted by Lovejoy, in contrasting the consciousness of distinct, intellectually separated and measured moments from the consciousness of the changing self—in a word, that he intends to deny temporal plurality only in the associationist's conception of it. Yet, as Lovejoy shows, there is undoubted difficulty in reconciling Bergson's diverse statements.

this continuity, and then defining still other bodies with which the first will enter into relations as if with persons."

(c) Bergson's theory of the relation of mind to body must be interpreted in accordance with this teaching about things and quantities. When he says that "the essential function of the body is . . . to limit the life of the spirit,"2 the statement must be read in the light of his invariable assertion that body, nerves, and brain are images.⁸ Somewhat to expand this summary statement: Bergson teaches that the body is a 'privileged image'4 in that I am conscious of it both through affection (organic sensation) and through perception (spatial perception). But he opposes with special vigor the materialistic doctrine that the brain is cause of consciousness, and he argues in great detail that for memory (in the sense of recognition) there is no adequate cerebral explanation.7 The body, he teaches, is best conceived as conductor of motions,8 a link between me and the other images which environ me, a "rendezvous between excitations received and movements accomplished."9 Occasionally Bergson expresses this relation by calling the body a "center of action"; 10 but this, as he acknowledges, is an inexact expression. Really, as he says, my body is but the symbol of 'the real center of action';11 and this real center of action is the self or 'person.' "My body," he definitely states, "has its position as center of [my] percepts; my personality (ma personne), is the being to which I must relate [my] actions.¹² The body, and in particular the brain, is thus

¹ Matière et Mémoire, Chapter IV, p. 220. Cf. ibid., p. 234, and Résumé, p. 258; also, L'évolution créatrice, pp. 206, 229.

² Matière et Mémoire, Chapter IV, §1.

³ Ibid., Chapter I, pp. 3 ff., Chapter IV, pp. 199 ff.

⁴ Ibid., Chapter I, p. 54. Cf. L'évolution créatrice, chapter I, p. 12.

⁵ Matière et Mémoire, Chapter I, pp. 1, ff.

⁶ Matière et Mémoire, Chapter I, pp. 4 ff. Cf. L'évolution créatrice, Chapter III, p. 285.

⁷ Matière et Mémoir, Chapter II.

⁸ Ibid., Chapter II, §1.

⁹ Ibid., Chapter III, p. 190.

¹⁰ Ibid., Chapter I, p. 4.

¹¹ Ibid., Résumé, p. 259.

¹² Ibid., Chapter I, p. 37. "Mon corps est ce qui se dessine aux centre de ces perceptions; ma personne est l'être auqel il faut rapporter les actions." Cf. pp. 54, 56.

simply an image among other images,¹ and a bodily or brain change is a link in that chain of continuous processes which either begins with inorganic phenomenon and ends in perception or, contrariwise, begins with perception and ends in the mechanical. From this demonstrable continuity between inorganic, organic, and psychic phenomena Bergson concludes that "things participate in the nature of our perception." The idealistic character of this teaching is perfectly obvious.

II. When from this summary of Bergson's teaching about the changing self, in its environment, we turn to his conception of the universe we find him describing nature in the terms which he has so far applied to the single person. In truth, as has already been noted, he expounds the meaning and argues the reality of the ever changing vital life-impulse by appeal to my immediate assurance of myself as in constant change, in unceasing process of self-creation. "We create ourselves continuously," he asserts. "In willing," he declares, "... we feel that reality is a perpetual growth, a creation which pursues itself unendingly."

In truth, Bergson explicitly uses the terms 'life's and 'vital impulse,'s in which, most often, he describes the universe, as synonyms for consciousness. Of "life," he definitely says that it "is consciousness." "To compare life to an impulse (élan) is," he says, "but a figure of speech. In reality, life belongs to the psychic order." "The whole of life (la vie entière)," he elsewhere declares, "is a rising tide (un flot qui monte) . . . , and this tide is consciousness." The essential causes of evolu-

¹ Op. cit., p. 4.

² Ibid., Chapter IV, p. 200.

³ L'évolution créatrice, Chapter I, p. 7.

⁴ Ibid., Chapter III, p. 260. Cf. ibid., Chapter I, p. 21. "Such is the character of our evolution and, doubtless, such also is the nature of the evolution of life."

⁶ L'évolution créatrice, Chapter I, p. 57; Chapter II, pp. 105-06; Chapter III, pp. 110, 112; Chapter I, p. 32.

Ibid., Chapter I, pp. 95; Chapter II, pp. 130 et al.

⁷ Ibid., Chapter II, p. 197. Cf. Chapter II, pp. 197, 201 et al. for the interchangeable use of the expressions 'current of consciousness' and 'current of existence'.

⁸ Ibid., Chapter III, p. 279.

⁹ Ibid., p. 292. Cf. Chapter I, p. 58.

tion are psychological. Thus though he teaches, in accord with common biological doctrine, that human consciousness appears late in the evolutionary process, we must attribute to him the conception of life as personal, not as impersonal.

There remains, however, a serious objection to a purely idealistic reading of Bergson's view of the universe. Unquestionably, the critic will admit, Bergson assigns to developing consciousness the title rôle in the life-drama. But matter also plays a necessary though subordinate part in this drama of the universe. Throughout L'évolution créatrice Bergson explains evolution by the opposition of brute, inert matter to the on-rushing current of life.2 To this opposition which is "never," Bergson declares, "surmounted," are due the many failures of nature, the choked channels and the culs de sac of the life-current. The diverse manifestations and forms of life, the concrete living beings, represent the successful strivings of life, or nature, with opposing matter.³ Superficially regarded, we certainly have here a dualism of life (that is, of consciousness) with matter. Three facts. however, prevent our conceiving this apparent dualism as the final expression of Bergson's conviction. In the first place, his references to matter in L'évolution créatrice are, many of them, introduced by qualifying phrases, such as 'in our view' and 'as if.' When Bergson says, for example, "the breaking up of life into individuals and species proceeds, we believe (croyons nous) from the resistance which life experiences from brute matter,"4 it is not unlikely that this "croyons nous" has the force of "we are wont to think," and that he is here seeking to state simply the conventional view of the relation of matter to spirit. The probability of this explanation is strengthened by such statements as the following: "Life manifested by an organism is in our view (à nos yeux) a certain effort to obtain certain things from brute matter,"5 and, "Everything happens as if a great current of consciousness had penetrated matter."6

¹ Op. cit., pp. 145, 149 et al.

² Ibid., Chapter II, pp. 148, 197; Résumé, p. 260.

³ Ibid., pp. 107-108.

⁴ Ibid., Chapter II, p. 107.

⁶ Ibid., Chapter II, p. 148. Italics mine.

⁶ Ibid., Chapter II, p. 197. Italics mine. Cf. page 125.

This apparently traditional and everywhere vague and figurative fashion in which L'évolution créatrice describes matter throws us back upon the explicitly idealistic conception in Matière et Mémoire. As has appeared, Bergson there teaches that matter is made up of images and that "without doubt the material universe, defined as totality of images, is a kind of consciousness." "In matter," he has previously said, "there is something more but not anything different from the actually given (ce qui est actuellement donné²). In other words, matter is not a hidden cause, an unknown reality, but a complex of qualities, immediately known. "Matter" so Bergson teaches (with Berkeley, though Bergson does not notice the likeness) "is precisely what it appears to be."

We have, finally, in L'évolution créatrice itself, suggestions of a personalistic interpretation of matter. The first of these compares matter with the formulations, the expressions, of consciousness. "From bottom to top of the organic world," Bergson says "there is always one sole, great effort; but most often this effort... is at the mercy of the materiality which it has of necessity given to itself. This is what every one of us can experience in himself. Our liberty, in the very movements by which it affirms itself, creates growing habits which will suffocate it unless it renews itself by constant effort. The liveliest thought will freeze in the formula which expresses it." Here matter is conceived as opposed not to consciousness but to freedom: in Bergson's words, once more, "Matter is necessity."

In a second passage, Bergson supposes a state in which there is "neither memory nor will . . . nothing but the moment which dies and is re-born again and again. . . . One may assume," he concludes, "that physical existence tends to be of this second sort." This reminds one of Ward's Leibnizian doctrine of 'bare monads' and his description of the bare monad as one "whose organism, so to say, reduces to a point, and its present to a

¹ Matière et Mémoire, Résumé, pp. 262-263. Cf. Chapter I, pp. 7, 22, 272, 492.

² Ibid., Chapter I, p. 65³.

³ Ibid., Chapter I, p. 67.

⁴ L'évolution créatrice, Chapter II, p. 138.

⁵ Ibid., Chapter III, p. 2862.

⁶ Ibid., p. 2192.

moment." Clearly, Bergson here suggests that matter consists in momentarily, as contrasted with continuously, conscious being or beings.

The last of these passages conceives matter in its opposition to life after the fashion of a conflicting personality. "Life." Bergson says, "is tendency and the essence of a tendency is to develop in the form of a sheaf (gerbe); creating by the mere fact of its growth diverging directions among which its impulse (élan) will divide itself. This," Bergson continues, recurring to his constant analogy, "is what we observe in ourselves during the evolution of that special tendency which we call our character. Each one of us . . . will admit that his childhood personality. though indivisible, united in itself different persons. . . . But these interpenetrating personalities become incompatible as they grow older and since each of us lives but one life, he is forced to make a choice. In truth we choose unceasingly, and unceasingly we suffer great losses. The way which we take through time is strewn with the *débris* of all which we began to be. . . . Nature, on the other hand, is not bound to such sacrifices. . . . It retains the diverse tendencies. . . . It creates . . . diverging series of species which develop separately."2 The opposition which is essential to the diverging forms of life is, according to this teaching, analogous to the conflicting aspects of a self. That 'brute matter' which, colliding with the life current, precipitates and defines single individuals is itself personal in however low a degree.

Thus interpreted, Bergson's view of nature is allied with Leibniz's, Fechner's and Ward's: he is, in technical terms, a pluralistic personalist. It is true that more than one of his statements lends itself to a numerically monistic interpretation. "In the absolute," he declares "we exist, we move and live." "The Absolute," he says elsewhere, "reveals himself very close to us and, in a certain measure, in us." But despite these statements, and though he admits that nothing logically forbids our imagining a unique individual within which the evolution of life

^{1 &}quot;The Realm of Ends," Lecture XII, p. 2571.

² L'évolution créatrice, pp. 108-109.

⁸ Ibid., Chapter III, p. 2171.

⁴ Ibid., Chapter IV, p. 3231.

should be accomplished, he none the less believes that "in reality evolution has made its way (s'est faite) through the intermediary of millions of individuals.¹ Bergson's opposition to absolutism is, in truth, uncompromising: it is the most fundamental of his negations, based on his passionate conviction not merely of the reality but of the ultimacy of change and progress. An absolutist may believe that time and change are vitally real, but he must conceive them as aspects, and in the end, subordinated aspects, of the eternal purposes,2 whereas to Bergson, as to every pluralist, reality is forever in the making, "we are forever creating ourselves." The cardinal error not only of Bergson's critics, but of Bergson himself, in the valuation and the estimate of his system, is the exclusive emphasis laid on this ultimateness of change and freedom, to the neglect of his equally positive doctrine that back of change is that which changes, that fundamental to time and freedom and evolution is the enduring, willing, developing self.

In conclusion, fresh stress should be laid on the personalistic character of Bergson's idealism. He loses no chance to criticise sharply what he calls deterministic associationism, that "gross psychology, the dupe of language [which] . . . reduces the I (le moi) to an aggregate of facts of consciousness." In opposition to this view of the self as 'assemblage of psychic states, '4 a conception, he declares, which "ever substitutes for the concrete phenomenon an artificial philosophical reconstitution of it," Bergson insists upon the fundamental reality of the 'I which feels, or thinks . . . or acts, '6 the 'I ever identical with itself,' The 'fundamental,' 'concrete,' 'living' self.

WELLESLEY COLLEGE.

MARY WHITON CALKINS.

¹ Op. cit., Chapter I, p. 58.

² Cf. Royce, The World and the Individual, Lecture III, and the writer of this paper, The Persistent Problems of Philosophy, 3d edition, pp. 440 f.

^{3 &}quot;Les données immédiates de la conscience," Chapter III, p. 1262.

⁴ Ibid., p. 122. Compare Bergson's criticism in Matière et Mémoire to the conception of 'the psychic state as a kind of atom' (p. 1443) and his assertion (p. 181): "Consciousness never reveals to us psychic facts floating about in a state of independence."

⁵ Ibid., p. 125.

⁶ Ibid., p. 1322. Cf. pp. 124, 1262, 128 f.

⁷ Ibid., p. 1312.

⁸ Ibid., p. 128. Cf. p. 167. Cf. also Matière et Mémoire, Chapter I, p. 54; and Chapter III; and L'évolution créatrice, Chapter IV, pp. 302-306, et al.

REVIEWS OF BOOKS.

Psychology of the Religious Life. By George Malcolm Stratton. London, George Allen & Co., Ltd., 1911.—pp. xii, 376.

In its materials, its methods of treatment, and its points of view. this work occupies a distinct place in the already considerable literature of the psychology of religion. The data here employed are drawn from sacred literatures and other ethnological documents to the exclusion of biographies, confessions, case-taking, records of child growth, and direct analysis of group or mass phenomena. This limitation is deliberately adopted lest near views should interfere with breadth of generalization. From the same attitude of mind, no doubt, grows the unusual limitation of the problems that are attacked. There is here no attempt to grapple on the one hand with the psychophysical details of individual experience (such as prayer, faith, conversion, mystical illumination), nor, on the other hand, with the genetic and social problems that King and Ames have made fundamental to their treatment of the psychology of religion. ests Professor Stratton is neither the mechanism of religious processes. nor the functions therein performed, nor the order and laws of the development of religion. What, then, one may ask, is left for study? In reply I would suggest as a partial parallel several possible ways of observing the rendition of a given symphony. We may proceed from the standpoint of the score, comparing the rendition with the author's thought, and placing the observed object in its proper position in the history and science of music; or we may proceed rather from the standpoint of orchestral technic, judging the tone quality, the precision of the players, the style of conducting, and so on; or, assuming the standpoint of sociology or of psychological esthetics, we may study the effect upon the audience as a whole. But there is still another possibility: One may simply listen, and listening detect something of the structure of the symphony directly from the tonal impressions as they are received. Similarly, the present work takes toward religion the attitude of a listener who discriminates its harmonies and discords, its rhythmic contrasts, and its various themes with their oppositions and systematic relationships. This method, to be sure, will not discover for us all that can be known about religion, but we cannot deny that it is a method of genuine objective analysis.

What chiefly attracts the attention of the author is the remarkable contrasts that appear everywhere in religion. Struggle, conflict, is of its essence. Light is opposed by darkness, summer by winter, good spirits by bad, God by Satan, and all this is reflected in men's attitudes toward themselves, their world, and their divinities. Religion appears as added appreciation of the self, and as the deepest self-depreciation; as the great inspirer of sympathy toward fellow men, and yet as the supreme instigator of intolerance; as adding beauty and attractiveness to the world, and yet as declaring all that is of earth to be vanity and a hindrance to the spirit; as drawing men into society, but also driving them into solitude; as good cheer, as deepest gloom, and as apathy; as priestly ceremonial, and as prophetic protest against it; as the conservatism of the established, and as a fountain of fresh inspirations; as incitement to contradictory lines of action, and also to passivity; as a stimulus to the intellect, toward which it nevertheless entertains profound distrust; as insisting upon imaging the divine, yet flouting the images that it creates; as striving toward utter unity, yet suffocating in the abyss of the One; as knowledge, illumination, the climax of reason, and yet the worship of a divinity that is surrounded by mystery and thick darkness; as seeking to find divinity near at hand, yet exalting it above all the incidents of time and all the fragmentariness of our experience. Such oppositions exist not only between different religions, but also within one and the same religion, often in one and the same individual, sometimes in one and the same act of worship. This surprising set of facts is established by superabundant citations from a wide range of sources. Herein, perhaps, lies the chief distinction of the book. That religion lies close to the strains and conflicts of the mind is no new discovery, of course; and isolated cases of inconsistency in religious thinking or attitude have often been pointed out. But it is doubtful whether the extent and pervasiveness of the fact, which now appears as a general mark of religion, have ever before been clearly recognized. The point, let it be remembered, is not that religion ministers to minds already torn by conflicts; we are dealing here with conflicts of religion with itself, conflicts that arise precisely when religion has its own way. Stratton infers that they represent, in a profound degree, the inmost nature of the whole religious movement.

Accordingly, his main problem is to trace this ever-present tendency to its ultimate cause in the mind of man. In some cases a general explanation is rendered unnecessary by the discovery of a special ground for a specific phenomenon. Thus, the constitutional differ-

ences of individuals with respect to feeling tone go far toward explaining contrasts of pleasure and pain in religion. Again, one of the great conflicts, that between imaging the divine and yet recoiling from the imagery that religion itself creates, is explained by the fixed opposition between sense and thought in general. Though a concept be derived from certain concrete particulars, no one of them can represent it without excess, defect, or twist. "This irrational element in what is sensuous and concrete may vary in its degrees of flagrance, but it is always there (p. 241)." A peculiarly apt example is found in the Homeric representations of the gods, where the epithets (the thought factor) are consistently dignified and noble, while the stories (the sense-image factor) contain many a degrading element.

But such special cases are not sufficient to account for the universality of the conflict-principle in religion. When we look deeper, we come, in fact, upon a distinctly religious root, namely, the very nature of the idealizing act, which is the fundamental process in religion. If I may venture a generalization that Professor Stratton leads up to, even if he does not fully state it, to idealize the unideal is to construct an idea that inherently rebels against its own meaning. For the ideal derives its content from the actual and from it alone: therefore the ideal can never free itself from the strain out of which it arises. The only apparent exception to this is found in theories, like that of Nirvana, in which negation is carried to a (supposed) limit. Here, however, the ideal is either entirely empty, so that one cannot say in what sense it is ideal, or else it retains some lingering trace of the actual which it nevertheless seeks wholly to deny. It will not be unfair, I think, to surmise that Hegel's great thought that the Highest realizes itself, not by annihilating contradictions but by taking them up into itself upon a higher plane, had something to do with giving direction to the thought of Professor Stratton. Certainly we are in this work everywhere met by the fact that religion both affirms and denies whatever it has to do with, and this whole process is made to appear as vital and inevitable.

To give Professor Stratton's exposition more explicitly, we note that idealization proceeds from various motives—sensuous pleasure, fondness for action, curiosity as to causes, delight in beauty, need of logical sufficiency, and social appreciations, whether of the family, of friendship, or of the larger groups. Now, these motives interfere with one another. In particular, the social idealizations fall into competition with the others. See, for example, how impossible it is for our ideal of a beneficent God to reconcile itself with an uncolored,

matter-of-fact causal explanation of this great world-mixture of good and evil. Consider also the conflict between friendly intimacy and comprehensiveness. It led James to declare that a divinity that is to-meet our needs must not be infinite! Then, too, the desire for logical inclusiveness at its highest flouts moral distinctions by including them within some one supreme principle.

Religion, then, is exceedingly varied. It is not exclusively a social process or product, as Ames maintains. Stratton says: "It would seem as much a forcing of facts to attribute such primitive impulses to the social consciousness or to social claims or social imitation as it would be to explain in any such way our sense of color and sound, or the native dislike of cold and spiders, or the enjoyment of food. The reverence which men have shown the Highest has usually been, not alone because it fulfilled their social needs, but also because of its satisfaction to sensuous and esthetic and causal and logical needs, which grow, it is true, by the mutual friction and support of men, but seem not to originate in this way nor to be part and parcel of the social feeling itself (p. 337)."

Just what, then, is our author's definition of religion? Obviously, it is not to be defined by reference either to the objects of worship, or to any particular feeling or attitude of mind toward them. Rather, it is man's whole bearing toward whatever seems to him to be the Best. It is his response to an assumed Perfect that seems to preside as an invisible genius over all consciousness. Quite naturally, however, the Best tends, with the development of religion, to take the form not only of conscious life but of ideal society. It is ideal social objects, no doubt, to which Stratton refers when he says: "Religion is the gradual awakening to the weight and import of a peculiar order of objects (p. 345)."

It is important to inquire whether religion has within itself any solution for its own conflicts, any healing for its own wounds. Is there any structural plan or form through which its harmonies and its discords are organizable into a genuine symphony? The author can, in the nature of the case, give no affirmative answer; indeed, it is of the essence of his theory that a negative answer is inevitable. Yet we face this conclusion with surprising calm. Why does not this pronouncement of irreconcilable contradictions have a more tragic tone for us? One has to suspect that we are not, after all, moving among the elements out of which tragedy is made. Even religious thinkers have ceased to be moved by the problem that Mansel raised. He, too, declared that there is an irreconcilable contradiction in the

notion that God is infinite and also creator of the world. Such things puzzle philosophers, it is true, but rarely does religion feel much disturbed by them. The reason is that the strains that religion feels are not these logical conflicts, whether of Mansel or of Stratton. Stratton has, in my opinion, established his main point—that idealization, which is a fundamental process in religion, produces logical oppositions. But the oppositions that religion feels are such as these: A life (one's own, that of a child, of a friend) that is worth preserving that nevertheless goes out for want of food or through disease for which no apparent justification exists; the poor, with insufficient goods to provide for a normal human development, beholding the rich with not only more than they can use, but so much that they are corrupted by it: love (of a mother for a wayward son, of a wife for a faithless spouse) erecting a cross upon which it itself is crucified; godlike capacities thwarted because they are joined with the passions of beasts; the daily burden under which the laborer groans, the daily temptation to sin, the daily wrong that must be endured-all these conflicts, which the Christian religion makes poignant, concern particular men, particular goods, particular events. This, rather than the contradictions to which Stratton calls attention, are the sphere of real tragedy, these are the spontaneous religious interests of men.1

We are now ready to point out the relations of the present work to some prevalent tendencies in the psychology of religion. The basis of religion, Stratton tells us, is that men desire something, and in the effort to obtain it form ideals. This is a good step toward construing religion by the advantages that it mediates, that is, toward a functional definition. It is interesting to notice how largely current definitions of religion begin at this point. One of the sure signs that psychology of religion has a valid claim to be counted a part of science is this convergence of thought toward a single basis for the definition of such an extraordinarily complex thing. Value, need, endeavor—these correlative terms are basal with Höffding, James, Ames, King, and Royce in his new Sources of Religious Insight (New York, 1912), to mention only a few of the more prominent names.²

It is, then, of the first importance to scrutinize primitive desires and the manner in which they give rise to what can be distinctly recognized as religion. Stratton's list seems unimpeachable, to be sure, yet it is so highly generalized, so far removed from its own groundwork in observation that some important concrete details seem to have lost

¹ Cf. Höffding, Philosophy of Religion (London, 1906), pp. 1-3.

² See, also A Psychological Definition of Religion, by W. K. Wright, Amer. Jour. Theol., Vol. XVI, No. 3, July, 1912, pp. 385-409.

the influence that belongs to them. There is, for example, a wide difference in concreteness in the list itself. Thus, a sense of the importance of family, friends, or the state fixes attention upon definite. concrete objects, whereas the need of logical sufficiency lacks any such sharp focus. Again, craving for sensuous pleasure really refers back to endeavors to procure particular things in response to particular conditions and in a particular way. Now, we get the most light upon the motives to religion when we define human impulses with direct reference to the concrete objects toward which they move. Men seek food by hunting, fishing, raising flocks and herds, cultivating the soil; they maintain families of one or another type, group themselves in tribes, organize monarchies; they fight and make peace; they struggle to adjust themselves to climate and the forces of external nature, to birth and death, to the conditions of a healthy, free, and full physical and mental life. And religion is bound up with, and gets its specific character in each case from, just such everyday enterprises. Here, moreover, the mind is itself formed; its structure appears in the functions it performs, and nowhere else. When, therefore, we undertake to trace some universal characteristic of religion back to its source in the human mind we need to remember that the 'universal characteristic' is a growing and changing one, and that 'the human mind' is no static thing.

Professor Stratton has approached, but not attained (very likely does not desire to attain) the genetic-functional standpoint. The functionalist thinks of each reaction as called out by a particular situation which must be known by us before we can adequately know what the mental reaction is, and he holds further that the function or faculty itself is molded by the reaction thus called out. This is the base line of such works as King's and Ames's. Stratton, on the other hand, turns his attention away from concrete situations, and attempts to define religion by an analysis of mental structure per se, and indeed structure taken generally, whereas to the functionalist mental structure itself has to be conceived in the terms of a law or order of development.

The kind of scientific consequences that flow from this distinction in points of view can be excellently illustrated by comparing Stratton's treatment of magic and ritual with that of King, Ames, and Henke.¹ Ceremonies, says Stratton, "begin in foolish mummery, in all manner of cheap and childish tricks to reach one's end, and did we not see

¹ Irving King, The Development of Religion. New York, 1910. E. S. Ames, The Psychology of Religious Experience. Boston, 1910. F. G. Henke, A Study in the Psychology of Ritualism. Chicago, 1910.

with our very eyes what they finally come to, no one could believe that they furnish the parentage of good. Acts that are intended to appeal to spirits or gods, if traced back, are often found to have their historic source in magic, pure and simple, in spells or charms differing from religious rites inasmuch as they accomplish their results by their own inherent though mysterious power and without first influencing some spiritual being by motives of the mind" (p. 133). Here are four assertions: (1) That truly religious ceremonies spring out of magical practises; (2) That the mark of a genuinely religious ceremony is appeal to spiritual beings; (3) That the mark of a magical ceremony is belief that there is inherent power in the ceremony itself to secure the desired end; (4) That magical ceremonies are mere mummery. The lack of an explanatory principle here is obvious; at every step there is a hiatus between an apparently artificial ceremony and real life, and at the end of the search for causes we are balked by "foolish mummery." It is true that the chapter from which the quotation is taken is entitled "Ceremonial and its Inner Supports," and that certain inner supports, such as the value of definite ways of doing things, are named; but here at the crucial point for determining the origin of ritual and the nature of magic, we find neither inner nor outer supports. On the other hand, as the authors whom I have named have shown, there is not lacking direct evidence of a vital connection between ritual and utilitarian acts. The ceremony is first of all a serious attempt to reinstate a process that is actually connected, and is supposed to be causally connected, with such obviously important events as food-getting, fighting, birth, death, marriage, and initiation into the tribe. The ceremony is at the outset a social, tribal act, with communal ends in view. This gives King a starting point for a penetrating research that tends to show that the only distinction between magic and religion that is free from arbitrariness rests upon the question whether a social or a private and unsocial use is made of the rite or ceremony.

The more abundant fruit of the genetic-functional point of view in this instance should not lead anyone to suppose that the work before us generally ignores historical or ethnological data. The difference is rather one of emphasis, and generally the broad horizon that is pointed out is in no manner of conflict with the humbler 'situation' of the functionalist. Indeed, a given fact may originate in such a situation, and at the same time have a deeper meaning for us because it is part and parcel of a great movement. It is these deeper meanings that Professor Stratton seeks to fix. If space

permitted I should like to show how, in several instances, this approach provides a needed complement for the results of the narrower method. A single instance must suffice, namely, the successful contention that in order to explain the social or unsocial traits of the gods we must look not only to contemporary or earlier forms of social and political organization, but also to a number of subtler but powerful influences of a more distinctly internal and psychical order (see pp. 320 ff.). It should be said, finally, that these essays are delightfully written.

GEORGE ALBERT COE.

UNION THEOLOGICAL SEMINARY.

Kant and His Philosophical Revolution. ["The World's Epoch Makers."] By R. M. Wenley. New York, Charles Scribner's Sons, 1910.—pp. ix, 302.

This volume, belonging to a well-known popular series, as indicated on the title-page, differs from other brief commentaries on Kant mainly in the much greater emphasis given to the general tendencies of thought and the political and social conditions obtaining during the 'epoch' considered. Professor Wenley fully realizes the difficulties of the task that he has undertaken, viz., to make Kant not only comprehensible but vitally significant to the intelligent general reader, and the tone of his Preface is such as to disarm criticism. He says: "Although Kant left no system in the strict acceptation, his technicalities possess rights that never lapse. I can but say that I have simplified to the best of my ability. . . . As far as may be, I have subordinated moot problems in Kant 'philology,' and avoided ramifications which could not be followed up within a space limited by prearrangement. . . . In particular, the proportions to be assigned to each part have raised sore puzzles, like the necessary omissions."

It may be said at once that, in spite of his decidedly unconventional style, which at times might suggest flippancy, the author takes his subject seriously and shows a good deal of historical sense in exhibiting Kant, not merely as a philosophical classic, but as a great figure in the history of human culture and a living influence in the thought of our own time, even though the many 'last words' of philosophy might suggest a very different estimate. Professor Wenley is as little the ardent apologist as the carping critic, and, on the whole, he may be said to have a fairly well developed sense for essentials; but, where the space at a writer's command is "limited by prearrangement"—a hasty computation seems to show that this little book contains only about sixty per cent. as much matter as the Paulsen volume—the

question as to "the proportions to be assigned to each part" is a really serious one. There are three "Parts,"—I, "Origins;" II, "Development;" and III, "The Philosophical Revolution,"—and the tell-tale paging shows that Parts I and II together occupy 170 pages, while Part III, "The Philosophical Revolution," i. e., the author's account of the Critical Philosophy, occupies only 123 pages; in other words, the introduction occupies very nearly sixty per cent. of the book. In an advanced treatise, which might or might not be followed by a supplementary volume, such disproportionate treatment would not necessarily be a really serious defect, but in an elementary commentary like the present one it is particularly important not to defer too long the consideration of the real gist of the matter. And this is obviously true, not merely because the remaining space is sure to be too little for what has to be treated, but quite as much because the reader's interest is sure to flag, if he is held in suspense too long.

After making this rather obvious criticism, one must admit that the first two Parts are, on the whole, the most interesting portion of the book. Part I, "Origins," consists of four chapters, two of which are devoted to what the author calls "the larger environment" and two to what he calls "the nearer environment," i. e., the more immediate influences to which Kant was subjected in his formative period. These chapters, though unsystematic and relatively drawn out, contain a good deal of interesting matter for the general reader; the principal criticism to be made is, that they occupy a third of the book. It may be added that the author's style is marred by certain mannerisms that finally come to interfere a good deal with the comfort of the reader. Examples taken at random are the following. "Fortune had no smiles for his folk" (p. 54); "During his student days Kant continued a familiar of poverty" (p. 70); [Martin Knutzen] "shone the bright, particular star among his mentors" (p. 72); "When railways were not, when roads conjured abomination"... Unfortunately the later chapters are at least as full of such expressions. For example: [Kant] "made no bones about the fundamental character of philosophy even in his maiden essay" (p. 101); "The eighteenth century has been sorely bethumped with words" (p. 145); "Kant wobbles often in the course of his exposition" (p. 197).

Part II, "Development" (about 70 pages) traces the gradual development of Kant's characteristic views during the pre-Critical period of his thought. Much the best chapter of this Part is the first, on "The Period of Scientific Eclecticism," which will give the general reader what he needs on this interesting phase of Kant's

development. The two other chapters, "The Period of Hesitation" and "The End of an Epoch," tend to drag, for by this time the reader, whatever his degree of unpreparation or preparation for what is to follow, is quite ready for the author's interpretation of the Critical Philosophy itself.

Part III, "The Philosophical Revolution," could hardly have failed to be disappointing, considering the extremely scant space that the author had allowed himself for expounding one of the great systems of modern philosophy,—one in which, as he himself has said, the "technicalities have rights that never lapse." But the self-imposed difficulty does not stop here. Professor Wenley never seems able, even for a brief time, to confine himself to systematic exposition; the temptation to make general observations and to anticipate difficulties before the nature of Kant's own treatment has been at all adequately explained constantly proves too alluring. The result can only be confusing to the general reader, for whom alone the book is evidently intended. Indeed, the more technical reader himself is likely to be puzzled by certain passages that can only be explained as the result of mere carelessness on the part of the author. After remarking that "the problem [of the first Critique] is approached as if the sensible and the intelligible [sic] were two disparate elements," he says: "Perhaps it is advisable to illustrate this at the outset by reference to the various interpretations that can be placed upon the Critique of Pure Reason. If stress be laid upon the factor contributed by the Intelligible world [sic], the synthetic, originative power of Reason acquires prominence. From this point of view, 'the Understanding imposes laws upon nature.' . . . A knowledge beyond the ken of the senses seems to be vindicated, and this so emphatically that Reason, as one might allege, determines the nature of reality. . . . On the contrary, if stress be laid upon the factor contributed by the Sensible world, Reason, despite its power of arrangement, is degraded from the 'spiritual' level granted by the former interpretation. . . . Thus its 'creative' function hangs in mid-air, as it were' (p. 180). This curious passage, which comes after a much too vague statement of the position of the Dissertation of 1770 (at the end of Part II and in the first few pages of the present chapter) and before any attempt has been made to explain Kant's actual procedure in the Critique of Pure Reason, cannot, of course, mean what it seems to say, and it is hardly necessary to remark that the author's later treatment shows no such utter confusion on his own part; but it is difficult to see how the beginner could be more effectually tangled up at this stage of the

argument, while the more critical reader will doubtless insist that a few, at least, of Kant's technicalities "possess rights that never lapse," even in popular exposition. Of course it is more than allowable to show that, in certain cases. Kant's technical statement of his problems is unfortunate. For example, a little later Professor Wenley says: "Kant takes it for granted that synthetic judgments occurring within an experience founded upon the senses need no justification: while those which belong to the a priori sphere do. . . . We ask, Why? . . . Of course, Kant's actual question is, How is any synthesis possible?" (pp. 184, 185). This is very much to the point. One's criticism is not that Professor Wenley does not understand Kant, but that he does not give the general reader adequate help in beginning to understand him. Closely following the last passage quoted is this: "So, just as Kant had assumed in the Æsthetic that individual images are provided apart from the activity of thought, he takes it for granted now that sense supplies definite objects which, in turn, understanding rationalizes into groups" (p. 188). This, certainly, is the extreme of over-simplification of Kant's real treatment-not a word about the 'creative imagination,' involving the implicit organization of experience, or a suggestion as to the wider and the narrower sense in which Kant employs the term 'understanding'-yet here follow characteristic criticisms, the point of which is necessarily lost, unless the reader is prepared to supply what the author has omitted. It is evident enough that Professor Wenley himself sees beneath the dualistic assumptions that Kant too often employs. As he says: "The 'manifold of sense' and the empty mental 'forms' happen to be pure fictions, themselves of mental origin. . . . Sense is either a transcript of experience from a certain limited standpoint, or it is nothing; and the same holds of mental 'forms'" (pp. 193, 194). And again: "The categories, as Kant presents them, fail, not because limited to the phenomenal, but because he omits to push his criticism far enough. Other categories pervade human experience, and, if analysis would win success, it must elicit them also" (p. 194).

It would be possible, if space permitted, to point out many similar cases of inaccurate or insufficient statement of matters essential to the understanding of the Critical Philosophy, closely followed by passages that show that the author himself has a much broader view of Kant's problem and a more independent grasp of the principles involved than his commentary as a whole would indicate on a first reading. It is rather characteristic of Professor Wenley's habit of dealing with problems by what might be called 'the method of anti-

cipation,' that the first chapter of the last Part, dealing mainly with the *Critique of Pure Reason*,—the chapter just considered,—should be entitled "The Theoretical Consequences of the Critical Philosophy." Chapter II, "The Critical Philosophy and the Function of the Moral Life," and Chapter III, "The Teleological Aspect of Experience and Religion," deal with the subjects indicated by the titles on about the same scale and according to the same plan as the preceding chapters, though the last chapter mentioned is badly crowded, and this is still more the case with the final chapter, "Forward from Kant."

In closing, the reviewer can only express his sincere regret that this little volume does not do greater justice to its very important subject and to the author himself. This would seem like a particularly fitting time for the publication of a popular book on Kant, showing his significance not only for the development of modern philosophy but for the history of our modern culture, and Professor Wenley has many qualities which ought to fit him specially for the difficult task of writing such a book. He has wide interests, a very genuine sympathy with the 'Philosophical Revolution' that he has attempted to interpret, an unusually large fund of relevant collateral information. and, what is equally important, he takes a very human view of Kant throughout his epoch-making 'Pilgrim's Progress'; moreover, his style, though open to criticism from the literary point of view, has 'popular' qualities of the legitimate kind that are calculated to hold the attention of the general reader; the fatal defect—one would not venture to say in the author himself, but in his treatment of the present subject-is unusual carelessness in the general plan of the book and still greater carelessness in essential details. But, even so, it is a real pleasure to find a writer of Professor Wenley's type, with much more technical knowledge than he always shows and with more of a sense for 'the things that are eternal' than he always confesses, helping to make intelligible and vitally significant to the wider audience problems that, in the past, have been too much a monopoly of the lecture-room and that now-let us be frank-are losing ground in the lecture-room because they have not found the wider audience.

ERNEST ALBEE.

CORNELL UNIVERSITY.

English Philosophers and Schools of Philosophy. By JAMES SETH. London, J. M. Dent & Sons; New York, E. P. Dutton & Co., 1912.—pp. xi, 372.

This volume is one of a series entitled "The Channels of English Literature," edited by Mr. Oliphant Smeaton, which aims to present

historically the various departments of English literature. It is indeed gratifying to find one volume in a series on literature devoted to the history of the concurrent philosophy, not only because much philosophy is literature, but still more because of the significance of philosophy in grasping the meaning of all literature. In England, perhaps, the inclusion of a history of philosophy in such a series may have been a matter of course, but if so it is all the more to be commended to the attention of academic students of literature in America. In this country at least there is too often a bitter truth in the iibe of the philologist,—that "Anyone can teach literature,"—because the subject is not supposed to demand any reference to the intellectual currents of the period which produced the literature. No surer way can be found to make the study of any work of art barren and empty than to treat it as if it were an isolated phenomenon,—a sort of unique manifestation of the Absolute.—not connected with the problems and struggles of the society which environed it. And in the environment of literature philosophical thought plays always an important, often a commanding, rôle. The wisdom of including a volume on philosophy in this series is therefore unquestionable and it is to be hoped that the significance of this inclusion will not be overlooked by the public or by the professional students of literature.

Professor Seth has performed in a very admirable fashion the task of supplying a history of English philosophy for such a series. He has pointed out in his Introduction the non-academic quality of English philosophy of the classical period, produced as it was in most cases by men of affairs rather than by professional teachers of philosophy. and he has evidently sought to follow the tradition of treatment thus Rarely indeed does an academic scholar, writing upon his specialty, produce a book so free from technicalities that might puzzle even the well-informed reader who is not a specialist. style of the work is admirable. Professor Seth's English is clear and fluent and at the same time dignified. In this connection the large and very skillful use of quotations ought especially to be commended. The philosophers speak each in his own language and the reader is thus enabled to get the literary flavor of the original in quite an extraordinary degree, considering the brevity of the work. use of quotation is an important element in realizing the intention to regard English philosophy as a form of English literature (p. vii). In arranging his chapters Professor Seth has avoided a slavish fidelity to his sources, his presentation following a logical order of development rather than the more or less accidental order in which circumstances may have determined a philosopher to write or publish his system. And yet this has been accomplished without falsifying the record. The result is a high degree of lucidity which makes the book delightfully easy to read, even where the subjects treated are the most difficult. The accuracy of scholarship is such as one would expect from such a student as Professor Seth. The work is an excellent piece of popularization, for it has the essential qualities of good popular writing,—simplicity of statement and accuracy of conception. Considered as a work of literature, the greatest defect of Professor Seth's book is the rigidly impersonal tone of his presentation; he rarely criticises a philosopher and his comments frequently lack that touch of personality which makes Leslie Stephen's writing upon English philosophy so interesting,—and also at times so exasperating to the reader who knows the sources at first hand. But a work of this size and kind does not easily lend itself to such a style.

The book is intended to be a history of philosophers rather than of philosophy. "My effort has been to concentrate attention on the epoch-making philosophers rather than on the less important figures in the movement, and on the actual thought of the individual philosophers rather than on the logical sequence of English philosophy as a chapter in the development of ideas" (p. vii). This undoubtedly is the wise plan to follow in a work of this kind. Professor Seth does not include, however, so much biographical material as this statement of his purpose might lead one to expect. In fact there is very little except in the case of Bacon and Hobbes, and the effort to relate the philosopher and his thought to the environment is rather conspicuously absent. In the part dealing with the nineteenth century the author has practically abandoned his intention to concentrate attention on epoch-making thinkers, for here we find a large number of brief and general summaries of different systems. Quite properly John Stuart Mill is given the most space, but even in his case Professor Seth does not appear to regard his philosophy as epoch-making. In fact, it is doubtful whether he appraises Mill quite so highly as he might with justice. For the rest, some nineteen other men are discussed in this part, receiving on the average about four and one half pages apiece; of these Spencer receives the most, about fifteen pages. It is a misfortune that Professor Seth desisted from his original intention when he came to discuss the philosophy of the nineteenth century. It is perhaps too soon to write the history of this period, but the latter part of Professor Seth's book might have attained more originality and a higher constructive plane if he had attempted to treat the

nineteenth century as he has the seventeenth and eighteenth. It would be worth while to know who were the epoch-making philosophers of the nineteenth century. Sooner or later the historian will have to answer this question and one wishes that Professor Seth had essayed it.

The three parts of the book, dealing respectively with the seventeenth, eighteenth, and nineteenth centuries, are practically equal in length. It is a question whether the purpose of the work might not have been better served if the earlier parts had been curtailed in order to save more space for the later parts, since the general reader is probably less interested in Bacon and Hobbes than he is in I. S. Mill or Spencer. On the other hand, the roots of English philosophy are undoubtedly to be found in the seventeenth century, as Professor Seth says, and no doubt also the general reader requires more assistance to appreciate the earlier thinkers than he does to understand his contemporaries. However the space might have been allotted,—and it is doubtful whether the division actually used has not as much to commend it as any other,—one regrets that Professor Seth could not have treated other philosophers in the more leisurely fashion that he is able to adopt in his chapters on Bacon and Hobbes. These chapters are the best in the book, apparently because the author has space for criticism and comment, whereas the later chapters take on more and more the character of abstracts. In the earlier chapters the work of the philosophers is not only summarized but evaluated and the exposition is enriched by biographical material and by more frequent references to the political and scientific currents which shaped the logical, metaphysical, and ethical problems of this period. The result is a certain breadth of treatment which one does not find, in the same degree at least, elsewhere in the book.

As a general rule Professor Seth's interpretations of the philosophers to whom he devotes any considerable space are entirely acceptable. There is one important exception to this statement, however, and to this we shall devote the remainder of our space. The chapter on Berkeley seems to the reviewer to give in certain respects a misleading estimate of that philosopher's place in the history of philosophy. Professor Seth regards Berkeley's immaterialism as the most significant element in his philosophy and holds that this entitles him to be ranked as the founder of modern idealism. "His philosophic genius may be said to have spent itself in a single flash of insight, in the clear apprehension of one great truth about external reality and man's knowledge of it; but so brilliant is this one achievement, so epoch-

making is its importance, not only for the sceptical reduction of Lockian principles in Hume, but for the subsequent movement of philosophical reconstruction in Kant and his successors, that it is not too much to say that Berkeley is the founder of modern idealism" (pp. 126 f.). Probably most idealists will be inclined to dissent from this, or at least to qualify it greatly, and in view of the labor which later idealists expended in differentiating their theory from Berkeley's, it seems somewhat surprising that Professor Seth should have taken the position he has without justifying himself more at length. Certainly modern idealism cannot be identified except in the most general way with the following items in Berkeley's services to philosophy: "For it was Berkeley who first . . . ventured the affirmation that the esse of material and extended things is percipi, that the primary reality is spiritual and the reality of the material world mind-dependent: that matter and extension are neither substantial nor attributes, co-ordinate with thought, of one ultimate substance, but in their very nature subordinate to thought and the thinking mind. And if Locke had already hinted that true agency is to be found only in the spiritual sphere, it was Berkeley who first clearly apprehended the essentially passive and impotent character of material 'forces' [was this not in fact a commonplace of speculation in Berkeley's time?], and pointed persistently to mind or will as the one true cause" (p. 127). The contribution which Berkelev really did make in his theory of immaterialism was his destructive criticism of the representational theory of knowledge, a criticism which Kant scarcely succeeded in improving, but this is very far from a constructive theory of idealism.

Whatever the origin of idealism may have been, or whether all idealism is essentially of the Berkeleyan type, there are good historical grounds for regarding Professor Seth's emphasis on Berkeley's immaterialism as a misconception. It is a misconception of Berkeley's natural capacity to class him as a metaphysical genius. On the contrary, in metaphysical construction he was uniformly weak, and his weakness is shown by the facility with which he deserted metaphysics for theology or even for popular religion. His genius was psychological rather than metaphysical, whatever his personal interest may have been, and his most significant and original contribution to English thought lies in his theory of vision and the deductions that can be drawn from it rather than in his more metaphysical theories. Whoever has read the works of the English Associationists, both in the eighteenth and nineteenth centuries, must have been struck with the profound impression that Berkeley's analysis of the visual per-

ception of depth had made upon them. In it they found the most convincing example of the working value of their principle of association. If an experience superficially so elementary and immediate as the perception of depth is a case of association, who will be rash enough to limit arbitrarily the scope of that principle in explaining other relations? Here is the solvent that shall break down the rationalist's intuitive relations for, as Berkeley himself perceived, it not only makes it possible to regard the empirical law of nature as an order of sensations, but it enables the critic to attack the rationalist on his own ground, the geometrical sciences based on the intuition of space.

The 'visual sign language' is Berkeley's most significant addition to English empiricism, and it is this which entitles him to a place as an epoch-making thinker. As the historians of philosophy have always pointed out, Locke was in many respects more of a rationalist than an empiricist. English philosophy as he left it was, so to speak, in a state of unstable equilibrium; it might, so far as he was concerned, have fallen in either direction, though doubtless, as Professor Seth says, the genius of the Anglo-Saxon might have been expected to develop it by an experiential method. But with the work of Berkeley the direction of its development was definitely determined and the outcome was prefigured. Mere experientialism was in the way of becoming empiricism in the technical sense of the word (the distinction between these terms is Professor Seth's, p. 5). Sensations and ideas were already conceived as self-contained mental entities between which only external relations can subsist, and this is the essence of empiricism. This and not immaterialism, which in itself took little or no hold upon Berkeley's successors, is his significant contribution to philosophy.

GEORGE H. SABINE.

LELAND STANFORD JR. UNIVERSITY.

Kant and Spencer: A Critical Exposition. By Borden Parker Bowne. Boston and New York, Houghton Mifflin Company, 1912.

— pp. xii, 439. \$3.00 net.

This posthumous book by Professor Bowne is in many respects a highly serviceable volume. It is based upon systematic lectures given during many years to his students. It offers a searching general criticism of both Kant and Spencer, but has also the special purpose of showing how the author's own body of thought stands related to each of these typical systems. The book is clearly and for the most

part strongly reasoned, and is written in a readable style. The present reviewer has been accustomed to regard Professor Bowne's writings as useful especially throughout the middle reaches of a student's philosophical education, but as less effective in developing and sustaining the highest insights. The Kant and Spencer probably does not succeed in removing entirely the measure of adverse criticism that might seem to be implied in such an estimate, but it modifies the estimate to such a degree as to advance by several stages Professor Bowne's philosophical reputation.

In form and editing the book seems to be reasonably complete. The Publishers' Note, to be sure, speaks of it as the first dictation of the matter to his stenographer, which had not received its final polish from the author's hand. A careful perusal, however, gives little evidence of the crudeness which this might imply, and warrants an indorsement of the publishers' belief that "all these errors have been eliminated by the studious care of friends thoroughly familiar with the author's thought,"—the corrections in every case being enclosed within brackets. But further, the work is fully wrought out as a systematic whole, and also the detailed discussions are logically complete, well-balanced, and effective. It is difficult to see what further changes the author would have cared to make.

The easier part of the author's task, no doubt, was the analysis of Spencer, to which the second half of the book is devoted. Very nearly all of the matter here adduced will receive the assent of all professional students of philosophy. It is true that the criticism is sweepingly destructive, but what would one have? It is at any rate couched in a respectful spirit, and is free from sarcasm and invective—a consideration which Spencer has not always received from his critics in general, nor even in the past from Professor Bowne himself. The treatment is restricted to the First Principles and Principles of Psychology, with brief reference to a few ideas contained in the Principles of Biology. The Ethics and the Sociology, then, fall entirely outside the discussion.

After a brief introduction, the body of Spencer's thought is taken up in five chapters under the following heads: "Mr. Spencer's Agnosticism;" "Mr. Spencer's Doctrine of Science;" "The Law of Evolution;" "Doctrine of Life and Mind;" "Spencer's Empirical Theory of Thought." An adequate exposition is given, as a basis for criticism, so that the book is complete in itself. The present reviewer has little but commendation for this entire half of the volume. It appeals to me as the most serviceable assemblage of fair and analytical criticism

of Spencer's system which we possess. Further, it wants little in point of exhaustiveness concerning the portions under discussion. Few studies would be more fruitful, for the student at a certain stage of progress, than the perusal of these three volumes of Spencer, checked at every step by reference to Bowne's destructive criticism.

The more onerous problem involved in the treatment of Kant's system is handled in a somewhat less satisfactory way. It is true that the line of discussion taken in any given case is usually well thought out, and strongly presented. Yet the author seems much in doubt about just what he wants to do with Kant. Nearly all Kant's detailed positions, of course, are disallowed; yet the Kantian critique of knowledge as a whole is regarded as intensely significant. But whether that significance points to a realistic or an idealistic interpretation of knowledge is an issue which seems to divide the author's sympathies; while the thing especially to be desired, a demonstration of the union of the two, he does not successfully develop.

The discussion is limited, in the first place, to the Critique of Pure Reason alone. No more than a single paragraph—the concluding one of the Kant lectures—is given to Kant's ethical writings. And this in spite of the fact that the ethical idealism there inculcated is highly congenial to Professor Bowne. As an exposition of the essential meaning of Kant's teaching, then, the lectures are not well-balanced.

But in the second place the chief difficulty with Professor Bowne's treatment of Kant is an antagonism, not really resolved, between a realistic and an idealistic rendering. Apparently Bowne's original antecedents had inclined him to a realistic treatment, but his own maturer thinking led him to idealistic views. Thus on p. 18 we find attention called to "a certain fact from oversight of which Kant has involved his system in needless skepticism and much confusion. If we ask concerning the possibility of knowledge or experience we note that there are two sets of conditions, one from the side of the subject and one from the side of the object, and for a complete theory of knowledge both sets of conditions have to be taken into account. Kant, however, took account of only one set, the conditions from the side of the subject." Again (p. 46), "If we will not allow that this [constructive activity of thought] truly grasps things and relations existing apart from it, then solipsism is the immediate result. . . . This point has been entirely overlooked by Kant." From passages like these one might infer that Kant's searching studies of the way in which the universals of thought construe and determine the objective meanings of our experience had been lost on the author.

be a presupposition of this type, too, which leads him to minimize the significance of Kant's transcendental deduction of the categories. He does not appear to detect within it the argument for an overindividual thought synthesis having objective import. Accordingly, he views it only as a "discovery of the categories from another point of view than that taken in the metaphysical deduction"—much as if it were an essay in psychology. He is determined at all events to "avoid the apparent absurdity in Kant's doctrine that the mind makes nature" (p. 77), and he does it by showing that "if we allow the world to be as real and as independent of us as the most pronounced disciple of common sense would maintain," there must still be a mental synthesis. But this fails to develop the full profundity of Kant's thought. A further result of the same presupposition is that Bowne will have nothing to do with Kant's conception of causality as a mere rule of synthesis among phenomena, and insists upon using this concept for gaining a metaphysical "world of power" beyond phenomena. In like manner the thing-concept, instead of marking a permanence of objective meaning, as for Kant, refers for Bowne to a metaphysical reality beyond experience. A dozen other criticisms and estimates issue from this same viewpoint, which arises, one may judge, from a failure to take Kant's meaning with sufficient depth.

Yet Professor Bowne is far from remaining upon the level of such an interpretation. He advances to the idealistic rendering. "The conception of a world of reality altogether apart from mind and antithetical to it, which is the source of the various agnosticisms, we reject outright" (p. 148). Indeed, we have in this volume one of the most effective formulations available of the argument against agnosticism, whether in its Kantian or Spencerian form. The very clear and satisfactory criticism of Kant's radical separation between phenomena and noumena even renders assistance in some matters not entirely free from difficulty in Bowne's own Personalism. author holds that Universal Mind is the ground and construing power of all being, that only through this conception can the realistic conceptions receive their vindication. Space, for instance, is real, and not, as for Kant, a subjective construction of the individual's mind. But its reality is but universal subjectivity, as a form of expression of the world-spacing Universal Mind (pp. 142-143). And so with all the categories, except so far as they are indeed devices due to the limitations of our human thinking.

But the trouble is that if "conditions on the part of the object"

are admitted in knowledge, as something quite apart from those universals of meaning that Kant traced to the determinant energy of mind, then all logical ground for maintaining the idealistic conviction is cut away. Not by a dogmatic assertion of real objectivity, but by a critical examination of the way in which the objective meanings of experience, which arise through spiritual activity, tend to realize and justify themselves in the expression of universal systematic order, can the subjectivism which has so haunted the idealistic interpretation be laid. And this task Professor Bowne has not achieved—he has scarcely even indicated its existence.

After the author has labored valiantly to establish the general lines of an idealistic construction of the world, and to show that a proper reading of metaphysical issues points with logical power to such a rendering, one is surprised to see how easily he throws it all away in face of Kant's criticism of the proofs for the existence of God. peculiar Kantian assumptions which infect this famous discussion, although in other places obnoxious to Bowne, are not here pointed out; and the argument throughout is accepted, with the comment that the theistic solution, while it cannot be proved, "is the only one that gives our minds any insight or satisfaction." "Thought has become pragmatic, especially in ethical and religious fields, and we are very little concerned with speculative inadequacy, provided a doctrine works well in practice and enriches and furthers life "(p. 209). Demonstration clear to the hilt need not here come in question; but surely if the truth-characteristics of our experience, when critically and logically read, point strongly towards an idealistic metaphysics, as Bowne really believes, the situation for theism is more favorable that as if, with Kant, the entire theistic argumentation were a hopeless paralogism. And it is worth while to claim all that advantage. Kant's batteries, based upon the absolute separation of thought and being, are of antiquated model; while some of us at least have not yet become so pragmatic as to leave the intellectual life entirely out of account in these issues.

EDGAR L. HINMAN.

UNIVERSITY OF NEBRASKA.

Études de Philosophie Ancienne et de Philosophie Moderne. Par V. Brochard. Recuillies et précédées d'une introduction par V. Delbos. Paris, Alcan, 1912.—pp. xxviii, 559.

By the death of Victor Brochard in November, 1907, France lost one of her most brilliant historians of philosophy. While the history of

philosophy was for Brochard a living garden of thought, and in reproducing he also recreates the systems of previous generations, his work never reached a stage of independent construction; his system of philosophy was still in the making when death overtook him. that reason the present volume is an adequate tribute to his memory: for it is a collection of studies, obviously written in the light of guiding principles, which taken as a whole makes on the mind an impression like that of a great painter's studies. Other works remain to support the memory of the author as a student of aspects and departments of philosophy, notably the essay De l'Erreur and the great work, Les Sceptiques Grecs, which, though now a quarter of a century old, is still so fresh. But there was room also for this collection of essays to show us how Brochard looked at the history of speculative thought as a whole. The book defies the reviewer by the number and complexity of its subjects and one can only say that every subject is treated with the brilliance of style that is the birthright of French philosophers and with a degree of accurate scholarship not often attained by them. The printing of the work leaves a feeling of regret that the monument of piety was not more carefully finished: from the first appearance of 'septicisme' (p. xv) to the last page the reader stumbles continually on peculiar combinations of letters, misplaced letters, and other typographical annoyances, while no Greek quotation of any length survives unmutilated and some are almost unintelligible. But we will waste no time on the proofreaders since more important matters call for our notice.

As the title indicates, the studies fall into two groups, ancient and modern. It will be convenient to indicate the affinities of the studies in a different way. The first four studies deal with the Pre-Socratic and Socratic development of dialectic: then comes a group of six studies in Platonism; followed by two on Stoic logic and two on Epicurean morality. This ends the first part. The second part opens with Bacon and that study is closely associated with the sixth on J. S. Mill and the seventh on the Law of Similarity. The second essay of this part unites Descartes with the Stoics; the third unites Descartes and Spinoza; while the fourth and fifth unite Spinoza with the Jewish-Alexandrian philosophy of Philo Judaeus. The last three are more distinctively studies in present conditions and theories. Of the twentyfour studies fourteen are occupied with the ancient and ten with modern philosophy. Not in quantity only but also in quality the balance remains in favor of the ancients; the Greek philosophers are studied in and for themselves, while the moderns are treated with a

view to earlier affinities or to comparison of modern with ancient the-The real pivot of Brochard's thought is that question of the nature of certainty which occupied his earliest curiosity (as a disciple of Renouvier) and guided his study of the Greek sceptics. progress of his work can be traced backward; from the Stoic position he moves back to Aristotle's metaphysic, finds himself among thoughts that have their root in Plato's dialectic, and then sees opening up before him the vista of Pre-Socratic thought. All these studies have been before the public many years; their results have in some cases become commonplaces; it would be an impertinence both to the author and his readers to do more than indicate how well these studies combine to mark the stages of a continuous history of thought. The series of studies begins from the Eleatic Zeno with a defence of his "arguments" against those who regard them as "sophisms." Incidentally this illustrates the significance of the Eleatic continuity: the converse or Heraclitean position is developed in a study on Protagoras and Democritus. This study, closely connected with the later scepticism, shows M. Brochard at his best; he has expressed with wonderful clearness the exact position of Protagoras, neither a sceptic of the later type nor a dogmatist of the earlier "physical" school, an empiric without the subjectivity of Hume and a trenchant critic of the "Unknowable." At the heart of Protagoras' teaching is a thought of great significance for all Greek philosophy, in the words of our author "on ne pense pas ce qui n'est pas." With Protagoras M. Brochard compares Democritus: for Protagoras thought is real and the limit of reality; there are, so to say, sensations, though beyond the sensible there is no permanent imperceptible ground of sensations; for Democritus "the bond which united being to thought, reality to representation, was broken" (p. 30): in other words the fatal idea of 'secondary' as opposed to 'primary' qualities here came in; to overcome the sophist the dogmatist invented the deadly weapon of scepticism: "c'était une sorte de scandale logique!" Henceforth the efforts of philosophers are to be centered on the question: Is there a permanent not perceived by the senses, and if so, what is its guarantee, its reason, its Logos? The study of Socrates shows us the power and the crudity of the Socratic position and leads into the ethical part of The studies on Plato embrace the literary and the philosophic aspects of the work of Plato, dealing with the myths of Plato, the Symposium, the problem of Becoming, Platonic ethics, and the theory of Ideas as expressed in the Parmenides, the Sophist, and the Laws. The myths are, for Brochard, significant as marking the

place of feeling in Plato's philosophy. The myth embodies a probability in a sphere where scientific certainty is not possible. It belongs therefore to that state of the soul which is called "right opinion," a condition of feeling (perhaps "transcendental feeling" to borrow a phrase from Prof. Stewart's Myths of Plato), and so really a sense of maximum probability. This is the point at which Brochard aims both here and in the essay on the place of Becoming in Platonic philosophy; he desires to show how far Platonism embodied a doctrine of maximum probability coexisting with certainty. The reference to Carneades (p. 53) explicitly shows that Brochard sees in this the root of the scepticism of the Academy. Probability is so much a matter of feeling that this topic naturally leads into that of the Symposium. The first part of this study is a brilliant presentation of the scheme and personelle of the dialogue, in its way the best thing in the book: the second part elaborates the doctrine of true opinion as intermediary between ignorance and knowledge, a mental attitude which attains truth and holds to it with a passionate rather than a rational devotion, truth being here attained ultimately through an affinity between the soul's true nature and its true environment.

The essay on the "Platonic Theory of Participation" is too subtle to be adequately summarized in a few words. The aim here is to show that Plato's doctrine of ideas evolved continuously with none of the modifications and renunciations which were at the time when M. Brochard wrote just beginning to be the shibboleth of Platonic higher criticism. With the same end in view M. Brochard has worked out the part played by the doctrine of Ideas in the Laws—throughout he finds that the Ideas represent eternal and immutable truths and that Plato never ceased to regard these as the real reality even where (as in the Laws) he does not explicitly restate his first principles.

From Plato we pass to the Stoics. The lack of any direct study of Aristotle leaves a serious blank and shows how far the series fails to represent Brochard's scheme of thought. The logic of the Stoics is ably expounded under the rubric "the idea of law replaces the idea of essence,"—a very just and fruitful estimate. The Epicurean theory of pleasure is also ably treated, the subject really beginning with Plato (p. 204) and being in this study treated as a continuous development of doctrine from Plato through Aristotle down to Epicurus. The essay does justice to the theory as a statement of Plato's doctrine of feeling modified by Aristotle's ideas on equilibrium and self-sufficiency: presumably by now this view of the Epicurean doctrine may be regarded as established.

Throughout the second part one is conscious of comparative inferiority; the studies though meritorious have not the quality of the former part. The character of the work has been indicated above and only two points call for notice here. In an essay on "Le Dieu de Spinoza", M. Brochard defends the thesis that Spinoza really intended by the term God a personal God; "le dieu de Spinoza est un Jehovah très amélioré," he says, meaning thereby that Spinoza was true to the Jewish concept of God as it was 'improved' in the work and days of Philo Judaeus. M. Brochard regards Spinoza as definitely teaching the immanence of God in the world and as avoiding the problem of personality (p. 360): so Spinoza is not so much a pantheist, as an "unmitigated monotheist." The significant points are first, that pantheism is not the one and only feature of Spinozism (as some seem to think); secondly that Spinoza's position in the history of speculation is really defined by the fact that he abandons the classical Greek tradition of pure intellect and final causes in favor of the primacy of will over intellect in the Divine mind and a real liberty of Divine action (p. 362). In this case we cannot but feel that the author confines himself too strictly to the purely historical treatment of Spinozism; we look for some hint of the way in which this view of Spinoza's "Deus" might help us to solve the problem of the relation between Creator and created, with the other familiar puzzles of Spinozism; but we look in vain. Finally we would draw attention to the study entitled "La morale ancienne et la morale moderne." First the points of difference are clearly stated: then M. Brochard estimates the significance of the differences and concludes that modern theorists confuse morality and theology, concluding that, theology apart, the Greek position is better than, e. g., the Kantian. In other words, a genuine ethic must be a science of the good as the Greeks conceived it, not a doctrine of duty as Kant formulated it. In the eclectic morals of the present day (the subject of the last study) M. Brochard sees a half-hearted compromise expressed in an ineffectual combination of Kantian and Greek ideas. So ends a collection of essays remarkable throughout for clear and vigorous thinking combined with obvious sincerity and a diligent use of original texts. Few books could teach so much in the same limits or provoke so much thought, leaving at the last no desire to snatch a querulous victory on one or other of the debatable points but rather the respectful acknowledgment that here is one who is above all things a seeker after true opinions.

G. S. BRETT.

NOTICES OF NEW BOOKS.

A Short History of Ethics, Greek and Modern. By REGINALD A. P. ROGERS. London, Macmillan and Co., 1911.—pp. xxii, 303.

While this volume contains about the same amount of matter as Sidgwick's Outlines of the History of Ethics for English Readers, both the plan of the book and the relative space devoted to the several divisions of the subject are quite different. As will be remembered, Sidgwick's Outlines, first published in 1886 and revised two years later, was an enlargement and substantial revision of his article on "Ethics," written several years before for the Encyclopædia Britannica. Needless to say, the eminence of the author and the qualities of the book itself contributed to give the Outlines a wide popularity; but, while it is still useful and will doubtless long remain so, there are some respects in which it can hardly fail to impress the present day reader as rather oldfashioned. Sidgwick is admirably fair, on the whole, in his treatment of the historic systems; but the center of interest in ethical speculation has shifted a good deal in the past quarter of a century and a correspondingly different emphasis upon certain fundamental conceptions would inevitably suggest itself to an equally thorough and original writer at the present day. On the one hand, the total influence of T. H. Green (whose Prolegomena to Ethics had been published, posthumously, only three years before the first edition of the Outlines) has proved much more far-reaching than Sidgwick could have anticipated, extending far beyond those who, by any latitude of classification, could be regarded as belonging to his school. In fact, it would seem like mere eccentricity for a writer today to exclude 'self-realization' as one of the 'methods of ethics' that have to be taken seriously, though this principle would probably be interpreted in a less metaphysical sense than it was by Green himself. And, on the other hand, Sidgwick's own peculiar view that 'egoism' must be regarded as one of the fundamental 'methods of ethics'-which was bound to influence in some degree his account of the history of ethics-certainly has not gained in plausibility since the Outlines was written. But, in addition to such considerations, it must be remembered that Evolutional ethics has developed into something much more definite and significant than it was a quarter of a century ago, while our knowledge of the actual 'data' of ethics has been greatly increased.

It is with this different background of contemporary tendencies that Mr. Rogers has undertaken to trace the history of ethics in as compendious fashion as Sidgwick did a generation ago. Sidgwick apparently wrote for the average intelligent reader, without special reference to pedagogical considerations. Mr. Rogers, on the other hand, seems to have had particularly in mind those who have very little, if any, knowledge of philosophy or of ethics. Whether

with deliberate intention or not, he has written a text-book, and his success or failure must be largely judged from this point of view. But it will be desirable first to notice the author's own standpoint, which is emphatically that of a follower of T. H. Green, though the influence of Aristotle is evident throughout the book. This is not to suggest that Mr. Rogers is narrow or intolerant: in the opinion of the reviewer, he could hardly have had two better teachers, though it is a matter for regret that he did not assimilate more of the spirit of Bishop Butler. But one recognizes throughout the whole account of Greek and modern ethics a somewhat undue preoccupation on the part of the author as to whether the system in question is logically valid or not. In a sense, this is an error in the right direction, for a history of ethics would be a poor affair, if it did not give the reader an increasing grasp of the essential 'methods of ethics'; the danger is, that every highly developed system, like that of Green, has a terminology of its own, which may be most helpful for purposes of exposition, but which, when employed in criticism, is likely to be anything but fair to other systems, proceeding upon fundamentally different

But there is another prepossession on the part of the author which must be mentioned, though it comes from a very different source. The influence of Sidgwick is plainly apparent in his frequent reference to what he calls "exclusive egoism." This, for Mr. Rogers as for Sidgwick, implies the supposed tendency of egoism as a theory of the moral motive to pass over into a 'method of ethics,' i. e., "a method of obtaining reasoned convictions as to what ought to be done," according to Sidgwick's own definition. The mere fact that this supposed tendency has never materialized into a definite system, however fantastic, in the whole history of modern ethics, seems to impress Mr. Rogers as little as it did Sidgwick himself. As a matter of fact, even Hobbes, the classical arch-egoist, would have laughed at such a suggestion. The most fanatical exponent of the now happily defunct doctrine of "passive obedience" among the theologians of his time, or a good deal later, could not have more strenuously objected to any attempt on the part of the individual to determine the rightness or wrongness of actions by a computation of his merely private chances of pleasure in the particular case. In truth, egoism is not, and never has been, employed as a 'method of ethics'--"a method of obtaining reasoned convictions as to what ought to be done"-though, as a theory of the moral motive, it enjoyed unprecedented popularity during the greater part of the eighteenth century and constantly tends to reappear in unexpected forms. It should always be remembered that the most patent difficulty of many of the eighteenth century systems-intuitional quite as much as hedonistic-was the flagrant dualism between the standard of moral evaluation assumed and this theory of the moral motive, which would not harmonize with any of them.

The principal difference between the volumes, as regards the apportionment of space, lies in the fact that, while Sidgwick devoted a little less than a fifth of his *Outlines* to a chapter on "Christianity and Mediæval Ethics," Mr.

Rogers saves this space for the more extended exposition of the typical modern systems, which does not mean that the significance of Christianity is in any sense minimized. The author's principal aim seems to have been to make the very most of the space at his command. In this he has succeeded to a remarkable degree: there is practically no waste space in the book and, with few exceptions, the expositions are admirably clear. As already remarked, the book is evidently intended mainly for those who have little or no knowledge of the subject. The brief Introduction explains, in very elementary fashion, some of the essential problems of ethics, while Part I, "Greek Ethical Systems," expounds in almost equally simple terms the salient features of Greek ethical speculation. While the simplification is carried pretty far in some cases. there is nothing really misleading in the treatment, which will leave the reader well prepared to profit by a more extended history of the subject. More than this, the Part on "Greek Ethical Systems," thanks to the simple and methodical treatment given, may be regarded as the real introduction to the last two thirds of the book, i. e., Part II, "Modern Ethical Systems."

The critical reader's estimate of the author's historical account of modern ethics will be largely determined by his sympathy or lack of sympathy with the standpoint and method adopted. Mr. Rogers says in his Preface: "This book is mainly descriptive but also critical." But, while the expository portion naturally occupies a good deal more space than that which is explicitly critical, the expositions themselves, while always careful and generally fairly objective, constantly indicate the author's own view as to the way in which the problems of ethics should be approached. For example, on one of the early pages of Part II we are told: "Many of the ethical systems hereafter described belong to one of two types, which may be termed Naturalism and Intuitionism. According to the naturalistic writers moral ideas are derived; they are the products of desires and feelings or instincts that originally have no moral predicates, and they arise by necessary laws of nature (whether physical or mental) which for all we know may be purely mechanical and undirected by Reason. . . . The Intuitionists, on the other hand, hold that moral obligation and moral ideas and truths are fundamental and irreducible: they cannot be explained as being products of non-moral forces like selfinterest, animal instincts, or the love of pleasure" (p. 119). This division, substantially Green's, of course, may look fair enough at first; but the definitions plainly emphasize the weakest side of 'naturalism' and the strongest side of 'intuitionism,' to say nothing of the fact that they are too general to admit of safe application to particular systems. And the attempt to apply these labels to the seventeenth and eighteenth century moralists—to whom alone, it is admitted, they are strictly applicable—leads to suggestive results. Spinoza appears as the representative of "Rationalistic Naturalism," while Butler's ethical theory is termed "Autonomic Intuitionism." The reviewer has very little sympathy with such attempts at 'scientific classification' in the history of philosophy or of ethics. In both of the cases noted, the highly artificial designation emphasizes a side of the system in question which, in

the reviewer's opinion, is emphatically not the most important side. Hume is supposed to represent "Sympathetic Naturalism." As might be expected, the exposition of his system is hardly illuminating; and the summary condemnation of Hume involves the unconditional rejection of all forms of 'naturalism,' as will be seen from the following quotation. "Naturalistic methods tend either to degenerate into Exclusive Egoism, or to regard conscience as an unreasonable and inexplicable instinct. Hume's Ethics illustrates the first [sic] of these defects, and to some extent the second, since he can give no reason why some natural virtues are approved. . . . Moral obligation, as ordinarily understood, is therefore meaningless in Hume's system; we cannot be under an obligation to do anything except to follow the pleasure of the moment, and we must do that" (pp. 188, 189). Such passages are painfully reminiscent of some of the most unfortunate pages ever penned by Green, and show only too clearly that the author of this volume, in spite of his ability and evident sincerity, lacks the capacity for really understanding positions fundamentally different from his own.

Considering his attitude toward 'naturalism' in general, it was perhaps to be expected that Mr. Rogers would have little to say of Utilitarianism in its unadulterated form, which for him dates from Bentham. He devotes less than six pages of actual exposition to Bentham and J. S. Mill, representing "Egoistic Utilitarianism" and "Sympathetic Utilitarianism" respectively, while he gives more than seven pages of exposition to Sidgwick, as representing "Intuitional Utilitarianism." The chapter on "Evolutional Naturalism" is almost wholly devoted to a rather conventional exposition and criticism of Spencer. The final chapter, "English Rational Idealism," gives a very brief account of T. H. Green's ethical theory, which, however, is fairly intelligible in the light of the previous treatment of the ethical philosophy of Kant and Hegel in the two chapters following that on Hume.

ERNEST ALBEE.

CORNELL UNIVERSITY.

Essays in Radical Empiricism. By WILLIAM JAMES. (Edited by R. B. PERRY.) Longmans, Green, & Co., N. Y., 1912.—pp. xiii, 283.

This volume of Essays represents, as the editor's preface states, "an attempt to carry out a plan which William James is known to have formed several years before his death." The twelve essays of which the book consists were originally published as separate articles by Professor James. In preparing this volume, the editor "has been governed by two motives. On the one hand he has sought to preserve and make accessible certain important articles not to be found in Professor James's other books. . . . On the other hand he has sought to bring together in one volume a set of essays treating systematically of one independent, coherent and fundamental doctrine" (p. v). The doctrine in question is that to which the author gave the name of radical empiricism, which, though intimately connected, was not by him identified with pragmatism. In order to carry out the plan as Professor James seems

originally to have had it in mind, and also to give a more complete and systematic presentation, three essays are included which were reprinted in Professor James's earlier books. These three are: The Thing and its Relations, The Experience of Activity, and The Essence of Humanism. While the essays included in the book are of the 'occasional' sort, they possess much more coherence and unity than one might antecedently expect. This is partly because the editor wisely disregarded the fact that some of them had already been reprinted and selected such as would serve best the purpose of giving an adequate exposition of radical empircism. Some of Professor James's most notable articles bearing on the pragmatic controversy, such as, Does Consciousness Exist? and A World of Pure Experience, appear now for the first time within the covers of a book.

These essays, then, are intended to constitute, not a collection but a treatise. They "set forth systematically and within brief compass the doctrine of radical empiricism" (p. vi). The central doctrine of the book is the thesis that "the relations between things, conjunctive as well as disjunctive, are just as much matters of direct particular experience, neither more so nor less so, than the things themselves" (p. x). This proposition differentiates the position from historical empiricism, gives the clue to an empirical interpretation of activity and to the way of escape from dualism generally, and indicates how the pragmatic doctrine of truth may receive a concrete, empirically verifiable setting or application. When properly elaborated, radical empiricism excludes all reality of a transcendental or trans-empirical sort, and provides a new basis and incentive for morality and religion.

For the student of philosophy a glance at the table of contents suffices to assure him that this book traverses familiar ground. With the exception of the final chapter on Absolutism and Empiricism, which appeared in 1884 in Mind, all the twelve essays were published within the past eight years. Eight of the twelve essays are reprinted from the Journal of Philosophy, two from Mind, one from the Psychological Review, and one from the Archives de Psychologie.

It is perhaps superfluous to add that in making these writings more easily accessible the editor has performed a service to philosophy. This service is exceptionally valuable, however, on account of both the good judgment shown in the selection and arrangement of the essays and the excellent preface which introduces them to the reader. We may hope that the book will promote a better understanding of the philosophy of William James and contribute something towards the differentiation of his standpoint from the rest of the "pragmatic movement."

B. H. BODE.

THE UNIVERSITY OF ILLINOIS.

Modern Science and the Illusions of Professor Bergson. By HUGH S. R. ELLIOT, with a preface by SIR RAY LANKESTER. Longmans, Green and Co., London and New York, 1912.—pp. xix, 257.

The reader will not go far in this book without discovering that Professor

Bergson is, in effect, a symbol—not to say a scapegoat. The sinner is metaphysics, and Professor Bergson serves as an incarnation of the sin. "The attitude maintained throughout this book is that metaphysics is a maze of sesquipedalian verbiage" (p. 6). That is the text in general. "Holding, as I do, that Bergson's metaphysics are a cloud of words, carrying with them no real meaning" (p. 16)—that is the special illustration of the text. So far then as I am concerned, the value of the book lies in its frank, refreshingly frank, exposition of a certain view of the nature of science and of philosophy rather than in its criticism of the alleged scientific aspects of Bergson's philosophy. A competent biological criticism of Bergson from one gifted both with knowledge of biology and with a sympathetic imagination is needed and will doubtless come in time. But Mr. Elliot does not supply the lacuna. It is enough for him to see that metaphors and analogies play a considerable role in the Bergsonian metaphysics in order to emerge in stridently triumphant demonstration that all metaphysics is verbiage and that Bergson is a metaphysician—the O. E. D. supplies itself. On many a page, one assists at a veritable intellectual Punch and Judy show. "Metaphysics" serves to knock Bergson down, and Bergson's alleged absurdities serve to topple over "metaphysics" if it shows any signs of getting on its feet.

As a presentation from a special point of view of the problem of philosophy in its relation to the problem of science, I nevertheless find a certain kind of instructiveness—though not instruction—in the volume. Nor do I have in mind simply the good old truth in which attacked philosophers may always find consoling refuge: that the ardent devotee who attacks metaphysics in the name of science generally exhibits himself in flagrant possession of a large assortment of uncriticized metaphysics. Mr. Elliot is no exception to this general rule. Associational psychology and psychophysical parallelism are to him among the last words of established scientific doctrine. Agnosticism, of a peculiarly aufgeklärt sort, is of course not metaphysics, but "science." After imputing to Mr. Bergson a belief in Life as a separate entity, a belief in a pure abstraction as if it were a reality, he disposes of one of the special difficulties that Bergson deals with by remarking: "The protoplasm from which they were derived possessed, I suppose, capacities for evolving in certain directions." He is quite innocent both of the metaphysics lurking in potentiality, and of the fact that he is but stating, in different "verbiage," Bergson's own doctrine. But the really instructive thing is that Mr. Elliot puts in words the attitude of complete disrespect for philosophy undoubtedly entertained, but not explicitly stated, by many men of science. Philosophers, I imagine, are not the obscurantists that Mr. Elliot fancies them. There should be some way for the men of science of wider sympathies than animate Mr. Elliot and the philosophers who are not obscurantists to come to a better understanding of one another's purpose and office. The burden of reaching this understanding rests upon the philosophers. Science, as Mr. Elliot and Mr. Lankester frequently and rightly point out, is justified by its works. Philosophy is thus challenged to show what it has to its credit, either in the

way of discovery of fact or in the way of contributing to the well being of humanity. Philosophy, in my opinion, can say something for itself in reply to this challenge. But to say it effectively it must abandon some of its cherished formulae about rigid demonstrations, and be more willing to recognize its kinship with the play of imaginative vision, and the rôle of imagination in life.

JOHN DEWEY.

COLUMBIA UNIVERSITY.

The Five Great Philosophies of Life. By WILLIAM DE WITT HYDE. New York, Macmillan, 1911.—pp. xii, 296.

This ingenious and edifying book appeared in 1904, under the title, From Epicurus to Christ, representing the Haverford Library Lectures; it had been reprinted four times by the year 1910, and now comes to us with a new name, and with the last chapter, 'The Christian Spirit of Love,' rewritten and expanded; all of which testifies to its usefulness and deserved popularity. President Hyde has a knack of reducing things abstruse to the comprehension of the average undergraduate, and can do this without seriously misrepresenting the philosophical doctrines which he aims to expound. His illustrations from the writings of Stevenson, Walt Whitman, and the like, are at once familiar and convincing; perhaps we could spare the one from athletics on p. 194. His divisions are large and clear: The Epicurean Pursuit of Pleasure; Stoic Selfcontrol by Law; The Platonic Subordination of Lower to Higher; the Aristotelian Sense of Proportion: The Christian Spirit of Love. And the climactic order on the whole is no disadvantage. It is true, putting Epicurus and his followers on the lowest rung may do violence to them at their best; and something might be said in favor of leading up to Chapter V, not through Aristotle but Plato—especially when we reflect on the historical bearing of Neoplatonism, in the Fathers, upon Christianity. But, after all, the kind of student whom the author has in mind needs some such perspective in reading philosophy and ethics as this book affords, and might well employ the volume as a center about which to organize his increasing knowledge. In other words, the book might find a use in the classroom, at a time when immature persons, having no perspective whatsoever, and no conception of method, are often set to reading the philosophers in a merely chronological sequence—barring, of course, the neglected mediæval scholars.

Oddly enough, the scheme of thought in the work of Dr. Hyde is anticipated in the *Convivio* of Dante (see Jackson's translation, pp. 209 ff.); and it might be illustrated throughout from Milton. Satan, for example, is a specious Stoic.

LANE COOPER.

CORNELL UNIVERSITY.

Un Romantisme Utilitaire: Étude sur le Mouvement Pragmatiste. Le Pragmatisme chez Nietzsche et chez Poincaré. Par RENÉ BERTHELOT. Paris, Alcan, 1911.—pp. 416.

In the introduction, the author, following James, finds that pragmatism

may mean any or all of three things: (I) an attitude of mind toward life and the world—the ethical aspect; (2) a conception of truth and error—the logical side; (3) a view of the world—the metaphysical meaning. The second of these aspects the author regards as the newest and most characteristic and is the one selected for discussion in this volume. After this announcement the reader may be surprised at the amount of space devoted to the other phases, and to many other things besides and may often find himself more impressed by the erudition than the cogency of the discussion.

As the title of the volume suggests, its thesis is that pragmatism is the offspring of the union of German Romanticism and English Utilitarianism. It exhibits the marks of the anti-intellectualism, mysticism, vitalism and voluntarism of the Romantic movement combined with the scientific interest of 'biological,' 'psychological,' and 'sociological' utilitarianism. The different degrees of completeness of the amalgamation of these various 'determinants' account, of course, for the 'varieties' of pragmatism, from the pure and radical type of Nietzsche to the very 'fragmentary' and 'limited' scientific type represented by Poincaré. These two representatives are selected for study as 'limiting cases,' which assumes that all the other variations represented by James, Schiller, Bergson, socialism [in a series with Nietzsche!] neo-catholicism and neo-protestantism will fall somewhere between. Of the two cases studied it is Nietzsche however who is supposed to illustrate the thesis that pragmatism is a combination of Romanticism and Utilitarianism. Poincaré's pragmatism is, indeed, so 'mitigated' and 'fragmentary' as to be scarcely worthy the name.

In general I believe most readers will feel that, with the exception of some parts of the discussion of Poincaré, the volume is made up too largely of general historical analogies which are interesting and often instructive, but do not reach the inside of the pragmatic movement. As symptomatic of the lack of close acquaintance with the details of the movement one may note the reference to James' California address as "The Will to Believe," and the dismissal, in the historical sketch, of Dewey's contributions, with the bare mention of his name. Such an omission as the latter is vitiating to the point of absurdity in a treatment pretending to give any account whatever of the English and American development of pragmatism.

From the beginning of the pragmatic movement critics have been fond of 'hitting off' pragmatism as a revival and recombination of this, that and the other group of elements of former systems. It is neo-sophisticism, neo-mysticism, neo-Romanticism, neo-Voluntarism, neo-Positivism, etc. This pigeonholing method of criticism assumes that there are certain eternal species of philosophical standpoints and *motifs* and that all philosophical development must be merely variations on these fixed themes. This assumption is of course quite consistent with the Platonic Hegelianism or Hegelian Platonism which M. Berthelot explicitly professes; but it is sure to miss important, perhaps the most important things in most philosophic movements, as indeed, it does in pragmatism.

But even proceeding on this assumption it would seem necessary somewhere in the course of the argument to dispose of the pragmatists' contention that between pragmatism and the mysticism, voluntarism and intuitionism of previous anti-intellectualisms there is this important difference: these anti-intellectualisms not only retained but were based upon the intellectualistic conception of the intellect, viz., that it is a self-enclosed function, quite independent in its operation of the other functions. For mysticism, voluntarism, etc., are all attempts to escape the difficulties of a segregated intellect by substituting an equally segregated will or feeling or intuition. Pragmatism on the other hand has tried to maintain some kind of organic connection between intelligence and the other functions.

But the author is either unaware of, or ignores all this. Nor does he come to close quarters with the problems which have been acute in the English and American discussion. There is frequent appeal to 'necessity' and 'consistency' without sufficient criticism of these concepts. The laws of number and of pure geometry are regarded as 'necessary laws of the movement of thought.' But applied mathematics, which is the realm within which the scientific pragmatism represented by Poincaré plays its rôle, is experimental and has only a 'limited necessity.'

The most general form of the author's indictment of pragmatism is that it ignores and consequently confuses and confounds the distinction between psychological and logical necessity. Here again no account is taken of the extended discussion of this point which has gone on from the beginning of the movement.

Perhaps some of the neglected issues are reserved for another volume which is to follow. But it is difficult to see how any one who has followed closely the discussions of pragmatism during the last ten years could proceed on assumptions which have been constantly in question in these debates without more recognition, if only in footnotes, of the unsettled status of these presuppositions than is given by M. Berthelot.

ADDISON W. MOORE.

THE UNIVERSITY OF CHICAGO.

Natural Philosophy. By WILHELM OSTWALD. Translated by THOMAS SELTZER. New York, Henry Holt & Co., 1910.—pp. ix, 193.

The original book of which the work under consideration is an excellent translation appeared as Vol. I in Reclam's Bücher der Naturwissenschaft. The author holds that "natural philosophy is not only concerned with the question of the mutual connection of all physical relations, but also endeavors to include in the sphere of its study chemical, biological, astronomical, in short, all known phenomena" (p. 1). All scientific investigation needs natural philosophy as a background so that the interconnection and relative value of scientific facts may not be overlooked.

Science begins with the formation of the *concept*; this is based upon the physiological retention of similar experiences. These concepts, through asso-

ciation and emphasis of similarities and differences, become the bases for conclusions and predictions—the latter, the main function of science. But there are always extraneous elements present due to necessarily limited observation, and so the natural law which emerges is valid for "ideal cases" rather than for the particular phenomena of observation. In his own words: "A series of instances are investigated which are so adjusted that the influence of the extraneous grows less and less. Then the relation investigated approaches a limit which is never quite reached, but to which it draws nearer and nearer, the less the influence of the extraneous elements. And the conclusion is drawn that if it were possible to exclude the extraneous elements entirely, the limit of the relation would be reached. . . . We here confront the fact that many natural laws, and among them the most important, are expressed as, and taken to be, conditions which never occur in reality." 1

The correspondence between "ideal cases" and phenomena becomes closer according as the inner interconnection and continuity of phenomena becomes known. Consequently, the various sciences will be found to have an organic and developmental connection, and so may be put in systematic arrangement. And here he reaches what proves to be the core of the work—a classification of the sciences. The following classification, like that of Comte, is made on the basis of a progressive development.

- I. Formal Sciences. Main concept: order. Logic, or the science of the Manifold; Mathematics, or the science of Quantity; Geometry, or the science of Space; Phoronomy, or the Science of Motion;
- II. Physical Sciences. Main concept: energy. Mechanics, Physics, Chemistry.
- III. Biological Sciences. Main concept: life. Physiology, Psychology, Sociology.

"The formal sciences treat of characteristics belonging to all experiences, characteristics, consequently, that enter into every known phase of life, and so affect science in the broadest sense" (p. 55). Formal is not used here in the Kantian sense, for the formal sciences are just as experiential and empirical as the other two groups. On account of their breadth and the fact that they are the most general of all experiences, it is often forgotten that we are dealing with experiences at all and they are thought to be "native qualities of the mind, or apriori judgments." The main concept of the second group, the physical sciences, is energy—a concept which does not appear in the formal sciences. The inclusion of chemistry in this group is defended on the ground that the special science of physical chemistry, which has been developed as such during the last twenty years, forms a transitional science between physics and chemistry. Under the third group—the biological sciences—fall all the relations of living beings. Physiology is here defined as "the entire science dealing with non-psychic phenomena" (p. 56).

These sciences here classified are put into a regular hierarchy because the concepts that have been dealt with in the preceding sciences are used or in-

¹ Page 46.

volved in the succeeding sciences, while certain characteristic new concepts are added. Furthermore, jurisprudence, astronomy and medicine are not included in the classification, for they are *applied* sciences and "do not unfold their problems systematically, but are assigned them by the external circumstance of man's life."

The chapters following are devoted to the exposition of how the dominant concepts of the pure sciences of the hierarchy bear a functional relation to each other.

PHILIP H. FOGEL.

PRINCETON UNIVERSITY.

Le travail d'idéation. Hypothèses sur les réactions centrales dans les phénomènes mentaux. Par EDME TASSY. Paris, Félix Alcan, 1911.—pp. 316.

The author undertakes to inquire into the concrete genesis of the ideational material, by analyzing its relation to the groups of histological elements and the psycho-neurological factors determining the nature of its development. On the basis of this analysis he advances a theory of 'ideative erethism,' as a substitute for the associationist theory, in so far as the latter touches upon the formation of ideas and the entire mechanism of reasoning (p. 19). This question concerning the formation of ideas is the capital one about mental life: the manner in which its progressive complexity is organized (p. 35). The character of this organization eludes us until we recognize the central reactions in mental phenomena as elements essential to the proper understanding of the latter. This does not mean that the formation of ideas is a merely histological matter; but it calls for a much closer analysis of the organic, emotive, and volitional,—the dynamic factors,—than is to be found in the static, structural theories of ideation.

Literary images are the more effective the more conditioned they are by a sense-analogy. The kinship of two ideas or two images results in their mutual reinforcement. The chance which a new idea has of incorporating itself in the mental life depends upon its capacity to gain a ready access, by emphasizing or calling forth the analogy between itself and the ideational material already acquired which it awakes to new life. The new idea, in making its way to a group of cells of 'composite specificity,' may qualitatively change the latter, but this re-formation would be impossible unless the two are analogous. The effect of an impression, 'exalted' by long duration, intensity, or repetition, may be so heightened as to spread itself over the whole field of consciousness; but if it is to take root and relate itself to the material already acquired, it must enter into groups possessing constitutive elements which are analogous to it. Again, two ideas, presented all at once, may cancel each other's effect; should they be analogous, however, they 'join hands' and are perceived coincidently. These three modes, stimulating mental activity,—the perceptible exaltation, coincidence, and re-formation of the thought-elements,-aid thought to affirm itself in its differentiation and to pass beyond the acquired differentiations in the acquisition of new ones (pp. 53, 310). This, in brief,

is M. Tassy's theory of the 'ideative erethism.' The give-and-take of groups of 'composite specificity,' a histological process, produces an increase of activity in the component mass; local activity tends to become general activity, and in so doing yields the feeling of physiological pleasure, or else of pain, if it encounters a check. M. Tassy chooses the term 'ideative erethism,' because the erethism apparent in the processes above described seems to provide a basis for a theory of the formation of ideas (pp. 76, 102, 103).

The sensorio-motor equation is studied at some length. The author discusses the mimic and imitative tendencies of the senses and their influence in organizing the mental life, and draws up a hierarchy of the senses in terms of their respective degrees of native differentiation,—his purpose being to assure himself of the real, concrete, physiological value of his so-called 'analogy' (p. 170).

The study of mental sensibility is next approached, in a fresh way. "Instead of discussing, as has too long been done, the problems of recognition, feeling, similarity and difference, æsthetic impression, reasoning, as if it were all a play of pure ideas" (p. 312), M. Tassy attempts a concrete study of the intervention of mental sensibility in the mechanical activity of ideation, under three heads. The ideative mental sensations concur in the formation of the idea, in its intrinsic properties of ideation and representation (mental pain and pleasure, similarity and difference, recognition, orientation). The cogitative mental sensations participate in the work of conception. The sensations of repercussion mark the effect produced by ideative activity upon the thinking mass. In contradistinction from the first two, this last concerns mental sensations which are not linked to ideas but accompany them as a sort of mental echo (pp. 177–178). In this connection the author discusses laughter, the effect of rhyme and rhythm, and the sense of pleasure-pain.

M. Tassy devotes his last chapter to an examination of the conditions of mental dynamics. Thought itself is dynamic; it must express itself; the idea and its expression are two sides of the same phenomenon—its beginning and its end (pp. 243–244). If the expression does not realize itself, it is because the idea is not strong enough to overcome the inhibition of other ideas pressing for self-expression. In tending to express itself, the active idea also tends to rouse to activity ideative elements of an analogous, or else of a contrary, character. The processes of logical reasoning, and the dynamics of attention and volition, are then investigated from the same point of view, and the general implications of the author's position are indicated. As applied to the formation of ideas and the process of reasoning, the associationist theory is declared to be incapable of explaining anything. The theory of the modes of ideative erethism must be substituted for it, as it serves to answer the question concerning the physiology of the principles of association.

Idealistic doctrine, the author thinks, has abandoned psychology and shows clearly a metaphysical bent. Materialism concerns itself only with elementary psychology. The positivism of Comte fails to recognize psychology as a distinct discipline, and assigns it to biology. M. Tassy proposes a 'con-

structive' theory of ideation, which should integrate the data of neurology and of physiology into psychology, should make good the sociological importance of the psychic fact, and should at least partially show "in what way man is distinguished from nature" (p. 314).

RADOSLAV A. TSANOFF.

CLARK UNIVERSITY.

The Philosophy of Schiller in its Historical Relations. By EMIL CARL WILM. Boston, John W. Luce and Co., 1912.—pp. xi, 183.

We have here, for the first time in English, an appreciative and fairly comprehensive study of Schiller's philosophical thinking. More than this the author himself does not claim for his work. Indeed, it would be difficult to do more than to present in a clear manner the results of others who have worked in this field; for among the numerous German writers who have dealt in detail with this phase of Schiller's activity there appear the names of such eminent scholars and thinkers as Kuno Fischer, F. Überweg, Hermann Hettner, Otto Harnack, and many others. Professor Wilm has appended to his book a sufficiently complete bibliography, consisting of eighty-four titles. Of these he picks out the names of eight writers, whom he considers of the first importance. "The remainder are either less significant or negligible." To Professor Wilm's list of eight there ought to be added, in all justice, the names of Eugen Kühnemann and Karl Berger, who have made important contributions to this subject.

The present discussion of Schiller's philosophy is divided into the following chapters: I, "Literature and Philosophy"; II, "The Historical Background-Leibniz and the British Moralists"; III, "Early Views"; IV, "Awakening"; V, "The Study of Kant"; VI, "First Fruits"; VII, "Independent Development"; VIII, "Relation to Post-Kantian Idealism." We may accept the author's suggestion that "the reader who wishes to get at the heart of Schiller's philosophy without delay" may omit chapters III, IV, and VI, since these chapters deal with "immature or transitional phases of the poet's thought." Schiller's early philosophical studies are of interest only in the development of his mature philosophical views. The author has emphasized this fact and has called attention to the elements of thought which are retained throughout Schiller's development and culminate in an agreement with and an advance upon his great contemporary Kant. But it would seem that a disproportionate amount of space is given to these early immature and transitional phases of the poet's thought; especially does this appear so when we read that the purpose of the book, "to give to the non-philosophical reader an account of the main stages of Schiller's reflective thought," has caused the author to neglect the final stage of the poet's reflection,—his crowning philosophy of æsthetic culture.

The introductory chapter briefly discusses, (1) the relations and differences between philosophy and literature, (2) the composite character of the poet-philosopher Schiller, and (3) the aim and the scope of the present investigation. The author finds that "the difference between philosophy and literature is

not to be sought in the problems with which they deal, nor in the method by which they approach and deal with these problems," but rather "in the form through which philosophy and literature are expressed." The "composite character of Schiller's personality" explains the inextricable interweaving of the literary and philosophical motives in his writings. Chapter II gives a brief outline of the philosophical systems before Kant, by which Schiller's early works were presumably influenced. Chapter V discusses the time, character, and influence of Schiller's first acquaintance with the philosophy of Kant. The most important chapter is the seventh, entitled "Independent Development." It deals with Schiller's real, mature philosophy. The relation to his own earlier attempts and to Kant is excellently characterized as follows: "The stream of his thought was clarified and deepened, rather than directed into other channels, by contact with the Critical Philosophy." The problem of the poet's philosophy, as Professor Wilm states it, is whether Schiller conceived "the progress of human development as passing from the natural through the æsthetic to the moral stage," or "rather from the natural through the moral stage to that final condition in which man is not merely natural or merely moral, but in which every part of his nature will have its due?" Although this is more strictly the problem of Schiller's Asthetische Erziehung des Menschen, the author bases his discussion almost entirely on Annut und Würde, and arrives at a dualistic solution in which he distinguishes between an "absolute ideal" and an "ideal which lies within man's possibilities." This seeming dualism can be largely explained by the fact that, while the Asthetische Erziehung des Menschen offers an ideal programme for the future education of mankind, Annut und Würde deals with the nobler types of man as they really exist. It would have been less confusing, at least, if the problems of these two important essays had been treated separately. Professor Wilm purposely leaves out of consideration the 'æsthetic theories' as 'too tiresome' and for this reason gives a very superficial analysis of what is, no doubt, Schiller's greatest philosophical work, "The æsthetic education of mankind." The final chapter, which gives the impression of an abrupt addition, deals chiefly with Schiller's relation to Fichte.

That not a word has been said of Schiller's last philosophical essay, Über naive und sentimentalische Dichtung, is to be justified only by the fact that this essay is purely æsthetical and that Professor Wilm has emphasized only the moral aspect of Schiller's philosophy. But surely no book which purposes to give the 'main stages' can afford to neglect this final stage of the poetphilosopher, which forms the transition from the field of speculative thought to that of artistic creation. For as the heart of Schiller's philosophy is first and last æsthetic, so also the end of all his philosophical studies was by means of them to become a greater artist.

W. D. ZINNECKER.

CORNELL UNIVERSITY.

Grundzüge der physiologischen Psychologie. Von WILHELM WUNDT. 6. Aufl., III Band. W. Engelmann, Leipzig, 1911.—pp. xi, 810.

The present volume of eight hundred pages and over completes the sixth edition of Wundt's Grundzüge. It was thirty-eight years ago (1874) that the work first appeared. Then it was all contained within one volume of approximately the size of the present instalment (see this REVIEW, XIX, 1910, p. 217, and XX, 1911, p. 344); but in spite of its wide expansion, the outline and the articulation of the system have suffered surprisingly little change through four decades of scientific construction. Wundt begins now, as at first, with introductory sections on the problems and concepts of psychology, although he has much more to say upon method and less about "internal observation." He still devotes a large section to the nervous system and to central functions-more than half a volume in the new edition; but the section now contains much more qualitative psychophysics than formerly, and much less pure neurology. Afterward, in order, come the Mental Elements, Sensory Ideas, Emotion and Voluntary Action, the Course and Integrated Forms of Consciousness, and General Principles. So far as the gross arrangement of materials is concerned, we find that the simple feelings now stand apart as elementary processes, that the doctrines of emotion and action have undergone both amplification and development, and that there has emerged from a mere program, set forth in 1874, an elaborate and systematic account of those forms of combination which represent the highly integrated consciousnesses of "association" and "thought." The original five pages of Schlussbetrachtungen have grown into two lengthy chapters devoted to the general problems of psychological theory.

As regards the more specific changes in the last edition of the third volume, several points of importance are to be noted. The account of the elementary æsthetic feelings has been considerably modified. Wundt still maintains, in spite of the general tendency toward revision of the facts and the theory of attention, his academic hypothesis of an intermittent central function. He drops the Herbartian term "complication" for multi-sensory perceptions; but he preserves it in his classification of associative formations. Among the alterations in the sections on affective complexes are to be observed a new emphasis on respiratory symptoms of feeling and a separation of emotive course and qualitative contents. As regards the problems of "range," Wundt has clarified his distinction between attention and total-consciousness. He does not fail to criticise the later literature of the Bewusstseinslage and the current doctrines of the Freudian school. Freud's psychology of dreams he characterizes as "ein echtes Produkt einer Wiedergeburt alter Traummystik in moderner, mit Hysterie und Sexual pathologie reichlich ausgestatteter Form."

A comparison of the successive editions of the *Grundzüge der physiologischen Psychologie* serves to strengthen the general conviction that Wundt is a master of systematic construction. He has not only produced and defended a doctrine of mind: he has laid the basis of a science; and he has succeeded in building symmetrically upon his foundation throughout a generation and more of

scientific development. No other system, formulated before the era of experiment, has kept on its even way and at the same time assimilated the vast annual accumulations from the laboratories. If Wundt has been the chief object of attack in discussion, he has himself forged many of the weapons for his enemies' use; and if the compendious *Grundzüge* has given undue prominence to the work of Leipzig students, it has at least supplied with problems not only the most prolific of all psychological laboratories but the whole realm of the science as well.

MADISON BENTLEY.

University of Illinois.

Logic, or the Morphology of Knowledge. By Bernard Bosanquet. 2 volumes. Second edition. Oxford, The Clarendon Press, 1911.—pp. xxiv, 384; xi, 327.

In the new edition of his Logic, Professor Bosanquet has kept the text of the original edition practically intact; he has made a number of additions but few alterations. The passages newly inserted which make substantive additions to the text are listed in the Preface (p. x) and the new footnotes, of which there are a good many, are marked with letters to distinguish them from the original notes, which are marked with numbers. There is no difficulty, therefore, in distinguishing precisely what now appears for the first time. The publication of the new edition represents no important changes of view and the additions in practically every case, therefore, are intended to define Professor Bosanguet's attitude toward discussions of logical theory that have gone on since 1888 when the first edition appeared. A few of the additions are distributed through the earlier text in the places appropriate to their subjects, but the major part of them come at the end of the second volume. Here three entirely new chapters have been added. The first of these deals with the theory of the Absolute and its relation to Professor Bosanquet's theory of judgment. The second (Chapter IX) is entitled "Truth and Coherence" and is a reply to Pragmatism, Realism, and Mr. Joachim's criticism of the coherence theory. Chapter X deals with "The Relation of Mental States to Judgment and Reality" and is largely devoted to the discussion of Prichard's Kant's Theory of Knowledge.

The criticisms of current philosophical theories given by Professor Bosanquet have been discussed at length in an article entitled "Professor Bosanquet's Logic and the Concrete Universal," published in this REVIEW, Vol. XXI, p. 546.

George H. Sabine.

LELAND STANFORD JR. UNIVERSITY.

Teleologie und Kausalität: Ein Grundproblem der Geschichtsphilosophie. Von HORST ENGERT. Heidelberg, Carl Winter's Univertätsbuchhandlung, 1911.—pp. 50.

The subject of this work is the relation of causal and teleological explanation in historical science. The point of view is that of H. Rickert, with some differences of detail. The problem of empirical science is conceived to be the

overcoming of the heterogeneous manifold of experience. This is done by selection according to one of two fundamental concepts,—the genus or the whole. The first gives rise to generalizing science and the latter to individualizing science, which is identified with history. History selects its materials by means of generally valid values and its method is the inclusion of individuals in larger individuals, not logical subsumption. But no empirical science can dispense with causality. The causal principle is a constitutive form of all experience. It is capable of being logically developed according to either of the two concepts mentioned above; it can be generalized or individualized. The latter is the process of historical causality. Accordingly the supposition that teleology excludes causality from history is merely a methodological confusion.

GEORGE H. SABINE.

LELAND STANFORD JR. UNIVERSITY.

The Essentials of Character. By EDWARD O. SISSON. New York, The Macmillan Co., 1910.—pp. x, 214.

This book is "a practical study of the aim of moral education" (sub-title). It "has been written in the belief that a clear comprehension of what really makes up human character would be one of the first and best aids to the actual worker" (p. vii). The method of the book is evolutional and the author accordingly begins with chapters on the natural endowment of the child, laying special emphasis on native differences. After two chapters on native tendencies and their treatment, there follow discussions of disposition, habits, tastes, the personal ideal, conscience, the social ideal, strength of character, religion, and the cultivation of character. It is perhaps generally agreed that any significant study of education or any thoroughgoing investigation into educational methods calls for a concise statement of a clearly conceived ideal of character. Such an ideal, however, while necessarily formulated in accordance with facts 'practically' coördinated and defined, does not come as a result of any "practical study." The author is therefore confusing his method with his conceived goal, with the result that the sub-title of his book expresses a contradiction in terms. It is the ideal which guides the practical study. rather than the practical study which leads to the ideal.

It is also agreed that a clear comprehension of what makes up human character is a prime consideration in any educational theory or practice. But the make-up of human character is a question for philosophical analysis, based, of course, on direct observation of the expression of character. To this analytical problem the book under consideration contributes very little. Where one would expect careful and painstaking analysis of the elements of character, one finds only series of platitudes of popular evolutional literature, in some cases falling almost to the level of sentimentality, as in the chapter on "Disposition." There is little scientific enlightenment in the "patient and loving study of the living child" (p. 43), and no great exhibition of analytical clear-headedness in the definition "character means the total of the qualities

that make a real man or woman: a person without character is so much less than a man: and a man of character is a man in the fullest sense" (p. 3).

E. JORDAN.

CORNELL UNIVERSITY.

Experiments in Educational Psychology. By Daniel Starch. New York, The Macmillan Co., 1911.—pp. vii, 183.

"This book is designed to serve as a guide for laboratory experiments in educational psychology. . . . For many experiments the material is contained in the book. . . . In order to emphasize the practical aspects of the principles brought out in the various experiments, a brief set of exercises is placed at the end of each chapter. . . . Additional references are given to excellent practical problems." . . . (pp. v-vi). Of the thirteen chapters in the book the first four deal with individual differences, sense defects, and types of mental imagery. Chapters v to viii are more strictly pedagogical in character and include the titles "The Trial and Error Method of Learning" (chap. v), "The Progress of Learning" (chaps. vi-vii), and "The Transference of Training" (chap. viii). The remaining chapters are psychological in character and bear the titles: "Association," "Apperception," "Attention," "Memory," "Work and Fatigue." The book ought to be a valuable instrument in the hands of elementary students of education.

E. JORDAN.

CORNELL UNIVERSITY.

Lectures on Fundamental Concepts of Algebra and Geometry. By JOHN WESLEY YOUNG. New York, The Macmillan Co., 1911.—pp. vii, 247.

This book appears in response to the present widespread interest in the fundamentals of mathematical theory. The author's purpose has been to "give a general exposition of the abstract, formal point of view developed during the last few decades, rather than an exhaustive treatment of the details of the investigations" (p. v). The twenty-one lectures which compose the book were delivered at the University of Illinois during the summer of 1909. In the first five lectures it is proposed to "consider rather informally our conceptions of space, and to illustrate in a general way the point of view to be followed in the later, more formal discussion" (p. 8). Beginning with a discussion of the historical development of the conceptions involved, it is found that Euclid's Elements is the "earliest work in which mathematics is exhibited as a logically arranged sequence of propositions," as the science of mathematics is defined by the author (p. 2). In these introductory lectures it was found that "the meaning popularly attributed to certain fundamental concepts . . . lacks precision, that the axioms and postulates of geometry cannot be regarded as self-evident, . . . that our intuitive knowledge of space is not sufficient to determine completely the fundamental propositions of geometry" (p. 58). "It thus became apparent that a purely logical treatment of geometry implies a purely abstract treatment, . . . it was seen that the

starting point of any mathematical science must be a set of undefined terms and a set of unproved propositions (assumptions) concerning them. The science then consists of the formal logical implications of the latter" (p. 59). The remaining chapters (vi to xxi), contain a more systematic discussion of the various concepts of mathematics, beginning with the concept of class and including those of order, number, Hilbert's assumptions, Pieri's assumptions, multi-dimensional space, variable and function, limit, etc. The volume closes with a note on "The Growth of Algebraic Symbolism," by U. G. Mitchell.

The author appeals to teachers of mathematics and to philosophers and logicians. To teachers the book will be found attractive on account of occasional paragraphs devoted to pedagogical methods. It should also be of value to students of philosophy by way of a critique of fundamental concepts and it ought also to furnish valuable suggestions toward a critical study of philosophical method, especially to those who claim to base philosophy directly upon scientific principles.

E. JORDAN.

CORNELL UNIVERSITY.

The following books also have been received:-

- The World We Live In, or Philosophy and Life in the Light of Modern Thought. By George Stuart Fullerton, New York, The Macmillan Company, 1912.—pp. xi, 293.
- The New Realism. Cooperative Studies in Philosophy. By Edwin B. Holt, Walter T. Marvin, William P. Montague, Ralph B. Perry, Walter B. Pitkin, and Edward G. Spaulding. New York, The Macmillan Company, 1912.—pp. xii, 491.
- Historical Studies in Philosophy. By ÉMILE BOUTROUX. Authorized translation by Fred Rothwell. London, Macmillan and Co., 1912.—pp. xi, 336. \$2.50.
- Founders of Modern Psychology. By G. STANLEY HALL. New York and London, D. Appleton and Co., 1912.—pp. vii, 470. \$2.50 net.
- The Mechanistic Conception of Life. By JACQUES LOEB. Chicago, The Univversity Press, 1912.—pp. 232. \$1.50 net.
- Selected Papers on Hysteria and Other Psychoneuroses. By Sigmund Freud. Authorized translation by A. A. Brill. New York, The Journal of Nervous and Mental Disease Publishing Co., 1912.—pp. ix, 215.
- Cerebellar Functions. By André-Thomas. Trans. by W. Conyers Herring. New York, The Journal of Nervous and Mental Disease Publishing Co., 1912.—pp. iii, 223.
- Essentials of Psychology. By S. RADHAKRISHNAN. London, Oxford University Press, 1912.—pp. 75. 1/4 net.
- Was Christ Divine? By WILLIAM W. KINSLEY. Boston, Sherman, French & Co., 1912.—pp. 144. \$1.00 net.
- Philosophische Abhandlungen. Von Hermann Cohen. Berlin, Verlag Bruno Cassirer, 1912.—pp. 359.

J. G. Fichtes Werke. Herausgegeben von Fritz Medicus. Band VI. Leipzig, Verlag von Felix Meiner, 1912.—pp. 680. 7 M.

Kant und die Marburger Schule. Von PAUL NATORP. Berlin, Verlag von Reuther & Reichard, 1912.—pp. 29. .80 M.

Der Mensch. Eine fundamental-philosophische Untersuchung. Von Bern-HARD RAWITZ. Berlin, Verlag von Leonhard Simion Nf., 1912.—98.

Hegels Entwürfe zur Enzyklopädie und Propädeutik. Herausgegeben von J. Löwenberg. Leipsig, Verlag von Felix Meiner, 1912.—pp. 58.

Das höchste Gut. Führer auf den Pfaden der Vollendung. Von PAUL CHRISTIAN FRANZE. Berlin, Verlag von Leonhard Simion Nf., 1912.—pp. 78.

Traité de Philosophie. Par G. SORTAIS. Two vols. Paris, P. Lethielleux, 1911.—pp. xxxii, 972; xvi, 978.

Histoire de la Philosophie ancienne. Par G. Sortais. Paris, P. Lethielleux, 1912.—pp. xviii, 625.

L'un Multiple. Par Robert Mirabaud. Paris, Félix Alcan, 1912.—pp. 103. 2 fr.

I Presupposti Formali della Indagine Etica. Da LUDOVICO LIMENTANI. Genova, A. F. Formiggini, 1913.—pp. xii, 541.

L'Esiglio di Sant'Agostino. Da Lorenzo Michelangelo Billia. Torino, Flli. Fiandesio & C., 1912.—pp. xv, 295.

La Filosofia Contemporanea. Da Guido de Ruggiero. Bari, G. Laterza, & Figli, 1912.—pp. 481.

SUMMARIES OF ARTICLES.

[ABBREVIATIONS.—Am. J. Ps. = The American Journal of Psychology; Ar. de Ps. = Archives de Psychologie; Ar. f. G. Ph. = Archiv für Geschichte der Philosophie; Ar. f. sys. Ph. = Archiv für systematische Philosophie; Br. J. Ps. = The British Journal of Psychology; Int. J. E. = International Journal of Ethics; J. of Ph., Psy., and Sci. Meth. = The Journal of Philosophy, Psychology, and Scientific Methods; J. de Psych. = Journal de Psychologie; Psych. Bul. = Psychological Bulletin; Psych. Rev. = Psychological Review; Rev. de Mét. = Revue de Métaphysique et de Morale; Rev. Néo-Sc. = Revue Néo-Scolastique; Rev. Ph. = Revue Philosophique; Rev. de Ph. = Revue de Philosophie; R. d. Fil. = Rivista di Filosofia e Scienze Affini; V. f. w. Ph. = Vierteljahrsschrift für wissenschaftiche Philosophie; Z. f. Psych. = Zeitschrift für Psychologie und Physiologie der Sinnesorgane, I. Abtl.: Zeitschrift für Psychologie. — Other titles are self-explanatory.]

Devoir et durée. J. WILBOIS. Rev. de Met., XX, 2, pp. 193-206.

The work of the modern moralist is of three kinds. He has first (1) to investigate the science of customs and the various forms of moral codes and to show the various stages of moral evolution in the race and in the nation. But in this, as such work has been laid out for us by MM. Durkheim and Bruhl, the main emphasis has been on mere description resulting in an apparently external science of morals, a mere branch of sociology, and the element of duty, of the moral imperative, is left untreated; to treat this properly requires the introduction of the further concept of duration. Duty presupposes an effort which shall be for others and so morality and industry are closely connected. This shows first in the freeing from matter involved in the modern division of labor; secondly in the increase of duty with the increase of the size of the social whole which is the basis of the existence of the duty. addition, the free individual, inserted as he is it the line of human progress, finds that he must follow his own vocation if he is to pass on the greatest results to the sum total of human welfare. The moralist must secondly (2) consider the moral imperative from another point of view. The question is of long standing concerning the basis of this imperative; on the one hand, we are told that it arises from experience, on the other, that if so we can have no guarantee of its universal validity. Both of these extreme schools are only partly right, for though it is obvious that duty is incapable of derivation from that which is not duty, in other words, that duty is a fact and incapable of an empirical demonstration of its obligation, at the same time duty is a personal matter and incapable of enforcement by rationalistic means. So we find this "morality of the vocation" to be general in its form though particular in the matter of its precepts. It is at once completely obligatory and adaptable to the changing of our social life. This change and renewing of the particular moral precepts is the third part of the work of the modern moralist. The first duty of the individual is obviously to obey his vocation; under this are subsumed certain secondary duties in three classes, (1) to keep the bodily health in a condition for the appointed work, (2) to strive self-sacrificingly in the duties imposed by present static conditions, (3) to strive for the bettering of the human race in its future along the lines toward which its present ideals seem to tend.

F. R. PROUT.

Les idées directrices de la physique mécaniste. A. Rev. Rev. Ph., XXXVII, 4, pp. 337-367.

As against the contention that science is not concerned with the real nature of things or dependent upon philosophical thinking, a study of the history of mechanical principles shows certain inevitable philosophical implications in even the most abstract and formal conceptions of physics. The modern interpretation of the principle of inertia implies the absolute passivity of matter. The school-men, following Aristotle, defined inertia as a positive tendency toward repose; modern physicists define it as quantity of indifference. The later view makes possible the substitution of a quantitative for a qualitative treatment of motion, as, in the absence of any specific or substantial quality in the body, all motions are regarded as homogeneous. Even rest is treated as a case of motion. This quantitative treatment of matter is regarded as truer in the ultimate philosophical sense, and furthermore, it necessitates the use of an abstraction of reason, viz., uniform motion in a straight line, as the standard of measurement. The principle of inertia implies further the externality of all force. The actual motion of a body is represented by the algebraic sum of all forces acting upon it. Acceleration in movement is due to the accumulation of force during the progress of a body; that is, velocity increases with the time.

KATHERINE EVERETT.

La psycho-analyse appliquée à l'étude objective de l'imagination. N. Kostyleff. Rev. Ph., XXXVII, 4, pp. 367-397.

The analysis of both morbid mental conditions and the normal play of the imagination reveals psychic complexes or constellations of ideas, that is, residues of previous experiences which develop in the new situation as the ideal fulfilment of desire. Such psycho-analysis is the key to the understanding of myths, legends, lyrics, and epics, for literary creations often symbolize youthful dreams and the awakening of the sexual impulse. Thus far, however, psycho-analysis has been applied most successfully in pathological cases. When once the psychic complex is discovered either by association experiments or by psycho-analysis, the apparently scrappy fancies of the insane can be pieced together into a coherent whole. In dementia mental activity is not weakened but reenforced, and the abnormality is simply the failure to connect with the immediately presented reality. The poet differs from the insane only in that he keeps in contact with real life. The products of his imagination, like those of the insane, can profitably be studied by psycho-analysis.

KATHERINE EVERETT.

Le bien dans les actions intérieures et extérieures. A.-D. SERTILLANGES. Rev. de Ph., XII, pp. 243-256.

The rough general definition of the good as what a man ought to do is faulty, in that it is too objective in its emphasis and leaves out the equally important side of how the will should be directed in the act of doing. first question then under consideration is that of the relation of reason to morality. Good and bad may be terms referring to morality or to nature and between the two senses lies the difference that the morally good is in accord with reason. Some things are naturally good which are morally indifferent and of these the seeking for happiness is one. We find then that everything which naturally is, is naturally good, so a good action will be one which does not defeat its own end. We must now distinguish between the external and the internal act; the one is the will, the mere acceptance on deliberation of the act to be performed, the other is the result following this acceptance and is not necessarily external to the psychological self which wills. The good of this internal act depends then obviously on the proposed objective act, including in this all the attendant circumstances. Hence the act of the will must conform to reason. This however is the same as to say that it must conform to the will of God, for in that will as it has been revealed is contained the whole of reason. Now the question arises of what is the characteristic of the good external act; this it seems lies in its agreement with a good will. The circle obvious here is a desirable one for it brings out clearly the interrelated elements in our nature, will and intelligence. For the morally good act both these elements must be present and be good as defined above. This however makes but one morality, not two; for we have here three values, the natural value of the external act, the moral value of the internal act, and the complete value of the whole act. In other words, the moral side of our nature is inseparably connected with the other sides and for complete morality we must attain the ideals of good proper to those other sides of our nature.

F. R. PROUT.

Can Biology and Physiology Dispense with Consciousness? Elliot P. Frost. Psych. Rev., XIX, 3, pp. 246-252.

Many biologists of the extreme type, and some not so extreme, regard consciousness as a *Begleiterscheinung*, an epiphenomenon; a concept that biology can well do without. For this conclusion psychologists are chiefly to blame. Psychology has not been clear as to the nature of consciousness, and has produced confusion by defining it as a *state*, or by defining it as a *process*. The definition of consciousness as a process is the more nearly correct; but this may go no further than physio-chemistry, and not touch psychology proper at all. A better word to describe animal behavior is *consciousizing*. Behavior will then have a three-fold description: *preconsciousizing*, *consciousizing*, and *consciousized*. The first is purely reflex mechanism in action; the second is characteristic of all races and individuals where development occurs, reaching its highest stage in man; the consciousized organism is marked by relatively

rigid, habitual, instinctive, non-progressive behavior, best illustrated by the hymenoptera. Consciousizing is reaction to a present stimulus plus a sensibility to past processes. The terms consciousness and conscious state should be relegated to the realm of pure concept. By adherence to this dichotomy of pure concept on the one hand and process on the other, a self-consistent psychology is possible, and physiology will no longer feel itself called upon to build up an artificial system of new terms to explain behavior.

MARK E. PENNEY.

The Progress of Evolution. A. C. Armstrong. J. of Ph., Psy., and Sci. Meth., IX, 13, pp. 337-342.

The subject proper of the essay is the noetic of evolution, the discussion of the concepts and principles implied by evolution, and on which it is based. It is treated under the following heads: (1) A just estimate has not yet been reached of the origin of evolutionary theory. Prior to both Darwin and Spencer, Geisteswissenschaften approached their problems by the genetic line of attack. (2) Progress has been made in distinguishing phenomenal from transcendent evolution. This is most clearly seen in ethics and theology. The progress in philosophy proper appears more doubtful. (3) Evolution and the sciences. Mental evolution, according to the extremists, must follow the same law as organic evolution. This is of doubtful application in the moral field and of questionable validity in philosophy. (4) The presuppositions of evolution: that is, the presuppositions of a noetic kind, the concepts and principles assumed by evolution and on which it depends. Advance has been made here, especially in the field of the mental sciences, but it has not been complete nor fully adequate. Enough progress has been made, however, to refute the thesis of "venturesome essays of a contrary type."

MARK E. PENNEY.

Beauty, Cognition, and Goodness. H. M. KALLEN. J. of Ph., Psy., and Sci. Meth., IX, 10, pp. 253-265.

In the history of thought, beauty has been regarded by both philosophers and artists either as a deep metaphysical principle made magically manifest, or as an ordinary psychologic or material datum. But beauty can never be found as a psychological experience like a sensation or an image, nor as a transscendental existence like the Kantian categories. The mind never experiences a thing called beauty, but an object to which it afterwards attributes beauty. Hence, the mind which seeks to experience beauty must take the esthetic experience as a whole. Interest is the directive or selective principle of this experience, which constitutes our world, and our primordial and ultimate relation to our world is a value relation. This value relation is knowing. Mind, then, is a system of objects related by a highly complex arrangement of value relations to another complex called a body. Good and bad are converse modes of designating immediate cognition, which is the value relation and the essential constituent of interest. Beauty is neither in the mind nor in the

object. It is an independent thing—a relation between mind and object, binding them together and holding them bound.

MARK E. PENNEY.

Imitation and Animal Behavior. M. E. HAGGERTY. J. of Ph., Psy., and Sci. Meth., IX, 10, pp. 265-272.

Advance in experimental analysis of behavior tends to make psychological concepts inadequate. This is especially manifest in the case of imitation. It was no doubt an advance when scientists distinguished instinctive from voluntary imitation, but the problem was thereby complicated all the more, for whatever one means by imitation, he must qualify it by what he means by instinct. At the present stage of experimental work, it is impossible to say, in the case of canine behavior, what is instinct and what is intelligence, and to imagine that something final has been said by calling a certain bit of dog behavior instinctive imitation is to mislead ourselves and to confuse the rightful course of experimental investigation. With voluntary imitation the case is even worse, and until human psychology can give us something more settled regarding the processes of volition, we do well to use the term volition with parsimony in reference to the doings of animals. Two alternatives confront the investigator: (1) to abandon the study of imitation and direct his studies to other fields; (2) to suspend judgment as to the particular level of psychical accomplishment denoted by the different kinds of imitative behavior, to free the concept of imitation from its unfortunate appendages, and to accumulate the facts.

MARK E. PENNEY.

Le monisme hylozoïste de M. Le Dantec. J.-B. SAULZE. Rev. de Ph., XII, 3, pp. 257-282.

The author of this article tells us that M. Le Dantec is not so deep or original as he is clever in illustrating the doctrines of other men. The two main theses, taken up in order, are those of materialism and of hylozoism The materialism is of a positivistic, anti-metaphysical type but this positivism is not that of Comte but rather that of Littré, the impossibility of knowledge, "polite materialism." M. Le Dantec's chief source and teacher seems to be Haeckel, and his chief work seems to consist in popularizing that philosophizing biologist; accordingly it is not strange that M. Le Dantec is little more consistent in his philosophy than the older man. In spite of this opposition to metaphysics, he gives us a metaphysic of the crudest type, the non-existence of everything which the commonest man cannot and does not observe to be true. In addition he is possessed by the geometrical, the mechanical spirit; to him biology has for its ideal a "mechanics of living beings," and he holds as now realizable the dream of Laplace of finding the unknown quantity in the equation which should throw open the whole past and future to our present gaze. But in addition to this mechanical materialism M. Saulze finds in his subject the other great strain of hylozoism, of vitalism. Instead of following

his own command given to the scientist, to measure, and in spite of his objection to metaphysics, he attacks the problem of the origin of life. His conclusion. whose metaphysical consequences are enormous, is that life arose from matter: and for this thesis he gives us no new proof nor even an improvement on the old; he derives it from the general thesis of materialistic determinism. This origin took place in the process of evolution and this evolution is a gradual. mechanically determined process. Here M. Saulze remarks on the absolutely inconsistent nature of the idea of a determined evolution. For M. Le Dantec the doctrine of evolution was first based on the work of Darwin but later it has turned out that Darwin was not a physicist, so the allegiance has been transferred to Lamarck. The sense, however, in which he interprets Lamarck is very different from that in which the Neo-Lamarckian school understand their master; only by reading his own ideas into Lamarck's work can M. Le Dantec hold that he is a follower of him. Along these lines too he is a popularizer of Haeckel rather than an original thinker. After considering these two main lines in the work under dicussion, M. Saulze passes to the consideration of certain additional ideas held by M. Le Dantec at different times. In theory of knowledge he has varied greatly in his different works, and even in the same work. At times he has launched a polemic against the idea of force as subversive of human reason, at another time knowledge becomes part of the universal mechanism, again knowledge has to do only with things seen, or it is vain and consciousness a mere epiphenomenon. The psychology of M. Le Dantec is consistently materialistic, a mere corner of biology. Denying as he does the existence of the concepts of personality and of freedom, his ethical doctrines become almost useless; he seems to lack the social sense entirely. As regards religion his creed is negative and materialistic. On the whole, as M. Saulze concludes, he is a mere populariser, a "great resonnator" of the doctrines of others rather than an original thinker on his own account.

F. R. PROUT.

The Rights of Man. A. K. ROGERS. Int. J. E., XXII, 4, pp. 419-437.

Those who have tried to set aside altogether the notion of rights, other than purely legal or *de facto*, have found the task easier in theory than in practice. If we look not to the universe nor to a priori truth, but to the constitution of human nature, the wants and desires of men, we can construct a working theory of rights. While the idea of rights is partly self-assertive in character, justice, which subjects self-assertion to an ideal law of balance or proportion, sums up the fuller content of the idea. We may here distinguish two elements, the sentiment of fair play and rational sympathy. Yet the argument for political justice must rest less upon the disinterested sentiment of justice than upon interested calculation. Our very constitution as rational beings prevents our setting up our first reaction against restraint as a final philosophy. Enlightened self-interest shows one that the social concept of justice is an indispensable tool for gaining the public recognition of his own rights.

J. R. TUTTLE.

The Present Status of the Problem of the Relation between Mind and Body.

MAX MEYER. J. of Ph., Psy., and Sci. Meth., IX, 14, pp. 365-371.

The problem of the relation of mind and body is the chief one for which the student of medicine should turn to psychology. The history of the discussion has been one of arguments in favor of one or the other of two metaphysical theories, interaction and parallelism. What these terms mean is, that any mental state is in a specially direct manner dependent on one or more variables of the nature of nervous activity. Supposing such mental and nervous variables, as corresponding values, do such values appear in our experience simultaneously or in succession? Accepting the latter case, we accept interaction; accepting the former, we accept parallelism. The decision between these two positions can be reached only through observation. We shall have to wait until an instrument is invented which enables a person having a mental state to observe the corresponding value, the corresponding objective process in his own nervous system, without the slightest interference with the normal function of this nervous system. With the biologists, the confession of parallelism did not mean the dogmatic solution of the problem; it meant merely that human life could be described without reference to states of consciousness: whereas interactionists introduce consciousness into the chain of causes and effects. Consciousness is here a 'ghost' introduced for purposes of explanation like the ghost introduced for the purpose of explaining an epidemic. There is no scientific advantage attaching to the ghost theory, but it is not refuted, as was supposed, by the law of the conservation of energy. Its reawakening is due to the neuron theory and the doctrine of the synapse, for which the ghost 'consciousness' is necessary. But it is possible to understand all the fundamental facts of animal life experience by simply conceiving of any nervous process as forcing, under certain conditions, any other nervous process out of the path of least resistance into another definite path. This represents the animal's acting in a new way, which we call an experience. The problem is then to establish definite nervous correlates for all the specific mental states and mental functions which are used in and seemingly cannot be spared from our descriptions of human life in the mental and social sciences.

E. JORDAN.

Essai de classification des mystiques. F. PICAVET. Rev. Ph., XXXVII, 7, pp. 1-26.

Since the time of Plotinus, the words 'mystic' and 'ecstasy' have implied the notion of a union of the soul with God. Mysticism appears among people who differ widely in their intellectual, moral and æsthetic powers, as well as in their physical health and practical customs. Consequently, ecstasy takes different forms in the completely developed individual and the individual who has remained a stranger to culture. This view is brought out by M. Th. Ribot, in his *Psychologie de l'attention*, and further illumined by the researches of Dr. Thulie, who shows that two absolutely opposite conceptions govern the classification of mystics. In the first of these, he is called a mystic who strives

to attain perfection in the pursuit of the absolute truth, beauty, or goodness: in the second, he is a mystic in whom we find nervous or morbid phenomena from which result cerebral affections and madness. The first class will contain three groups: (I) those wishing a complete development of human personality; (2) those desiring, in addition to personal development, the pursuit of the good, the beautiful, or the true; (3) those following one alone of the three ways indicated by Plotinus, thus arriving more nearly at supreme perfection. In these three groups cerebral troubles are never causes, but are frequently concomitants of eccentricities in belief or practice. The second class is not so easily divided into groups, and those who lead this class really are in accord with those of the first class, in that they seek perfection either in themselves or in the ideal with which they seek to be united. But, in general, this second class practices rites which have serious physiological consequences, sometimes resulting in madness. Besides these two main classes, there may be said to be a third class of mystics composed of those who are too narrow and ignorant to seek perfection of any sort or to desire to unite themselves with any higher being. This class presents hardly anything to study but the various phenomena of morbidity and madness.

ALMA R. THORNE.

Le raisonnement par l'absurde et la méthode des résidus. A. BERROD. Rev. Ph., XXXVII, 4, pp. 397-404.

The method of proof by a reduction to the absurd presupposes two logical contradictories. But there are no logical contradictories in mathematics, only equalities and identities and their opposites; moreover, there are often more than two possibilities for the conclusion. The method of reduction to the absurd is like the experimental method of residues; for they appeal both to reason and experience, are implied by, rather than correlative with the other experimental methods, are indirect, and exhibit no necessary connection between the terms of the conclusion. They differ in emphasis rather than in kind. In the so-called deductive method of reduction to the absurd the conditions are more abstract and therefore more completely under the control of the mind, whereas in the inductive method of residues, the mind is more dependent upon the suggestions of experience.

KATHERINE EVERETT.

La sociologie juridique. G. RICHARD. Rev. Ph., XXXVII, 3, pp. 225-247.

The little book, Le droit social, le droit individuel et la transformation de l'état, published by M. Duguit some years ago, has aroused lively discussion. In France the method of M. Duguit is questioned; in Italy they question the worth of his doctrine. The method is that of Condorcet, Comte, Spencer, and Marx, which seeks to apply to sociology the theory of limits, and thus becomes an infallible source of utopias. M. Duguit solves his juridical problem in the name of a future society, where the idea of justice is to correspond no longer to any personal claim, but is to express only the social rules which should guarantee the performance of reciprocal duties. In this future society the right of

private property will have disappeared and the state will have been resolved into a system of public and autonomous service. Subjective rights, public and private, will have vanished, but the exigencies of the division of labor will render all the more necessary the respect for objective justice—for juridical rules fixing the function and obligations of each toward all. M. Duguit's authority for the prediction of such a transformation of society is the present syndicalism, which he regards as a re-constitution of the mediæval corporations, or communes. This view is open to the objection that modern syndicalism involves a sharp division between union labor on one side and corporate capital on the other, instead of the mediæval hierarchy of masters, journeymen, and apprentices. Syndicalism supposes the substitution of an anonymous society for the patronat. The reconstitution of the old corporations would suppose the persistence of the patronat. The worker in the corporation exercised his trade in one locality during a whole life-time; the employee of the syndicat passes from one branch to another in his profession, and from one place to another in the exercise of it. He goes all over the world. In many instances he passes into the patronat,—into commerce, journalism, politics, administration. would seem to disprove M. Duguit's assertion of the disappearance of the tendency to claim subjective rights. Modern man seems to place his personal liberty above all other good that society could guarantee him. The negation of the subjective right cannot be considered as a point gained for the philosophy of right. The antithesis of the juridical norm and personal justice is obvious, and it cannot be seen how the rule of right could be realized, if it did not give birth to pretensions and claims, both private and public. One may, like M. Duguit, attempt to oppose the ought-to-be to the given fact, but care must be taken not to confuse the 'ought-to-be' with the 'ought-tohappen'—the Sollen with the Müssen. Nothing proves absolutely that general morality would gain anything on the disappearance of the subjective rights of the individual or the state. Justice itself would disappear, if the state should become a mere automatic constitution of the 'interests.'

ALMA R. THORNE.

NOTES.

We have to record the death of three noted European scholars: Henri Poincaré, of the University of Paris, Theodor Gomperz of Vienna, and Shadworth Hodgson. the well-known English philosopher, and founder of the English Aristotelian Society.

Poincaré's death occurred on July 20. He was born in 1854. He was primarily a mathematician and mathematical physicist, but his broad interests and philosophical type of mind led him to occupy himself with problems of method, which gave rise to the three well-known volumes, Science et l'Hypothèse, La Valeur de la Science, and Science et Méthode.

Gomperz was eighty years of age, being born in 1832. He was professor of classical philology at the University of Vienna. His best known work, of which we have a translation in English, is *Griechische Denker*, eine Geschichte der antiken Philosophie.

Hodgson was also born in 1832. He was Honorary Fellow of Corpus Christi College, Oxford, to which he bequeathed his very valuable library. His principal philosophical writings include: Time and Space, 1865; The Theory of Practice (2 vols., 1870); The Philosophy of Reflection (2 vols., 1878); The Metaphysics of Experience (4 vols., 1898).

We also regret to announce the death of Dr. Williston S. Hough, dean of the Teacher's College of George Washington University, and previously professor of philosophy in the same institution. Dr. Hough was a contributor to many periodicals and was also known as the editor of the English translation of Erdmann's *History of Philosophy* and as the translator of other books from the German.

In honor of the eightieth birthday of Professor Wilhelm Wundt, which occurred on August 16, a "William Wundt Stiftung," with an endowment of 7000 Marks, was presented to the University of Leipzig by some of his former students and friends. In accordance with Professor Wundt's suggestion the money is to be expended for the investigation of certain psychological problems.

On the occasion of the celebration of the seventieth birthday of Professor Hermann Cohen, of the University of Marburg, a gift of 100,000 Marks was made to the Jewish Institute of the University by Herr Brunn of Berlin for the establishment of a Hermann Cohen professorship.

Professor Rudolf Eucken, of the University of Jena, is this semester lecturing at Harvard University as exchange professor.

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Professor Madison Bentley, of Cornell University, has accepted a call to the professorship of psychology in the University of Illinois, and Dr. Harry P. Weld has been called from Clark University to Cornell to fill the position caused by Dr. Bentley's resignation.

Dr. Archibald A. Bowman has been called from the University of Glasgow to Princeton as Professor of Logic and Ancient Philosophy.

Professor Wilbur M. Urban, who is abroad this year on sabbatical leave, will spend some months at Graz in collaboration with Professor Meinong. During his absence Dr. Carl Vernon Tower will have charge of the work in philosophy at Trinity College.

We give below a list of the articles in the current philosophical periodicals:

MIND, No. 83: S. Alexander, On Relations; and in particular the Cognitive Relation; J. S. Mackenzie, Notes on the Problem of Time; A. E. Taylor, The Analysis of EHIETHMH in Plato's Seventh Epistle; F. C. Sharp, The Ethical System of Richard Cumberland, and its Place in the History of British Ethics; Discussions: G. Dawes Hicks, The Nature of Sense-Data; L. E. Hicks, Euler's Circles and Adjacent Space.

THE JOURNAL OF PHILOSOPHY, PSYCHOLOGY, AND SCIENTIFIC METHODS, IX, 18: Henry Rutgers Marshall, The Causal Relation between Mind and Body; June E. Downey, Literary Synesthesia.

IX, 19: B. H. Bode, Consciousness and Its Object; Margaret Hart Strong and H. L. Hollingworth, The Influence of Form and Category on the Outcome of Judgment; Discussion: L. E. Hicks, Something More about Inversion: A Rejoinder.

IX, 20: C. A. Strong, The Nature of Consciousness. I; Discussion: John Dewey, In Response to Professor McGilvary.

THE MONIST, XXII, 3: Bertrand Russell, The Philosophy of Bergson; James H. Leuba, Psychotherapic Cults: Christian Science; Mind Cure; New Thought; Hartley Burr Alexander, The Mystery of Life; Criticisms and Discussions: James G. Townsend, Bergson and Religion; Paul Carus, The Intellectual Movement of To-Day; Bruno Jordan, Kant and Bergson; Philip E. B. Jourdain, Maupertuis and the Principles of Least Action; H. Poincaré, The Capture Hypothesis of T. J. J. See; Harry A. Sayles, Notes on the Construction of Magic Squares; R. Garbe, Postscript on Buddhism and Christianity; Poincaré's Cosmogenic Hypotheses.

THE PSYCHOLOGICAL BULLETIN, IX, 8: General Reviews and Summaries: A. S. Pearse, Recent Literature on the Behavior of the Lower Invertebrates; C. H. Turner, Recent Literature on the Behavior of the Higher Invertebrates; Margaret F. Washburn, Recent Literature on the Behavior of Vertebrates.

IX, 9: General Reviews and Summaries: J. W. Baird, Memory, Imagination, Learning, and the Higher Mental Processes (Experimental); W. C. Gore,

Memory, Concept, Judgment, Logic (Theory). June E. Downey, Graphic Functions; W. V. Bingham, Vocal Functions.

THE PSYCHOLOGICAL REVIEW, XIX, 4: Frederick Lyman Wells, The Question of Association Types; J. E. Wallace Wallin, Experimental Studies of Rhythm and Time: III. The Estimation of the Mid-Rate between two Tempos; June E. Downey, Literary Self-Projection; D. O. Lyon and H. L. Eno, A Time Experiment in Psychophysics.

THE HIBBERT JOURNAL, X, 4: Max Nordau, The Degeneration of Races and Peoples; C. G. Montefiore, The Significance of Jesus for His Own Age; R. Kennard Davis, Christ as "The Truth"; Bishop of Tasmania, The Church, The World, and The Kingdom; A. W. F. Blunt, The Ungodly Organisation of Society; E. W. Lummis, Conformity and Veracity: 1662 and 1912; M. M. Pattison Muir, The Vain Appeal of Dogma to Science; Philip E. B. Jourdain, Logic, M. Bergson, and Mr. H. G. Wells; E. F. Carritt, The Artistic Attitude in Conduct; G. E. French, The Interpretation of Prophecy; Archibald A. Bowman, The Sistine Madonna; B. A. G. Fuller, The Gods of Epicurus; Emma Mahler, Social Service. No. 4. The Hardships of Seamen's Wives.

THE AMERICAN JOURNAL OF THEOLOGY, XVI, 3: J. Warschauer, The Present Position of Liberal Theology in Great Britain; James Westfall Thompson, The Alleged Persecution of the Christians at Lyons in 177; W. K. Wright, A Psychological Definition of Religion; Hugh R. Mackintosh, The Liberal Conception of Jesus in its Strength and Weakness; Theodore G. Soares, Practical Theology and Ministerial Efficiency; In Memoriam: William Newton Clark, George William Knox.

ARCHIV FÜR SYSTEMATISCHE PHILOSOPHIE, XVIII, 2: Iwan Iljin, Die Begriffe von Recht und Macht; L. Denckmann, Energien; Josef Klemens Kreibig, Über den Begriff des "objectiven Wertes"; Arthur Erich Haas, Ist die Welt in Raum und Zeit unendlich? Ernst Müller, Henri Bergson; E. Hurwicz, Ludwig Knapp's "System der Rechtsphilosophie"; Theodor Lessing, Psychologie der Ahmung; Rezensionen; Die neuesten Erscheinungen auf dem Gebiete der Geschichte der Philosophie.

XVIII, 3: Joh. Zahlfleisch, Ist die Lüge erlaubt?; Paul C. Franze, Grundlagen der Erkenntnisgewinnung; Paul von Rechenberg-Linten, Unmittelbares Ich-Bewusstsein und Tod; Victor Schlegel, Über die Form des Menschen; Kurt Bernhard, Die Relativität der Zeit; Ernst Wilken, Psychologische Vernunftkritik; Dietrich Heinrich Kerler, Kategorienprobleme. Eine Studie an Emil Lask's "Logik der Philosophie"; Rezension; Die neuesten Erscheinungen auf dem Gebiete der systematischen Philosophie.

ARCHIV FÜR GESCHICHTE DER PHILOSOPHIE, XVIII, 4: Gustav Falter, Hermann Cohen: Ästhetik des reinen Gefühls; Heinrich Romundt, Die Scholastik des europäischen Mittelalters im Lichte von Kants Vernunftkritik; Friedrich Maywald, Über Kants transzendentale Logik oder die Logik der Wahrheit; Richard Groeper, Ist Schopenhauer ein Mann der Vergangenheit

oder ein Mann der Zukunft?; Eggenschwyler, Nietzsche und der Pragmatismus; Emanuel Loewe, Das Fr. 2 Heraklits; H. Gomperz, Einige wichtigere Erscheinungen der deutschen Literatur über die Sokratische, Platonische und Aristotelische Philosophie 1905–1908; Rezensionen; Die neuesten Erscheinungen auf dem Gebiete der Geschichte der Philosophie; Zeitschriftenschau.

VIERTELYAHRSCHRIFT FÜR WISSENTSCHAFTLICHE PHILOSOPHIE UND SOCIOLOGIE, XXXVI, 1: Hans Kleinpeter, Zur Begriffsbestimmung des Phänomenalismus; Karl Gerhards, Zur Kontroverse Planck-Mach; Karl Marbe, Beiträge zur Logik und ihren Grenzwissenschaften; Erich Rothacker, Zur Methodenlehre der Ethnologie und der Kulturgeschichtschreibung; Bessprechungen.

XXXVI, 2: Karl Marbe, Beiträge zur Logik und ihren Grenzwissenschaften. II (Schluss); F. M. Urban, Über die Unterscheidung zwischen logischer und empirischer Wahrheit; Demtrius Gusti, Ein Seminar für Soziologie, Politik, und Ethik an der Universität Jassy; F. Müller-Lyer, Die phaseologische Methode in der Soziologie; Charlotte Hamburger, Unser Verhältnis zur Sinnenwelt in der mathematischen Naturwissenschaft. I.

ZEITSCHRIFT FÜR PSYCHOLOGIE UND PHYSIOLOGIE DER SINNESORGANE, LXII, 1 u. 2: G. Heymans u. E. Wiersma, Beiträge zur speziellen Psychologie auf Grund einer Massenuntersuchung (Siebenter Artikel); Otto von der Pfordten, Empfindung und Gefühl; W. Frankfurther u. R. Thiele, Über den Zusammenhang zwischen Vorstellungstypus und sensorischer Lernweise.

LXII, 3: Auguste Fischer, Neue Versuche über Reproduzieren und Wiedererkennen; Literaturbericht.

REVUE PHILOSOPHIQUE, XXXVII, 8: J. Segond, L'idéalisme des valeurs et la doctrine de Spir; L. Depuis, Les conditions biologiques de la timidité; W. M. Kozlowski, La réalité sociale; L. Robin, L'oeuvre philosophique de V. Brochard.

XXXVII, 9: A. Chide, La notion du miracle; G. Seliber, La philosophie Russe contemporaine (2° et dernier article).

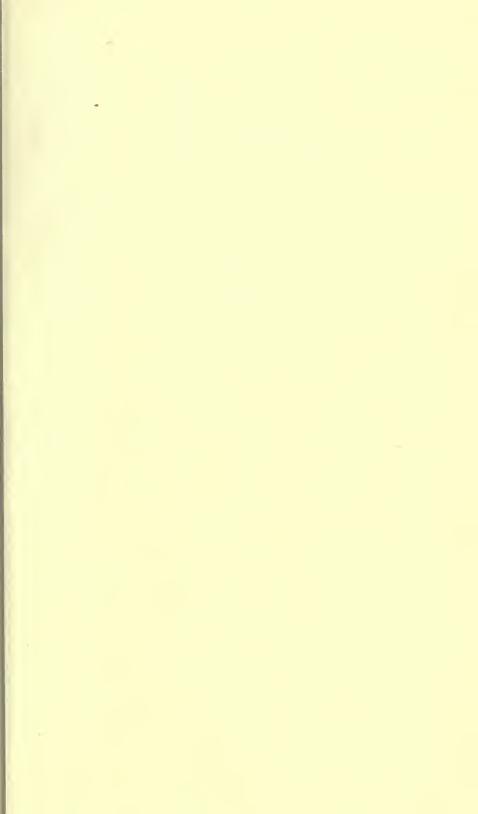
REVUE DE PHILOSOPHIE, XII, 8: S. Belmond, L'Univocité scotiste (second article); A. Huc, Névrose et Mysticisme. Sainte Térèse relève-t-elle de la pathologie? (second article); E. Peillaube, Théorie des émotions.

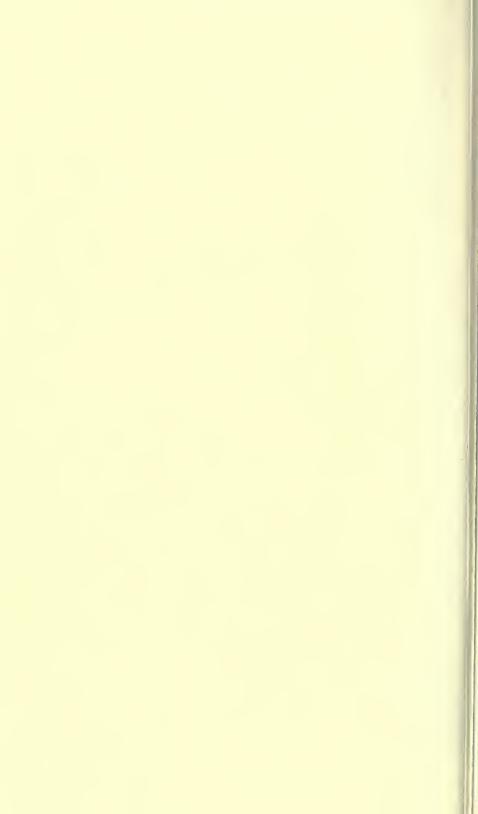
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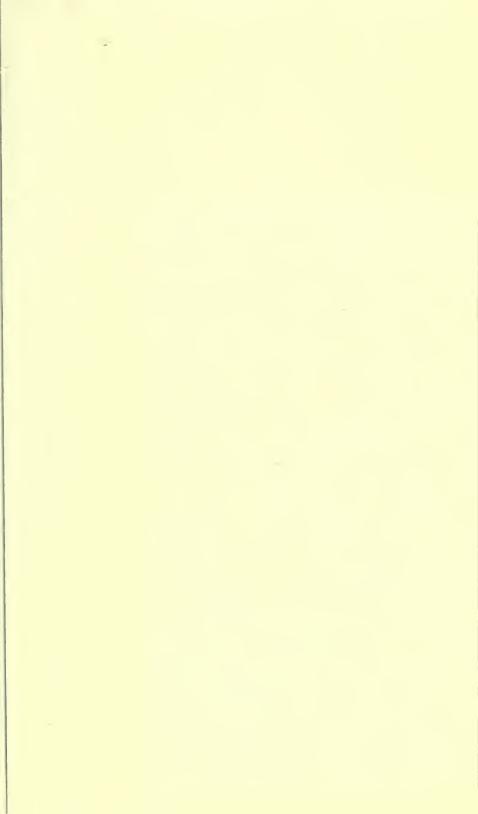
REVUE NÉO-SCOLASTIQUE DE PHILOSOPHIE, A. Farges, La notion bergsonienne du temps; H. Lebrun, Néo-Darwinisme et Néo-Lamarckisme; M. Grabmann, Le "Correctorium corruptorii" du Dominicain Johannes Quidort de Paris; M. DeWulf, Ouvrages recents sur l'histoire de la philosophie médiévale en Occident; M. DeWulf, Le Mouvement néo-scolastique.

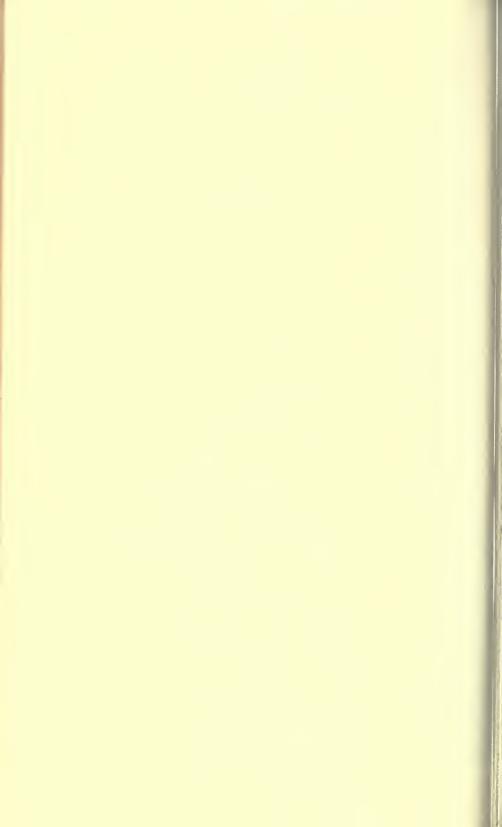
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RIVISTA DI FILOSOFIA, IV, 3: Giuseppe Tarozzi, Empirismo filosofico; A. Faggi, Il pensiero; Giuseppe Paladino, Per l'edizione critica della "Citta del Sole" di Tommaso Campanella; Ferdinando Belloni-Filippi, Il Paticcasamuppada; Aldo Mieli, Scienziati e pensatori di Kyrene.









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