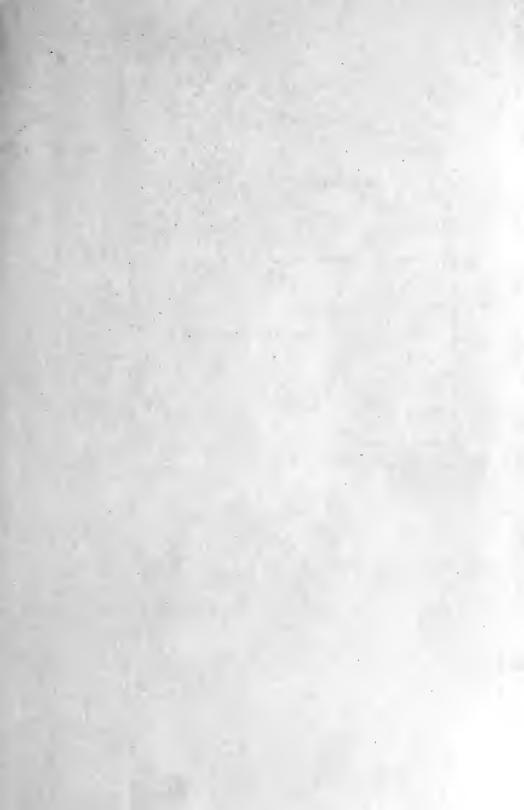
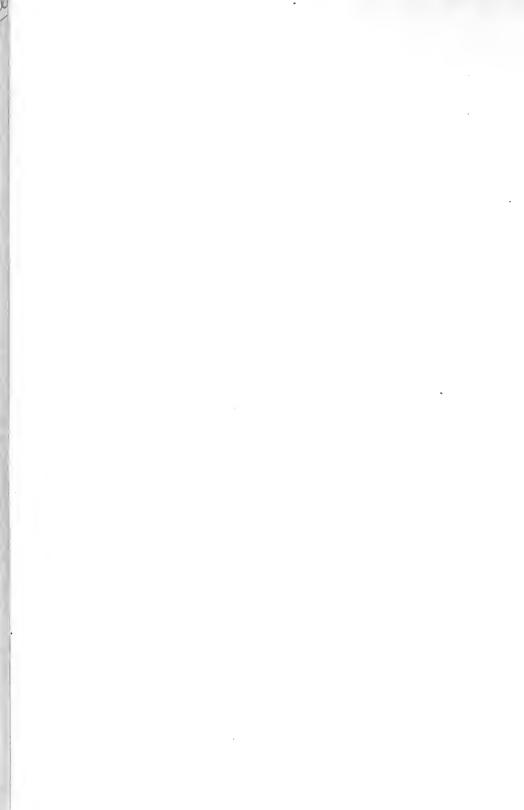


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THE JOURNAL

OF

SPECULATIVE PHILOSOPHY.

Vol. VIII.

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No. 1.

ROSENKRANZ ON HEGEL'S HISTORY OF PHILOSOPHY.

Translated from the German of Dr. K. ROSENKRANZ, by G. S. HALL.

The third great work which Michelet elaborated from Hegel's posthumous papers was the History of Philosophy. This subject was treated with very unequal merit in its different parts. Ancient philosophy is treated as a totality, and its presentation is quite uniform and is made from original authorities; that of the middle ages is very inorganic, and is composed from secondary sources and with the manifest wish to get through it as quickly as possible. Recent philosophy again is studied exhaustively from original sources, although more according to the chronological succession of the chief systems than in a proper historicogenetic bearing and construction. Often there are only extracts from cardinal works, with brief introductions and critical remarks, which give a rich fulness of insight in pithy, characteristic words; and the readiness with which he assumes a kind of frank superiority aids him here to the most happy and vigorous periods.

Hegel prepared for no other undertaking so carefully as for this History. He exhaustively wrought out the determination of its domain, its distinction from related departments, its position in the system, its divisions, its ordinary conception, its sources, and its necessary method of treatment. The History of Philosophy records facts, but facts which are thoughts, and not merely thoughts in general, but such as have the conception of the absolute for their content; if it states, in a merely objective way, that a philosopher then and there taught this or that, it remains without a connective idea. It should rather show how the thoughts of different philosophers are developed from one another, what relation subsists between the false and the true in a given philosophy, and how progress cannot refute its previous stand-point as a mere error without at the same time confirming its positive content. All philosophies in and for themselves are only philosophy itself. The system of philosophy must integrate all stand-points as organic moments, as categories of its different spheres.

Philosophers do not elaborate their systems apart from all connection with universal history. It is often thought that they project unique ideas of God and the world from purely speculative idiosyncrasy, while in fact they stand in the most intimate relation with the spirit of peoples and with the movement of mankind. They seek to fathom, by solitary reflection, that which more or less engages all contemporaries, and to express with all possible clearness what is often the open secret of the age. When the sequence of philosophical systems appears only as a gallery of fortuitous opinions, nothing seems more comfortless than the study of the history of philosophy, and nothing but superficial skepticism, the profane stand-point of a Pilate, can be the result. Criticism, according to Hegel, does not consist in applying the measure of one presupposed system upon another, or upon all systems. It should arise from the development of a system as its own critique, in which the consequences of its stand-point reveal the imperfections which it involves, and at the same time disclose the positive germ which constitutes its imperishable truth and thereby its historic right. Philosophy must be learned from the history of philosophy. Hegel would say that philosophy, as well as every other science which has a name-or, as we often say, an authority-may recall a necessary and eternally true conception. Harvey and the discovery of the circulation of the blood, Copernicus and the true theory of our planetary system, are synonyms. So too, in philosophy. The Eleatic stand-point

and the conception of self-identical Being, Plato and the conception of true, affirmative dialectics, Aristotle and the conception of teleology, &c., are all identical. Were this not so, philosophizing would be entirely without results, which is indeed a very common view of it, ascribing to it at most the utility of a certain formal exercise of thought. The highest system is not merely an external summation of foregoing systems, but their vital unity, which sublates them into itself, and thereby acquires for itself new illumination and a relatively changed significance. Hegel claimed to have harvested into his own the truth of all preceding systems, and not merely to have gathered them synthetically into a syncretistic aggregate, but rather to have posited them at the same time analytically with immanent dialectics and as selfproducing and cancelling moments of the totality. It should not be imagined, as it often is, that he expected to find, point for point, in history the sequence of the determinations of his system, or, in its determinations, to find the temporal succession of philosophers, although on the whole a marked coincidence might be admitted. In a philosophy one side of the absolute will be emphasized as its qualitative element, but from it the philosopher will seek to apprehend and present the whole; as Plato not only established the conception of dialectics, but from it sought to develope the conception of nature and mind.

In the perfect and clear consciousness which Hegel had concerning the process of the history of philosophy down to his own time, he stands alone among modern philosophers: I say modern, because among the ancients Aristotle took a similar position, as his Introduction to Metaphysics and his other numerous references to other philosophers show. Leibnitz also was unusually well versed in the history of philosophy, as his treatise *De arte combinatoria* especially shows; but he lacked the proper conception of its inner connection, which gave Hegel so great superiority and externally so great repose. Brucker, Tennemann, and Buhle, Hegel's predecessors in this department, were perhaps superior to him in the extent of their erudition, but they lacked depth of speculative penetration, imitative vitality of reproduction, and the sharpness of universal criticism, which is not confined

within the circle of Wolffian or Kantian categories. When Hegel expounds foreign systems, he does not merely quote the decisive words in the language of the original—all the others do that—but he translates and expounds them; and it is this attempt at correct objective apprehension which throws a charm over such passages, as well as the exquisite tact with which he discriminates between the essential and the unessential, the philosophical and the unphilosophical.

According to human seeming, it is much to be regretted that Hegel was not himself permitted to bring the history of philosophy out of the crude state of lecture-manuscripts to full maturity and perfection for the public. What an entirely different finishing it would then have received, and how the grouping of single parts would have been transformed! As it is, it is invaluable, and has exercised a most abiding influence upon the elaboration of this discipline. In its philosophical content it is classic, but in form it is imperfect. From single extracts we may compute what he sought to have achieved. His presentation of Plato's system, made with such predilection and perfection, deserves especial praise. Other historians, e.g. Brandis, in his history of ancient philosophy, has presented a very true and comprehensive picture of the Platonic doctrine, but it is dry and cold; so that, with all the citations which he printed under the text, we can attain to no vital understanding, to no penetration into the real essence of Plato's system. The poetic endowment and the mythbuilding phantasy of Plato have been ever admired, but where, down to Hegel, do we find a single rational word concerning the relation of this mythic system to speculation proper? Hegel does not merely refer, but, as a philosopher, coöperates in the formation of a principle; he strives with the striver, and this invests his statements, even where resthetically they are unsatisfactory, with an infinite charm. We feel ourselves transported to the secret laboratory of thought where mind thirsts for knowledge. How many and voluminous reproductions of Spinoza's Ethics and of Kant's Critique of Pare Reason we have had within the past century, and how weary we became in reading them, and how duped with the expectation that now the true light was about to dawn upon us; while the brief, somewhat slovenly presentation of Hegel, penetrating however with freedom into the ground of the subject, enlightens us at once! This he didoften, with a sort of rude pedagogical manner, even in dealing with the greatest philosophers.

It might be expected in the construction of this History that Hegel would divide it into Oriental, Antique, and Christian. This he essentially did. Yet he is unwilling to recognize Oriental philosophy. He makes a beginning first with the Greeks because they first formed states with free constitutions, and true philosophy is impossible without political freedom. He discourses nevertheless upon Chinese and Indian philosophy. It has been often remarked that the abstractions of the Oriental world do not suffice for the critical estimates of concrete history. The Chinese and Hindoos have not philosophized like the Greeks, but they have philosophized. The Chinese, as rational moralists, have cultivated practical philosophy; the Hindoos, as essentially religious men, have cultivated metaphysics and psychology. How can the Chinese Mengtseu, who vindicated to the inhabitants of a state under certain conditions the jus revolutionis against their prince, from the conception of the state, be called other than a philosopher? This he did not do as a poet, or a prophet, or a priest, but as a prosy-thinking Confucian.

Or, among the Hindoos, can Kanada, whom Hegel mentions on account of his doctrine of categories, be refused the name of philosopher? After all it avails nothing, especially since the further investigations in this domain since Hegel's death, to seek either to ignore or to exclude the Orientals; for they have philosophized, though they have taken a lower standpoint than the Greeks.

The History of Ancient Philosophy is Hegel's historical master-piece. Details may be disputed, here and there he may be corrected and supplemented, as Zeller has done; but in essentials he is correct, and in the delineation of details he is unsurpassable. He preserves his power to the end, while that of historians often falters before Neo-platonism. They generally excuse themselves by loudly disparaging it as eclecticism and mysticism, so that we seek in vain for a clear conception of it, and are lost in wonder that philoso-

phers like Plotinus and Proclus, who have evidently studied Plato and Aristotle profoundly, should have erred so extravagantly.

The History of Mediæval Philosophy, in spite of a few genial touches, is the weakest of all his works. He had a general dislike for the middle ages. To him it was an age of barbarism, where little that was congenial was to be found. Erdmann, a follower of Hegel, in his admirable text-book on the History of Philosophy, has especially treated scholasticism after the French, e.g. Cousin, Rousselot, Hauréau, and others, had preceded him.

Respecting Hegel's disposition and criticism of Arabic and Jewish philosophers there is much to be said, but this would take us too far from our proper theme. We must conclude the same also with reference to the History of Modern Philosophy. It is too desultory, and lacks, from the effort at compendious abridgment in order to hurry through with the material before the end of the semester, a formal completeness. It becomes, in fact, even more difficult to follow and describe the movements of thought in Modern Europe, because, by the mediation of printing, the diffusion of systems has become much more rapid and wide, and extends from nation to nation in a way and to a degree which cannot be estimated, so that a wide margin must be left for chance; but especially because religious (or more properly ecclesiastical and political) interests now play so great a part. The crossing of systems, and the number of hybrid formations and of syncretic mediation, as well as the numerous efforts which have the appearance of originality, but which are often the misunderstood reproductions of long anterior systems, grows towards infinity. How much of all this mass deserves notice? literary historian of philosophy is unquestionably bound to register subordinate and even inferior authorities, the philosophical author must be allowed to confine himself to the epoch-making central figures. If principles are strictly adhered to, the divisions of the history of philosophy, in accordance with those of universal history, will be found to arrange themselves very simply about the antithesis of ethnicism and monotheism, and their sublation into Christianity.

I. The Philosophy of Ethnicism.

Chinese philosophy; realism.
 Indian philosophy; idealism.

3. Græco-Roman philosophy; ideal realism.

II. Philosophy of Monotheism.

The Jews and the Mohammedans have themselves produced no independent philosophy, because they were under no necessity to do so. Only by contact with the Greeks were they impelled to make the attempt to construe the world of thought in accordance with their faith, as was first done by Philo with extraordinary acuteness and with remarkable phantasy. The vast number of the philosophical writings of the Arabians must not make us forget their dependence upon the Greeks. All finally centres about the substantive and operative predicates of God. Christian scholastics have borrowed from the Arabs and Jews, but the converse has never taken place. Christians quote Averrhoës and Moses Maimonides, but Arabs and Jews do not quote Abelard and Thomas Aquinas.

III. The Philosophy of Christianity.

A. First period: the philosophy of faith. 1. Gnosticism. 2. Patristic philosophy. 3. Scholasticism.

B. Second period: philosophy as an independent science. 1. The reaction of national individuality against ecclesiastical scholasticism. (a) Dogmatism in Italy; Platonic in Florence, Peripatetic in Lombardy, individualistic in Campania. Bruno, Vanini, Campanella. (b) Skepticism in France; Pierre de la Ramée, Sanchez, La Mothe le Vayer, Montaigne, Charron, Gassendi. (c) Empiricism in England; Bacon of Verulam (already anticipated by the scholastic Roger Bacon). (d) Theosophy in Germany; Paracelsus, Weigel, Jacob Böhme. 2. Philosophy as a rational science. (a) The idealism of the principle of substantiality; (α) Cartesius, (β) Spinoza, (γ) Leibnitz. It recedes partly into mysticism and scholasticism. (b) Realism of the principle of subjectivity as éclaircissement of the understanding; (α) in the sensism and skepticism of England, (3) in the materialism and atheism of France, (7) in the eudæmonism and deism of Germany. (c) Kant's critical idealism and the systematic formation of philosophy resulting therefrom.

Let this simple outline be kept in mind and it will not be difficult to group into their proper place all the enlargements of a principle, its amalgamation with others, its often striking correlation with seemingly contradictory potencies, without forced or artificial constructions. What Hegel says respecting individual thinkers is always profound, but his construction is not free from confusion, and often conceals the natural course of development which he followed. What is individual also naturally finds its proper place in the epochs here indicated, and thus the colossal genius of Kant, who first grasped together the antithesis of the subjective and objective principle in a truly scientific synthesis, may be recognized even more justly than it has been done by Hegel.

The history and the absolute system of philosophy should, according to Hegel, cover the same ground. There should be found in history no system, of which the principle wherein lies its truth and its justification, cannot be proved to be an organic moment of the systematic totality. Thus the history constitutes the critique of the system of philosophy, and the system the critique of the history. By this, of course, it is not to be understood that the same stand-point may not be empirically repeated in history, i.e. Pythagoreanism, Platonism, Epicureanism, Stoicism, Scholasticism, Materialism, &c., may appear repeatedly, and thus far they belong to history; but, first, they would always appear in new connections, which, in the general identity of its principle, would individualize it again and again; and, secondly, they would always be final stand-points to which history had advanced from former stand-points which here became merely relative. Hegel himself furnishes a very plain example of this. In his characterization of Proclus, it is plain that he fully accords with him in his general apprehension of the idea as a triad of triads. He commends Proclus because he so affirms the unity of the absolute that every triad within its own peculiar domain is at the same time a totality, because otherwise they could not harmonize with one another. He commends him because he distinguished triads as essence, life, and mind (οὐσιοδῶς, ζωτικῶς, νοεμῶς εἶναι). He commends him because. in the conception of essence, following the Philebus of Plato, he distinguished limit, the unlimited, and measure (πέρας.

άπειρον, μέτρον, or, as Proclus says, συμμετρία), precisely as Hegel himself began with the categories of quality, quantity, and measure. He commends him because he characterizes the νοῦς as the return (ἐπιστροφή) to the logical idea, just as he himself did, &c. Is Hegel's system, therefore, a mere repetition of that of Proclus? Certainly not. Contrasted with Hegel's system that of Proclus is only an abstract sketch with tedious and diffuse dialectics, with nature wrapped in shadows, and with a superabundance of artificial theology, while the logical idea of Hegel becomes real flesh and blood, and freedom organizes itself into the concrete form of the State. Mention had often been made of a law in the History of Phi-Dogmatism, skepticism, and criticism; or objectivity, subjectivity, and the absolute; or idealism, realism, and ideal realism; or analytic, synthetic, and eclectic systems, had succeeded one another; it is also quite right to discern such connections, because every one-sidedness engenders its antithesis, and the antithesis demands sublation into a higher unity, but, since the element of chance pervades history, no scheme can be established as an unconditional norm without incurring the danger of putting a forced construction upon facts. The principal fact ever remains that every system does criticize itself in its own consequences, and thus aids in producing from itself a relatively higher stand-point. This Hegel saw more profoundly than any of his predecessors, and explained most admirably, in the Introduction to his History, as the conception of the development of philosophy. This idea embraces what is sought for under the name of a philosophy of the history of philosophy, or a law for its process. Because Hegel believed that he had articulated all essential stand-points, of both previous and contemporary systems, into their proper place in his system as organic moments of the idea, he rightly regarded it not merely as the most perfect and complete, but as the most critical, because a vital unity pervaded all parts of the whole, and thus, in an immanent way, brought to bear, not only positively but negatively, a criticism of details.

COMPLETION OF THE HEGELIAN SYSTEM IN THE SECOND EDITION OF THE "ENCYCLOPEDIA" IN 1827.

The exoteric occasion of a new edition of his Encyclopedia determined Hegel to make his system as accessible as possible from without. This he could not do without foregoing further discussion upon its subject-matter, and striving to give to it a finished and final form. This edition, which was completed but a short time before his death, remained unaltered. He added a new chapter to the Introduction, in which he presented the attitude of thought towards objectivity, as metaphysics of the understanding, as empiricism, as critical philosophy, and as immediate knowledge. He gave greater scope to philosophy of nature, psychology, and to practical philosophy, and shed light on many questions of the day, e.g. the relation of philosophy to religion, the conception of state constitutions and of the budget, and in how far the name law was unfitting for a pecuniary grant, &c. The simple articulation of the whole suffered from the addition of these didactic ornaments.

His Philosophy of Nature, a department of such intense interest for our age, was printed, in the general edition of his works, with the appendices which Michelet gathered from Hegel's lectures in this field. Valuable as these are, it is still to be regretted that he did not treat this science as exhaustively as he did the Æsthetics, or Philosophy of Histotory, or the Philosophy of Religion. The form of a commentary upon paragraphs as they occur in a text-book brings unavoidable repetitions, misplacements, and, from the nature of the material treated, great contingency. In the sciences of organic nature these appendices sink to the rank of mere extracts which Hegel had made, for the purpose of his own study, from Treviranus, Authenrieth, Bichat, &c. We may, however, hence infer to how great an extent, and with what extraordinary attentiveness, he pursued empirical sciences, while at the same time the wish becomes strong to see this mass more clearly and sharply organized. We may conclude from many merely casual and passing expressions that Hegel was not wanting in a poetic sense for nature, as is often affirmed of him; but that the picture of the phenomenon, which hung before him clear in all its most exquisite details, became often very loosely bound by its logical frame, and that much which is admirable and original—which indeed is often found—did not attain to the reality to which it was entitled on account of this incompleteness. It is to an Italian philosopher, August Vera, that the great merit belongs of having translated Hegel's Philosophy of Nature into French, and of furnishing it with an admirable commentary in which the peculiarity and fruitfulness of Hegel's intuitions on nature are convincingly exhibited.

Recent natural science declares that nature can be conceived only atomically. It is resolved, it asserts, to proceed only empirically; its method must be inductive, i.e. analytical. An atom however is an hypothesis, for experience cannot make it a subject of observation. Instead of being empiric, it is also metaphysical; instead of being inductive, it is deductive. The atom, it is said, is matter as the infinitely small, which is absolutely unchangeable. In order that a movement of atoms may become possible, a void must, in the second place, be postulated for it, which the originators of this doctrine quite rightly did. This void modern thought has determined to be not merely space but æther. then, ether must be distinguished from space, it has been found necessary to make it also consist of atoms, so that we have on the one hand the atoms of æther, and on the other the atoms of concrete materiality. In order that they may not be idle, a repellant force is ascribed to the former and an attractive force to the latter. All these fictions aim to give to the phenomena of nature a purely mechanical basis, and to subject them to the laws of the calculus. Since physical and especially chemical processes cannot thus be reached, a warm envelop has been ascribed to atoms. Thus they are made small planets.

All the real progress of recent natural science has been made by observation conducted according to the conclusions of induction and analogy. The atomic theory and its calculus has contributed nothing to this progress, but has rather obstructed and limited it. The category of quantity is in great requisition for the processes and forms of nature; but this must not, because it necessarily contains the extremes

of the infinitely large and the infinitely small, be identified with atomism.

The Hegelian philosophy of nature is very far from undervaluing mathematics. It has expressly accepted it as a moment of natural science, but, in place of the artificial constraint which is put upon natural phenomena by premature expression in number, it seeks to posit the realism of spontaneous self-formation. The work of arithmetical formalism depends only upon the facts upon which the computations are made. If the former are false, the latter are barren. Very important rectifications, e.g., have become necessary in modern astronomy for the distances between the sun and the planets, as a result alone of a more accurate measurement of the velocity of light.

Hegel attempts to apply dialectics to the scientific treatment of nature. He did this himself in a very imperfect way, but there is no doubt that science will be compelled to come back eventually to this method. He distinguishes (1) Mechanics, (2) Physics, (3) Organics. If we put in their place the content of these special sciences, we shall have (1) Matter, (2) Force, (3) Life. If we translate these conceptions into abstract categories, they will read, (1) Substantiality, (2) Causality, (3) Teleology.

According to the Hegelian method, each of these spheres has an immanent conformity to law in itself, which becomes phenomenal (1) as weight, (2) as qualitative change, (3) as determination of form. But these differences sublate themselves, as consecutive, both forward and backward. truth of matter is force, and the truth of force is life. Life, as the absolute end of nature, presupposes the other spheres as its conditions. Of late only matter and force are talked of, though form is equally important in nature, because, by virtue of it, first the individual, and then life, become possi-Organic cells are now treated atomically in order to construct organisms as mere mechanisms from them, but the cell is essentially an individualizing power developing itself into a distinct shape. It is not enough to say that organism is endowed with vital force, for the former is, through and through, the nisus formandi, according to Blumenbach, or inner conformity to an end, according to Kant.

Hegel's apprehension of the conception of life is profound, but its depth is but little elaborated in the extent of the thousand-fold forms of nature, i.e. all morphology is omitted.

Hegel believes the earth to be the only star upon which life exists. This 'may easily excite surprise, and it is readily admitted that, empirically, we cannot know whether or not organic beings exist upon other stars, e.g. Venus and Mars. As a strict systematizer, however, he could not do otherwise than vindicate to the Earth this superiority. Bessel, in a treatise on the physical constitution of the world, and Whewell, in his "Plurality of Worlds," have arrived at the same result. The further conclusion that, in the entire universe, a history has been unfolded only upon the Earth, is unavoidable.

The infinite multiplicity of the heavenly bodies did not embarrass Hegel. This he regarded as a "mere" infinity which was no more imposing than the infinite multiplicity of infusoria, or insects, &c. He disapproves of the measureless admiration of natural phenomena which placed them above the productions of mind. Thus a tiny infusorium, because it was a living individual, stood infinitely higher than a constellation which is inorganic, although ever so gigantic in its mass.

INTRODUCTION TO SPECULATIVE LOGIC AND PHILOSOPHY.

By A. VERA.

CHAPTER III.

§ 1. Preliminary Remarks to Legitimate Logic.

We may now dismiss old Logic as artificial, arbitrary, and inadequate for the attainment of truth, and turn our attention to legitimate and rational Logic and to the principles upon which it must be firmly established.

First of all, it ought to be borne in mind that if there be a logical Science, it must be an absolute Science, or a part or division of the absolute Science. And by absolute Science, I mean a Science which inquires into, and is adequate to, the

absolute and eternal nature both of thought and things. For neither thought which is not the right thought of its object, nor the object which is not rationally thought, is science. Nor is it science if it is thought which is not an absolute, but a limited, transient, and accidental thought. Thus in dividing, defining, classifying, in deducing Ideas, or in affirming the Infinite and describing its attributes, either thought grasps and defines the inward and immutable nature of things, in which case there will be science, or it performs mental operations which are not necessarily and inwardly connected with the nature of things, in which case there will only be the shadow of science, nay, mere delusion and phantoms of the imagination.

This shows how unfounded is the division, generally admitted, of Truth into logical and metaphysical truth, a sister distinction to that we have just exploded between Reason and Reasoning. For it will be easily perceived that if Logical truth, whatever it may be, is not an absolute truth, it is no truth at all. If, on the contrary, it is an absolute truth, it possesses in its own sphere and attribution a worth and importance equal to that of Metaphysical truth—indeed it is itself a metaphysical truth. In fact, if there be an absolute Science, this Science must be Logic. All sciences presuppose Logic, whilst Logic presupposes none. All sciences avail themselves of logical processes and notions; nor could they attain their own peculiar object without bringing them into action, as it were. Even taking Logic as it now stands, it is easy to see that all sciences-Mathematics, Physics, Ontology. &c.—borrow from it a part of their own subject-matter. And by borrowing I mean this, namely, that all Sciences make, and cannot but make, Logical principles and substance (if I am allowed the expression) a part of their own substance, like the plant that borrows from surrounding elements strength and life. And as earth, air, and light, constitute an integral part of the plant's life and nature, so Logic must be considered as a necessary and essential element of all Sciences, and consequently of all Thought and Being. In fact, it would be irrational and inconsistent to admit that Logic is the universal organon of truth, that there is no . being that can be apprehended or understood unless it goes

through some logical process, and to refuse at the same time to Logic all objective and consubstantial connection with the very being known through it. Indeed, if we look closely into the subject, we will perceive that, by taking this view of Logic, we admit that there are two Logical sciences, a Logic eternal and absolute, according to which things are made, arranged, and thought; and a Logic finite, accidental, and arbitrarily contrived for our special use and purpose. But then we must give up Logic—and, with Logic, Science—as useless and deceptive, and as holding out expectations it is absolutely unable to fulfil. For we use it in the expectation of attaining through it the real knowledge of things, and actually find that our knowledge has no other foundation, nor any other object, but our own transitory notion, and the negative and limited conceptions of our mind.

In order to arrive at a correct view of Logic we must, therefore, view it as a Science in the strict sense of the word, viz. as a Science of *Knowing* and *Being*, whose principles constitute at once the principles of thought and the principles of things; so that if we were, for instance, to realize it as the Science of *Form*, we should not consider the Form, as old Logic does, namely, as a merely *subjective Form*, but as a Form embracing the twofold sides of existence—the subjective and the objective, thought and the thing thought—in the unity of its nature.

§ 2. On Science in general.

As Logic, whatever be its importance, constitutes only a part of the Absolute, or of the Absolute Science, we cannot form a clear notion of Logic unless we give an insight into Science in general, its conditions, its bearing, and the part it plays in the constitution and the existence of the Universe.

(a) Is there an Absolute Science?

If there be an absolute Science, this must be the Science of the Absolute, and, vice versa, if there be an Absolute, there must be an absolute Science. For an Absolute without an absolute Science is no absolute, and an absolute Science without an absolute object is not an absolute Science. The absolute Science and the Absolute, the absolute thought and the absolute object of thought, are therefore reciprocally and

inseparably connected, or, to speak more properly, are the two sides of one and the same being. The question now is whether the Absolute is within the reach of the human mind; and as it is a question of vital importance, and bearing upon Logic as well as upon Science in general, I will dwell at some length upon it.

The opinion respecting the capability of the human mind to attain absolute knowledge may, I think, be divided into three heads.

First, there are those who entirely refuse to the human mind the power of reaching the Absolute. The Absolute, if it exist, they argue, is a *Deus absconditus;* it is a Being into whose ineffable and inscrutable nature no human eye can penetrate. In fact, is not man an imperfect and finite being? How, then, could be comprehend the Perfect and the Infinite?

Secondly, there are others who steer an intermediate course. These do not say that we are refused all knowledge of the Absolute, but that our knowledge does not extend beyond its existence. We know that the Absolute is, but we are not allowed to know what it is, and to have an insight into its nature, its attributes and perfections.

Finally, others go one step farther, and admit that we are capable of apprehending both its existence and some of its attributes, as, for instance, that it is Infinite, All-powerful, All-wise, &c., without being able to reach the very length, the essence of its nature, nor to determine clearly and in a positive manner what these attributes are; and consequently, according to this tenet, we would know that the Absolute is All-wise, Omnipotent, &c., without comprehending what omnipotence, all-wisdom, &c., are.

Although these doctrines seem, at first sight, to stand on different bases, and to represent different opinions, they start in reality from the same point of view—the inadequacy of the human mind for the attainment of absolute knowledge; and lead to the same result—the negation of Science, or Skepticism. Indeed the two latter, though apparently more comprehensive and more condescending, as it were, towards the human mind, labor, when compared with the former, under the disadvantage of inconsistency; and the third, which seems to conciliate matters and to hit upon the right solu-

tion is the most inconsistent of the two. In fact there is no inconsistency in affirming that man's mind is utterly inadequate for absolute knowledge. There may be error, but there is no inconsistency; whilst in the other two opinions error is coupled with inconsistency, as they state both, and the latter more explicitly than the second, that man can reach the Absolute, and then they take up, so to speak, the opposite thesis, in the same proposition, and state that he is unable to reach it; and although the inconsistency does not appear in the expression, it is not the less involved in the real meaning.

The second doctrine teaches that we are allowed to know that God is, but we are forbidden to advance a step farther. If we were to trace the origin of this doctrine, we should find that it arises from a superficial view of the subject, and from an application equally superficial and erroneous of the analogical and inductive process to absolute knowledge. Here is a tree, or an animal, or myself. As I can affirm that a tree is, or that I am, without knowing the nature of the tree or my own, so likewise can I affirm that God is, although I may be unable to comprehend His attributes and nature.

Now this manner of arguing is erroneous and deceptive even within the sphere of experimental perception. For the perception of the existence of all objects which come within the pale of experience is inseparable from the perception of some of their qualities; as, for instance, that the tree occupies a portion of space; that it has color, leaves, &c.; and its existence is made known to me through some of these qualities. Nor am I conscious of my existence save by apprehending myself either as a thinking, or as an active, or as a sensitive being. Now this connection between the existence and the attributes of a being is still more intimate and inseparable in God. For when we say that God is, we do not mean that He is like anything finite, or falling under the senses, but that He is in such a manner as is conformable with the perfection of His nature. Consequently, the affirmation of the existence of God involves already the apprehension of the manner in which God exists, that is to say, of a part or aspect of the Divine nature. Besides, when we state that God is, either the word God is a mere word, an empty sound, and then the proposition means nothing; or it has a meaning,

and then it means that the Absolute, or the Perfect Being, or the Ens realissimum, etc., is: i.e. it expresses some essential and necessary attribute of the nature of God. In fact, in God the Esse essentiæ and the Esse existentiæ, to use the expression of Schoolmen, are more intimately blended than in finite beings; so that in God to be and to be such is one and the same thing. Nor could He be if He might be otherwise than He is, and, vice versa, were He otherwise than He is, He could not be. Consequently, to apprehend that God is, is to apprehend, in a certain manner, what He is; and to pretend that we can apprehend that God is, and then to say that we are not allowed to know what He is, is to deny in the second part of the proposition what we have admitted in the first.

With respect to the third doctrine, it will be easily seen that it is still more inconsistent and arbitrary; for it states that we are allowed to apprehend a part only of the Absolute, and then it adds that even this part is known to us negatively; which means, in reality, that we do not know it at all.

With regard to the first part of the proposition, namely, that we know, or are capable of knowing, a portion, a certain number of the attributes of the Absolute, but not the whole of His nature,—it will be observed that those who hold this doctrine break asunder artificially and arbitrarily the unity of the Absolute, and, after having thus disfigured, nay, annulled the absolute, say, this part of the absolute we can know, and this other part we are not allowed to know. But how can they say that there is a part, a sphere in the absolute which is beyond the reach of the mind, if the mind has no notion of it? If, on the contrary, the mind has some notion of it, how can they say that it is beyond the reach of the mind? Besides, is it not one and the same mind that apprehends in the one and the same absolute both the part which is known and that which is supposed to be unknown? If so, how could I affirm that the part supposed unknown in the absolute belongs really to the absolute, and constitutes the highest sphere of its nature and existence, if I have not actually, or am not allowed to have, any knowledge of it! The fact is that the absolute cannot be so dismembered; for, such is the unity of its nature, that of the Absolute, more

than any of other being, it may be truly said, that, if we cannot know all, we can know nothing of it.

But even granted that it would be rational to admit that we know only a part of the Absolute,—if the knowledge we possess of it is merely a negative one, such a knowledge is, in reality, no knowledge at all. In fact, to possess a negative knowledge of a thing, is not to know what this thing is, but what it is not. For instance, to have a negative knowledge of the triangle is not to know what the triangle is, but that the triangle is not a square; or to have a negative knowledge of a tree is not to know what the tree is, but that the tree is not a mountain; or to have a negative knowledge of the good is not to know what the good is, but that the good is neither the evil, nor the beautiful, nor any other thing. This manner of arguing seems, at first sight, quite plausible; for although I do not know, one would say, what a man is doing at the present moment, yet this I perfectly know, that he is neither writing, nor reading, nor sleeping, &c. All the strength of the argument lies in the assumption that we are able to know what a thing is not without knowing in any way what it is. Now it is quite plain that we cannot state what a thing is not unless we know in some manner what it is unless, in other words, we possess some positive knowledge of it. For I must know in a positive manner what a man is to affirm that he is neither writing nor sleeping, &c.; nay, I must know that writing and sleeping are parts of his nature. And this connection of positive and negative knowledge is still more inseparable in matters eternal and absolute. To say that the Infinite is not the Finite requires that I should have some positive notion of what the Infinite is. And it is by comparing the positive notion of the Infinite with the Finite that I am enabled to draw the conclusion that the former is not the latter. Had I not some positive notion of the Infinite I could neither affirm that the Infinite is, nor that it is or is not in such and such a manner.

The fact is that we cannot consistently conceive two Sciences, an absolute science and a science which is not absolute—not any more than we can admit two Reasons, the human Reason and the Divine Reason, as substantially distinct. For by admitting two Reasons we would not only

admit that one Reason knows what the other does not know -a difference which exists within the limits of the human Reason and between man and man-but that what is knowledge and truth to the one is not, or may not be, knowledge and truth to the other. For if the Reason which apprehends mathematical or any other truth, in man, is not the Reason which apprehends the same truth in God, or if the Reason by which man apprehends God is of a different genus and substance from that by which God apprehends himself, all human knowledge is a mere delusion. Indeed all relation between God and man is at an end if God's and man's Reason does not flow from one and the same principle. And this would strike at the very root not only of Science but of Revelation also; as where there is not a community of nature, some identical faculty between the master and the disciple, there can be no teaching possible, let this take place either through an inward inspiration from mind to mind, or by word of mouth. Therefore the only solution of the problem—the solution which alone will be found, upon an impartial and close examination, consistent with science, religion and truth -is that the divine and the human reason, springing from one and the same source, are, as to their essence, one and the same reason.*

(b) Nature and Characteristics of Science.

To the uncultivated and unscientific mind Science appears as an accident, and a kind of superfluous luxury which is not required by any inward want or necessity of human nature. This is the point of view of purely sensitive life belonging to the undeveloped and elementary stage of existence, either national or individual—to what we might call the state of childhood and nature. Here the satisfaction of physical wants appears as the law of life. For, to quote the argument in its popular and crude form, there is necessity in eating and drinking, and in removing all unpleasurable sensation; but there is no necessity in learning.

However, man soon feels that physical life is not the supreme object of his existence, that there are wants of a higher order and more cognate with his own nature than physical

^{*} See also on this question my book, lately published, "The Problem of the Absolute."

wants, and that the satisfaction of the former is a duty as imperative, nay, more imperative, than the satisfaction of the latter. For it is this that makes him what he is, a being who by his mind holds swav over the inanimate and brute creation, adapting it to his spiritual as well as to his material wants, elevating thereby the latter to a higher dignity, and imparting to them such beauty and perfection as they would never have possessed had not the mind stamped them with its own perfection. Here man acknowledges Science and reverences it. He acknowledges that Science is an object of paramount importance either as a moral and intellectual necessity, or as a source of the purest enjoyment, or as a means of conquering the blind and unruly forces of Nature. Now this acknowledgment is nothing else than the actual expression and manifestation of the idea of Science. In fact, the idea or notion of Science is, like the ideas of the Infinite, of the Beautiful, of Justice, of Number, &c., a primitive, objective, and necessary attribute of the mind; or, more exactly, it is a notion that springs from its very essence, and is more intimately inherent in it than any other notion, principle, or law. For it may be truly said that the mind is more absolutely and more irresistibly attracted towards Science than matter towards its centre; as a mind not possessing any desire for knowledge would be a sort of contradictio in terminis—it would be a mind which is not a mind, an understanding which is not an understanding. But this desire for knowledge, this inward and inextinguishable longing after truth, is nothing but a movement of the Intellect towards its natural object and nourishment, stimulated, as the Intellect is, by this very Idea of Science; so much so, that were the Idea erased from the Intellect, the longing also would thereby be extinguished.

If it be so, if Science rests on a primary notion or law of the mind, to determine the nature and essence of Science we have only to describe the essential feature and characteristics of this same notion.

First of all, the notion of Science and the notion of absolute Science are inseparable, or, more accurately speaking, are one and the same notion. All relative and finite knowledge conceals under various forms, and more or less visibly,

an infinite knowledge, from which it emanates and with which it is connected by necessary and inward bonds. Thus it may be truly said that the natural and predominant aspiration of the mind is not towards limited but absolute knowledge—an aspiration that rises with the rising of our intellectual activity. That world-embracing curiosity, that vague but profound and ardent desire for universal knowledge which is fermenting as it were in the innermost recess of our soul, is nothing else than the aspiration, still obscure and indefinite, after absolute science, of which subsequent inquiries are the greatest satisfaction and actual realization. This aspiration, or want, or whatever it be called, may be traced in every mind; and the only difference between them in this respect is the difference arising from the various degrees of their development, or from the influence which external and accidental causes—moral, social, and physical exercise upon this development either to promote or to impede it, as well as from their application to the multifarious objects of knowledge and practical activity. And if we closely examine into the nature of beings, and the constitution of the Universe, such differences, far from surprising us, will appear as a necessary condition of this existence. Thus all men virtually possess the same faculties and instincts, all are endowed with the same natural aptitude for all social functions. But the unity of the Universe as well as the unity of human nature is divided into particular and individual beings, and split as it were into fragments; the necessary consequence of which division is that in some beauty, in others morality, most predominates; that one is possessed of a peculiar aptitude for mechanical labor, and another for some liberal or intellectual avocation. So it is with science. There is but one Science, as there is but one Intellect; and particular sciences constitute as many degrees, or stages, of the absolute Science. They are so many radii that spring from a central focus, from which they derive life, light, and nourishment. The natural philosopher who studies matter and its laws well knows that his investigations and results possess but a limited and relative importance, and are subordinate to a superior knowledge, where their justification and ultimate reason are only to be found. He knows it, or he ought to know it. And if he be not aware of it-if, in consequence of a defective intellectual training he concentrates his attention and inquiries within the limited sphere of nature, seeking in it the ultimate solution of the problem of science, he is certainly mistaken in seeking the centre of knowledge where it is not to be found. Yet he thereby explicitly acknowledges that there is such a centre; he acknowledges, in other words, the existence and necessity of an absolute Science, and it is such a science he endeavors to realize. And so it would be with Mathematics and with any limited science that would set itself up as the ruling power of Intellect and as the Science of sciences. This high pretension would not be in keeping with the limited object of this investigation, but this would, at the same time, bear testimony to the existence of a higher object and a higher visual power than their own. Science and absolute Science are therefore, in the strict sense of the word, identical, and particular sciences are only sciences, inasmuch as they are parts of the absolute Science, coincide with, and are justified by it. Now, as there cannot be two Sciences, the second essential character of the really scientific knowledge is unity. The unity of Science is not the mathematical or quantitative unity, but the higher and absolute unity of qualities and essences, something like the unity of the human body, or the unity of the Universe*; namely, a whole in which the various qualities and essences, the conflicting elements, forces, and principles, are so harmoniously adjusted as to converge towards one and the same centre, and melt, as it were, into a common result; in other words. Science is essentially a System.

There are those who object to systematic knowledge on the plea that a system, i.e. a doctrine, which would be, so to

^{*} This is an important distinction; for, misled by mathematical notions, we are apt to represent to ourselves the unity of things as an empty and abstract mathematical unity. But the unity of force, the unity of the soul, the unity of God, are neither points nor numbers, but are indivisible wholes, containing quality and quantity as well as the various attributes that constitute their nature. When we say that the soul is—that it possesses sensibility, will, intellect, &c., we count its attributes, and in this respect there is quantity in it; but the connection or unity of these faculties and qualities is not a numerical but an essential unity—the unity of the essence of the soul. Besides the unity of thought that thinks, and is all things, cannot be the mathematical unit. (See below ? 3. On Thought.")

speak, the reflex of the Universe, embracing the universality of things, deducing and connecting them according to some rational process, describing their properties and nature, and determining the part they play either within their own limited sphere or in their relation to the whole, is well nigh, if not wholly, impossible. But the difficulty, however great it may be, we meet with in the realization of a scheme, is not a test against its rationality and usefulness; and because it is not an easy matter to realize a system, it does in no way follow that we must not make the attempt, if Science be, as it evidently is, On the contrary, the consequence to be naturally drawn therefrom is, that the more systematic the investigation, the more accurate and complete the result. And it ought to be borne in mind, that the difficulty we find in realizing a perfect system may be said to beset all knowledge, the knowledge of the most rudimentary and minute objectof a pebble, of an insect—so that this argument belongs to the category of those which overshoot the mark, or, as logicians say, proving too much prove nothing. Indeed, if the matter be attentively inquired into, it will be seen that the difficulty in explaining the nature of particular beings chiefly arises from the absence of systematic knowledge, which precludes the mind from perceiving their connection with collateral beings and with the whole. For the part thus singled out and dissevered from the whole is not the same being as when connected with the whole. The eve which is separated from the body is no longer an eye but a dead and useless object; and the dissection and analysis of the anatomist, however careful and minute, is unable to reproduce the real eye, the eye that was in union with the whole organism, with life, with the mind, and through the mind with the Universe. The leaf which has fallen from the tree has ceased to be a leaf; and if we continue to call it so, it is from the remembrance of its former connection with the whole plant. But as soon as this connection is broken, its growth. its beauty, and all its other functions and purposes, are broken also. Thus it is with Science. Science which disconnects and scatters knowledge, and breaks asunder the unity of things—the golden chain from which the Universe is suspended—converts a full, concrete and living being into

an unmeaning, lifeless and purposeless object. Moreover, by admitting that Science is not a system, we admit that knowledge may be gathered at random, and that we are able to obtain it without deducing and disposing our thoughts and inquiries according to their natural and necessary connection -an opinion contradictory to the very notion of science, as well as to the universal nature of things, since nothing can either be rationally thought or exist which is not a system. The beauty, the proportion, the unity, we admire in the Universe is nothing else than a systematic arrangement—an arrangement which is not confined to the general outline and to the framework of the structure, but extends to all its parts and penetrates into its most minute details, thus filling alike the intellect and the imagination with wonder and delight. This applies equally to Science; for, whether Science be considered as the representation of the Universe, or the Universe as the representation of Science, the conclusion to be drawn, in either supposition, is that knowledge must be a system, and consequently that where there is no system there must be error, confusion, a medley of inordinate and irreconcilable elements. For to gather knowledge unsystematically is either to take up questions, notions and principles at random, without defining their nature, meaning and bearing,* or to consider a part as if it were a whole, t or the whole as if

^{*} Thus it is, for instance, that we use the notion infinite, applying it indiscriminately to different objects, and saying that God is infinite; that Space is infinite; that Number, Beauty. &c., are infinite, without inquiring what an infinite being is or can be, nor how these various objects can be infinite. We deal in the same manner with other notions, and the most important, as God, Force, Being, Object, &c. For instance, we say, God is a Being, Man is a Being, the Plant is a Being, without inquiring into the meaning involved in the notion Being, or if it is the same notion which is applied to these different objects, and, if the same, how it can be applied to them.

[†] This is the way in which the different parts of Science are generally handled: Logic, Metaphysics. Ethics, Psychology, Art. Religion, &c. are considered irrespectively of each other, and as if each of them constituted a whole. And within the province of each separate branch of knowledge, particular subjects are handled in the same manner. Hence exclusive, one-sided theories, as, for instance, in Psychological Science, the theory that deduces the whole mind from sensation; in Morals, the theories which identify all movives either with pleasure or with interest; in Art, the theories that concentrate beauty either in form or in expression; in Politics, all theories which, instead of embracing the various wants, tendencies and interests of the social body, single out some particular want or principle, and violently merge, as it were, the whole body politic into it-

it had no parts and could exist without them;* or to bring together things irreconcilable, and to separate things necessarily connected; or to confound things that are distinct by mixing their provinces, and forcing the nature of one upon that of the other;† or to admit or deny in a certain form the the very same things that had been denied or admitted in another.‡

We say, then, that absolute Science is one, and that it is one as a system.

But to know in the absolute sense of the word is not only to think and to apprehend, but to be the object of knowledge. In fact Science is neither Thought without Being, nor Being without Thought, as neither Thought which involves no real object, nor any real object which is not thought, constitute Science. Science is therefore the unity of thought and being—the object thought—or it is Thought par excellence, thought

^{*} When, for instance, we say that the cause is perfect without its effect, or the substance without its accidences. Under the same head may be ranged those doctrines which strip a substance or a principle of its attributes, modes, or qualities—matter, for instance, of color, form, weight. &c.—the soul of sensibility, will, imagination, &c.—which they consider as non-essential, pretending that matter or the soul could exist without them; just as, in another province, some politicians would banish force, inequality, war from the State, which they consider as unessential elements of social life.

[†] This is one of the most common errors, as it is difficult to draw an exact line of demarcation between the various beings and spheres of existence. Thus it is that we transfer from one being or from one province of knowledge or existence to another the qualities, laws, and attributes, which belong only to the former. In this respect the inductive and analogical processes are the greatest source of inadvertencies and misconceptions.

t This inadvertency may be frequently observed in common life, where men will admit the very same proposal, opinion, and principle, they had formerly rejected, and which they would still reject unless it were put to them in a different form. Instances of the same error are not uncommon in science and in the most important questions. For instance, there are doctrines which draw an absolute separation between the substance of God and the substance of the world, and then when they come to determine the nature and attributes of the Godhead they realize them in conformity with our own, assigning to God our own faculties—a Personality, a Consciousness, a mode of loving and governing the world modelled upon our own corresponding attributes; so much so, that, according to this manner of viewing the subject, the popular dictum, that man is made in the image of God, ought to be reversed, and said that God is made in the image of Man. It will be observed that formal Logic is unable to supply any rule or criterion by the aid of which the mind could guard against these or other similar errors, as it is only by inquiring into the matter and objective nature of things that they can be discovered and avoided.

which is become adequate to its object, and in the nature of which the object has been so merged and absorbed as to make one and the same thing. The unity of the Universe is not to be found in the absolute Being, or in the absolute Substance, but in the absolute Thought and Knowledge in which the Being and the Substance as well as all other principles are involved, and attain their highest and fullest existence. Being and Substance without Science are like the body without the mind, or Nature without the Spirit.

We say, then, that to know is to be, and I will add that it is to be in the fullest acceptation of the word. The difficulty we find in perceiving the truth and importance of this principle is mainly due to a deficiency in the training of our speculative faculty, which keeps our mind within the bounds of sensation, of experience and induction, and conceals from its sight other and higher realities—realities without which experience itself, and all things appertaining to it, could neither exist nor be apprehended. In fact, if we start from experience,-holding it as the criterion of reality, the identity of knowing and being, is, I admit, inconceivable. For to apprehend a tree is not to be a tree, and to apprehend the fire is not to be the fire and to burn; so that here thought and its object are beings distinct and separable. But if we admit, as we must admit, that besides and above the visible and experimental there is an invisible and transcendent Reality, that this latter Reality is the principle of the former, and that, being beyond the reach of the senses, it can only be apprehended by pure thought—by thought freed from sensation and all experimental elements—the difficulty will be more easily solved.

To elucidate this point, let us consider the two propositions, God is—This flower is. Here, deceived by the identity of the word is, and by the habit of picturing to ourselves all reality in a material and sensible form, we apply to the word the same meaning in both instances, and thus are led to realize the Being of God as the Being of a flower or of any other object falling under the senses. Now, it may be easily perceived that the meaning involved in the is of the one proposition is entirely different, nay, the reverse of that which is involved in the is of the other. For the Being or the to Be

of God is not the Being of the flower, and were we to conceive His Being in any manner similar to that of an external. and phenomenal object, not only would we distort but suppress at once the notion and existence of God. Consequently, when we say that God is, we mean, if we mean anything, that He is in a purely intelligible and ideal manner, and that He can be apprehended through that faculty which alone is able to reach the eternal and the absolute, by whatever name it be designated, whether it be called Reason, or Intellect, or Speculative Thought. Whence it follows also that the existence of God is quite the reverse of the existence of finite and phenomenal beings, and that, in order to form a correct notion of Him, we must strive to remove from our mind all trace of experience, and set its visual power, so to speak, in antagonism with it. And these considerations not only apply to God, but to all principles, causes, and essences. For neither God, nor any principle whatever, can be apprehended through experimental process, and it is only by a fallacy and delusion of the inductive method that we are led to believe that metaphysical science can be founded on experimental knowledge; it is from inconsistency, and by leaping over instead of filling up the gap-nay, by tacitly and unwittingly presupposing the very notion and principle it professes to draw from its operation—that experimental method concludes the infinite and eternal from the finite and temporal. Were it consistent, as phenomena, facts, effects-all, in one word, that comes within the pale of experience is changeable and perishable—the conclusion ought to be that principles, causes, and essences, are changeable and perishable also. Thus, for instance, as motion, force, light, heat, &c., when considered in particular phenomena, are continually perishing and reviving, the inference would be that the principles of these phenomena are subject to the same alternate movement of destruction and revival; or that the cause, whatever it be, that produces man is mortal, because man is mortal—and similar examples—which would be simply absurd, as nothing could be, nor be restored to life when destroyed, if its principles were liable either to alteration or destruction. Accordingly, the nature and knowledge—the Being and Knowing — of principles and essences, differ from the nature

and knowledge of their products—facts, phenomena, effects. And if we contrast the former with the latter we shall see, 1°. that, for the very reason that the former are the creative essences of things, their nature remains unimpaired and undiminished in the begetting of them; 2°. that they possess a purely ideal and intelligible nature,—indeed they are ideas, as we will see hereafter, and as such they cannot be felt, or brought within any sensuous shape, or any point of time and space, but only be apprehended by pure thought; 3°. that, from their being creative essences, they produce the effect without mingling their eternal and impassible nature with it, like the hand, or, still more truly, like the mind, that produces the work without being reacted upon by it and receiving the imprint of it; thus it is that Death destroys without destroying itself, and fire burns without burning itself out;* and 4°. that, because of their possessing a pure and intelligible nature, thought can think them in their intelligible existence—thinking the fire, for instance, the light, the air, as well as the Good, the Beautiful, &c., and when thinking them in their objective and essential nature, being the fire, the light, &c., &c., and keeping clear at the same time from their effects.

§ 3. On Thought.

This will be better understood if we give a deeper insight into the nature of Thought, of Science, and their eternal and inseparable object—namely, Ideas, and the relation in which they stand to each other.

To know is to think, and it is to think in the highest sense of the word. Now thought is not only the faculty from whose inexhaustible depths springs all knowledge, but it constitutes also the highest essence and the culminating point of existence. The old adage that man is a microcosm has only a meaning when applied to thought. For thought alone possesses the privilege, shared by no other faculty or being, of thinking itself and all other things, and of thinking them as within itself, and as objects not only cognate to, but identical with, its own nature. There is no being, whatever be its

^{*} This elucidates the theory of the First mover of Aristotle, namely, of the Mover who moves All without moving itself, or being moved.

nature and properties, there is no point of space, actually or possibly, without the reach of thought. The infinite and the finite, the invisible and the visible world, the numberless variety of beings with their numberless qualities, difference and opposition, all equally meet in the depths of thought as in their common centre. Indeed it is in thought that the Universe attains its highest perfection. The external world, by being thought and in thought, is made partaker of a dignity, beauty, and perfection, it does not possess in itself. For it is within the mind that Nature attains its ideal and essential existence, whilst without the mind Nature's existence is fragmentary, scattered, destitute of inward bond or unity. It is an external juxtaposition of beings unconscious of themselves as well as of their mutual connection. Nor can we conceive, either in God or in man, anything more excellent than thought. Indeed it constitutes in both the very excellence of their nature.* In man, his whole being, so to speak, supposes thought, and is thought. Take away thought from him and he ceases to be what he is, the most wonderful amongst created beings, and he will find himself lowered to the level of the brute and inanimate creation. All his activity, internal as well as external, flows from thought; and there is no manifestation of it, from the most profound researches and the highest soarings of imagination to the most humble occupation, in which thought stands not foremost and is not the motive power of action. Will, imagination, memory, selfconsciousness, and even the faculty that stands, as it were, on the limit of the physical and the spiritual worlds, of the body and soul-Sensation I mean-are not merely impelled by thought, but thought is their essential element—nay, they

^{*} As far as we can conceive God. But this must not be lost sight of, namely, that God, like all other things, is only known to us through thought, and that beyond thought His being is for us = 0. It is one of the popular inadvertencies to believe that we can reach God through any other faculty—sentiment. intuition, or whatever be its name—but thought, although sentiment and intuition are only inferior forms of thought, or thought which is still mixed with sensation, and unable to perceive truth in its pure essence. We possess the sentiment of God as we possess the sentiment of ourselves, of mathematical truth, and of all things in general—which sentiment is a dim perception of these objects, or confused and imperfect thought, involving inconsistencies and delusion, a mixture of light and shade, of truth and error.

are different forms or instruments of thought. For there is thought in Sensation as well as in any other faculty and mental operation, and not only is it through thought that sensation is inwardly felt by the soul, but the external object that produces sensation is likewise apprehended by Thought constitutes, therefore, the unity of the human being, of mind and body, and of their connection with the universe*; and if it constitutes the highest essence and per fection, it follows that everything is made for it and is subordinate to it; that it is thought that will impart light, vigor and life to individuals as well as nations, and that where the internal activity of thought is declining there the external also will languish or become extinct. Such is thought, the most stupendous of beings! In the presence of Nature, before the huge masses that move in space, the vast expanse of the water, the sun and the planets, and the bodies innumerable with which the vault of heaven is studded, we are struck with wonder and awe. How much more will thought appear worthy of our admiration if we bear in mind, that not only these objects but the Universe is concentrated in thought,

^{*} Those who place this unity in the brain as the centre of the nervous system. or those who localize the soul by assigning it a particular place, either in the brain, like Descartes (glandula pinealis), or in any other part of the body, are deceived by external and sensuous representation which lead them to assimilate the unity of the soul to something like the spider feeling in the centre of the cobweb the insect that skims over its threads. But quite different is the unity of the human being. Here the centre is everywhere and nowhere; and the sensation is not felt in a central point, but all over the body and in every part of it. Moreover, all sensation, however different and opposite—as the sensation of pain and pleasure, of light and darkness, of heat and cold. &c .- may be compared and brought into a unity, though telt by different senses and in different parts of the body. From the fact that we feel thinking in the brain, and that the more intense is thought, the more it seems to concentrate itself in this part of the body, it does not follow that thought has its seat in the brain, and much less that the brain is the faculty of thinking, but merely that the brain is the main instrument of thought, as the eye is the instrument of vision and the ear of hearing. I say the main; for all the senses and organs of the body are instruments of thought, as it is not the eye that sees, nor the ear that hears, but it is thought that sees and hears through the instrumentality of the organ. Besides, any theory attempting to explain the unity and nature of thought, or the unity and nature of the human being, by some organic function or arrangement, will run aground not only against abstract and speculative arguments, but against experience itself. For it is a fact that thought apprehends the infinite, the eternal, and the absolute, and consequently cannot be circumscribed within the bounds of corporeal organs.

and that the ultimate reason of all that exists and will exist is apprehended by thought, and is thought! For thought that constitutes the excellence of the human, constitutes also the excellence of the divine nature. God is the absolute and eternal thought. This is the highest definition of God. His preëminent attribute and perfection. The omnipotence, the love, the providence, as well as the goodness and justice of God are subordinate attributes and modes of His Being. All presuppose thought, and it is by coming, as it were, in contact with thought, that they attain their highest power and perfection. Thus the love of God is the thought of the eternal ideas which are His perfection, a love embracing the love of Himself and the love of the external manifestation of ideas, or the World; which shows that the love of God towards the world cannot be love towards individuals, nor even towards nations, but towards the Whole, and that the parts are only loved by God inasmuch as they harmonize with the Whole, and contribute to its preservation and the fulfilment of the law, which is the eternal thought of God. And thus it is that what is wisdom and love in the sight of man may be foolishness and hatred in the sight of God. This applies also to His Providence. The providence of God is His eternal and immutable thought, which is the law out of and according to which all things are made and governed. The government of the World is implied in the very essence of things, as everything must be made and governed according to its special essence. Therefore to think is in God to govern and to foresee, and to govern through and to foresee in the immutable essence of things. This is the rational notion of the Providence and Prescience of God, the only notion in conformity with the majesty and excellence of His nature. To realize God as actually foreseeing and regulating all single and daily events, all transient phenomena and accidents, is to degrade and lower Him to the level of finite beings.

Note.—The popular doctrine is that God not only governs the world through general laws, but that His Providence extends to all particular events, and to the minutest details of this vast and wonderful machinery. For it is agreed, if there were events—nay, one single event—that should not be predetermined by God, God's Providence would not embrace all things, and consequently God would not be All-powerful, which is contradictory to the notion of the Deity. The same

argument applies to His Prescience. Those who rest their doctrine on this and similar arguments do not perceive that they fall, and still more deeply, into the difficulty they pretend to avoid; for against this mode of arguing it may be retorted, that if it be contradictory to the notion of God that God's Providence should not embrace all things, it is much more at variance with the whole of His nature that He who is the Absolute and Perfect Being should busy Himself with individual beings and particular and transitory events, however unworthy they may be of His providential care. But we deal with God in a more off-hand way than we are wont to do with our fellow-creatures. For we would think it derogatory in the sovereign to descend from his high station and perform menial or inferior duties, or in the judge to carry out with his own hands the prescription of the law; but with God we are not so considerate and reverential, and He must have a hand in all our daily affairs, no matter how irreconcilable they may be with His majesty and perfections. And this is done to shield Him, as it were, from imperfection, and to describe Him in the fulness of His nature and existence! The fact is that such representation of God is sheer anthropomorphism; nay, it is the heathenish conception of the Deity, glossed over with a kind of nominal Spiritualism. For, in reality, we make Him love, foresee, and govern, as we do love, foresec, and govern; and we force upon Him what we call our Personality and Consciousness, adding, it is true, that all such attributes and faculties are infinite in Him, but taking care, at the same time, not to state what an infinite Love, an infinite Providence, an infinite Personality is or can be. In fact, if the matter were more closely gone into, it would become manifest that an infinite love, an infinite personality, &c., are mere vain and empty words, calculated only to mislead the mind. if we realize God's love and personality like man's. The heathenish representation of God would then be at least more consistent. For if love in God be what love in man is, God must love as man does; and if God's government of the Universe be what man's government is, Jupiter must convene his council in Olympus as Agamemnon in the eamp, and frown when in anger, and drink and eat as man does when impelled by thirst and hunger, except that he will partake of some unknown and immortal nourishment. And what is still stranger in the matter is, that if any one come forward and suggest that these and the like representations of God-namely, all representations drawn from experience, analogy, and induction—are not only inadequate, but fallacious and at variance with the very nature of God; and that the only way by which we can form a correct and true notion of the Deity is through purely intellectual and speculative processes, as God is not only a Being that no experimental process can reach, but rather the reverse of all we know through experience;—if any one, I say, come forward and hold such a doctrine, some will object that they do not understand it, and that it is too subtle for their perception; others, that they have neither leisure nor taste for such inquiries, and that they rest satisfied with the popular and current notions on the matter; and finally, others, that all speculation is the delusion of a visionary brain that mistakes its own phantoms for realities, not unfrequently exciting against it popular ignorance and prejudice by branding it with the name of Pantheism, of Atheism and Infidelity. Surely, if there be Atheism and Infidelity, all doctrine that inculeates an irrational and erroneous notion of the Godhead deserves such a name; and if there be Pantheism, the doctrine that teaches that God predetermines and foresees everything, and that there is not a single event in which God has not a share, is Pantheism of the coarsest description. That God is All, and that all things are in God. is a sound-nay, it is the only rational doctrine. For all things must come from God, if they do not come from nought; but if they come

from God, were they even created ex nihilo, there must be something of God—a spark of the divine essence-in them. Consequently, those who hold that God is in the World, and that the World is in God, hold a rational tenet. In fact, this parental connexion of God with the World is that which, on the one hand, imparts to the World and to everything that is in it whatever being and perfection they possess, and which, on the other hand, completes, as it were, the perfection of God Himself. For if we separate, substantially and absolutely, God and the World, we do not only impair and curtail the being of the World but that of God also. We curtail the being of the World, by separating it from its principle; we curtail the being of God, by admitting that the substance of the World is independent of Gotl, and, consequently, by admitting two absolute substances. And the creative ex nihilo would not fill up the gap, as the creatio ex nihilo could not affect the principles and essences of things, which under any supposition, must be coëternal with God. But if God be All, He is not so in the sense that He is every individual being and every single phenomenon—so that if I am joyful or sorrowful He should rejoice and grieve with me, or that He should be the insect that crawls or the seed that grows upon the earth-but in the sense that He is the principle of all things, and that all things find their ultimate reason, their essence, in Him. Thus, being the principle, He is not what the thing is of which He is the principle. And, being All in this high sense of the word. He is not what the individual and fragmentary part is. It is because joy and sorrow, as well as life and death, come from Him, that He does neither rejoice nor grieve, neither come to life nor end in death. For should He come to life or end in death He could give neither life nor death; and if He felt joy and sorrow as we do He could be the principle of neither, as they would be sent to Him as they are sent to us. Besides, being All and the Absolute, He is liable neither to want, nor loss, nor to any increase of perfections, which are the conditions of joy and sorrow and of all similar modifications and changes through which the finite and mortal being must pass. Again, the seed that becomes and the seed that is (the essence) are two different seeds. The former we see and touch, the latter we think only. But that which we think only, is eternal and immortal. God is the Thought, the Idea, the Essence of the Universe this is the highest and absolute definition of God, a definition in which are comprised His Providence, Ilis Love, Ilis Power, and all His perfections. For the Thought of God is the Providence of things, and, for the very reason it is the essence, it is the Providence of each being particularly. The Providence of the plant is its idea, according to which it is born, it grows and dies. And so it is with everything. And, knowing and being the idea, God need not extend His care to individual beings, as not only the knowledge and being of the latter are involved in the knowledge and being of the former, but they find in the former their highest and perfect existence. Thus, for instance, in the knowledge and being of the ideal triangle are comprised all material triangles, whatever be their size, form, and position, as in the knowledge and being of the ideal man-genus or species—are involved the knowledge and being of all men. Consequently, it must be laid down as a fundamental principle of metaphysical science that God is in the World, and that He is not in the World; that He is All things in their idea, and as a Whole, and in the Unity of their existence; and that He is not All things individually, or in their particular and fragmentary existence.

ON HEGEL'S PHILOSOPHIC METHOD.

To Hegel has been ascribed the honor of discovering a new Philosophic Method. In the Introduction to his great central work, "The Logic," Hegel himself claims that although the method which he has "followed in that book-or rather the method which the system itself has followed-may be capable of much improvement, or more thoroughness of elaboration, as regards details, yet I know that it is the only true method." "Because," he adds, "it is identical with its object and content; for it is the content in itself, the Dialectic which it has in itself that constitutes its evolution." "The only thing essentially necessary to an insight into the method of scientific evolution is a knowledge of the logical nature of the negative; that it is positive in its results,—in other words, that its self-contradiction does not result in zero or the abstract nothing, but rather in the negation of its special content only; that such negation is not simple for absolute] negation, but the negation of a definite object which annuls itself, and is therefore a definite negation. Hence in the result there is contained essentially that from which it resulted—which amounts to a tautology, for otherwise the somewhat would be an independent original existence and not a result."

If we restate his method and affirm it to be the process of discovering in the finite or limited what it is that constitutes its limitation or finitude, and thereby of ascending through successive syntheses to the self-limited or infinite, we shall see in that statement its substantial identity with the Platonic Dialectic. To trace out the dependent to that on which it depends is to go from the part to the whole, from that which is not self-existent to that which is self-existent. (Plato's definition we shall quote below.)

The triad—Being, Naught, and Becoming—with which Hegel begins his Logic furnishes an example of an application of the general method as well as an exhibition of what is peculiarly Hegelian. In consideration of the fact that this triad is better known than anything else of Hegel, and that it has furnished the point of attack to his most powerful

opponents—Trendelenburg in particular*—an exposition of his method in the evolution of this triad will serve to exhibit the true nature of the Hegelian Philosophy more directly than any general disquisition on its results.

Let us at once, then, proceed to grapple with this much disputed beginning of Hegelian Logic, and make, first, an abstract exposition of the theme; second, a more concrete or explanatory one; third, a critical one, directed towards the position of Trendelenburg. We will attempt to give Hegel's thought in our own manner.

I. Abstract Exposition.

A. Introduction: why we begin with the category of Being.

Whatever we postulate as a beginning of pure science must be, as such, not yet scientifically determined. It is the object of pure science to develope a system, and of course the beginning cannot be a system. Since in pure science we must not receive determinations (attributes, qualities, categories, definitions, logical terms, &c.) except those justified and defined by the system, any determination that we postulate, and that is not objectively evolved, must be regarded as unscientific and therefore rejected. Determination and negation are identical, and the complete removal of determination or negation should give us pure being as a beginning or starting-point of our system. Were our system to start with any other category, as for example with the Ego, that category must be as empty as pure being; if not, it would contain pure being plus determinations, and thus duality would be present before the system had evolved it. would be ostensibly seized as a simple somewhat, and yet the mind would mean something else more concrete. Science has to do with what is expressed and not with what is merely meant. Hence, unless Science is to start unscientifically, it must commence with pure Being.

- B. Being: what comes of the pure thought of it.
- I. Being is the simple undetermined.
- II. Since it is the not-determined, it is distinguished from the determined, and is already determined by the con-

^{*} Logische Untersuchungen.

trast. (The abstraction from the world of concrete being here becomes explicit.)

III. But since according to its definition (I.) it is the absolutely undetermined, it must be the negative of all determined somewhats, and hence of itself, if it is determined through contrast. It is therefore negative of itself as Being, if Being be defined at all as contrasted. Such a universal negative may be named, substantively, Naught.

Remark.—Here we have I. its definition, whence results II. its opposition or contrast, III. its self-relation. Thought endeavors to seize the object (Being) as a whole, i.e. to comprehend it in its entirety. It seizes first the abstract definition, and then proceeds to realize it as thus defined. It finds contrast, and then further, universal negation as the more adequate statement of the idea which it is contemplating.

- C. Naught: the result of attempting to think it purely.
- I. Being can comply with its definition—which requires it to be kept distinct from its determination or negation—only by negating itself and thus becoming Naught.
 Naught is the negative of all Being.
- II. Naught as the negative of all Being is defined through contrast: it is distinguished from Being.
- III. But since Naught is the negation of all Being, it is the negative of itself; for if Being were regarded as the determined, Naught would be the undetermined, and hence the negative of itself as the opposite of Being (i.e. contrasted with Being); or, if Being is defined as the undetermined, then Being becomes universal negation, and Naught as the negation of Being must be the negation of universal negation or negation of itself.

Resumé.—The thought of Being is the thought of a vanishing, a negation of itself. It is hence a form of Becoming. But the thought of Naught is the thought of a self-negation or a determining of itself, hence the thought of origination or beginning to be. Naught can be thought, therefore, only as a form of Becoming. Origination (beginning) and evanescence (ceasing) are the two forms of Becoming. Becoming is the thought which results from thinking Being and Naught.

- D. Becoming: Results from trying to think the All as a Becoming.
 - I. Becoming in general is a union of Being and Naught, but a union wherein their difference vanishes and each passes into the other. The difference must persist, and likewise the annulling of that difference must persist, or else the Becoming will cease.
 - II. The union of Being and Naught in the Becoming is a union wherein each is a self-annulment. Not Being nor Naught in their simple abstraction, but each a vanishing—the former as Ceasing, the latter as Beginning. Being and Naught have proved themselves no adequate categories, but in their places we have two forms of Becoming.
- III. Becoming considered by itself is a self-nugatory, for it implies duality and involves a from and a to; but not from Being to Naught nor the contrary, but from Beginning to Ceasing, and the contrary; for the difference that remains in the Becoming is that between the two kinds of Becoming only. Beginning likewise, as a form of Becoming, possesses duality and is a from and to, but for the reason stated can have in itself only the difference of the two forms of Becoming, and hence contains within it its own opposite; Ceasing, too, contains in itself its opposite in so far as it is Becoming. Hence the difference upon which Becoming rests also vanishes, and each side becomes identical through its evolution of its opposite from itself. Thus instead of Becoming we have rather determined (or definite) Being. Each form of Becoming is a process that returns into itself through its opposite, and by this each becomes the total process, and the total process is a present unity of Being and Naught or of Beginning and Ceasing.

Note.—The "from and to" involved in Becoming is not a spatial one. If Spatial, then we have a concrete form of Becoming, to wit, motion. But Becoming involves only beginning and ceasing, and this applies as well to ideas as to natural things, and hence includes spatial motion under it as one species distinct and separate from the activity of thinking as another species. All spatial motion is measured in feet or decimals of a foot, but ideas do not admit of such measurement, and the activity of passing from one to another is therefore non-spatial.

Remark.—This deduction will seem wholly arbitrary and a mere play of words to most people. All exposition of

pure thought—that in Plato's Parmenides, for example—seems arbitrary word-jugglery.

Let us go over the ground once more in a more explanatory and familiar manner, when some of the difficulties may clear up.

II. Explanatory Exposition.

BEING AND NAUGHT.

I wish to know the truth—to think it; and by truth I mean the abiding, that which is universally and necessarily valid, and all that is involved in it.

How shall I begin? I wish to think the truth, the abiding, that which must be as it is and can be nothing else. Hence I am to find the universal conditions of Being; and these universal conditions must result from Being itself as its nature. Let me think Being then and see what else is implied.

If I think Being as self-sufficing, I do not set it opposite to Naught as something else than it, for thus it would receive distinction or determination through this very contrast. I must think Being by itself; as excluding all multiplicity, for the multiple can be only where there is distinction of parts, and distinction is negation or Not-being. Hence if I would not let in the opposite of Being (or Non-being) into my thought of the same, I must think being as simple and undetermined; otherwise it will be a self-contradiction—it will be a being that contains negation or limitation already.

Having now before me the thought of pure simple Being, let me examine it. What is pure simple Being? It is—undetermined; it has no content; it is—Naught. It cannot differ from Naught; for if it did, it would differ by means of some characteristic or determination, and this would render its simple pure Being, determined Being. I think pure Being, therefore, as identical with Naught when I think it by itself. "It at once becomes its opposite"? No, it does not become its opposite; it is Naught, and does not seem to become it. Let me pause, however, and consider the result at which I have arrived. For it is clear that in trying to seize Being purely by itself, and without negation or limitation, I have arrived at a dead result identical with Naught. I set out with the resolve to think Being pure and simple, and even with-

out opposition or contrast. But by removing all difference from it I get only Naught as a result. I must, however, investigate this result and see what implications my thought of it contains.

What do I mean by the thought of Naught? It is the thought of the negation of All—a negation by itself, for I am considering each category by itself, as a universal. It is the negation of all, and yet is all. But as such it is a negation of itself. Either it is a negation which does not negate anything, or it is a negation that negates itself. It is the content of its own negation. At all events, the thinking of negation in the universal form of Naught gives as result the cancelling of negation.

Here we are arrived at a very strange view. At first, Being seemed identical with Naught without Becoming,—two names for one concept; now, Naught has shown itself to involve self-opposition; it is inherently antithetic, and posits distinction or difference instead of identity. It therefore posits duality, and the duality of Being and Naught rises before us as an immediate distinction which cannot be resolved into any other or more simple one. Being and Naught are opposites and contradictories, and yet are this only when in one unity. If we try to seize them isolatedly each becomes the opposite of itself, and each has no truth or meaning outside of the synthetic thought which unites them.

Note.—A psychological question arises: Why is not the absolute Naught, the Nihil negativum, entirely outside of all relation or contrast, and hence, no "negation of all"? It is made relative by thinking it as active negation. It seems, therefore, an assumption to pass from "naught" to "negation of all"—an unwarrantable substitution, a petitio principii. Of course, so soon as one can see Naught to be a self-negation, the dialectical self-movement must be apparent. Hegel has omitted any notice of this point in treating of Being, Naught, or Becoming, but has elucidated the question in its proper place under "Reflexion" (vol. ii. of the large Logic) and also under "Begriff" (vol. iii. of the same). In the third or critical exposition of this subject, which follows, an endeavor will be made to clear up this point.

BECOMING.

If I review my result, it is this: my thought of Being is a thought of the becoming of Naught—a ceasing to be, a de-

parting, an evanescence. My thought of Naught is a thought of the becoming of Being—a beginning to be, an arising or origination. These I perceive are two species of Becoming, and they exhaust the genus. These appear distinct, and their distinction is the distinction which I formerly supposed I saw between Being and Naught, but which proved on examination to be really a distinction between these two kinds of Becoming. I note also that Becoming cannot be a becoming of Naught or of Being, for each of these latter categories has shown itself to be in reality a species of Becoming.

Is this distinction between the two forms of Becoming a true and abiding one? Is Becoming the "solvent word" which explains the All?

Let me examine this distinction more closely: the Becoming is a duality, it is a from and a to: a union of distinct somewhats in the process of uniting. Ceasing is from Being to Naught; Beginning is from Naught to Being. Becoming is the term indifferently applied to either. But Ceasing cannot become Naught, for the thought of pure Naught showed it to be a self-dirempting, a Beginning. Hence Ceasing can only cease in Beginning. Beginning cannot become Being, for pure Being is a self-nugatory whose more adequate statement is Ceasing. Hence Beginning is a movement towards Ceasing, inseparable from it, and therefore no simple pure species of Becoming, but rather a movement that is at once "reflected into itself." Beginning is a movement from itself to Ceasing which is a movement to Beginning. Each species of Becoming has the other species as its own content. Each process traced out is a becoming of itself through the becoming of its other. Beginning becomes Ceasing, which, again, becomes Beginning. Such a process to itself through its other has been called "Reflection into itself."

The form of Reflection into itself cannot be considered as a Becoming. Its form is that of self-relation. Each of its sides is reflected into itself through the other, and hence each is identical with the other. Each is itself plus the other in one process. Becoming can persist only so long as the inequality or non-identity of the two sides persists. The becoming of the same from the same is no becoming; it is rather an unchangeable continuance of one phase.

I must, therefore, seek another name, since Becoming is no longer an appropriate predicate for the All. Being and Naught were no adequate designations of the All; they were mere phases of the process of Becoming. The phases Beginning and Ceasing vanish in more comprehensive processes. Instead of Being, Naught, or Becoming, I have before me the thought of the Determining of Being: two forms of self-relation, Being or Ceasing returning into itself through Naught or Beginning, and the opposite of this, i.e. Naught reflected into itself through Being. Here is Determination: determined Being and determined Naught. The abyss of difference that yawned for me between Being and Naught is now narrowed to that between Reality and Negation, the two forms of determined Being. Each is a form of Being. for each begins and ends with itself, i.e. has the form of selfsufficiency, and not the form of dependence or of relation to another.

Remark 1.—We note that the Dialectic movement carries with it two threads which are ever becoming identical in a new Category. Thus at first our two threads were Being and Naught; next, Beginning and Ceasing, whose general name is Becoming; then, again, Reality and Negation, the sides of Determined Being. These two threads become identical in the respect wherein they were first distinguished, and this their identity is a new Category. But their distinction reappears in the new Category, as a less essential one.

Remark 2.—Upon inspection of the Dialectic movement one will see that it is not a method of proceeding from a first principle "which continues to remain valid"—as, e.g., some mathematical axiom. One is rather engaged in a process of proving his first principles to be untrue or inadequate, and is leaving them behind him as abstract untrue elements and arriving at comparatively concrete and true ones. Each new category is richer in what it contains than the preceding, for it is a unity resulting from a synthesis of what has gone

 ${f before}.$

Remark 3.— Thus the dialectical procedure is a retrograde movement from error back to truth, from the abstract and untrue back to the concrete and true; from the finite and dependent back to the Infinite and Self-subsistent. We are proceeding toward a First Principle rather than from one.

In Plato's Republic, book vii., chapter xiii. (Stallbaum), a clear distinction is drawn between the Dialectic Method ('Η διαλεχτική μέθοδος) of pure science (ἐπιστήμη), which

cancels one after the other its hypothetical categories or principles on its way to the highest principle $(\tau \dot{\alpha}\zeta \ \delta\pi o\theta \dot{\epsilon}\sigma\epsilon\iota\zeta \ d\nu\alpha\iota\rhoo\bar{\nu}\sigma\alpha \ \dot{\epsilon}\pi' \ a\dot{\nu}\dot{\tau}\dot{\gamma}\nu \ d\rho\chi\dot{\gamma}\nu)$, and Geometry with its kindred sciences, which use fixed hypotheses or axioms $(\tilde{\epsilon}\omega\zeta \ d\nu \ \delta\pi o\theta \dot{\epsilon}-\sigma\epsilon\sigma\iota \ \chi\rho\dot{\omega}\mu\epsilon\nu\alpha\iota \ \tau a\dot{\nu}\tau\alpha\zeta \ d\nu\dot{\nu}\dot{\tau}\tau o\nu\zeta \ \dot{\epsilon}\omega\sigma\iota$, $\mu\dot{\gamma} \ d\nu\nu\dot{\alpha}\mu\epsilon\nu\alpha\iota \ d\nu\dot{\gamma}\nu\nu \ d\iota\dot{\alpha}\dot{\nu}\nu\alpha\nu$ and are not able to deduce them. Thus our hypothetical "Being," "Naught," &c., have been removed on our way to the first principle.

Remark 4.—We do not lose any of our categories, but only reduce them to subordinate elements ("moments"). The unity wherein they are thus annulled is called a "Negative Unity."

Remark δ.—Hegel's logic in this manner proceeds to show up one after another all the general ideas or categories of thought, finding for each the exact place in the series which its extension and comprehension gives it. The highest and ultimate is the IDEA as definition of Personality—the self-conscious Absolute, the νόγσες νοήσεως which Aristotle finds to be the highest, and which Theology defines as God.

Before arriving at this point such questions have arisen as:

(1) Is not all this a play on words?

(2) If not a play on words, is it not merely a subjective play of thought, and not in anywise a process related to objective truth?

(3) Do you not in every instance presuppose concrete categories (movement, for example) as underlying the pure

thoughts with which the dialectic begins?

(4) If you were really to begin without presuppositions, could you find any language into which to translate your results? Do you not in fact merely translate one set of categories into another set not scientifically deduced?

In order to clear up these and a multitude of other similar objections which have no answer in the foregoing expositions the following considerations are presented. Those acquainted with the objections of Trendelenburg and others will perhaps see their pertinence best.

III. Critical Exposition.

A. "The presuppositionless Beginning."

1. That Pure Science should begin without presupposition means that it should begin with an idea that is not analytically resolvable into simpler ones. If the idea with which we begin involves others simpler than it, we should discover ourselves in the act of thinking those simpler presuppositions while on our way to think the beginning; that is to say, if we turned our attention fully upon our unconscious processes.

Our attempted beginning would be a farce, for we should at once repudiate it: our first thinking would result in detecting the ideas implicit in it, and from these elements we should make a new commencement.

2. In science all should be explicit, or should become so. A term should not mean more than it is defined to mean. But when we claim that Pure Science should begin without assuming results implicitly contained in some synthetic idea, we do not mean that Pure Science does not imply or presuppose—(a) that the philosopher who is to understand it must have ideas and names for them; (b) that his progress will consist in recognizing, in the Pure Science, ideas before familiar to him and known by name. He will learn in Pure Science to know their necessity, scope, and affiliation. familiar unscientific knowledge goes before a scientific one. The description of the categories of Pure Science must at the beginning be made by means of terms not yet dialectically Trendelenburg criticizes Hegel (Logische Untersuchungen, 2°. Auflage, p. 37 sqq.) for using the expression "unity" in speaking of the "unity of Being and Naught in the Becoming." It was a presupposition surreptitiously brought in where all presupposition was expressly excluded. So, too, he points out the expression "pure abstraction," and more especially the idea of "movement" where Hegel says of Being and Naught, "Their truth is therefore this movement of the immediate vanishing of the one in the other: Becoming, &c." The idea of movement, says Trendelenburg, "is the vehicle of the dialectic evolution in thought."

Here is a misunderstanding of the sense in which presupposition is applied. Trendelenburg would demand strictly that Pure Science should, according to Hegel, generate not only its ideas from the à priori activity of thought, but also the names and predicates applied to them. He would prohibit any recognition of any determinations that arose in thought, for recognition would imply that the ideas were known before in some shape, and hence were presupposed and not originated. Such a demand completely stultifies all pure science inasmuch as the latter sets out with the express problem before it of deducing the content of experience, or at least the form of experience, and every result in pure science

must consequently be an identification (act of recognition) of its \hat{a} priori determinations with the content of experience. Only in this way could science explain anything by exhibiting its origin and necessity.

- 3. It can, however, be reasonably asked of pure science that it shall at its close leave no category of pure thought undeduced. Each category must exhibit what ideas it presupposes as its elements or moments analytically contained in it, as well as what ideas it demands either to complement its defects, or to transcend and include it in a higher totality. But science cannot deduce all ideas at once. Its beginning must be made with the simplest idea and the others must be introduced in the order of their complexity. Pure science cannot be said to be complete until it explains and deduces the simple idea with which it began. It must be a circle.
- 4. We may call thinking finite so long as it is involved with a content foreign to itself—i.e. with some matter of Experience derived from the senses. Through the act of Reflection (in the form of analysis and abstraction) thought steps back from the world of Experience and contemplates its own generalizations or abstractions. The summum genus of such generalization is Being. When it abstracts from all multiplicity and says all things in the world are, or have Being, Being is contemplated as the ultimate result of analysis. Thought has cut off one by one all special determinations (properties, characteristics, attributes, predicates), and now has before it the empty form of itself: of itself, because experience gave only the multiplicity, and analysis has eliminated it all. Being is therefore the empty form of pure thought from which all content has been removed. It is justly considered a great era for Philosophy when the Eleatics announced Being as the highest principle. It was the first time that a Philosophy had announced a pure thought for its principle. Neither Pythagoras nor Heraclitus did this explicitly. When thought becomes its own object it assumes the form of the infinite; i.e. it is no longer limited by and dependent on an external object, but is self-limited and independent, in its cognition.
- 5. Being is the limit of Analytic thinking. How does thought become synthetic and find its way back to concrete

Categories? Simply by extending its consciousness into self-consciousness. In reflection it is conscious of the object and of its negative power of abstraction. In the speculative activity of thought it must objectify its entire activity and observe it. In sense-perception only the object is known, and no notice is taken of the function performed by thought in furnishing the general ideas through which we recognize the object. In reflection we recognize the general ideas as the basis of the particular. In the speculative we must cognize the primitive synthesis of Reason which makes it possible. Reflection, therefore, always recognizes only dead results. It fails to grasp the synthetic movement that takes place unconsciously in the mind, as its counterpart.

B. The Dialectic: how synthesis arises from analysis.

6. Being is defined as the undetermined. Abstraction has removed all determinations in order to seize Being purely. But if we now try to seize Being and realize its definition in thought, we come upon this contradiction: it is defined as indefinite. When we attempt to seize Being as the negative of all, we seize it as determined and defined by this negative attitude. We correct this act of determination and limitation of the idea of Being by recurrence to the definition of indeterminateness, and hence we think it as negative to itself as thus defined and limited. It flees itself. We thus find our thought of Being an infinite regress: first we apply a predicate to it, but we immediately annul the predicate on account of its inconsistency; we continue to annul its predicates, but the act of annulling them is the act of predicating them. Predicatelessness is itself a predicate, and to think without the act of predication is impossible. Hence our thinking activity necessarily posits a self-negative idea when it posits Pure Being. It posits a regress ad infinitum: a vanishing; an idea which perpetually finds itself in opposition and thus has become a particular, and therefore annuls itself and escapes beyond itself. It is a self-remover, a self-negative. It must flee all particular, i.e. retire to the extreme of simplicity: but thus it goes into self-contradiction, for it should be pure from all relations or antitheses, and hence pure from purity.

But such a thought is no longer simply analytic, but an active synthesis—the thought of self-determination or self-annulment.

- 7. Self-annulment of Being is a form of Becoming. In our synthetic act as the totality of the thought of Being, we have Becoming in both forms. As Being it is a self-cancelling = ceasing-to-be. But it is just as much an act of opposition or antithesis in itself, and hence a specializing or particularizing of itself, a becoming of something or a beginning-to-be. Thus it is an activity of determining itself while in the act of annulling determinations; and vice versa. This remarkable result we have arrived at only through observing our whole thought, its process as well as its results. Reflection noted results; the speculative thought notes processes as well.
- 8. Becoming is then the more adequate name of the object of pure thought as it is now before us. But it is Becoming as a process which unites two counter activities each of which is a becoming. A tendency to, and a tendency from, are the extremes of its activity. But each of these extremes is likewise dual, and sustains itself only through its opposite. The Ceasing (or self-annulment of Being) is only an activity of self-opposition by which it reduces its simple empty being to a definite particular—and thus it is a Beginning. But it is the latter only in so far as it is an active cancelling of such opposition and particularization. Hence we now see that our activity is a circular one and returns back into itself continually. Becoming is therefore now seen to be no adequate designation of the synthesis before us. It is a self-sustained process of determination (called by Hegel Daseyn) which we may call determined Being.

We can proceed further to examine the adequacy of our new designation and trace out its synthesis of the two counter movements which we recognized in it as (a) Beginning returning into itself through Ceasing, and (b) Ceasing returning into itself through Beginning.

This is enough, however, to show the critical basis of Hegel's method, and to furnish a key to the insight into the difference between its procedure and that of the Analytical Reflection. Plato's "Knowing by wholes" (i.e. knowing the results in their entire process) has here its explanation.

C. Pure Thought objective as well as subjective.

9. We now will inquire briefly what are the grounds of the assertion that this pure thought has objective validity and furnishes the key to the explanation of the world of Experience.

Pure thought is the universal and necessary form of thought and hence the net result of all thought. What is found in pure thought is the thought which underlies all concrete thinking. Pure thought brings to consciousness the whole process, while in ordinary thinking we know only the results of our thinking activity, and not only can give no account of the process within us, but for the most part never suspect the existence of such a process. We refer the results of the unconscious dialectic process within us to an objective origin.

Thought exhibits its process exhaustively in pure science. Hence it would be as impossible to think of an objective existence which transcended the categories of pure thought as it would be to think without thinking. Any special act of thought can be analyzed at once, and the pure thought which lies at its basis exhibited. The possibility of all special think-

ing lies primarily in pure thinking.

Not only is it impossible to think or express anything that transcends the categories of pure thought, but the speculative insight is certain of the universal and necessary objective validity of what it recognizes as the total process of the thinking activity. It is perfectly certain that what it finds true of quantity in general can never be untrue of quantity in particular. For the thought of any particular quantity is limited by the thought of quantity in general. So of Cause and Effect, of Substance, Essence, Design, &c. When we determine à priori a mathematical theorem we are perfectly certain that we can never experience its opposite in Space or Time. For it is the logical condition of the existence of phenomena in Time and Space. So pure thought is the logical condition of all thought, and hence no one can ever cognize an experience other than through it and in accordance with it.

10. In fancy or imagination our thinking activity exhibits its arbitrariness and caprice, and hence in them we do not

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PEDAGOGICS AS A SYSTEM.

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THIRD PART.

Particular Systems of Education.

SECOND DIVISION.

THE SYSTEM OF THEOCRATIC EDUCATION.

§ 227. The system of National Education founded its first stage on the substantial basis of the family-spirit; its second stage on the division of the nation by means of division of labor which it makes permanent in castes; its third stage presents the free opposition of the laity and clergy; in its next phase it makes war, immortality, and trade, by turns, its end; thirdly, it posits beauty, patriotic youth, and the immediateness of individuality, as the essence of mankind, and at last dissolves the unity of nationality in the consciousness that all nations are really one since they are all human beings. In the intermixture of races in the Roman world arises the conception of the human race, the genus humanum. Education had become eclectic: the Roman legions levelled the national distinctions. In the wavering of all objective morality, the necessity of self-education in order to the formation of character appeared ever more and more clearly; but the conception, which lay at the foundation, was always, nevertheless, that of Roman, Greek, or German education. But in the midst of these nations another system had striven for development, and this did not base itself on the natural connection of nationality, but made this, for the first time, only a secondary thing, and made the direct relation of man to God its chief idea. In this system God himself is the teacher. He manifests to man His will as law, to which he must unconditionally conform for no other reason than that He is the Lord, and man His servant, who can have no other will than His. The obedience of man is therefore, in this system, abstract until through experience he gradually attains to the knowledge that the will of God has in it the very essence

of his own will. Descent, Talent, Events, Work, Beauty, Courage,—all these are indifferent things compared with the subjection of the human to the divine will. To be well-pleasing to God is almost the same as belief in Him. Without this identity, what is natural in national descent is of no value. According to its form of manifestation, Judaism is below the Greek spirit. It is not beautiful, but rather grotesque. in its essence, as the religion of the contradiction between the idea and its existence, it goes beyond nature, which it perceives to be established by an absolute, conscious, and reasonable Will; while the Greek concealed from himself only mythically his dependence on nature, on his mother-The Jews have been preserved in the midst of all other culture by the elastic power of the thought of God as One who was free from the control of nature. The Jews have a patriotism in common with the Romans. cabees, for example, were not inferior to the Romans in greatness.

—Abraham is the genuine Jew because he is the genuinely faithful man. He does not hesitate to obey the horrible and inhuman command of his God. Circumcision was made the token of the national unity, but the nation may assimilate members to itself from other nations through this rite. The condition always lies in belief in a spiritual relation to which the relation of nationality is secondary. The Jewish nation makes proselytes, and these are widely different from the Socii of the Romans or the Metoeci of the Athenians.—

§ 228. To the man who knows Nature to be the work of a single, incomparable, rational Creator, she loses independence. He is negatively freed from her control, and sees in her only an absolute means. As opposed to the fanciful sensuous intuitions of Ethnicism, this seems to be a backward step, but for the emancipation of man it is a progress. He no longer fears Nature but her Lord, and admires Him so much that prose rises to the dignity of poetry in his telological contemplation. Since man stands over and beyond nature, education is directed to morality as such, and spreads itself out in innumerable limitations, by means of which the distinction of man from nature is expressly asserted as a difference. The ceremonial law appears often arbitrary, but in its

prescriptions it gives man the satisfaction of placing himself as will in relation to will. For example, if he is forbidden to eat any specified part of an animal, the ground of this command is not merely natural—it is the will of the Deity. Man learns therefore, in his obedience to such directions, to free himself from his self-will, from his natural desires. This exact outward conformity to subjectivity is the beginning of wisdom, the purification of the will from all individual egotism.

- —The rational substance of the Law is found always in the Decalogue. Many of our modern much admired authors exhibit a superficiality bordering on shallowness when they comment alone on the absurdity of the miracles, and abstract from the profound depth of the moral struggle, and from the practical rationality of the ten commandments.—
- § 229. Education in this theocratical system is on one side patriarchal. The Family is very prominent, because it is considered to be a great happiness for the individual to belong from his very earliest life to the company of those who believe in the true God. On its other side it is hierarchical, as its ceremonial law develops a special office, which is to see that obedience is paid to its multifarious regulations. And, because these are often perfectly arbitrary, Education must, above all, practise the memory in learning them all, so that they may always be remembered. The Jewish monotheism shares this necessity with the superstition of ethnicism.
- § 230. But the technique proper of the mechanism is not the most important pedagogical element of the theocracy. We find this in its historical significance, since its history throughout has a pedagogical character. For the people of God show us always, in their changing intercourse with their God, a progress from the external to the internal, from the lower to the higher, from the past to the future. Its history, therefore, abounds in situations very interesting in a pedagogical point of view, and in characters which are eternal models.
- § 231. (1) The will of God as the absolute authority is at first to them, as law, external. But soon God adds to the command to obedience, on one hand, the inducement of a promise of material prosperity, and on the other hand the

threat of material punishment. The fulfilment of the law is also encouraged by reflection on the profit which it brings. But, since these motives are all external, they rise finally into the insight that the law is to be fulfilled, not on their account, but because it is the will of the Lord; not alone because it is conducive to our happiness, but also because it is in itself holy, and written in our hearts: in other words, man proceeds from the abstract legality, through the reflection of eudæmonism, to the internality of moral sentiment—the course of all education.

—This last stand-point is especially represented in the excellent Gnomic of Jesus Sirach—a book so rich in pedagogical insight, which paints with master-strokes the relations of husband and wife, parents and children, master and servants, friend and friend, enemy and enemy, and the dignity of labor as well as the necessity of its division. This priceless book forms a side-piece from the theocratic stand-point to the *Republic* of Plato and his laws on ethical government.—

§ 232. (2) The progress from the lower to the higher appeared in the conquering of the natural individuality. Man, as the servant of Jehovah, must have no will of his own; but selfish naturalness arrayed itself so much the more vigorously against the abstract "Thou shalt," allowed itself to descend into an abstraction from the Law, and often reached the most unbridled extravagance. But since the Law in inexorable might always remained the same, always persistent, in distinction from the inequalities of the deed of man, it forced him to come back to it, and to conform himself to its demands. Thus he learned criticism, thus he rose from naturalness into spirit. This progress is at the same time a progress from necessity to freedom, because criticism always gradually opens a way for man into insight, so that he finds the will of God to be the truth of his own selfdetermination. Because God is one and absolute, there arises the expectation that His Will will become the basis for the will of all nations and men. The criticism of the understanding must recognize a contradiction in the fact that the will of the true God is the law of only one nation; feared by other nations, moreover, by reason of their very worship of God as

a gloomy mystery, and detested as odium generis humani. And thus is developed the thought that the isolation of the believers will come to an end as soon as the other nations recognize their faith as the true one, and are received into it. Thus here, out of the deepest penetration of the soul into itself, as among the Romans out of the fusion of nations, we see appear the idea of the human race.

§ 233. (3) The progress from the past to the future unfolded the ideal servant of God who fulfils all the Law, and so blots out the empirical contradiction that the "Thou shalt" of the Law attains no adequate actuality. This Prince of Peace. who shall gather all nations under his banner, can therefore have no other thing predicated of him than Holiness. is not beautiful as the Greeks represented their ideal, not brave and practical as was the venerated Virtus of the Romans; he does not place an infinite value on his individuality as the German does: but he is represented as insignificant in appearance, as patient, as humble, as he who, in order to reconcile the world, takes upon himself the infirmities and disgrace of all others. The ethnical nations have only a lost Paradise behind them; the Jews have one also before them. From this belief in the Messiah who is to come. from the certainty which they have of conquering with him, from the power of esteeming all things of small importance in view of such a future, springs the indestructible nature of They ignore the fact that Christianity is the necessary result of their own history. As the nation that is to be (des Seinsollens), they are merely a historical nation, the nation among nations, whose education-whenever the Jew has not changed and corrupted its nature through modern culture—is still always patriarchal, hierarchal, and mnemonic.

THIRD DIVISION.

THE SYSTEM OF HUMANITARIAN EDUCATION.

§ 234. The systems of national and theocratic education came to the same result, though by different ways, and this result is the conception of a human race in the unity of which the distinctions of different nations find their Truth. But with them this result is only a conception, being a thing external to their actuality. They arrive at the painting of an

ideal of the way in which the Messiah shall come. But these ideals exist only in the mind, and the actual condition of the people sometimes does not correspond to them at all, and sometimes only very relatively. The idea of spirit had in these presuppositions the possibility of its concrete actualization; one individual man must become conscious of the universality and necessity of the will as being the very essence of his own freedom, so that all heteronomy should be cancelled in the autonomy of spirit. Natural individuality appearing as national determinateness was still acknowledged, but was deprived of its abstract isolation. The divine authority of the truth of the individual will is to be recognized, but at the same time freed from its estrangement towards itself. While Christ was a Jew and obedient to the divine Law, he knew himself as the universal man who determines himself to his own destiny; and while only distinguishing God, as subject, from himself, yet holds fast to the unity of man and God. The system of humanitarian education began to unfold from this principle, which no longer accords the highest place to the natural unity of national individuality, nor to the abstract obedience of the command of God, but to that freedom of the soul which knows itself to be absolute necessity. Christ is not a mere ideal of the thought, but is known as a living member of actual history, whose life, sufferings and death for freedom form the security as to its absolute justification and truth. The æsthetic, philosophical, and political ideal are all found in the universal nature of the Christian ideal, on which account no one of them appears one-sided in the life of Christ. The principle of Human Freedom excludes neither art, nor science, nor political feeling.

§ 235. In its conception of man the humanitarian education includes both the national divisions and the subjection of all men to the divine law, but it will no longer endure that one should grow into an isolating exclusiveness, and another into a despotism which includes in it somewhat of the accidental. But this principle of humanity and human nature took root so slowly that its presuppositions were repeated within itself and were really conquered in this reproduction. These stages of culture were the Greek, the Roman, and the

Protestant churches, and education was metamorphosed to suit the formation of each of these.

—For the sake of brevity we would wish to close with these general definitions; the unfolding of their details is intimately bound up with the history of politics and of civilization. We shall be contented if we give correctly the general whole.—

§ 236. Within education we can distinguish three epochs: the monkish, the chivalric, and that education which is to fit one for civil life. Each of these endeavored to express all that belonged to humanity as such; but it was only after the recognition of the moral nature of the Family, of Labor, of Culture, and of the conscious equal title of all men to their rights, that this became really possible.

I. The Epoch of Monkish Education.

§ 237. The Greek Church seized the Christian principle still abstractly as deliverance from the world, and therefore, in the education proceeding from it, it arrived only at the negative form, positing the universality of the individual man as the renunciation of self. In the dogmatism of its teaching, as well as in the ascetic severity of its practical conduct, it was a reproduction of the theocratic principle. But when this had assumed the form of national centralization, the Greek Church dispensed with this, and, as far as regards its form, it returned again to the quietism of the Orient.

§ 238. The monkish education is in general identical in all religions, in that, through the egotism of its way of living and the stoicism of its way of thinking, through the separation of its external existence and the mechanism of a thoughtless subjection to a general rule as well as to the special command of superiors, it fosters a spiritual and bodily dulness. The Christian monachism, therefore, as the fulfilment of monachism in general, is at the same time its absolute dissolution, because, in its merely abstracting itself from the world instead of affirmatively conquering it, it contradicts the very principle of Christianity.

§ 239. We must notice as the fundamental error of this whole system, that it does not in free individuality seek to produce the ideal of divine-humanity, but to copy in exter-

nal reproduction its historical manifestation. Each human being must individually offer up as sacrifice his own individuality. Each biography has its Bethlehem, its Tabor, and its Golgotha.

§ 240. Monachism looks upon freedom from one's self and from the world which Christianity demands only as an abstract renunciation of self, which it seeks to compass, like Buddhism, by the vow of poverty, chastity, and obedience, which must be taken by each individual for all time.

- This rejection of property, of marriage, and of self-will, is at the same time the negation of work, of the family, and of responsibility for one's actions. In order to avoid the danger of avarice and covetousness, of sensuality and of nepotism, of error and of guilt, monachism seizes the convenient way of abstract severance from all the objective world without being able fully to carry out this negation. Monkish Pedagogics must, in consequence, be very particular about an external separation of their disciples from the world, so as to make the work of abstraction from the world easier and more decided. It therefore builds cloisters in the solitude of deserts, in the depth of forests, on the summits of mountains, and surrounds them with high walls having no apertures; and then, so as to carry the isolation of the individual to its farthest possible extreme it constructs, within these cloisters, cells, in imitation of the ancient hermits—a seclusion the immediate consequence of which is the most limitless and most paltry curiosity.—

§ 241. Theoretically the monkish Pedagogics seeks, by means of the greatest possible silence, to place the soul in a state of spiritual immobility, which at last, through the want of all variety of thought, goes over into entire apathy, and antipathy towards all intellectual culture. The principal feature of the practical culture consists in the misapprehension that one should ignore Nature, instead of morally freeing himself from her control. As she again and again asserts herself, the monkish discipline proceeds to misuse her, and strives through fasting, through sleeplessness, through voluntary self-inflicted pain and martyrdom, not only to subdue the wantonness of the flesh, but to destroy the love of life till it shall become a positive loathing of existence. In and

for itself the object of the monkish vow—property, the family, and will—is not immoral. The vow is, on this account, very easy to violate. In order to prevent all temptation to this, monkish Pedagogics invents a system of supervision, partly open, partly secret, which deprives one of all freedom of action, all freshness of thinking and of willing, and all poetry of feeling, by means of the perpetual shadow of spies and informers. The monks are well-versed in all policearts, and the regular succession of the hierarchy spurs them on always to distinguish themselves in them.

§ 242. The gloomy breath of this education penetrated all the relations of the Byzantine State. Even the education of the emperor was infected by it; and in the strife for freedom waged by the modern Greeks against the Turks, the *Igumeni* of the cloisters were the real leaders of the insurrection. The independence of individuality, as opposed to monkish abstraction, more or less degenerates into the crude form of soldier and pirate life. And thus it happened that this principle was not left to appear merely as an exception, but to be built up positively into humanity; and this the German world, under the guidance of the Roman Church, undertook to accomplish.

II. The Epoch of Chivalric Education.

§ 243. The Romish Church negated the abstract substantiality of the Greeks through the practical aim which she in her sanctity in works founded, and by means of which she raised up German individuality to the idealism of chivalry, i.e. a free military service in behalf of Christendom.

§ 244. It is evident that the system of monkish education was taken up into this epoch as one of its elements, being modified to conform to it: e.g. the Benedictines were accustomed to labor in agriculture and in the transcribing of books, and this contradicted the idea of monachism, since that in and for itself tends to an absolute forgetfulness of the world and a perfect absence of all activity in the individual. The begging orders were public preachers, and made popular the idea of love and unselfish devotion to others. They labored toward self-education, especially by means of the ideal of the life of Christ; e.g. in Tauler's classical book on

the Imitation of Jesus, and in the work of Thomas-à-Kempis which resembles it. Through a fixed contemplative communion with the conception of the Christ who suffered and died for Love, they sought to find content in divine rest and self-abandonment.

- § 245. German chivalry sprang from Feudalism. The education of those pledged to military duty had become confined to practice in the use of arms. The education of the chivalric vassals pursued the same course, refining it gradually through the influence of court society and through poetry, which devoted itself either to the relating of graceful tales which were really works of art, or to the glorification of woman. Girls were brought up without especial care. The boy until he was seven years old remained in the hands of women; then he became a lad (a young gentleman), and learned the manner of offensive and defensive warfare, on foot and on horseback; between his sixteenth and eighteenth year, through a formal ceremony (the laying on of the sword), he was duly authorized to bear arms. But whatever besides this he might wish to learn was left to his own caprice.
- § 246. In contradistinction to the monkish education, Chivalry placed an infinite value on individuality, and this it expressed in its extreme sensibility to the feeling of honor. Education, on this account, endeavored to foster this reflection of the self upon itself by means of the social isolation in which it placed knighthood. The knight did not delight himself with common possessions, but he sought for him who had been wronged, since with him he could find enjoyment as a conqueror. He did not live in simple marriage, but strove for the piquant pleasure of making the wife of another the lady of his heart, and this often led to moral and physical infidelity. And, finally, the knight did not obey alone the general laws of knightly honor, but he strove, besides, to discover for himself strange things, which he should undertake with his sword, in defiance of all criticism, simply because it pleased his caprice so to do. He sought adventures.
- § 247. The reaction against the innumerable number of fantastic extravagancies arising from chivalry was the idea of the spiritual chivalry which was to unite the cloister and

the town, abstract self-denial and military life, separation from the world and the sovereignty of the world—an undeniable advance, but un untenable synthesis which could not prevent the dissolution of chivalry—this chivalry, which, as the rule of the stronger, induced for a long time the destruction of all regular culture founded on principles, and brought a period of absence of all education. In this perversion of chivalry to a grand vagabondism, and even to robbery, noble souls often rushed into ridiculous excesses. This decline of chivalry found its truth in Citizenship, whose education, however, did not, like the $\pi \delta \lambda \epsilon \zeta$ and the *civitas* of the ancients, limit itself to itself, but, through the presence of the principle of Christianity, accepted the whole circle of humanity as the aim of its culture.

III. The Epoch of Education fitting one for Civil Life.

§ 248. The idea of the State had gradually worked itself up to a higher plane with trade and industry, and found in Protestantism its spiritual confirmation. Protestantism, as the self assurance of the individual that he was directly related to God without any dependence on the mediation of any man, rose to the truth in the autonomy of the soul, and began out of the abstract phantasmagoria of monachism and chivalry to develope Christianity, as the principle of humanitarian education, into concrete actuality. The cities were not merely, in comparison with the clergy and the nobility, the "third estate"; but the citizen who himself managed his commonwealth, and defended its interests with arms, developed into the citizen of a state which absorbed the clergy and nobility, and the state-citizen found his ultimate ideal in pure Humanity as cognized through reason.

§ 249. The phases of this development are (1) Civil education as such, in which we find chivalric education metamorphosed into the so-called noble, both however being controlled as to education, within Catholicism by Jesuitism, within Protestantism by Pietism. (2) Against this tendency to the church, we find reacting on the one hand the devotion to a study of antiquity, and on the other the friendly alliance to immediate actuality, i.e. with Nature. We can name these periods of Pedagogics those of its ideals of

culture. (3) But the truth of all culture must forever remain moral freedom. After Education had arrived at a knowledge of the meaning of Idealism and Realism, it must seize as its absolute aim the moral emancipation of man into Humanity; and it must conform its culture by this aim, since technical dexterity, friendly adroitness, proficiency in the arts, and scientific insight, can attain to their proper rank only through moral purity.

1. Civil Education as such.

§ 250. The one-sidedness of monkish and chivalric education was cancelled by civil education inasmuch as it destroyed the celibacy of the monk and the estrangement of the knight from his family, doing this by means of the inner life of the family; for it substituted, in the place of the negative emptiness of the duty of holiness of the celibate, the positive morality of marriage and the family; while, instead of the abstract poverty and the idleness of the monkish piety and of knighthood, it asserted that property was the object of labor, i.e. it asserted the self-governed morality of civil society and of commerce; and, finally, instead of the servitude of the conscience in unquestioning obedience to the command of others, and instead of the freakish self-sufficiency of the caprice of the knights, it demanded obedience to the laws of the commonwealth as representing his own self-conscious, actualized, practical Reason, in which laws the individual can recognize and acknowledge himself.

—As this civil education left free the sensuous enjoyment, freedom in this was without bounds for a time, until, after men became accustomed to labor and to their freedom of action, the possibility of enjoyment created from within outward a moderation which sumptuary laws and prohibitions of gluttony, drunkenness, &c., could never create from the external side. What the monk inconsistently enjoyed with a bad conscience, the citizen and the clergyman could take possession of as a gift of God. After the first millennium of Christianity, when the earth had not, according to the current prophecies, been destroyed, and after the great plague in the fourteenth century, there was felt an immense pleasure in living, which manifested itself externally

in the fifteenth century in delicate wines, dainty food, great eating of meat, drinking of beer, and, in the domain of dress, in peaked shoes, plumes, golden chains, bells, &c. There was much venison, but, as yet, no potatoes, tea and coffee, &c. The feeling of men was quarrelsome. For a more exact painting of the Education of this time, very valuable authors are Sebastian Brant, Th. Murner, Ulrich von Hutten, Fischart, and Hans Sachs. Gervinus is almost the only one who has understood how to make this material useful in its relation to spirit.—

§ 251. In contrast with the heaven-seeking of the monks and the sentimental love-making of the knight, civil education established, as its principle, Usefulness, which traced out in things their conformity to a proposed end in order to gain as great a mastery over them as possible. The understanding was trained with all exactness that it might clearly seize all the circumstances. But since family-life did not allow the egotism of the individual ever to become as great as was the case with the monk and the knight, and since the cheer of a sensuous enjoyment in cellar and kitchen, in clothing and furniture, in common games and in picturesque parades, penetrated the whole being with soft pleasure, there was developed with all propriety and sobriety a house-morality, and, with all the prose of labor, a warm and kindly disposition, which left room for innocent merriment and roguery, and found, in conformity to religious services, its serious transfiguration. Beautiful burgher-state, thou wast weakened by the thirty years' war, and hast been only accidentally preserved sporadically in Old England and in some places in Germany, only to be at last swept away by the flood of modern world-pain, political sophistry, and anxiety for the future!

§ 252. The citizen paid special attention to public education, heretofore wholly dependent upon the church and the cloister; he organized city schools, whose teachers, it is true, for a long time compassed only accidental culture, and were often employed only for tumultuous and short terms. The society of the brotherhood of the Hieronymites introduced a better system of instruction before the close of the fourteenth century, but education had often to be obtained from the so-

called travelling scholars (vagantes, bacchantes, scholastici, goliardi). The teachers of the so-called schola exteriores, in distinction from the schools of the cathedral and cloister, were called now locati, then stampuales—in German, Kinder-The institution of German schools soon followed the Latin city schools. In order to remove the anarchy in school matters, the citizens aided the rise of universities by donations and well-invested funds, and sustained the streetsinging of the city scholars (currende), an institution which was well-meant, but which often failed of its end because on the one hand it was often misused as a mere means of subsistence, and on the other hand the sense of honor of those to whom it was devoted not unfrequently became, through their manner of living, lowered to humiliation. of the monkish method of instruction became ever more apparent, e.g. the silly tricks of their mnemotechnique, the utter lack of anything which deserved the name of any practical knowledge, &c. The necessity of instruction in the use of arms led to democratic forms. Printing favored the same. Men began to concern themselves about good text-books. Melanchthon was the hero of the Protestant world, and as a pattern was beyond his time. His Dialectics, Rhetoric, Physics, and Ethics, were reprinted innumerable times, commented upon, and imitated. After him Amos Comenius, in the seventeenth century, had the greatest influence through his Didactica Magna and his Janua Reserta. In a narrower sphere, treating of the foundation of Gymnasial Philology, the most noticeable is Sturm of Strasburg. The universities in Catholic countries limited themselves to the Scholastic Philosophy and Theology, together with which we find slowly struggling up the Roman Law and the system of Medicine from Bologna and Salerno. But Protestantism first raised the university to any real universality. Tübingen, Königsberg, Wittenberg, Jena, Leipzic, Halle, Göttingen, &c., were the first schools for the study of all sciences, and for their free and productive pursuit.

§ 253. The Commons, which at first appeared with the clergy and the nobility as the Third Estate, formed an alliance with monarchy, and both together produced a transformation of the chivalric education. Absolutism reduced the knights to

mere nobles, to whom it truly conceded the prerogative of appointment as spiritual prelates as well as officers and counsellors of state, but only on the condition of the most complete submission; and then, to satisfy them, it invented the artificial drinking festivals, of a splendid life at court, and a temptingly-impressive sovereignty of beauty. In this condition, the education of the nobles was essentially changed in so far as to cease to be alone military. To the art of war, which moreover was made so very much milder by the invention of fire-arms, must be now added an activity of the mind which could no longer dispense with some knowledge of History, Heraldry, Genealogy, Literature, and Mythology. Since the French nation soon enough gave tone to the style of conversation, and after the time of Louis XIV. controlled the politics of the continent, the French language, as conventional and diplomatic, became a constant element in the education of the nobility in all the other countries of Europe.

-Practically the education of the noble endeavored to make the individual quite independent, so that he should, by means of the important quality of an advantageous personal appearance and the prudence of his agreeable behavior, make himself into a ruler of all other men, capable of enjoying his own position, i.e. he should copy in miniature the manners of an absolute sovereign. To this was added an empirical knowledge of men by means of ethical maxims, so that they might discover the weak side of every man, and so be able to outwit him. Mundus vult decipi, ergo decipiatur. According to this, every man had his price. They did not believe in the Nemesis of a divine destiny; on the contrary, disbelief in the higher justice was taught. One must be so elastic as to suit himself to all situations, and, as a caricature of the ancient ataraxy, he must acquire as a second nature a manner perfectly indifferent to all changes, the impassibility of an aristocratic repose, the amphibious sang-froid of the "gentleman." The man in the world as the man of the world sought his ideal in endless dissimulation, and in this, as the flowering of his culture, he took the highest interest. Intrigue, in love as well as in politics, was the soul of the nobleman's existence.

-They endeavored to complete the refinement of manners

by sending the young man away with a travelling tutor. This was very good, but degenerated at last into the mechanism of the foolish travelling of the tourist. The noble was made a foreigner, a stranger to his own country, by means of his abode at Paris or Venice, while the citizen gradually outstripped him in genuine culture.

§ 254. The education of the citizen as well as that of the noble was taken possession of, in Catholic countries by the Jesuits, in Protestant countries by the Pietists: by the first, with a military strictness; by the second, in a social and effeminate form. Both, however, agreed in destroying individuality, inasmuch as the one degraded man into a will-less machine for executing the commands of others, and the other deadened him in cultivating the feeling of his sinful worth-lessness.

(a) Jesuitic Education.

§ 255. Jesuitism combined the maximum of worldly freedom with an appearance of the greatest piety. Proceeding from this stand-point, it devoted itself in education to elegance and showy knowledge, to diplomacy and what was suitable and convenient in morals. To bring the future more into its power, it adapted itself not only to youth in general, but especially to the youth of the nobler classes. To please these, the Jesuits laid great stress upon a fine deportment. In their colleges dancing and fencing were well-taught. They knew how well they should by this course content the noble, who had by preference usurped the name of Education for this technical way of giving formal expression to personality.

—In instruction they developed so exact a mechanism that they gained the reputation of having model school regulations, and even Protestants sent their children to them. From the close of the sixteenth century to the present time they have based their teaching upon the ratio et institutio Studiorum Societatis Jesu of Claudius Aquaviva, and, following that, they distinguish two courses of teaching, a higher and a lower. The lower included nothing but an external knowledge of the Latin language, and some fortuitous knowledge of History, of Antiquities, and of Mythology. The memory was cultivated as a means of keeping down free activity of thought and clearness of judgment. The higher course com-

prehended Dialectics, Rhetoric, Physics, and Morals. Dialectics appeared in the form of Sophistry. In Rhetoric, they favored the polemical-emphatic style of the African fathers of the Church and their pompous phraseology; in Physics, they stopped with Aristotle, and especially advised the reading of the books De Generatione et Corruptione, and De Cælo, on which they commented after their fashion; finally, in Morals casuistic skepticism was their central point. They made much of Rhetoric on account of their sermons, giving to it much attention, and introduced especially Declamation. Contriving showy public examinations under the guise of Latin School Comedies, they thus amused the public, disposed them to approval, and at the same time quite innocently practised the pupil in dissimulation.

—Diplomacy in behavior was made necessary to the Jesuits as well by their strict military discipline as by their system of reciprocal mistrust, espionage, and informing. Abstract obedience was a reason for any act of the pupils, and they were freed from all responsibility as to its moral justification. This empirical exact following out of all commands, and refraining from any criticism as to principles, created a moral indifference, and, from the necessity of having consideration for the peculiarities and caprices of the superior on whom all others were dependent, arose eye-service, and the coldness of isolation sprang from the necessity which each felt of being on his guard against every other as against a tale-bearer. The most deliberate hypocrisy and pleasure in intrigue merely for the sake of intrigue—this most refined poison of moral corruption—were the result. Jesuitism had not only an interest in the material profit, which, when it had corrupted souls, fell to its share, but it also had an interest in the process of corruption. With absolute indifference as to the idea of morality, and absolute indifference as to the moral quality of the means used to attain its end, it rejoiced in the superiority of secrecy, of the accomplished and calculating understanding, and in deceiving the credulous by means of its graceful, seemingly-perfect, moral language.

—It is not necessary to speak here of the morality of the Order. It is sufficiently recognized as the contradiction, that the idea of morality insists upon the eternal necessity of

every deed, but that in the realizing of the action all determinations should be made relative and should vary with the circumstances. As to discipline, they were always guided by their fundamental principle, that body and soul, as in and for themselves one, could vicariously suffer for each other. Thus penitence and contrition were transformed into a perfect materialism of outward actions, and hence arose the punishments of the Order, in which fasting, scourging, imprisonment, mortification, and death, were formed into a mechanical artificial system.

(b) Pietistic Education.

§ 256. Jesuitism would make machines of man, Pietism would dissolve him in the feeling of his sinfulness: either would destroy his individuality. Pietism proceeded from the principle of Protestantism, as, in the place of the Catholic Pelagianism with its sanctification by works, it offered justication by faith alone. In its tendency to internality was its just claim. It would have even the letters of the Bible translated into the vivacity of sentiment. But in its execution it fell into the error of one-sidedness in that it placed, instead of the actuality of the spirit and its freedom, the confusion of a limited personality, placing in its stead the personality of Christ in an external manner, and thus brought back into the very midst of Protestantism the principle of monachism—an abstract renunciation of the world. Since Protestantism has destroyed the idea of the cloister, it could produce estrangement from the world only by exciting public opinion against such elements of society and culture which it stigmatized as worldly for its members, e.g. card-playing, dancing, the theatre, &c. Thus it became negatively dependent upon works; for since its followers remained in reciprocal action with the world, so that the temptation to backsliding was a permanent one, it must watch over them, exercise an indispensable moral-police control over them, and thus, by the suspicion of each other which was involved, take up into itself the Jesuitical practice, although in a very mild and affectionate way. Instead of the forbidden secrecy of the cloister, it organized a separate company, which we, in its regularly constituted assembly, call a conventicle. Instead of the cowl, it put on

its youth a dress like that of the world, but scant and ashencolored; it substituted for the tonsure closely-cut hair and shaven beard, and it often went beyond the obedience of the monks in its expression of pining humility and prud ish composure. Education within such a circle could not well recognize nature and history as manifestations of God, but it must consider them to be limitations to their union with God, from which death can first then completely release The soul which knew that its home could be found only in the future world, must feel itself to be a stranger upon the earth, and from such an opinion there must arise an indifference and even a contempt for science and art, as well as an aversion for a life of active labor, though an unwilling and forced tribute might be paid to it. Philosophy especially was to be shunned as dangerous. Bible lectures, the catechism and the hymn-book, were the one thing needful to the "poor in spirit." Religious poetry and music were, of all the arts, the only ones deserving of any cultivation. The education of Pietism endeavored, by means of a carefully arranged series of representations, to create in its disciples the feeling of their absolute nothingness, vileness, godlessness, and abandonment by God, in order to displace the torment of despair as to themselves and the world by a warm, dramatic, and living relation to Christ—a relation in which all the Eroticism of the mystical passion of the begging-friars was renewed in a somewhat milder form and with a strong tendency to a sentimental sweetishness.

2. The Ideal of Culture.

§ 257. Civil Education arose from the recognition of marriage and the family, of labor and enjoyment, of the equality of all before the Law, and of the duty of self-determination. Jesuitism in the Catholic world and Pietism in the Protestant were the reaction against this recognition—a return into the abstract asceticism of the middle ages, not however in its purity, but mixed with some regard for worldly possessions. In opposition to this reaction the commonwealth produced another, in which it undertook to deliver individuality by means of a reversed alienation. On the one hand, it absorbed itself in the conception of the Greek-Roman world. In the

practical interests of the present, it externalized man in a past which held to the present no immediate relation, or it externalized him in the affairs which were to serve him as means of his comfort and enjoyment; it created an abstract idealism—a reproduction of the old view of the world—or an abstract Realism in a high appreciation of things which should be considered of value only as a means. In one direction, Individuality proceeded towards a dead nationality; in the other, towards an unlimited world-commonwealth. In one case, the ideal was the æsthetic republicanism of the Greeks; in the other, the utilitarian cosmopolitanism of the Romans. But, in considering the given circumstances, both united in the feeling of humanity, with its reconciliatory and pitying gentleness toward the beggar or the criminal.

(a) The Humanitarian Ideal.

§ 258. The Oriental-theocratic education is immanent in Christian education through the Bible. Through the mediation of the Greek and Roman churches the views of the ancient world were subsumed but not entirely subdued. accomplish this was the problem of humanitarian educa-It aimed to teach the Latin and Greek languages, expecting thus to secure the action of a purely humane disposition. The Greeks and Romans being sharply marked nationalities, how could one cherish such expectations? It was possible only relatively in contradiction, partly to a provincial population from whom all genuine political sense had departed, partly to a church limited by a confessional, to which the idea of humanity as such had become almost lost in dogmatic fault-findings. The spirit was refreshed in the first by the contemplation of the pure patriotism of the ancients, and in the second by the discovery of Reason among the heathen. In contrast to formlessness distracted by the want of all ideal of culture of provincialism and dogmatic confusions, we find the power of representation of ancient The so-called uselessness of learning dead languages imparted to the mind, it knew not how, an ideal drift. The very fact that it could not find immediate profit in its knowledge gave it the consciousness of a higher value than material profit. The ideal of the Humanities was the truth to

Nature which was found in the thought-painters of the ancient world. The study of language merely with regard to its form, must lead one involuntarily to the actual seizing of its content. The Latin schools were fashioned into *Gymnasia*, and the universities contained not merely professors of Eloquence, but also teachers of Philology.

(b) The Philanthropic Ideal.

§ 259. The humanitarian tendency reached its extreme in the abstract forgetting of the present, and the omitting to notice its just claim. Man discovered at last that he was not at home with himself in Rome and Athens. He spoke and wrote Latin, if not like Cicero, at least like Muretius, but he often found himself awkward in expressing his meaning in his mother-tongue. He was often very learned, but he lacked judgment. He was filled with enthusiasm for the republicanism of Greece and Rome, and yet at the same time was himself exceedingly servile to his excellent and august lords. Against this gradual deadening of active individuality, the result of a perverted study of the classics, we find now reacting the education of enlightenment, which we generally call the philanthropic. It sought to make men friendly to the immediate course of the world. It placed over against the learning of the ancient languages for their own sake, the acquisition of the more needful branches of Mathematics, Physics, Geography, History, and the modern languages, calling these the real studies. Nevertheless it often retained the instruction in the Latin language because the Romance languages have sprung from it, and because, through its long domination, the universal terminology of Science, Art, and Law, is rooted in it. Philanthropy desired to develope the social side of its disciple through an abstract of practical knowledge and personal accomplishments, and to lead him again, in opposition to the hermit-like sedentary life of the book-pedant, out into the fields and the woods. It desired to imitate life even in its method, and to instruct pleasantly in the way of play or by dialogue. It would add to the simple letters and names the contemplation of the object itself, or at least of its representation by pictures; and in this direction, in the conversation-literature which it prepared for

children, it sometimes fell into childishness. It performed a great service when it gave to the body its due, and introduced simple, natural dress, bathing, gymnastics, pedestrian excursions, and a hardening against the influences of wind and weather. As this Pedagogics, so friendly to children, deemed that it could not soon enough begin to honor them as citizens of the world, it was guilty in general of the error of presupposing as already finished in its children much that it itself should have gradually developed; and as it wished to educate the European as such, or rather man as such, it came into an indifference concerning the concrete distinctions of nationality and religion. It coincided with the philologists in placing, in a concealed way, Socrates above Christ, because he had worked no miracles, and taught only morality. In such a dead cosmopolitanism, individuality disappeared in the indeterminateness of a general humanity, and saw itself forced to agree with the humanistic education in proclaiming the truth of Nature as the pedagogical ideal, with the distinction, that while Humanism believed this ideal realized in the Greeks and Romans, Philanthropism found itself compelled to presuppose an abstract notion, and often manifested a not unjustifiable pleasure in recognizing in the Indians of North America, or of Otaheite, the genuine man of nature. Philosophy first raised these conceptions to the idea of the State, which fashioned the cognition of Reason and of the reform which follows from its idea, into an organic element in itself.

—The course which the developing of the philanthropic ideal has taken is as follows: (1) Rousseau in his writings, *Emile* and the *Nouvelle Heloise*, first preached the evangel of Natural Education, the abstraction from History, the negation of existing culture, and the return to the simplicity and innocence of nature. Although he often himself testified in his experience his own proneness to evil in a very discouraging way, he fixed as an almost unlimited axiom in French and German Pedagogics his principal maxim, that man is by nature good. (2) The reformatory ideas of Rousseau met with only a very infrequent and sporadic introduction among the Romanic nations, because among them education was too dependent on the church, and retained its cloister-like

seclusion in seminaries, colleges, &c. In Germany, on the the contrary, it was actualized, and the Philanthropia, established by Basedow in Dessau, Brunswick, and Schnepfenthal, made experiments, which nevertheless very soon departed somewhat from the ultraism of Basedow and had very excellent results. (3) Humanity existed in concreto only in the form of nations. The French nation, in their revolution, tried the experiment of abstracting from their history, of levelling all distinctions of culture, of enthroning a despotism of Reason, and of organizing itself as humanity, pure and simple. The event showed the impossibility of such a beginning. The national energy, the historical impulse, the love of art and science, came forth from the midst of the revolutionary abstraction, which was opposed to them, only the more vigorously. The grande nation, their grande armée, and gloire—that is to say, for France—absorbed all the humanitarian phases. In Germany the philanthropic circle of education was limited to the higher ranks. There was no exclusiveness in the Philanthropia, for there nobles and citizens, Catholics and Protestants, Russians and Swiss, were mingled; but these were always the children of wealthy families, and to these the plan of education was adapted. Then appeared Pestalozzi and directed education also to the lower classes of society—those which are called, not without something approaching to a derogatory meaning, the people. From this time dates popular education, the effort for the intellectual and moral elevation of the hitherto neglected atomistic human being of the non-property-holding multitude. There shall in future be no dirty, hungry, ignorant, awkward, thankless, and will-less mass, devoted alone to an animal existence. We can never rid ourselves of the lower classes by having the wealthy give something, or even their all, to the poor, so as to have no property themselves; but we can rid ourselves of it in the sense that the possibility of culture and independent self-support shall be open to every one, because he is a human being and a citizen of the commonwealth. Ignorance and rudeness and the vice which springs from them, and the malevolent frame of mind against the human race, which are bound up with crime—these shall disappear. Education shall train man to self-conscious obe-

dience to law, as well as to kindly feeling towards the erring, and to an effort not merely for their removal but for their improvement. But the more Pestalozzi endeavored to realize his ideal of human dignity, the more he comprehended that the isolated power of a private man could not attain it, but that the nation itself must make their own education their first business. Fighte by his lectures first made the German nation fully accept these thoughts, and Prussia was the first state which, by her public schools and her conscious preparation for defence, broke the path for National Education; while among the Romanic nations, in spite of their more elaborate political formalism, it still depends partly upon the church and partly upon the accident of private enterprise. Pestalozzi also laid a foundation for a national pedagogical literature by his story of Leonard and Gertrude. This book appeared at first in 1784, i.e. in the same year in which Schiller's Robbers and Kant's Critique of Pure Reason announced a new phase in the Drama and in Philosophy.

—The incarnation of God, which was, up to the time of the Reformation, an esoteric mystery of the Church, has since then become continually more and more an exoteric problem of the State.—

3. Free Education.

§ 260. The ideal of culture of the humanitarian and the philanthropic education was taken up into the conception of an education which recognizes the Family, social caste, the Nation, and Religion, as positive elements of the practical spirit, but which will know each of these as determined from within through the idea of humanity, and laid open for reciprocal dialectic with the rest. Physical development shall become the subject of a national system of gymnastics fashioned for use, and including in itself the knowledge of the use of arms. Instruction shall, in respect to the general encyclopædic culture, be the same for all, and parallel to this shall run a system of special schools to prepare for the special avocations of life. The method of instruction shall be the simple representation of the special idea of the subject, and no longer the formal breadth of an acquaintance with many subjects which may find outside the school its opportunity, but within it has no meaning except as the history of a science or an art. Moral culture must be combined with family affection and the knowledge of the laws of the commonwealth, so that the dissension between individual morality and objective legality may ever more and more disappear. Education shall, without estranging the individual from the internality of the family, accustom him more and more to public life, because criticism of this is the only thing which can prevent the cynicism of private life, the half-ness of knowledge and will, and the spirit of caste, which has so extensively prevailed. The individual shall be educated into a self-consciousness of the essential equality and freedom of all men, so that he shall recognize and acknowledge himself in each one and in all. But this essential and solid unity of all men shall not evaporate into the insipidity of a humanity without distinctions, but instead it shall realize the form of a determinate individuality and nationality, and shall enlighten the idiosyncrasy of its nation into a broad humanity. The unrestricted striving after Beauty, Truth, and Freedom, actually through its own strength and immediately, not merely mediately through ecclesiastical consecration, will become Religion.

The Education of the State must rise to a preparation for the unfettered activity of self-conscious Humanity.

THE GRAND MAN.

By THERON GRAY.

The phrase that leads our thought in this discussion of some of the affairs of experience is becoming somewhat frequent in use, and, as it is questionable whether there is a due appreciation of the real purport thereof, and of the practical bearing or sway thence derived in all human conduct, it may be well to give it a moment's consideration. Man is somewhat known, we may suppose, but mostly known, doubtless, in his limited, private, individual form; in that which isolates or separates him from the race, rather than that which unites him with it. He is mostly known in extreme contrast—by marked distinction from his kind, instead of integral alliance that consolidates in firm solidity and

strength. Hence we are apt to use our best endeavors to prompt *vir*-tuous action, thus practically ignoring and nullifying the thought of a *homo*-geneous manhood, which alone can glorify virtue in a common sunshine of life—a kindred human fervor that shall glow and melt and mingle, and never languish nor fade away for want of base foil in human distress.

Surely man is individual, private, or personal, as also common, public, or social, in nature, spirit, and power. Otherwise there were only a blank chaos for him that must swamp. him forever in the gloomy depths of mere brute nature.

In order to be sure of our reckoning, and to exhibit to the understanding just what we understand the Grand Man to comprehend, let us try to properly define.

We hold the term to mean the aggregate humanity; mankind as a unit, in nature, power, and destiny. The first seal to such a unit is a common origin—natural consanguinity one-ness of blood. The second seal is a one-ness of spiritual energy, that prompts every individual of the race to press onward in the endeavor for fuller personal realizations in life. The third seal is a unity of destiny, that assures true social alliance, fullest opportunity and clear competence for all. The first is like a motionless sea, sure to become putrid if left thus to stagnate. The second makes a common motor or stimulus of action, which, although engendering painful turbulence of particles and seeming destruction, tends to work the whole body pure and good in constant use. third is the inexhaustible fount or ocean, competent to satisfy all thirst, allay all the fevers of life, and amply to refresh forevermore.

In plain terms, the first estate of mankind, as a whole, is one of common inheritance in native equality, practically void of the differential human spirit requisite to develope personal force, or individual character, while yet *involving* that spirit in latent form. The second is one of universal strife and toil under the active promptings of this involved spirit, and fosters continual connection and discord as means to a worthy end—full accordance. The third is one of rest and peace through perfect adjustment, by competent institutions, of "each with all and all with each"; making every indivi-

dual factor a firm integer to an integral public body. They all stand by together as successive forms of one structure; a one comprising an involved primary as a ground of action, an evolutionary course as a process of action, and an evolved result as the object of such action. These are held to comprise the *thetic*, the *antithetic*, and the *synthetic*, aspects of the *one*. Like the order of the solar system, the first term, under the diction of centripetal law, tends to obliterate the human in the Divine; the second term, as centrifugal, tends to destruction through extreme, or unqualified, self-projection; the third tends to a reconciliation and balance of these extremes in an orbitual poise that carries the perfected form on its own axis, in perpetual play around its Supreme Centre, whence alone it can derive light, heat, and requisite vital energy.

The elementary principles of this formula may be found in—first, *simple unity*, which buries personality in universality; second, in *duality*, which separates, self-asserts, or immediately antagonizes universality; third, in *trinity*, or compound unity, which unites, or reconciles, the prior contrarieties in a new power of matchless worth—a power that orders and keeps all of the intrinsic glories of diversity in the supreme glory of eternal unity.

It is clear, accordingly, that the Grand Man can only become duly conscious of himself, in external realms, through an experience of the third condition indicated in our formula. In other words, the actual, complete organization and experience of full integral order in human affairs—of perfect society and fraternal alliance in all things—must be clearly effected before there can be due public consciousness of universal unity—divine social order with its boundless delights—as the sure vital constituent of human earthly destiny. As in the individual one identical life rules different eventful periods, and only comes to manly consciousness in the experience of manhood itself, so the race-humanity-slumbers long in prehistoric feetal environment, then emerges in a comparatively helpless and innocent state of childhood, then passes on to the boisterous turbulence of "the coming man" in the spirit of the youth, and only comes to know its true objective personality in the deliverance of a complete manhood

achieved. Extreme earthiness must be the generative initial of the Grand Man; thence, for a time, comes a cradling amid the flowers of springtime, and bathings in the dewy breath of morning. Then come struggles with the sterner and more painful realities that beset his way and pierce and tear him, from which he finally emerges into an open experience of the sublime destination that ruled from the first, even while he was all unconscious of his essential Life.

In the great march of Humanity—the Grand Man in process of development—Christianity answers to this third estate, and applies itself to fulfil accordingly. Yet serious doubts ensue and questions spring up to chafe and plague the sturdiest intellects till there arises a clear understanding of the whole ground. Unless we sharply distinguish the real difference between the developing process of Christianity and the fruitional condition wherein that development is consummated, we shall be found reeling somewhat beneath the sturdy blows of skepticism; at least we shall, otherwise, be unable to justify the Christian claims on rational grounds. We must know that in the race-career each distinctive form of human character exacts an era of growth wherein it is not distinctly visible in its essential character; like the corn that germinates unseen in the earth, then, in higher form, is also covered by a course of stock-growth; and again is hidden, in process of ear-growth, beneath its enveloping husk. The era of Christian development stands as this maturing process in the career of the Grand Man, while the era of accomplished ripeness throws down the perishable husk and exhibits the imperishable "corn fully ripe in the ear." Seeing this, and knowing that the kingdom that "shall break in pieces and consume all other kingdoms" hath its foundations already firmly fixed, only needing some proper divesting of outward scaffolding and rubbish, we should find ourselves duly prepared to explicate the stirring events of seeming adversity that transpire during the developing throes of Christian civilization, and to point the clear way to the coming Day, even though immediately jolted and bruised amid present tumult. We should stand firmly to our task and labor as the husbandman, having first partaken of the fruit. We should see and know the risen Christ, with his great involution of "good-will

towards men, and on earth peace," to be made real through the supreme sway of his vital presence and power. Jesus, as the Christ, brought to light—personally revealed—the great realities that come to general consciousness in the actual experience of established harmony and order in human affairs; but those realities surely exacted the adverse and painful experience, in the career of the Grand Man, known and felt as the commotions of Christian development. And when such experience becomes a stumbling-block to the human intellect, and prompts it to question and deny the Christian verity itself, the need of a comprehensive intellectual poise becomes at once evident. The great law that, in all cases, makes the multiplication of a good in natural realms to depend upon a previous planting of that good there, and then upon a tedious experience in developing culture and structural effort in its behalf, before a worthy fruition can be had, must become apparent. Then, not only the shocking throes of Christian development will be found consistent, but its blessed promise of divine harmony and order in all earthly affairs will be not only anchored in the affections but also held in the intellect, as the adequate lumen on all occasions.

Accordingly, let our vision revert briefly to the status of the Grand Man to-day. Let us face some of the sterner realities of experience that confront us and challenge our faith in both God and man, threatening social dissolution and decay.

The pompous splendor of outward possession, of personal aggrandizement and display, so influences and commands in certain directions, that there is coming to be felt a fearful greed and an equally fearful disregard of neighborly interests under its promptings. Ambition to outweigh and outshine, in such comparatively unworthy ways, works constant mischief, making men unscrupulous and inhuman, even to the extent of the most hideous criminality in many instances. Then, in other quarters, comes into play all the forces of human nature with starved appetite, claiming satisfaction of its wants in all its broad range; while, amid prevailing antagonism of interest, competition, and especial self-assertion, hordes of such as are variously weak and less competent to crowd, strive, and supply wants, are prompted to seize

upon any means that seem to be available to serve, even though penal barriers pend at every point. Threats of disaster and death are weak where unregulated human passion and unrelieved natural want are in the ascendant. There is no ferocity more keen and relentless than that which is born of unrelieved human want-unregulated human nature. It will rage, storm, and destroy, in the endeavor to appease its promptings, whatever the obstacles erected or the inflictions threatened. It is not less determined to its native level than the waters in our streams; hence, if found malarious or destructive in its course, no obstructive device can long avail to check the flux. Only new channels—new means of expression—will remedy the evil and secure public welfare. plain words, human nature is an irrepressible force, and, if found expressing itself violently and harmfully when operated by present methods, new ways should be devised and instituted to give more consistent expression; thus not only keeping the full power as a public treasure, but securing the freedom and dignity of the subject. Repression by force may for a time measurably check, but only perfectly ordered freedom will effectually cure, and thus serve both the individual and the public.

The problem doubtless requires new studies and more humane endeavors, but its solution is demanded as our only hope of peace and social order. Murders and every kind of violence are coming to be shockingly frequent. Men stand aghast before the floods of crime that surge upon us. Whenever life seems to menace passion, obstruct want, or in any way to thwart cherished designs, it is held to be awfully cheap, and is swept aside with horrid levity. Moved by all this, earnest, considerate minds are at least becoming duly inquisitive: and not a few are at loss which most to deplore, the low-bred rapacity that prowls and stabs in dark alleys and hidden retreats, in behalf of some personal end, or the inhuman anger and hate poured forth on every hand, towards these base offenders, in supposed behalf of public interests. The flippancy with which hate and vengeance leap forth to berate the wretches betokens murderous conditions on a large scale, more demoralizing and deplorable, if possible, than those private bloody horrors that are mostly born of

degradation and prostitution of one kind or another. One is Murder, well-dressed, challenging public recognition and approval—at least boldly presuming upon them; the other is Murder in rags, and filth, and debauchery—self-condemned, and solely intent upon dodging the policeman and hangman.

If the force thus spent in vindictive malediction were directed, instead, to a careful consideration of the motive powers of society, with its numerous covert traps and seductive springs which allure and destroy human worth—Manhood when it should be stimulated and supported constantly and on every hand, we should at once begin to breathe a new and reviving social atmosphere, and feel new sensations of precious health and spirits never before imagined. Shall we thus begin to amend? or, shall we go on in the vain endeavor to give the Grand Man the coveted rest and integrity by petty amputations and lacerating thrusts? Let our answer to these questions take a wholesome practical turn, and all will vet We must commence to build with strict reference to the End. We must shape all preliminaries by its clear light. Especially as a Nation planted distinctly in the principle of this intrinsic unity of private and public, special and general, personal and combined interests in a universal fraternization, we must proceed to form and conduct all of our civil affairs in actual consistency therewith. In this way, and in this way alone, may we hope to live and prosper and become the great nation that we must, to verify our national principle of "each in all and all in each."

The initial conception of our nationality, distinctly involving the principle of full composite order—the unity of all, in interest, power, and social worth—was clearly announced, and partially formulated in institutions, at the first; but it was utterly impossible that fruition should come at the time of planting. A long course of faithful toil was requisite—labor that should truly comprehend the nature of the seed and the promise of the harvest, and thus insure issues in all respects complete. During immaturity we doubtless needed penal institutions and all the appendages of unripeness; but they should all have been shaped accordantly with the central principle involved—the principle of fraternity that aimed at ultimate embodied or actualized fraternization. Hence the

main intent and power of all penal structures should have been educational and reformatory instead of repressive and maledictory.

An instance comes to mind, where, almost within a stone's throw of our present writing, the head manager of a criminal institution avowed it to be his especial purpose to treat his subjects with such severity that they would not come back again to his charge. And such adverse, base conceptions seem mostly to rule, not only criminal administration, but criminal legislation.

We have nationally sowed for a magnificent harvest; but if we tread down and mutilate the crop, in rash and bungling impatience during our efforts to cultivate, we can hardly expect to reap as we have sowed. Only consistent culture can assure the harvest. Let our statesmen, therefore, proceed to form and direct anew, in more strict conformity to the demands of our national genius, and so correct those flagrant violations that frustrate our national hopes and tend to destruction. Neither true heart nor head will counsel any sentimental folly that would shelter social offenders from stern tutelage. Those criminally offensive, and in any way adverse to tolerable social order, must be held to courses of tutelage as constant and true as our heart-throbs; and with equally constant purpose to purify the particles, and send health, vigor, and the ruddiest glow of a common life, throughout the whole system. Until we do thus conform to the national pledge and the national demands we shall be in constant peril of national destruction, and shall continue to be played upon by dire inflictions to the end. We may easily avert such evils by projecting institutions—tutelary and educational—strictly conforming to the commanding national thought, being sure to have them faithfully administered accordingly.

Nothing could prompt us to present or urge useless innovations or impracticable measures. All seeming urgency proceeds solely upon such a knowledge of the constitutional law, developing law, and finally organizing law of social order, as leaves one no option as to the choice of action in the case. With Paul we feel under bonds to say some word, duly authorized, to disturb prevailing lethargy, and arouse

statesmen and moralists from their present state of alarming mental photopsia. It is not that present institutions are too lax or unexacting in their aims at a tolerable order, but that they are largely mistaken and inefficient; which prompts criticism and protest and a call for reform. They "carry us into captivity, and yet require of us a song; they waste us, and in return expect of us mirth."

Our institutions—at least our statesmen—do not sufficiently take into account that man is never so truly man as when standing in the full stature of integral freedom; and that such freedom is dependent upon the attainment of fullest amity between the private and public man, and that all provisional or educational means must be strictly designed accordingly. True statesmanlike endeavor will at once comprehend the whole situation. It will see that the grand national mistake consisted in an attempt to ignore the demands of national development and culture towards an involved end or object, and thereupon an endeavor to enter into full occupancy and use, as if the full structure were accomplished from the first, and ready to dispense its blessings accordingly. The proceeding was as absurd and fruitful of disaster as were that of a party in want of a physical structure to shelter and serve him variously, who, upon securing a satisfactory plan and specifications, proceeds to lay the foundations, and then to immediate occupancy and use. True, statesmanlike vision will see and aim to correct this great error, though it cannot annul the national experience of heats and chills and stormy peltings already felt in consequence of the blunder.

Thus the question constantly recurs, and demands equally constant consideration, how may we outgrow and amend? The dreadful events of our daily experience being distressingly impressive in witness of the count we make—aye, in witness of our utter inability to make that count in sufficiently impressive terms—there can be no room for indifference either in word or deed. Under God's providence the full remedy is possible; aye, it is certain; but it were better that it come through our intelligent coöperation than through the experimental bungling of mere intuitional endeavor. In the former case all will proceed in beautiful order and peace; in the latter, in disorder and painful commotions, being attended

with large breaks, or interruptions, that betoken for a time final failure. In order that our statesmen may more truly comprehend the needs, and that the promise of our republic may not end in such a break, let us renewedly try to outline the path that must be opened and faithfully trodden in order to plant our feet securely upon the foundations of the New City, wherein, alone, the Grand Man can become duly conscious of ample social integrity.

In the whole range of our national endeavor we must dispose ourselves with the docility of little children, and begin to study and learn anew. We must heartily turn from the ways and means heretofore relied upon and found impotent to serve, and implore God that our eyes may be opened to see, and our hands nerved to do, the right. We must come to know that life mistakenly expressed, and goring us at every point with its violence, cannot be righted by violence in return. Nor can it be repressed by any obstructive device that can be erected—as we ought to learn ere long. conduct may be directed or duly ordered, but can never be annulled or choked off-not with desired effect. to a due sense of the truth of these allegations, a new endeavor arises, and new studies begin, through which we may hope to conduct the human forces, that now destructively play upon us, into productive channels. "How?" use of new institutions, graded to fit all the varying needs institutions that shall reach out and humanly embrace every factor of the social compact that in any way inclines to debauch or to subvert the public interests. Social material, while yet in the rough, must be seized and firmly held, and properly shaped for the great structure in view.

In agriculture, physical chemistry is coming to lend itself to the conversion of offensive decay and poisonous stenches into the priceless wealth of abundant fertilization and growth. It is high time that political and social science were sounding the depths of those matchless human chemical stores in reserve, whereby present social and political filth and poison may as surely be transformed into means of equal productive worth in these higher realms of life and experience.

Perfect personal liberty is surely essential to the constitution of the fully conscious Grand Man—to social order fully

achieved; but the unqualified factors thereof must first be seized and forced, if necessary, into qualifying processes. They must be trained in the use of due means for manly development—achievement of character—and held firmly to the task, even if personally averse. The personal freedom of a partial culture may rightly be held in immediate abeyance, always with a view to fitting the subject for the enduring freedom of a perfected composite culture. Accordingly, the public must sternly command and direct the private force in all needful ways, in order to educe - educate - unfold such force to best purposes, and never to circumscribe or despoil in any way. For instance, the ballot should be withheld until suffrage is first qualified, measurably at least, according to the great behests of our national standard of intelligent and virtuous manhood. Not for the purpose of defrauding or despoiling the subject, but for the purpose of assuring his interests, which his own unqualified action would be quite sure to undermine. He were thus not a direct or active power in government, but none the less an indirect or passive power, ruling perforce of needs intelligently apprehended rather than by the exercise of his own unintelligent will. One involuntarily shudders in view of the great peril of our nation in consequence of an attempt to realize universal suffrage ere such suffrage were duly qualified. Men truly enough saw that it was involved in our system, but failed to see that its investing conditions must be first provided before it could prove safe and salutary in actual experience.

When our legislation comes to appreciate the national needs and to apply itself accordingly, it will proceed to command and organize all institutions in the clear interest of every citizen. It will make our national structure one great "ring," or organic form, that shall play upon all minor rings and make them all variously tributary to the highest welfare of every citizen. The invincible spirit of combination, organization, association, that gives character to the present era and exhibits its powers in countless partial and conflicting organic forms or rings, must come under the diction of competent ordering and qualifying intelligence, which will give adequate form and augmented force thereto, thus finally exhibiting a grand national unity that shall hold and operate

every fibre of the immense system in exactest order. tory thereto, legislation should at once project and properly man a series of institutions that will tend to carry every particle of the blood of the Grand Man into healthy circulation, gradually working it clear of all impurities, and giving the whole form the glow of immortal health and beauty. If repressive and penal institutions be kept for a time—as doubtless they must—they should be ordered and conducted anew. Criminal offenders should be duly classified and brought under the play of the most ennobling incentives to manly conduct. Stimulating influences should be constantly made to bear in fostering manly endeavor and strength, and securing actual growth and permanent reform. "Population is wealth." and all decimation should be carefully prevented. In order that such wealth be converted to highest value, the broad vision of ripest statesmanship must come in to devise and direct and construct to the sublime human ends in view. Social intuitions that confusedly develope and organize must give place to social science. Not to a merely nominal or miscalled social science—itself hobbling with infirmity—but to the clear vision that determines all previous events, and assures every onward and upward step in the sure light of That End, alone, must truly determine all means; hence no developing nor organizing means can proceed with infallible effect unless such means be dictated solely by its ample lumen, held by the intellect as positive science. Beneath its transforming rays, not only spears will be turned into pruning-hooks and swords into ploughshares, but criminal courts and prison-houses will gradually melt away, giving place to Social Directories and Reformatories, which again will grow into hierarchal Councils overlooking palatial homes, temples of worship, art, science, education, industry, recreation, amusements, where will centre and abide all the graces and delights of Divine-Human Social Order.

LOGIC.

By Joseph G. Anderson.

Whatever exists is a thing or being. The words "thing' and "being" are used convertibly. Things are of two kinds, Substances or beings by themselves, and Qualities or beings by accident or by or through another. "For Being ($\tau \delta$ $\delta \nu$, ens) is primarily divided into Being by itself (ens per se) and Being by accident (ens per accidens)."*

Logic is the science of the Laws of Substances and Qualities as substances and qualities.

Every logical term names a substance or class of substances. A term may include in its signification all the individuals in a class (that is, the whole class), or a part of them only. When all the individuals are included the term is said to be universal, otherwise particular.

All substances outside of, or not belonging to, or included in, a class may be considered together as forming another class, which is the negative of the first. Hence results an axiomatic law:—Law I. Every class added to its negative equals or rather constitutes the class all substances. A negative class as well as a positive one may be considered all together or otherwise, and therefore negative terms may also be universal or particular in the same manner as positive terms.

There are, then, four classes of terms produced by this cross division of universal and particular, positive and negative terms, namely, the positive universal, the negative universal, the positive particular, and the negative particular.

Now let capital letters be used as universal terms and small letters as particular terms; let Roman letters be used as positive terms and Italic letters as negative terms. Thus, A as the positive universal term, the usual expression therefor being "All A"; A as the negative universal term, for which there is, perhaps, no exact equivalent commonly used, but which would mean the same as "All non-A," or "All ex-

^{*} Sir William Hamilton's Lectures on Logic, p. 141.

cept (or besides) A"; a as the positive particular, usually "Some A"; a as the negative particular, equivalent to "Some non-A," or a portion of what is outside the class A.

The particular terms a and a are indefinite in their meaning, being equivalent to any "some A," or any part of A, and are accordingly used when it is wished to signify an indefinite part of the class A. a' and a' are used when it is desired to signify some definite part of the class A or the class A.

Discretive identity is the relation which two classes bear to each other when the same individuals which constitute one constitute the other also. The whole of one class may be discretively identical with the whole of another or with a part of another, or a part with a part. Now let a colon (:) placed between two terms be the sign of identity—indicate that the classes signified are discretively identical.

A proposition is a statement that two classes are discretively identical.

By the various combinations of the four classes of terms, sixteen propositions will result as follows:

(1) A : B,	(5) $A:b$,	(9) a:B,	(13) $a:b$,
(2) $A:B$,	(6) $A:b$,	(10) $a:B$,	(14) a:b,
(3) $A:B$,	(7) $A : b$,	(11) $a : B$,	(15) $a:b$.
(4) A: B,	(8) $A:b$,	$(12) \ a:B,$	(16) $a:b$.

These are all convertible. When A:B, B:A; when A:b, b:A, and so throughout. It will be observed that several of the propositions are substantially alike and that the number of propositions might thus be reduced to ten; but, for reasons that will appear hereafter, all are retained.

A number of inferences, commonly called immediate, arise from the first twelve propositions. Of these there are two series. The first arise in accordance with the following axiomatic law:—Law II. When a whole class is discretively identical with another whole class, or with part of another class, then any part of the first class will be discretively identical with a part of the second class.

In other words: What is true of each individual contained in a whole class, is also true of each individual contained in any part of that class.

Applying this law to the first twelve propositions, we have

From	(1) A:B,	a:b;	Fron	n (7)	$A:\mathbf{b}$,	a:b;
"	(2) $A:B$,	$\mathbf{a}:b$;	"	(8)	A:b,	a:b;
"	(3) $A:B$,	a:b;	"	(9)	a:B,	a:b;
"	(4) $A:B$,	a:b;	"	(10)	a:B,	a:b:
"	(5) $A:b$,	a:b;	"	(11)	a:B,	a:b;
"	(6) $A:b$,	a:b;	"	(12)	a:B,	a:b.

While the particular term in the last eight examples does not change its form, there is in reality a lessening in the quantity of the term exactly corresponding to that in the other member of the proposition. So in the other four propositions while there may be an inference drawn in the same manner as in the first twelve, it would produce no change of form in the proposition. This can be made to appear as follows: in the proposition a:b, let us make both terms definite, a':b'; now let a" be a part of a' and b" be the corresponding part of b', then we have the inference from a':b', a":b".

The second series of inferences arise in accordance with the following laws:

Law III. When a whole class is discretively identical with another whole class, the whole of the negative of the first class will be discretively identical with the whole of the negative of the second class.

Law IV. When a whole class is discretively identical with a part of another class, then a part of the negative of the first class is discretively identical with the whole of the negative of the second class.

These laws are demonstrated as follows:

Law III. When A:B, A:B.

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Let Z be all substances:
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Then A+A:Z, by Law I.;

but A:B,

therefore B+A:Z.

But B + B : Z,

therefore A:B.

 $\mathbf{A} + A : \mathbf{B} + B$, by Law I.

Dropping A from one side, and its equivalent B from the other, we have A:B.

This reasoning may also be stated thus: If the classes A and B exactly coincide, then must their negatives also exactly coincide.

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Law IV. When A:b, a:B.
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A+A:Z;

A:b;

... b+A:Z,

or A:Z-b.

Let b+b':B,

then b+b'+B:Z,

or b'+B:Z-b,

whence A:b'+B.

Let b+b':B,

A+A:b+b'+B,

... A:b'+B.
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Dropping b' from one side, and the corresponding portion of A from the other, we have a:B.

Applying law III. to the first four propositions, and law IV. to the next eight, we have

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From (1) A:B, A:B; From (7) A:b, a:B; (2) A:B, A:B; (8) A:b, a:B; (9) a:B, A:b; (10) a:B, A:b; (11) a:B, A:b; (11) a:B, A:b; (12) a:B, A:b; (12) a:B, A:b;
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Neither of these laws apply to the last four propositions. The only inference from them is, first making both terms definite and letting a'+a'': A and b'+b'': B, when a': b', A+a'': B+b''.

A Syllogism is an inference from two propositions having a common term which in the syllogism is called the middle term. The law of this inference is:

Law V. Classes discretively identical with the same class are discretively identical with each other. When A:B and B:C, A:C.

By the various combinations of the sixteen propositions, two hundred and fifty-six pairs of premise-propositions will result as given in the following table, which also gives the conclusion, if any, to be derived from each:

	1	2	3	4	5	6	٦,	8	9	10	11	12	13	14	15	16
1	A: B B: C A: C	B:C	A: B B: C A: C	Λ: B Β: C Λ: B	A: B B: c A: c	A: B B: c A: c	A: B B: c A: c	A: B B: c A: c		A: B b: C a: C	A: B b: C a: C	$\begin{bmatrix} A \colon B \\ b \colon C \\ a \colon C \end{bmatrix}$	A: B b:c a:c	b:c	A: B b: c a: c	A: B b: c a: c
2	B: C	\mathbf{B} : C	$\begin{vmatrix} A \colon B \\ B \colon C \\ A \colon C \end{vmatrix}$		$\begin{array}{c} A:B \\ B:c \\ A:c \end{array}$		B: c	A: B B: c A: c	$\begin{vmatrix} \mathbf{A} : B \\ \mathbf{b} : \mathbf{C} \\ \mathbf{a} : \mathbf{C} \end{vmatrix}$	A: B b: C a: C	A: B b: C a: C	b:C	A: B b : c a : c	A: B b: c a: c	A: B b: c a: c	A: B b: c a: c
3	B: C	B: C			B: c	A: B B: c A: c	A: B B: c A: e	A: B B: c A: c	b:C	b:C	A: B b : C a : C	A: B b: C a: C	b:e	A: B b: c a: c	A: B b : c a : c	A: B b: c a: c
4	A: B B: C A: C	A: B B: C A: C		$\begin{array}{c c}A:B\\B:C\\A:C\end{array}$	A: B B: c A: c	A: B B: c A: c	$\begin{array}{c c}A:B\\B:c\\A:c\end{array}$	$\left. \begin{array}{l} A\colon B \\ B\colon c \\ A\colon c \end{array} \right $	b:C		A:B $b:C$ $a:C$	$\left. \begin{array}{l} A\colon B \\ b\colon C \\ a\colon C \end{array} \right $	A: B b: c a: c	A: B b: c a: c	A: B b: e a: e	A: B b:c a:c
5	A: b B: C A: c		A: b B: C A: c	B:C	A: b B: c A: c	B: c	A: b B: c a: c	A: b B: c a: c		A: b b: C a: e	b:C		A:b b:c *		A:b b:e a:c	
6		A: b B: C A: c		$B: C \mid$	B:c	A: b B: c a: c	A: b B: c A: c	A: b B: c A: c		A: b b : C A: c	$b : \mathbf{C}$	$\begin{vmatrix} \mathbf{A} : b \\ b : C \\ a : \mathbf{c} \end{vmatrix}$		A: b b: c a: c	A: b b : c	A: b b: c
7	A: b B: C A: c	$\mathbf{B}: C$	A: b B: C a: C	$\begin{vmatrix} A : \mathbf{b} \\ B : C \\ \mathbf{a} : C \end{vmatrix}$	A:b B:c A:c	A: b B: c A: c	A:b B:c a:c	A: b B: c a: c		A: b b: C a: c	b:C	$\begin{vmatrix} A \colon \mathbf{b} \\ b \colon C \\ \mathbf{a} \colon C \end{vmatrix}$	A: b b: c *	A: b b: c *	A: b b : c a : c	A: b b: c a: c
8	A: b B: C a: C	A:b B:C a:C	A:b B:13 A:c	$\begin{vmatrix} A:b \\ B:C \\ A:c \end{vmatrix}$	$\begin{bmatrix} A:b\\B:c\\a:c \end{bmatrix}$	A:b B:c a:c	A:b $B:c$ $A:c$	$\begin{array}{c c}A:b\\B:c\\A:c\end{array}$	A: b b: C a: C	A: b b: C a: C	b:C	$\begin{vmatrix} A:b\\b:C\\a:c \end{vmatrix}$	A: b b: C a: c	A:b b:c a:c	A:b b:c	A: b b: c
9	B:C	B: C	a: B B: C a: C	B: C	B: e		B: e	a : B B : c A : c	b:C	a : B b : C a : C	b: C		a : B b : c a : c		a:B b:c	a:B b:c
10	a: B B: C a: C		B: C	$\begin{vmatrix} \mathbf{a} : B \\ B : C \\ \mathbf{a} : C \end{vmatrix}$	B: c	a: B B: c a: C	B: c	a: B B: c a: c	b:C	a: B b: C a: c	b:C	$\begin{array}{c c} \mathbf{a} : B \\ b : C \\ \mathbf{a} : C \end{array}$	a : B b : c	a: B b: c	a:B b:c a:c	a:B b:c a:c
11	a: B B: C a: C	n:B B: C a: C	B: C	a:B B:C a:C	a:B B:c a:c	a:B B:c a:c	B: c	B: c	a : B b : C a : C	b:C	a:B b:C a:c	a:B b:C a:c	a:B b:c a:c	a:B b:c a:c	$\begin{bmatrix} a : \mathbf{B} \\ b : \mathbf{c} \\ * \end{bmatrix}$	a:B
12	B: C	a:B B:C A:c	a:B B:C a:C	$\begin{vmatrix} a:B\\B:C\\a:C \end{vmatrix}$	a:B B:c A:c	a:B B:c A:c	<i>B</i> : c	a:B B:c a:c	$\begin{vmatrix} a:B\\b:C\\a:c \end{vmatrix}$	a:B b:C a:c	a: B b: C a: C	a:B $b:C$ $a:C$	a:B b:c	a:B b:c *	$\begin{vmatrix} a:B\\b:c\\a:c\end{vmatrix}$	a:B b:c a:c
13	a:b B:C a:c	a:b B: C a: c	a:b E:C a:c	B:C	a:b B:c a:c	a:b B:c a:c	a:b B:c	a:b B:c *	a.b b:C	a:b b:C	a:b b:C a:c	a:b b:C a:c	a:b b:c	a:b b:c	a:b b:c	a:b b:c
14	a:b B:C a:c	a:b B:C a:c	B: C a: e	$\begin{vmatrix} \mathbf{a} : b \\ B : C \\ \mathbf{a} : c \end{vmatrix}$	a: b B: c	a:b B:c	a:b B:c a:c	a:b B:c a:c	a:b b:C a:c	a:b b:C a:c	a:b b:C	a:b b:C	a:b b:c	a:b b:c	a:b b:c	a:b b:c
15	a:b B:C a:c	a:b B: C a: c	a:b B:C a:c	$\begin{vmatrix} a : b \\ B : C \\ a : c \end{vmatrix}$	a:b B:c a:c	a:b B:c a:c	<i>a</i> : b <i>B</i> : c ☀	a:b E:c	a:b b:(3	a:b b:C		a:h b:C a:c	a:b b:c	a:b b:c	a:b b:c	a:b b:c
16	a:b B:C a:c	B: C	$\begin{vmatrix} a:b\\B:C\\a:e \end{vmatrix}$	a:b B:C a:c	a:b B:c *	a:b B:c	a:b B:c a:c	a:b B:c a:c	a:b b:C a:c	b: C	a:b b:C	a:b b:C	a:b b:c	a:b b:c	a:b b:c	a:b b:c

^{*} No conclusion can be reached.

It will be observed that the same figure, that is, the same order of terms and propositions, is used throughout the table. This is done because we thus get every possible variation of the simple syllogism, the figure otherwise making not the slightest difference. If it were attempted to produce syllogisms in the other three possible figures, it would be found in effect to result in a simple repetition of the same syllogism. The conclusion is deduced from the two identities, and it makes no difference which proposition comes first, or, in each proposition, which term comes first.

In many of the cases in the table the conclusion is reached directly in accordance with law V. In others, however, it is necessary first to transform one or both the premises by laws II., III. and IV., or some of them, before a conclusion can be reached.

By examination of the table, it is found that a conclusion can be reached in every instance where two or more of the four terms contained in any two premise-propositions in the table are universal, and that too whatever be the variation of the terms as to quality.

When but one of the four terms is universal, a conclusion can be reached in all cases (and in those only) where the universal term is the middle term in one of the propositions and the middle term in the other proposition is of the same quality, that is, positive when the universal term is positive and negative when the universal term is negative, or where the propositions can be reduced to that form by the application of law III. or IV.

Keokuk, Iowa, Dec. 1, 1873.

[Continued from page 48.]

find objectively valid thoughts. Even Reflection is an activity partly confined to images which it is unable wholly to transcend. It cannot seize the living process, and is therefore inadequate to state what is universally and necessarily valid in the objective world. The Speculative Reason, however, is occupied solely in the contemplation of this living process not only as defined in pure thought, but also as manifested in the world of Experience.

- 11. Think in universals. Place every idea "under the form of eternity"; i.e. make it universal, and see what will come of it. Its dialectic will then appear. The dialectic is the soul of the whole revealing itself in the part. The partial exhibits its implications or presuppositions when it is posited as universal by thought. Trace out these implications and the true whole will appear.
- 12. That there hovers before the mind a "presupposition of the world from which abstraction has been made" when one discusses pure being, is a critical saying of Trendelenburg. Undoubtedly he is right; but of what nature is this presupposition? It is not a presupposition of some idea more simple than Being—of some idea that must be thought before thinking Being. On the contrary, Being is the idea that must necessarily be thought prior to the idea of the world. Let one endeavor to think the world (or any other concrete idea), and his first mental act will be the predication of the undetermined Being of it: the world is. The second act of thought will necessarily be the simple first determination of it—the thought of its negation or limit. The next thought (whether this process is conscious or unconscious, it is, all the same, involved in every mental act of seizing an idea) will be that of the synthesis of its Being and its limit, and only after these three steps will the mind recognize before it the definite being of its object. These three steps are rarely separated consciously; their result alone is seized as the first step. triad Being, Naught, and Becoming, takes us but a little way forward in Logic. Hegel considered it the nadir of pure thought, and opposite to it held up the idea of Personality as the zenith of his system ("Die höchste zugeschärfste Spitze"). But the spirit of his method may be exhibited even in these barren abstractions.

The Dialectic is a process of passing from Seeming to Truth. Pure Science furnishes the general formulas for the solution of all problems. It is a Calculus, a general theory without which particular solution is impossible, inasmuch as it underlies all synthesis.

NOTES AND DISCUSSIONS.

In the present number of the Journal we offer our views on the Method of Hegel as a contribution to the settlement of the question of Speculative Dialectic. If we can only ascertain what thoughts and ideas in our minds have the most unmistakable universality (of application) and necessity, we can ascertain what thoughts and ideas have the most objective validity. For what we must think on a given subject is the logical condition of all experience regarding that subject. The article to which we refer is the result of thirteen years' thinking on Hegel's results. The third or "critical exposition" is the final (and to us satisfactory) statement which explains the other views. It is made with special reference to the objections of Trendelenburg in regard to the matter of presupposition and beginning, as well as the objections of English and American writers, who generally attack the objective validity of Hegel's Logic.

The following notes on Vera's polemic against Trendelenburg will be of interest here:

Vera on Trendelenburg.

Mr. Editor :

I have just been reading over the article in No. 25 of the Journal of Speculative Philosophy, entitled "Trendelenburg on Hegel's System," and translated from the Preface of Prof. Vera's Introduction to Hegel. The title should have been—should it not?—"A. Vera on Trendelenburg"; for the article is a series of observations on Trendelenburg's supposed doctrines, and not an account of Trendelenburg's famous criticism of the dialectic method. The stand-point and consequent doctrine attributed to Trendelenburg seem to me so different from those really held by him, that I have thought it might be worth while, for the benefit of any among your readers who have not made a special study of Trendelenburg's works, to write a few words of explanation and correction.

I. The logic of Trendelenburg is not written from the stand-point of the Hegelian logic. Since M. Vera, after asserting the contrary, himself ad-

mits the truth of what I state (he says, in loc. cit., p. 29, that the "dialectie" of Trendelenburg is not "any dialectic whatever, but rather the contrary of all dialectic," and what is the Hegelian logic if not dialectic?) yet it may be well enough to state what Trendelenburg's logic is. It is true that T. rejects the so-called formal logic; but from this it does not follow that he must therefore adopt the Hegelian logic. The contrary is so true, that it is notorious that Trendelenburg did more to weaken the credit of the Hegelian logic, both in its "general and fundamental point of view" and in its "form," than any one among his contemporaries. The Hegelian logic affirms the identity of thought and being, identifies therefore logic and metaphysics, and asserts the possibility of a dialectical development of all the qualifications of being (or of the absolute) in pure thought. Trendelenburg denies all these positions, holding, however, that there must be a principle common to thought, as an ideal function, and to objective being, in order to the possibility of any act of knowledge. But thought, for Trendelenburg, is not being, nor is being thought; hence logic is not metaphysics; and as thought, in the view of Trendelenburg, depends on a principle present in physical being (viz. motion, which has its ideal, but not independent, counterpart in thought). it can develop nothing in absolute independence of that faculty by which motion is apprehended, viz. Anschauung, or intuition, in the etymological sense of this term, including therefore the sensibility; hence a dialectical development by pure thought, is of course held to be impossible. Trendelenburg's logic is the logic of Aristotle, in which he conceives the forms and processes of thought to bear a relation of demonstrable correspondence to the general relations of things. But Aristotle's logic, it need not be said, is no dialectic. As to Trendelenburg's "Logical Investigations," they are not primarily an exposition of logic, but constitute an attempt to lay the ground for metaphysics and logic, or to establish a Theory of Science.

II. There is no triad in Trendelenburg's system, certainly none that is put forth as such, nor any that can be demonstrated to be such in the sense required by, or in a sense imitated from, the dialectic method. less is there, as in Hegel's logic, a series of triads following each other in dialectic development. Trendelenburg seeks to account for the possibility of knowledge, and more especially for the element of scientific necessity. To accomplish this he proceeds in the ordinary scientific way, assuming provisionally the fact to be explained, just as the theory of vision assumes the reality of vision, and seeking for an hypothesis which shall explain the He proceeds thus from the particular and the known to the general and the unknown, or from the "prior for us" (in Aristotelian phraseology) to the "prior in nature." The simplest analysis of an act of knowledge discloses the antithesis of subject and object, "thought" and "being." These are not assumed as starting-points given in absolute knowledge from which to proceed in dialectical development. They are simply found empirically to exist as different factors in all cognitive acts, and the distinction, in the form of theory or method and subject-matter, is found concretely exemplified in all the positive sciences. To explain, now, the possible union or harmony of thought and being in knowledge, an hypothesis is selected and tried, like any other scientific hypothesis, by its power of explaining the facts. In this there is no talk and no semblance of triads or triadic development, or of any species of dialectic. The method is simply that of ordinary, accredited science.

University of Michigan, Ann Arbor, Dec. 5, 1873.

GEO. S. MORRIS.

BOOK NOTICES.

History of Philosophy from Thales to the Present Time. By Dr. Friedrich Ueberweg, late Professor of Philosophy in the University of Königsberg. Translated from the fourth German Edition by Geo. S. Morris, A.M., Professor of Modern Languages in the University of Michgan, and Associate of the Victoria Institute, London.—Vol. II. History of Modern Philosophy. With Additions, &c. New York: Scribner, Armstrong & Co. 1874.

As our readers are already informed, this work constitutes the first of the Philosophical Division of the Theological and Philosophical Library, "A Series of Text-books, original and translated, for Colleges and Theological Seminaries, edited by Henry B. Smith, D.D., and Philip Schaff, D.D., Professors in the Union Theological Seminary, New York." It is a truly meritorious undertaking, and deserves more than the mere approval of American students in Theology or Philosophy. The two volumes on the History of Philosophy now published should be in the library of every person interested in the thoughts of the world's greatest thinkers. So complete a storehouse of information as regards the history of Philosophy has never before been accessible in English. The work of Ueberweg is noted for its conscientious accuracy and the minuteness of its bibliographical information. The translator, Professor Morris, has, in our judgment carried away the palm before all rival translators from German Philosophy. That his work is con amore we find evidence on every page. How thoroughly he has himself studied certain special systems of Philosophy is shown in his full account of the system of Trendelenburg which is added as an appendix to the brief paragraph of Ueberweg. Professor Morris has likewise diligently searched the English sources for information regarding any of the Philosophers, and has added under appropriate heads references to English translations and commentaries which will prove of great service to the English reader. The "Appendix on English and American Philosophy, by Noah Porter, D.D., LL.D., President of Yale College, and the second appendix "On Italian Philosophy, by Vincenzo Botta, Ph.D., late Professor of Philosophy in the University of Turin," are elaborated in the spirit of Ueberweg by thoroughly capable and equally fair-minded scholars.

The readers of this Journal have had occasional glimpses of the great Philosophical activity in Italy. Dr. Botta is intimately acquainted with the whole movement, and indeed has been an active participant in it. President Porter's account of American Philosophy is a contribution to a new subject. His treatment of it will, we trust, stimulate others to investigate the same field. The reciprocal action of Theological and Metaphysical thinking in this country is a theme that deserves exhaustive elaboration.

We know of nothing that would so much help the cause of Philosophy in America. For it is the Theological Seminaries of this country and not the Colleges which make the professional thinkers. An indigenous philosophy here must originate in Theological soil.—We find an exquisite specimen of the dry humor of Dr. Porter in a foot-note to his account of Herbert Spencer's system. It runs thus:

"The system of Spencer is still under criticism, and perhaps may not have been fully expounded by its author. Possibly it has not yet been completely developed. Should Spencer continue to devote to Philosophy his active energies for many years, it is not inconceivable that new associations may take possession of that physiological organization which he is accustomed to call himself, and perhaps be evolved into another system of first principles which may displace those which he has taught hitherto."

Of the original power of speculative thought possessed by Ueberweg one cannot speak very highly. His critical remarks in this work are seldom of value, and, fortunately, few in number. An example of these which will give the reader an insight into his calibre as a thinker we will quote. It is a note relative to Kant's criteria for à priori knowledge. That Kant held universality and necessity to be sure signs of non-empirical cognition, he tells us is the fundamental mistake from which the whole critical system of Kant grew up.

"The principle of gravitation which is strictly universal in its truth, and yet, as Kant admits, is derived from experience, is alone enough to refute him. The simpler the subject of a science, so much the more certain is the universal validity of its inductively-acquired principles; so that from Arithmetic (quantity) to Geometry, Mechanics, &c., a gradation in the measure of certainty, and not, as Kant affirms, an absolute difference in universality, subsists. The empirical basis of Geometry is admitted by mathematicians of such weight as Riemann and Helmholtz."

That the principle of gravitation is universal and necessary, in the Kantian use of these terms, is a supposition worthy of a place in Lewes's Biographical History of Philosophy, but not of a place in a book emanating from Königsberg and written by a Professor in the University that Kant honored by his long labors in Philosophy.

A few typographical errors observed by us we omit to mention as they are corrected ere this in a new edition of the work.

Boston Lectures, 1872.—Christianity and Scepticism: Embracing a Consideration of important traits of Christian Doctrine and Experience, and of the leading Facts in the Life of Christ. Boston: Congregational Publishing Society, 1873.

The contents of this volume consist of nine lectures, forming the third course of "Boston Lectures." The first and fifth were delivered by two of the ablest divines of the West—the former by Rev. Dr. Magoun of Iowa College, the latter by Rev. Dr. Post of St. Louis. The subject of the first lecture: "The Adjustment between the Natural Law of Progress and Christian Law." It exhibits the Christian Religion as a system not merely adapted to the wants of mankind, but as fundamentally necessary to the progress of the race. The topic of the fifth lecture is "The Incarnation." This volume seems to bring out the prominent doctrines of Christianity in a treatment at once popular and profound.

An Analysis of Schiller's Tragedy, Die Braut Von Messina, after Aristotle's Poetic: Being an Inaugural Dissertation for obtaining the degree of Doctor of Philosophy, at the Georgia Augusta University in Göttingen by Isaac Flagg (at present Professor in Cornell University).

This essay is a fine example of the kind of aesthetic criticism which we need in our higher institutions of learning. The student must be shown the presuppositions of the ancient works of art before he can form a true estimate of them or be genuinely affected by them. The discussion in this essay following the Aristotelian categories of the Poetics treats, I. The Complication, (a) events within the action, (b) events outside the action; II. The Development, (a) the discoveries, (b) the revolution, (c) the calamities.

We suggest resolution or solution for the category "development" used by the author.

The Rising Faith. By C. A. Bartol, author of "Radical Problems." Boston: Roberts Brothers. 1874.

The contents of this book include the following topics: The Seeker, The Seer, The Secret Power, Sincerity, Sex, Teaching, Training, Forms, Values, Validity, Personality, Prayer, Unity, Survival, Signs, Ideas.

In the chapter on Personality, our author says: "This is the curiosity of speculation, that a creature should, with its own, doubt its Author's consciousness." "Human unfolding is into personality ever more pronounced. Lost in Deity? The more we are absorbed the more we are found and find ourselves. The infant is confounded with other persons and things. But out of this baby imperfection is developed the character of Charlemagne, or Luther, reaching by differentiation its union with the Most High, as the root of a tree widens with its top." "You tell me God is not personal. From the unconsoling statement how much do I learn? What else is He not? What more important quality can you eliminate? What is personality but the focus or burning-point where all the faculties meet, the concentration in which judgment and memory flame into genius, the grip wherein every ability is hurled to accomplishment; the property whose scale with each new degree is the measure of greatness?"

* There is nothing in this book that is not inspiring. It is the very atmosphere of hope and aspiration. Like the Cologne Cathedral, all its lines lead upward to the sky, and whatever is depressing or manifests gravitation is allowed to appear only in some subordinate shape—a pendant that seems to look earthward, but is prevented from reaching the floor by reason of the strong counter-impulse it receives from the roof which carries it upward.

Life's Mystery. Philadelphia: Henry Longstreth. 1873. "From Old-fashioned Ethics and Common-sense Metaphysics." By William Thomas Thornton Mac Millan & Co. London."

 Λ discussion of the problem of evil in metre.

Crimes of Passion and Crimes of Reflection. By J. B. Bittinger.

Reprint from the Princeton Review for April, 1873. An able discussion.

The River of Life. A music book for Sunday Schools, &c. By H. S. Perkins and Wm. M. Bentley. Boston: Oliver Ditson & Co. 1873. For sale by Balmer & Weber, St. Louis, Mo.

Clarke's Dollar Instructor for the Reed Organ. By Wm. H. Clarke. Boston: Oliver Ditson & Co. For sale by Balmer & Weber, St. Louis, Mo.

 $[\]frac{1}{2} \frac{\partial \hat{s} \sigma i \zeta}{\partial \hat{s}}$, $\frac{2}{2} \frac{\lambda \hat{b} \sigma i \zeta}{\partial \hat{s}}$, $\frac{3}{2} \frac{\partial \lambda \hat{a} \gamma \hat{b} \omega \hat{b} \hat{b}}{\partial \hat{s}}$, $\frac{4}{3} \frac{\pi \hat{s} \rho i \pi \hat{s} \hat{s}}{\partial \hat{s}}$, $\frac{5}{3} \frac{\pi \hat{a} \theta \gamma}{\partial \hat{s}}$,

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SUBJECT AND OBJECT, OR UNIVERSAL POLARITY.

By RICHARD RANDOLPH.

- "Sing ye praises with understanding."—Ps. xlvii. 7.
- "Let all things be done decently and in order."—1 Cor. xiv. 40.
- "For our process of thought is such as requires no especial acuteness and vigor of mind, being almost equally ready and open to all degrees of intelligence." (Nostra verò inveniendi scientias ea est ratio, ut non multum ingeniorum acumini et robori relinquatur; sed que ingenia et intellectus ferè exacquet.)

 —Francis Bacon.
- Synopsis.—1. Manner and Matter: their unfathomed reciprocity suggestive at least of the true Law of Criticism.—2. A manifest present Want: the most definite possible Formula of universal Duty.—3. The Facts of Mind: their former empirical and complex Classification now obsolete and futile.—4. The Polarity of all Experience and of all Thought.—5. The implied Lesson of Order, or Subordination.—6. Its only Difficulty.—7. Its virtual Dignity.
- 1. In oral unpremeditated converse alone can perfect communion be realized and manifested between mind and mind. There is an element of dictation, however allowable or necessary it may often be under attendant circumstances, in every premeditated effort of the orator or the essayist upon any abstract theme, which the continual interpolation of fresh inquiry or suggestion can alone remove or prevent in a true partnership of thought. But though there is danger of their being over-estimated, there is still obvious occasion for the sermon and the essay. The true flow of soul is not necessarily solitary or exclusive merely by reason of that intellectual distance between the communicants, which may render necessary a sustained argument on the part of either for the

presentation of his views. Such efforts will evidently be successful directly in proportion as they shall be made to anticipate the questionings or comments of the intelligent reader or hearer, on the simple condition of a studious attention on his part, proportional to his previous want of acquaintance with the subject treated of. However abundantly such prolonged and premeditated discourses may at any time be pressed upon us, some of them are presumably entitled to a hopeful welcome: and in the still increasing throng of such claimants, some brief and general statement of the law of criticism, one which shall do justice to the mutually dependent and often conflicting claims of manner and matter, becomes therefore increasingly necessary as a test of literary and logical pretensions.

Estimating all truth at an average value, then, for the sake of arriving at such a general statement, we may safely allege, that that which we at any time read or hear will be useful to us, in proportion either to the amount of matter which is at once fresh to us and clearly expressed, or to the amount of that which, while already more or less known to us, is there so vividly presented to us as to induce a more constant regard to it, or to both of these considerations combined. We may often think that we understand what is written, when we only recognize therein modes of thought and of expression which are familiar to ourselves and current among our associates, but which we do not at all understand aright. Such reading must evidently be fictitious reading of the most deceptive kind, and must of course be left out of account in every just estimate and comparison of substantial literary values. The reader of the ensuing lay sermon is besought to bear these observations in mind; and to pass judgment upon the production, not according to the proportion in it, as compared with other utterances of equal length, of matter which may be to him unfamiliar and at first unintelligible, but according to the supply of fresh suggestion or expression which may mingle with the plainly trite or the seemingly unmeaning. Seeming mysticism must itself be an additional plea for cheerful toleration and hopeful attention, so far as it may possibly be due to the mere replacement of conventional fiction by sound abstraction. The appreciation of

manner, as the higher grace, should meanwhile remain unattempted. It is both safe and expedient for the critic or the student to presume at the outset upon the fitness of the verbal vehicle, and to proceed in the assurance that the mysteriousness of a true and adequate expression will be precisely proportioned to the novelty of the truth conveyed or symbolized. Matter and style, or truth of experience and aptness of utterance, must on the whole advance or recede together.

> "Running while reading, taught as they pursue Advancing good, true men all lessons true Consider and enact."

- 2. The great Atonement being confessedly "finished," the definition and appreciation of those elements of present and future life and salvation which are not finished, plainly become the universal practical desideratum. Professional theologians have so glaringly fallen short, whether in Biblical exposition or in original speculation, of meeting this common want, that the field is evidently open to all careful explorers; and the ear of earnest workers presumably as open to all clear and competent reporters. How far the present essay may indeed report a genuine exploration in that direction, the writer can only invite such "fit audience" to determine.
- 3. To the faithful or truly observant liver, life is continually becoming experience. How it becomes so, is the problem which involves all other problems. That there is nothing truly originative, any more than inherently* distinctive in the so-called faculties of the mind, is proved by their natural subjection to the limitations of time and space, a more or less entire exemption from which (such as is conceivable from the most fragmentary intimations of truly spiritual experience) must proportionally consign Memory, Reason, and Imagination, to the category of simple Perception or Observation. In other words, these diversities of mental manifestation are rather diversities in the relation of

^{*} That is, permanently, dividually—objectively or in the nature of things. It must be obvious that the same process of mental construction or inference which is Imagination at one instant, may become Reason the next instant, and Memory ever afterward, and may already be so to some other mind.

mind to time and space, than diversities of mental power. They may be compared, both in derivation and in development, to different forms of a single molten material, as caught and congealed in moulds of different patterns. As merely circumstantial variations, they must be left out of account, or only incidentally included, in the investigation and demonstration of that which is essential. The great desideratum of Mental Philosophy, therefore, is a simple description of the connection, in all human life and experience, between the spiritual volition which is the directive power of individual life and the sensational impression which is the primary or crude material of individual experience. The volition from within—the exercise, that is, however inspired or however independent, of the individual will—and the sensation from without, are in fact connected by a chain of distinguishable processes or phenomena, whose definition by one mind to another becomes often exceedingly difficult, and perhaps temporarily impossible, by reason of the different spheres of experience and therefore of communion (one often, practically or socially, wholly including another) which appertain to different grades of culture, and even of inherited intelligence and sensibility. As the largest minds are also presumably the deepest, that which is consciously external, and so, glaringly obvious, to one mind, may thus be often unfathomably mystical to another of more contracted range; so that the only intellectual principle which they can be said to possess or to be able to exercise in common, is the intuition, which a faithful adherence to the lessons of experience may supply to all, that the determining power of enjoyment and enlightenment is from within rather than from without-from the perceiving and acting Subject, rather than from the observable and demonstrable Objects, of experience and action.

4. Accordingly, the one thing upon which Metaphysicians may be said to be unanimously agreed, is, the convenience of, and the necessity for, the use of the terms Subjective and Objective as distinguishing diverse phases or polar elements of experience, thought, and language.

Whether the universe is all soul, or all body, or a mixture of the two; whether thought is one with the thinker, and the

thinker one with the mind; and what may be the power and the province, the scope and the limitation, of the mysterious individual will,—are all questions which have not been unanimously decided. Indeed they cannot be, so long as investigators shall begin and prosecute their work with the purpose of framing and the hope of establishing any complete system (still less any incomplete system) of truth, rather than with that single eye to the present guidance of Divine Wisdom in the ever-progressive development of its only universal system, which can alone qualify any steadily to serve as vehicles of its inspiration. But, as already intimated, in tracing this progressive development of mind and doctrine, it is universally found necessary to have some such otherwise mystical terms as Subject and Object to designate the same thing or principle in those (to our still limited and forming view) diverse stages, aspects, or relations, which the more familiar terms, cause and effect, interior and exterior, power and vehicle or instrument, substance and phenomenon or surface, action and passion, and perhaps the Hegelian "becoming" and "being," less comprehensively distinguish."

^{*} The contrast of internal and external, of spiritual and material, of cause and effect, of substance and surface, of power and manifestation, is always fugitive in any special instance or development of it, owing to that very advance in the standard of life, experience, and knowledge, which is the sole presentable proof of our living to any lasting purpose. These terms being all derived from the limited realm of human experience for the purposes of language, partake of the partiality and fallibility of that experience. Language, however, has a ground of verity or fitness outside of the largest human experience, in that analogy between the inner and the outer worlds, which, as the secret storehouse of metaphor, is the very armory of all abstract argument, because the original vehicle of all general statement. The current language is evidently the practical social embodiment of that Science of Mind in which alone the special sciences can meet, so far as they do meet, at any stage of social progress. Hence the old aphorism, "Grammar is the Janitress of the Sciences," is no mere pedantic flourish, but a real "hard fact." As the most comprehensive science, that of Language (or Grammar) must evolve from itself the largest or most nearly adequate expression of the largest universal fact. Now that fact, we may venture to assume, is the relationship of national phenomenon to supernatural power, or of natural truth to supernatural truth. No other terms can so at once indicate both the largeness and the fugitiveness of this distinction as the grammatical terms Subject and Object, which are not only illustrated or exemplified in every spoken sentence, but which derive all their significance from, or through, their temporary relativity. Short, at least, of that completeness of humanity which implies the very "fulness of God," the distinction between these terms must remain a movable (and in healthy life, of course, a progressive) one, so that we

The more urgent examples of this metaphysical polarity, and of the resulting necessity for discrimination in the analysis of human consciousness and activity may be included in the subjoined list, with the proviso that, as Perception is the avenue in which all the bodily senses converge, it must, as the real connecting link between the inner and the outer world, be regarded as being itself a thing or principle having two aspects or relations, of which the internal aspect* (the external relation) is the only one here included, viz.:

SUBJECTIVE.

OBJECTIVE.

'Η πρὰξις (praxis), THE DOING. Τὸ πρὰγμα (pragma), THE DEED.
Thought, Perception.
Desire, Emotion.
Will, Spiritual Knowledge.

In the wider classification, which should take in the external universe on the one hand, and the self-existent spiritual Power, or Powers, on the other, Perception must of course be viewed as subjective to external fact, and the human will as objective to the Divine Will, or to the Divine and the demonic. Our list may therefore, perhaps, be somewhat more completely rendered thus:

can only speak of them relatively to each other; that which is "subjective," or internal, or even supernatural, to one person, or at one time, being "objective," or external, and wholly natural, to another person, or, at another time, to the same person. How treacherously vacillating must even the best language be to those who do not fathom this temporariness or fugitiveness, and who depend upon "the letter" for the purposes of thought rather than of intercourse, as though man were made for language, not language for man!

* It is of course impossible definitely to distinguish, in ideas and words, things which are in nature so intimately combined as to be inseparable without some change of their nature; so that, for instance, even the solar spectrum imperfeetly expresses to us the constitution of light. The combination in nature of elemental potencies may be most plausibly conceived as a concentric arrangement of curvilinear strata of manifestation rather than a mere succession of planes. The true arrangement or relation of nature is doubtless not one of lateral composition or of vertical imposition, but one of involving and being involved—the rays of shorter wave, in the case supposed, being included in those of longer wave. For the purposes of intellectual analysis, therefore, it may be a smaller departure from the absolute truth of nature, to compare the constituent elements of the unshivered ray, either physical or metaphysical, to the concentric layers of a tulip-bulb, or of an onion, than to mere parallel planes without any relationship of subordination. As thus conceived, it must be apparent that the external aspect of any constituent element is that by which it is internally related to these adjoining constituents, and vice versa, as above assumed.

SUBJECTIVE (praxis).

Sensation,
Perception,
Thought or Emotion,*
Desire,
Spiritual Knowledge,
Human Will, Choice, or Volition,
Self-Existence,

OBJECTIVE (pragma).

External Universe.
Sensation.
Perception.
Thought or Emotion.*
Desire.
Spiritual Knowledge.
Human Will.

The complete analysis of a perfect consciousness, or of the illumination which, so far as it at all prevails, involves the whole nature of man, will doubtless be the last triumph of philosophy. Possibly, this attempt may to some minds present, or at least suggest, some advance toward the development of what may be called a psychological spectrum.†

5. The pantheistic rashness which predicates self-existence of the external universe, and which accordingly so confounds all the subjective and objective aspects of life and experience as practically to reverse their legitimate order of development, is at least herein indicated. It is indeed unhappily true that men may be tempted to live from without rather than from within, or retrogressively rather than progress-

It may, however, be neither visionary nor premature, while thus hinting at the possible analogy between the physical and a psychological spectrum, to remark, that the summary analysis of the latter in the familiar trinity of Intellect, Sensibility, and Will—or Idea, Motive, and Self-determination or individual Choice—may possibly, as ultimately rectified, be found to correspond with the reduction of the seven actual colors of the outward spectrum into the three primary ones.

^{*} This apposition, which may perhaps startle some readers, is hazarded on the presumption that undefined emotion is more essentially and closely related to current or communicable thought than has been hitherto generally apprehended. The relation of bullion to coin, or of invisible moisture in the atmosphere to developed cloud, may here be found illustrative and suggestive.

[†] The inquiry can scarcely yet be ventured upon, how far Sensation, in some yet attainable sense of the term, may, with the other elements of a perfect consciousness at its back, be said continually to create the External Universe. The reader who is familiar with the reflections and arguments of Addison on the nature of Time, as presented in No. 94 of the "Spectator," and who has pondered the vitally important suggestions which flow therefrom in all directions, will perhaps find some seasonable illustration as well as safe suggestion in a simple stanza from a lately published poem, on Immortality:

[&]quot;So may we know the central Source of Light, So may its flood our finite measures fill, That the Creative and Redemptive Might May prove in every pass our treasure still."

sively, by a reckless inversion of that law of subordination through which alone the Divine goal of harmony in thought and feeling can at length be realized. But short of the conscious attainment or the conscious relinquishment of that happy result, the distinction between Subject and Object with their more or less diverse and sexual functions, vaguely denotable as begetting and awakening (or quickening), must remain as the widest expression of the law of human intelligence, as the basis of all present order in practice, and as the hope of all future progress in theory. Through their ever advancing subordination alone can we steadfastly regard the creation in its unbroken dependence upon the Creator, and rationally adopt and illustrate the oft-occurring and aweinspiring adjuration, "Wait thou only upon God." The necessary objectivity of all sound and dividual or communicable thought can thus only be made to comport with its self-evident internality, and to complement the essential though neglected subjectivity of all present inspiration; and the genuine manifestation of such thought can thus only be presented in its necessary dependence* upon such inspiration, as that ever available test of truth and right in all literature and in all life which a manly independence of external means universally calls for. No otherwise, in short, can we intelligently gather the full value of the instruction which has for thousands of years fallen upon Jew and Christian from the precept, "Keep thy heart with all diligence, for out of it are the issues of life."

6. The only difficulty of apprehending this universal lesson of order or law of subordination, springs from the depth of the distinction between Subject and Object—a distinction which can no more be permanently illustrated by isolated instances, than any single vital movement of a physical organism can perpetuate its life-principle, or preserve it for the revelation of the dissecting-knife, the test-tube, or the spectroscope. Indeed, as itself a principle of vitality, that distinction represents the as yet inexhaustible and unfathom-

^{* &}quot;The Holy Spirit does not teach by arbitrary acts, or those acts which have no relation to the constitution of the human mind; but by silently, and yet effectually, inspiring and guiding the movements of the natural powers of perception and knowledge, in cooperation with their own action."—Upham.

able fact of an "irrepressible conflict" pervading all nature. It is a mystical ladder, or law of insensible gradation, upon which error and vice covertly ascend and plausibly imitate the dignity and office of truth and virtue, in all but their latest, and highest, and most invisible flights. Hence the justness, as to all minor principles, of Pope's startling epigram—

"On human actions reason as you can, It may be reason, but it is not man: His principle of action once explore, That instant 'tis his principle no more,'

As a primary principle of thought, lending coherency alike to the manifestations of evil and of good, the polarity of Subject and Object is in all particular applications variable and fugitive, and sure at last to betray the inquirer or the schemer who lives not in the spirit of renunciation and reverence, and whose first care accordingly is not that "all things" shall so "be done decently and in order," as to be made tributary to the ever advancing glory of God.* Such an one will surely mistake the pursuit of knowledge for the guidance of wisdom. In life, matter will more or less gain the precedence of manner; in logic, the material or the statistical—the "à posteriori"—be made to dominate the spiritual or the essential, the "à priori"; and the first practical questional in theology, the relation of sanctification to justification, remain a more or less transcendental issue. In the very company of the believing may be those who, from thus failing to realize their own intellectual position, would seem to

^{* &}quot;The soul," writes Ralph Waldo Emerson, "can be appeased not by a deed, but by a tendency. It is in hope that she feels her wings. You shall love rectitude, and not the disuse of money or the avoidance of trade: an unimpeded mind, and not a monkish diet: sympathy and usefulness, and not hoeing or coopering: tell me not how great your project is, the civil liberation of the world, its conversion into a Christian church, the establishment of public education, cleaner diet, a new division of labor and of land, laws of love for laws of property;—I say to you plainly there is no end to which your practical faculty can aim so sacred or so large, that, if pursued for itself, will not at last become carrion and an offence to the nostril. The imaginative faculty of the soul must be fed with objects immense and eternal. Your end shall be one inapprehensible to the senses—a goal always approached, never touched; always giving health. A man adorns himself with prayer and love, as an aim adorns an action. What is strong but goodness, and what is energetic but the presence of a brave man?"—Method of Nature.

rank with the swine-consuming Mahometans of Cowper's famous fable; and Emerson's perhaps less known lines have too wide an applicability to be omitted here:

"The horseman serves the horse,
The neat-herd serves the neat,
The merchant serves the purse,
The eater serves his meat;
'Tis the day of the chattel,
Web to weave, corn to grind;
Things are in the saddle,
And ride mankind.'"*

7. Obvious or recondite, be it repeated, Philosophy can prescribe no other corrective for the confusion and disgrace of this practical heresy and draggling bewilderment than THE SUBORDINATION OF THE OBJECTIVE. But may not this prescription, as the universal lesson of Philosophy, and as an essential element in the triumph of freedom over fate. and of immortality over death, after all be regarded as no other than the philosophical rendering of the very purpose of Christianity? Our Saviour's own statement of that which was essential has been, perhaps, too much lost sight of in our glorification of the circumstantial: "To this end was I born, and for this cause came I into the world, that I should bear witness unto the truth." In the conduct of the present life, the method of Christ's career in the flesh doubtless concerns his followers as responsible agents more immediately than the results of that career, however largely those results may now be embodied in the very ground and materials of our action. To a prone, object-bound, and therefore latitudinarian and retrograde nature, the Subordination of the Object may evidently represent our Lord's Crucifixion as its immediate desideratum. In a love-inspired, object-ruling, and therefore truly expansive and progressive nature, as evidently "the same rule," through the enlarged meaning that will then attach to its terms, will convey all that can be told of his Resurrection. While time shall endure, the old "stumbling-block" and "foolishness" of self-denial must thus remain as the more or less hidden law of true culture

^{*} Ode to W. H. Channing.

and healthy development; and the true lover of his kind must be content with continually adapting it in practice and precept to the ever advancing manifestations of truth, and to the closely following transformations of error. The "mystery of iniquity" is indeed not yet obsolete: but the "mystery of godliness" is justly distinguished as "great"; and there can be no change in the fundamental principles of human nature and of divine truth which underlie and unify the whole history of the human race while that history shall remain incomplete. As it approaches completion, the crude manifestations of demoniac possession, and of the "rebellion which is as the sin of witchcraft," may indeed be buried more and more deeply in the grave of the past; but, short of that mysterious goal, there can be but one unvarying method of true progress and one comprehensive object of healthy aspiration, even as there is but one universal rule of initiation into that better nature which they illustrate.

"Higher and higher mounts the law that binds
Enfranchised hearts and unperverted minds.
Larger and larger fact
Restrains while liberating their career,
As in the light of sphere encircling sphere
New visions still attract,
Deploying in due sequence Christ, the stair
On which they climb to reach such survey fair.
Let largest lore and tact,
Possession, prudence, energy and skill
Hasten his holy programme to fulfil!"

INTRODUCTION TO SPECULATIVE LOGIC AND PHILOSOPHY.

By A. VERA.

CHAPTER IV.

§ 1. On Ideas.

The universality and unity of Knowledge as well as the universality and unity of Being require a principle which should extend to all things and embrace all things in the unity of its nature. This principle, we have seen, is Thought. Viewed in this light the various branches of knowledge may

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be considered as constituting the various branches or stages of Thought, and then, according to this notion, Logic would represent a special province of Thought. But it will be easily perceived that this mode of viewing Logic, though abstractly correct, cannot convey a concrete and full notion of this Science unless we previously define the object of Thought in general, the *subject-matter;* or, to use more familiar expressions, the principles and laws with which Thought is invariably and absolutely concerned, as well as their import and bearing with relation both to Knowing and Being.

This leads us to the fundamental and decisive Problem of Science, the Problem which lies, under various forms, at the bottom of all others, and constitutes, as it were, the keystone of the whole edifice, I mean the Problem of Ideas. The two main points we shall have to elucidate on this subject are

- 1°. The relation of Ideas to Thought and Knowledge, or what has been termed the *subjective and psychological Problem of Ideas*.
- 2°. The intrinsic value of Ideas, or the Ideas considered in themselves and in their essential existence, i.e. the objective and ontological Problem of Ideas.

It must be observed that these two Problems are but two aspects of one and the same thing, and may be comprehended in a general query, namely, "Are Ideas at once the principles of Knowledge and the principles of Being?"—a point which must be constantly kept in view in the course of the following investigation.

If to know is to think, to think is, in its turn, to possess the idea of the object apprehended by Thought—Thought and Idea are inseparable. Thought embodies itself in Idea, and Idea embodies itself in Thought. Where there is no idea there is no thought, and where there is no thought there is no idea.* The clearness and fulness of Thought are in

^{*} Ideas cannot exist in their general form and unity—i.e. as ideas—in nature and without Thought. From which will also be seen that those who, like Spinoza or the Materialists, see in Substance or in Matter the universal principle and substratum of things, overlook the fact that Substance, Matter, Being, as well as the Good and the Beautiful, are attributes or essences subordinate to Thought. For Thought comprehends them, whilst it is not comprehended by them. And it comprehends them in the twofold manner in which we use the word; for it understands them, and, for the very reason that it understands them, it contains

proportion to the clearness and fulness with which Idea is apprehended by it. To possess distinct and complete ideas is the natural impulse and the most inward want of Thought: and to evolve them out of the obscure and confused mass of facts, images, and sensations, incessantly flowing into the soul, constitutes its permanent labor and highest enjoyment. Sentiment, heart, feeling, intuition, are, as we have already observed, inferior stages or forms of Thought. Here thought is still enveloped in nature and sensation, not having reached the clear and pure perception of ideas. Yet, even at this stage, Idea is present, though dimly, in Thought; and whatever value and truth the latter possesses, it is from Idea it is derived. The sentiment of God, of the Beautiful, of the Soul. of any internal or external object, is inferior to the clear perception—the idea—of them. But whatever truth is in it, it is Idea that imparts it. Let, for instance, the idea of God be erased from the mind, and with the idea all perception and sentiment of the Deity will be extinguished.*

But, in order to establish still more incontestibly the intimate connection of Thought and Ideas, let us analyze Thought in its most rudimentary operation, in that state in which it hardly distinguishes itself from the external world—I mean sensation. For there are those who will admit that Thought cannot think God, the True, the Beautiful, and other transcendent objects, save through an idea, but who will not acknowledge the idea of sensation. However, it is easy to see that the idea of sensation is as necessary to apprehend sensation as the ideas of God, of the Beautiful, &c., are necessary to apprehend God and the Beautiful. For sensation, to

them in the manner in which Thought contains all things—namely, spiritually and ideally—in their highest form and perfection.

^{*} It may be said that the progress not only of Science but of Religion is nothing else than an evolution of ideas. For instance, all Religions are founded on the belief in the existence of God, and in this respect there is no difference between them. Consequently they can differ only in the manner in which they realize God. And it is immaterial whether it is through Faith or through Science that God is realized: for in both cases there must be a notion of God; and the more correct the notion, the truer the Religion. Those who pretend to found Religion exclusively on the Word of God, forget the simple but most glaring fact that the Word of God must be apprehended and received by the mind, and consequently that the mind must possess some notion through which it perceives the existence of God and the truths contained in His Word.

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be felt, must be thought, and thought as something determined, and different from any other phenomenon and subjective modification. Now what determines Thought in sensation is the idea of sensation, as the idea of triangle determines thought in the apprehension of the triangle, and the idea of God in the apprehension of God. It may be supposed that it is the external object that produces both the organic modification—the impression—and the internal apprehension of the phenomenon by Thought. But it must be observed that the external object as well as the organic modification that follows the impression are converted into mental phenomena by their coming in contact with Thought, and consequently they are unable to produce an effect which it is beyond their nature and faculty to produce. Moreover, the very idea by which the mind apprehends the corresponding phenomenon must needs be previously contained in Thought, and cannot be imprinted in it as an image in wax. For, on the one hand, ideas are neither images, nor symbols, nor any material representation, but pure and merely intellectual elements, and, on the other hand, not only do they precede the impression, but before and after the impression they distinguish themselves from it.

This brings before us the *vexata quæstio* of the origin of Ideas, a question which in our days and since Kant's labor has lost much of its importance,* but upon which I have deemed it necessary to dwell at some length, as to form a correct and clear notion of the nature of ideas we must embrace them in their various aspects; and, besides, the elucidation of this point will pave the way to the solution of the ontological problem.

If Thought and Ideas be inseparable, either ideas are given with and in thought, i.e. are innate, or not only ideas but ideas and thought must equally be derived from experience. This is the real and rational position of the problem, and when considered from this point of view its solution will more readily be arrived at. In fact, those who deny the

^{*} Because since Kant it has been more clearly perceived that the main and decisive point in the problem of ideas is not to determine whether ideas are innate or derived from experience, but what is their objective meaning and function; in other words, their essential and absolute nature.

inneity of ideas will perceive that they deny at the same time the preëxistence of the mind to sensation and experience. To hold that the mind alone precedes experience, but ideas are gradually brought into the mind by it, is in reality to hold that the mind is not the mind, if it be true that the essential business of the mind is to think and to know, and that there is neither thinking nor knowing without ideas. But, even granted that the mind and ideas were not so intimately connected as to be inseparable, the very fact that the mind is capable of forming ideas (a fact which those who pretend to draw our mental constitution and activity out of the materials furnished by experience are obliged to admit, but which they explain by the process—equally possessed by the mind —of generalization), this very fact, I say, shows how untenable the ground is upon which the sensualistic doctrine rests. The capabilities of a being constitute its nature, and the bringing of them into play constitutes its actual existence and operation. The capability of wood is to burn and that of powder to explode, and these capabilities are involved in their inward and essential constitution. So likewise the capability possessed by the mind of forming ideas is nothing else than the preëxistence in the mind of these very ideas; which means, in other words, that to think through and according to ideas is what constitutes the mind's whole essence and activity.* And we shall arrive at the same result if we examine the manner in which experimental philosophers profess to explain the formation of ideas, namely, the wellknown process of generalization. In fact, generalization presupposes ideas; for to generalize is, according to the definition of these philosophers, to deduce from individual, transient and scattered phenomena a general, fixed and indi-

^{*} The so-called laws of Thought are nothing else than ideas. For instance, the laws of causality, of action and reaction, or that the whole is greater than the part, &c., are only ideas and relations of ideas, such as cause and effect, action and reaction, etc., and it is by applying these ideas to phenomena that we name and distinguish them. As we handle here the problem of ideas in a general way, we will not enter into the question relating to the difference between category and idea as established by Kant. It will suffice to say that what Kant calls eategory is nothing else but the idea, taken only in its abstract form, as a form or element of the understanding (Verstand), and not in its concrete and real unity, in its systematic existence, and as it is in reason (Vernunft), which constitutes the speculative idea in the strict Hegelian sense.

visible notion. Now it is plain that this result would be unattainable unless the very notion which, it is pretended, is brought out by this operation, preëxisted in the mind; for it is the presence of the notion in the mind that induces the latter to generalize, and therefore, were the notion abolished, the generalizing process would cease with the principle that produces it. To speak more correctly, there is no generalization at all, and what is called generalization is merely the successive and partial application of ideas to single phenomena. Let us take an instance, the general idea of man. According to the empirical doctrine this idea would be formed in the following manner: We perceive through the senses a certain number of men, we abstract from each individual man some common qualities, and these common qualities which are scattered in each individual we combine and unite so as to compose the general notion, man. process seems very simple, and well-adapted to account for the presence of ideas in the mind, whilst it escapes the popular argument directed against this inneity, and founded upon the fact that we are not aware in childhood of possessing any general idea, our mind being then exclusively occupied with sensations and phenomena of the obscurest and most fleeting kind—a fact showing, it is assumed, that ideas are subsequently and gradually formed upon materials furnished by experience. This argument, I say, seems very simple, and the more cogent as it is founded upon psychological experience; but it will be seen, upon close examination, that it mutilates and perverts the very experience from which it is deduced. In fact, if things were to take place as it is stated, ideas would come from naught; for whence could ideas be derived, experience supplying only individual, fugitive and isolated elements? And how could these elements be collected and so combined as to form a unity, if this unity—the idea—do not preëxist in Thought! Besides, each of these particular elements—sensations, phenomena, and representation of material objects—in order to be transformed into a general notion, must be singled out, determined, and named (the first as well as the second, and the whole series), as it is presented to the mind, otherwise it would mean and represent nothing, and then the pretended formation of ideas

could not take place. But to name and discriminate a phenomenon a preëxisting idea is necessary, and the very idea to which the phenomenon is referred, let it be a man, a sensation, a phenomenon of light, of heat, &c. For when we generalize the different men, or phenomena of light, heat, &c., we do not generalize indiscriminately or in an indeterminate manner, but we refer each successive representation to a distinct idea, which for the very reason that it names and determines each of these phenomena distinguishes itself, as we have already observed, from each of them, and consequently must need precede them as well as continue after they have disappeared.

With regard to the other part of the argument, namely, that ideas cannot be inherent in the mind because we are not conscious of their presence in childhood, it comes to this. that there is no law regulating our digestive or visual power, or any other organic function, because we digest, see, walk, without being aware of, or inquiring into, these laws; and, agreeably to this criterion, it ought to be said that these, or any other laws, begin to exist only when we become aware of them, and not before; and straining the consequences, that they exist for those who are conscious, but not for those who are unconscious of their existence. This is the real import of the argument, which shows that it is no argument at all. In fact, the subjective state of the individual, his consciousness or unconsciousness does not in any way affect principles. Principles, laws, ideas, exist and produce their effects whether he be conscious of their existence and operation or And if it be recollected that this state of unconsciousness with regard to principles is not confined to childhood, but extends to mature age and all periods of life, and that this transition from unconsciousness to consciousness, from ignorance to science, takes place in some—and these the very few-men's minds, whilst others-the greatest number-live in a state of unconsciousness and ignorance, the hollowness of the argument will become still more apparent. The part experience plays in the development and training of the mind is to awaken attention and reflection, which in some are directed towards the general, the absolute and the eternal, whilst in others they do not rise above the particular, the 114 On Ideas.

relative, and the temporal. But experience produces nothing; it does no more produce ideas than the mind, its instincts, tendencies and faculties, or the body and its functions. The objection drawn from the fact that without the help of experience and of the senses we could not possess the physical ideas of color, light, sound, &c., goes so far as to prove that experience calls the attention of the mind to ideas through the sensuous representation of them, and that these representations are apprehended by the mind through the instrumentality of the senses, but not that experience is the principle and the source of ideas; for representation and ideas are entirely distinct, though they are generally confounded.* The sound that I hear is not the idea of sound, but the image and the symbol of it (we will see hereafter that it is its effect and product); and when I hear a sound, two different events take place in my mind—though both apprehended and distinguished by Thought, i.e. the representation of the particular sound and the perception of the idea that

^{*} It is a confusion generally occurring in the popular and irreflective mind which makes use indiscriminately of the word idea to designate the particular and the general, the phenomenon and its principle. This confusion is one of the greatest obstacles to the right understanding of idealism, and it is of the utmost importance that the philosopher should by an appropriate training be enabled to avoid the confusion, and to distinguish between representations and ideas. Descartes, to mark this distinction, has recourse to the following example: "I can," says he, "represent to myself a triangle. I can also realize a pentagon or a decagon, though not so distinctly as a triangle. But as the number of sides and angles increases, the representations become more and more difficult and indistinet, until they vanish entirely. For instance, I cannot in any manner represent to myself a chiliagon; and yet, although I am unable to realize it, I can define it, and determine its properties, as clearly and rigorously as those of the triangle an operation showing that I possess the idea of the chiliagon which I apprehend through pure thought" (intellection is the word used by Deseartes) "without the assistance of any sensible representation." Similar examples may be found in all departments of knowledge. For instance, we can form sensible representations of the rapidity of a horse, or of a small distance, but cannot form sensible representations of the rapidity of light or of a long distance, though we can equally measure and determine both. However, such examples are not needed to perceive the distinction between representation and idea, and, though they help the inexperienced, they may, on the other hand, mislead him by making him believe that we can represent to ourselves the idea of triangle, for instance, whilst the fact is that we can no more form a representation of the idea of triangle than of the idea of the chiliagon or of any other object. What we represent to ourselves is a particular triangle, but not the idea of it, which, like any other idea, can only be apprehended by pure Thought.

imparts to the latter, whatever value and meaning it possesses—of the idea which, as we have already observed, was in my mind before the sound was perceived, and will continue in it ready to apprehend all similar phenomena, and which has perceived, is perceiving, and will perceive them in the minds that were, that are, and that will be.

We must then admit that ideas are innate, and that, far from originating with experience, they are presupposed by it, so that were the mind deprived of ideas no experimental object could reach the mind, nor be apprehended or named by it.

The question now arises whether all ideas be innate, or whether only some of them be so. For there are philosophers who acknowledge the inneity of ideas, but only of some of them, and who consequently make a selection, single out some of them as innate, and consider the rest as adventitious (generally dividing them into metaphysical and physical or primary and experimental ideas, calling metaphysical or primary the ideas of God, of the Infinite, the Beautiful, the Good; or categories, such as the categories of Quantity, of Unity and Plurality, of Substance, Action and Reaction, &c.), and physical or experimental all ideas relating to external objects. Now it will be seen that this distinction is founded neither upon speculative nor upon experimental grounds. For, if we bear in mind that inasmuch as they are all ideas, they must partake of the same nature and flow from the same source, we shall come to the conclusion that either they are one and all innate, or that none of them are. In fact, the difference which distinguishes them bears upon their objective meaning, i.e. the various aspects or qualities of being they express—the Beautiful, Justice, Color, Light, &c. -but it cannot in any way affect their origin. Why, for instance, the idea of the Infinite should be innate, and the idea of Light should be acquired? Are they not both ideas, and do they not fill, each in its own sphere, similar functions? When, to prove the dissimilarity of their origin and nature, it is argued that the idea of the Infinite cannot be deduced from the Finite, as the latter will always remain so whatever be the perfections with which the mind will endow it, and consequently that the idea of the Infinite cannot be 116 On Ideas.

drawn from the Finite, whilst the idea of Light, or any other physical idea, is produced by the direct apprehension of corresponding phenomena,—an argument is brought forward which rests on the confusion, I have just pointed out, between representation and idea, besides overlooking other vulnerable points which lav it open to other objections. For it will be seen that, in this argument, we have, on the one hand, the idea of the Infinite, whilst, on the other, we have not the idea but the representation of Light. Had Light been considered, like the Infinite, in its idea, it would have been perceived, as I have demonstrated, that there cannot be such a difference between them, and that we cannot any more deduce the general idea of Light, Heat, or Sound, from luminous, calorific, and sonorous phenomena, than the idea of the Infinite from the apprehension of finite beings. Therefore, as the idea of Light bears the same relation to luminous phenomena as the idea of the Infinite to the perception of the Finite, the argument applies equally to both or to neither. But, setting aside all other considerations, the hollowness of the argument will be more readily discovered by directing the attention to its general purport, and to the principle upon which it is grounded. It is there assumed that the idea of the Infinite and that of the Finite cannot be traced back to a common source because of the impossibility of deducing the former from the latter. Now if we grant the impossibility of the deduction, we must admit at the same time that the impossibility affects both terms and their mutual relation. If so, the converted proposition will be equally true; I mean that, if it be true that the *Infinite* cannot be drawn from the Finite, it is equally true that the Finite cannot be drawn from the Infinite; for if, by indefinitely enlarging the boundaries of the Finite, we would never reach the Infinite, and as, on the other hand, we could discover no limit in the Infinite, we would equally be unable to descend from the Infinite to the Finite. Therefore, both ideas being, in this respect, identical, the only inference to be legitimately drawn is, that they issue not from a different, but from one and the same source. Thus this famous argument upon which eclectic idealism mainly rests, is found, on close examination, to be no argument at all. The fact is that ideas are all innate,

and they are all innate because of their being all ideas, namely, purely intelligible principles constituting the components and indivisible elements of intellect and thought. They are also innate because of their being the immutable and eternal principles of Knowledge and Being. This leads us to the consideration of the other—the objective and ontological—aspect of the Problem.

§ 2.

What we have now to consider is the objective nature of Ideas, or Ideas in themselves independent of the subjective and accidental state of the individual mind, and the part they play with reference either to Knowing or to Being. This, I need hardly add, is the highest Problem of Science, in whose solution is involved, directly or indirectly, that of all others, and compared with which all other inquiries must be looked upon as preliminary exercises, a kind of mental gymnastic whose object it is to invigorate the mind, that it may reach this supreme object of its labors and aspirations.*

First of all, if, as I have demonstrated (section preceding), thought and idea are inseparable, and where there is idea there is thought, and where there is no idea there is no thought, it follows—

1°. That the limits of thought and the limits of ideas are identical, and that there exists between things and ideas the same relation as between things and thought.

2°. That, as to know is to think, and that where thought ceases there knowledge ceases also, knowledge and idea are inseparable, and, consequently,

3°. That there are as many ideas as there are determinations and objects of thought, and that the more we penetrate into the nature of ideas the more we become possessed of a clear and adequate knowledge of things; whence it follows, also,

4°. That as, on the one hand, there is no being, virtually or

^{*} See on this point Plato passim in his Dialogues, but more especially in the Phedon, the Republic, and the Banquet. Hegel has admirably and systematically described in his Phenomenology of Spirit this metamorphosis of the mind, these gradual evolutions which the mind must go through that it may be enabled to handle pure ideas and deal directly with them.

actually, beyond the reach of thought, and as, on the other, thought can think no being but through or in idea, there are ideas for all things, i.e. for all beings, modes or forms of existence.**

Yet, although this is a consequence which necessarily flows from the above enunciated principles, we are generally, so to speak, less condescending, in this respect, towards ideas than towards thought. For we readily admit that thought is endowed with the faculty of thinking all things, but with regard to ideas we here deal with them as we did with regard to their origin; we make a selection, and accordingly reject the doctrine that there are ideas corresponding to all things; admitting, for instance, the ideas of Justice, of the Good, of the Beautiful, of God, &c., but refusing to admit the ideas of Body, of Plant, Organism, Light, &c. It is, as it may be seen, the same eclectic and arbitrary process applied to the present question. In fact, whatever be the conception we form of ideas, whatever the value we assign them—let them be the essence of things, or mere subjective forms of thought-either we must admit that there is an essence, or an absolute form for the body, the plant, the light, as there is one for justice, the infinite, the good; or if we deny it, our denial must extend to both, to the latter as well as to the former.

The reluctance we feel to assign ideas to all things, and the difficulty we find in perceiving this fundamental truth, are mainly owing to our not being sufficiently impressed with the importance of this principle, namely, that the invisible and the ideal constitute the essential element of all beings, of Nature and Spirit, of body and soul, as well as of their mutual relation. In a general and indefinite manner we do acknowledge the principle, but, as we do not possess a clear perception of it, and do not embrace it in all its bearings and relations, when we come to application, either we totally disregard it, or we apply it in a desultory and arbitrary manner, so as to stultify ourselves and fall into the strangest contradictions. Thus it is, for instance, that we will assert that God is a Being immaterial and invisible, and, at the same time,

^{*} Plate has laid down this principle in the *Republic* and *Parmenides*, but he has made only a partial and incomplete application of it.

that He is the Principle of Nature, for the reason that Nature and the visible World cannot contain within themselves the ultimate principle of their existence; which means, and cannot but mean, that the reason, the cause, or the ultimate essence of Nature, resides in God. But if any one set forth the doctrine that Idea is either the principle or an essential element of Nature, we will not listen to such a doctrine, on the ground that we cannot understand how a purely intelligible element could be the principle of matter, space, motion, &c., here rejecting what we had formerly admitted in another form, and basing our rejection upon the very same ground on which we had admitted it.

We were, then, right in stating that we must deny or admit the objective reality of all ideas, and deny or admit them on the same grounds. Therefore, if there be the ideas of the Good, the True, the Infinite, there will be also the ideas of quantity, of quality, of number, light, animal, body and soul, life and death,* indeed of beings which seem the most remote from the ideal world; I mean, matter, phenomenon, and the Self. In fact, all Selfs, as well as any other being, possess an invariable element, a common essence, and they are such only inasmuch as they are the product of this essence and partake of its nature. And the adversaries of Idealism, the so-called psychologists who pretend to found philosophical knowledge upon internal experience and facts of consciousness, as they term them, acknowledge, or must acknowledge, this principle, namely, that in examining and describing such facts it is not as facts belonging exclusively to the indivi-

^{*} Physiologists, for the same reason that they do not generally admit the idea of organism (I say, generally, for there are some—Burdach, for instance—who admit it), reject the idea of life and death. And yet they endeavor to give a definition of them (see Cuvier, Regne animal, Introd., and Bichat, Recherches sur la vie et sur la mort). Now, either the definition possesses a merely nominal value, and then life and death would be a compound of words, or it must be acknowledged that there is an idea corresponding to each of them. And this is what, in reality, they acknowledge themselves by endeavoring to describe the conditions and invariable elements which constitute them. It is what, for instance, Cuvier acknowledges, who, after having defined life as the faculty possessed by the body of assimilating to itself, by a fixed and regular process, the environing substances, winds up his remarks by saying that the form is more essential to the living body than the matter. Now this form is nothing else than the idea, which appeared to Cuvier as a more form because of his not having given the subject sufficient attention.

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dual self that they describe them, but as facts extending to all selfs, nay, as constituting their very nature. And this only can lend to their inquiries a scientific importance; which means that it is this very science—Idealism—which they oppose that furnishes them with a leading principle, and imparts a meaning and a value to their own doctrine.

This misconception of idea in its relation to the Self must be chiefly attributed to the incorrect and deceptive notion we entertain about this same Self and consciousness. we hold that Self combined with Consciousness, or Selfconsciousness, is the highest stage and perfection of the human being, so that, according to this opinion, truth must be apprehended by the Self in Consciousness or Self consciousness; and a truth which does not fall under Self-consciousness is, as far as we are concerned, = 0. Now, even granted Self-consciousness to be the highest perfection or faculty of the human being, here also it must be admitted that it is not the exclusive attribute of single individuals, but that all individuals are possessed of it; which leads us to the same conclusion we have just stated, that there is a type, an idea, a common essence for self-consciousness, in which idea lies the cause and unity of all self-consciousness, and by which all self-consciousnesses are linked together and set in mutual communication.

Moreover, the knowledge of my Self rests on the knowledge of the Self, as the knowledge of my nature rests on the knowledge of man's nature. This is the import of the $I\nu\delta\partial t$, $\sigma\varepsilon\omega\tau\delta\nu$. For to obtain the real knowledge of my faculties, rights, and duties, I must know other men's also. And to embrace my Self in the wide range of its relations as a physical, social, moral, and religious being, I must know the beings also with whom I stand in such a relation. And if, in examining into my Self, I do not discriminate what belongs to it and what belongs to the Self—what is local and accidental, the effect of ignorance, caprice and opinion—from what is invariable, permanent and absolute in my nature, I shall know neither the Self in general nor my individual Self.*

^{*} If any one were to state that man is the Englishman or the Frenchman—or, what is the same, that in possessing the knowledge of the Englishman we possess the science of man—the Englishman himself would smile at such a state-

If we now consider the Self in its relation to truth, we shall arrive at the same result. In fact, truth which would be exclusively my individual Self's truth would prove no truth at all. And if I apprehend it as identical with, or inseparable from, my Self, I pervert it, or apprehend the shadow and not the reality of truth. For the very nature of truth is to be universal, and so constituted as to be open to universal apprehension. Therefore when I say that it is my mind which apprehends truth, I use an erroneous expression which creates in me the belief that it is really my mind that apprehends it, whilst it is the mind that is in me, and with which I am in union, that really perceives it. And, far from my selfish nature being the organon of truth, all my endeavors must, on the contrary, be directed towards vanquishing and silencing it, in order to invigorate and give rein to that universal nature that lies hidden in the depths of my soul, and which alone is able to apprehend the universal and the eternal. For when I live with and within the narrow compass of my individual Self, I live amidst fleeting shadows and deceptive phantoms which I mistake for realities, and instead of enlarging and perfecting my individual nature by raising it to the True and the Good, and by actually accomplishing my union with the universal and the absolute, I disfigure and curtail the latter by violently compressing them (if I am allowed the expression) into the mould of my individual and perishable nature. Consequently, to apprehend truth I must abolish my Self-consciousness, and turn it into Unconsciousness, or the Consciousness of Truth. This is the high and exclusive privilege of Truth and of the intellect that apprehends it. For in this mutual embrace of Intellect and Truth, Truth becomes Intellect and Intellect becomes Truth. Now this union and identification is what Thought and Idea alone can accomplish. For Thought that has become adequate to Idea is Thought not only of my individual Self, but of Consciousness and the Self, as well as of the Non-self and of all

ment. Now those who pretend that the Self is the highest attribute of man, and refuse, at the same time, to admit an essence common to all Selfs, hold a still stranger opinion. For the error of the former would only be to mistake the species for the genus, whilst the latter substitute the individual for the whole genus.

things as grasped by the mind in their universal and immutable essence.

Analogous considerations will lead us to the idea of matter. In fact, if there be an essence of matter, this essence must need be a merely intelligible principle. Now there is and there must be such an essence. For even were we to realize the principle of matter in a manner similar to that of Plato's and Aristotle's, i.e. as a principle utterly passive and formless $(\check{a}\mu\rho\varphi\sigma\nu)$, as the absolute virtuality or indetermination $(\check{a}\dot{\nu}\nu a\mu\zeta)$, it would be this virtuality and this indetermination, this absence of all forms, and consequently this capability of receiving any, that would constitute its essence.

The habit of representing to ourselves matter as compound and impenetrable is the chief hindrance to our apprehending the simplicity and *intelligibility* of its principle.

Now, with regard to composition, if by composition be meant an accidental and external union, or juxtaposition of elements and properties that would not be united by any internal, simple, and consubstantial principle; in this case, matter is no more compound than spirit. Otherwise we ought to hold that spirit is compound also, as it contains, like matter, various properties, faculties, and modes of activity. If it be said that in matter it is *form* that links together its properties, this would be equally applicable to spirit, and in this respect also there would be no difference between them. Finally, to realize either Spirit or Matter as a merely external and fortuitous aggregate of elements, is to fall into atomism and all the impossibilities with which this doctrine is beset.

As to impenetrability, it is not only speculative thought but experience itself that shows matter not to be absolutely impenetrable; for, if it were impenetrable, how could the most essential fact—the fact constituting, so to speak, the very life of matter—I mean, its transformation, and the mutual fusion and identification of the various material substances—be explained? Besides, if we admit matter in itself, matter forming the link of all material substances, we must admit also that matter penetrates all these substances, or, what is the same, that all these substances penetrate each other through the medium of matter. Therefore, what is

impenetrable is not matter in itself, but matter in its particular and fragmentary existence, i.e. bodies. And, consequently, we must hold that bodies are penetrable and impenetrable: penetrable inasmuch as they possess a common nature and substance, impenetrable inasmuch as they are distinct and separate parts of this same substance. Finally, extent and impenetrability, as well as all properties and modes of matter, are general and essential properties, and consequently, like matter itself, merely intelligible elements; they possess, in other words, like matter, a principle, a type, an idea.

LECTURES ON THE PHILOSOPHY OF LAW.*

By James Hutchison Stirling.

IV.

Gentlemen:—The last subject of consideration with us was the alienation of property through long omission of the manifestation of will in it. There the omission was indirect, and the step from indirect to direct omission constitutes the transition from the subject of the use of property to that of its alienation proper. A thing is mine when it is willed mine, and not mine, consequently, when it is willed not mine; or, from that into which I have set my will, I can also withdraw it again. This is alienation which may be an act direct, explicit, and declared, as well as one indirect, implicit, and undeclared. What is alienable, however, must be by very nature external; whereas what is by very nature internal, is also by the very terms inalienable. I cannot outer what is wholly and solely inner. Now, such is my personality as personality; such my free-will, my moral sense, my religious conviction. These I cannot commit to the disposal of another; for they are my very inmost being, my very principle of existence, my very self; and the nature of one's absolute self is free-will, and that is freedom, liberty. I can neither be a slave, then, nor have a slave. All compulsion is unlawful but that of law itself, which, properly considered, is no com-

^{*} Delivered before the Juridical Society, Edinburgh, Nov. 16, 1871.

pulsion; for it is the restoration of right, of free-will, not only to him who has been compelled, but to him who has been the compeller. Or, to put it otherwise, no man can be compelled but to undo his compulsion, which evidently is the restoration of his own right. He who gives into the possession of another his capability of rights, his moral and religious principles, gives away what he does not possess. Let him once possess them, let him once take his own free-will into possession, and such alienation is impossible. Retrocession from an immoral covenant, then, is no wrong; for the right that might be said to be wronged, as regards either contracting party, no matter which, never could have been his. inviolable inner of my being is no externality, and once I have taken it into my possession as such, every externality is powerless against it. Nevertheless, a part is, as in relation to the whole, external; and I may alienate to another the temporary and partial use of my inner abilities. Were such alienation not partial, but complete, then I were again a slave. This question of partial alienation of what is in its nature inward leads Hegel to speak of right in reference to the various products of mind, and one remark here is this: "The merely negative, but indispensably first, furtherance of the arts and sciences is to secure those who work in them from theft, and allow them the protection of their property, just as it was the indispensably first and the most important furtherance of trade and industry to procure them safety from robbery on the roads." Hegel naturally, also, considers here the question of self-alienation, of the alienation of one's life, of suicide. The complete totality of our external activity, life, is not, to the personality which it naturally constitutes, an outer thing; it is not my right to seek death, then, unless at call of the ethical universal in which I am held, and which is my substance. "Suicide," says Hegel, "may be possibly thought bravery, but it is the false bravery of tailors and girls." Still he seems a little soft to the suicides of the heroes. "When Hercules burns himself," he says, "when Brutus falls on his sword, that is the bearing of the hero to his own personality; but when the question is of the simple right of suicide, it must be denied to the heroes as well as to the rest." The prohibition here, however, hardly seems a strong one,

seeing that it appears to be admitted that there is an heroic bearing to which personal life is an externality.

Property as external is in connection with other things external which are also properties; but the principle of property is will, and property to property is consequently will to This relation of will to will is the true and proper element in which free-will has existence; and property, no longer through subjective will and an external object, but property through a common will, through the will of another —this is the sphere of Contract. And, perhaps, there is that in this transition which will reveal to you at last how the triplet Property, Contract, and Penalty, is conditioned by the moments of the Notion. In property, for example, the relation is that of a single will, in contract that of several wills. and in penalty that of the common or universal will. Very plainly, then, there is here but the ordinary succession of the moments, singular, particular, and universal; and I may remark in this connection, that Hegel does not tie himself down to the universal being always first, but allows it freely to exchange places with the singular.

The main moments with Hegel in his treatment of contract are the act of will which constitutes it—from the very notion, and that the realization is a simple consequence of this act, and necessarily contained or implied in it. "My promise in the case of a contract," he says, "implies that I, with my own will, have excluded something from the sphere of what is mine, and, at the same time, that I have acknowledged that the other person has received it into the sphere of what is his. The thing, then, by virtue of the contract, is already the property of the other, inasmuch as that a thing is mine so far as it depends on me, has its ground in my will. In so far, then, as I should not render to the other the matter of the contract, or fail to put him in possession of it, I should be infringing his property. The contract itself binds me to its realization."

There is that in the relation of the mutual wills present in contract which is peculiarly interesting to Hegel. He sees in it all the features of the notion, and so, as he is fain to believe, its sanction also. He finds property an affair of wills now, and no longer to depend for manifestation on an exter-

nal object. Contract, he says, is "the process in which there is exhibited and resolved the contradiction that I am and remain independent proprietor, excludent of the other will, so far as, in a will identical with the other will, I cease to be a proprietor." I not only can, but must, alienate property; for it lies in its very notion that will should be made objective, external. But if it is external it is another—that is, another will, as it were; and so we have the unity of different wills—a unity in which this difference is at once negated and affirmed. This, however, is the very movement of the notion — the identification of differences, the differentiating of identity—and signifies the production of an identical will in the absolute difference of independent proprietors, in which each, with his own will and with the will of the other, ceases to be a proprietor, remains a proprietor, and becomes a proprietor. It follows, then, that each issues from contract the same proprietor that he entered into it, or that there is virtually between them an identical property; this is the value in which the articles of the contract are, with all their specific external differences, equal to each other. So it is, says Hegel, that a lasio enormis cancels the obligation of a contract. It is in this neighborhood also that Hegel censures the unilateral and bilateral and other divisions of contract in Roman law, accusing them of superficiality and confusion.

Possession stands to property as in a relation of substantiality to externality. Property, namely, is an assertion of will, of which possession is the internal reality. relation but repeats itself in contract in its two terms of agreement and fulfilment (prastatio, solutio). The agreement is wholly substantial, it is in the element of ideality; and the utterance of ideality—expression—is the sign. the agreement brings itself through the stipulation, in the symbolical formalities of gestures or of speech (which last is the fittest expression of ideality), into a sign. The stipulation, therefore, gives an outer body to the ideality of the agreement. Formalities, doubtless, get simpler and simpler: still, for the conversion of subjectivity into objectivity, an externality is necessary, and formalities of some kind will remain as necessary for the expression of will, as speech generally for the expression of thought—it lying in these

very words that the expression of will will reduce itself more and more to the expression of thought as such. The formalities of contract, then, are not there only to bring a fee to officials, but that the mobile inwardness of will may be stereotyped in an outward and undeniable form. It is impossible to gainsay the value, in all cases, of the external proof: a thousand witnesses to the contents of a letter are really impotent beside production of the letter itself. Where agreement and prestation are not simultaneous, then the stipulation must be regarded as a real essential. What is implicitly meant must be explicitly set. The derivation of the word stipulation, as an outer expression to an inward will, does not seem quite certain. Kant derives it from stipula: the contracting parties broke a straw between them. Dr. D. C. Heron, again, has it that "whatever was firm was termed a stipulum by the ancients: probably from stipes, the trunk of a tree."* The stipulation is the guarantee, then, that something does not lie only in the will, but actually is willed, and so lies out of will - a fact. The stipulation further, then, must be regarded as what in contract is legally substantial, or in the stipulation the transfer of property must be regarded as virtually accomplished. This is the declaration of the notion; but of course, between the stipulation and the prestation there is allowed the usual latitude of understanding; understanding has always the fact of the equal value—in regard to what is given and what is taken as basis and standard. Stipulation, moreover, as substantial, only applies to what is substantial—value. A contract is not a mere promise; and the stipulation gives shape and fixture to the difference. Fichte and others are quite wrong, then, in assuming the obligation in contract only to begin with the beginning of the prestation. Contract is an affair of legal, not of moral right, and has nothing to do with the secret intentions, the state of mind morally, of either side. Duplicity of moral meaning is not allowable in contract, and

^{*} Nevertheless, in the libris "Originum seu Etymologiarum" of Isidorus Hispalensis we find it said (iv. 24): "Stipulatio a stipula—veteres enim quando sibi aliquid promittebant, stipulam tenentes frangebant," which would seem to be dead against Dr. Heron, who, for the rest, supports his own statement by no authority.

the stipulation is the embodied and undeniable guarantee of that. Prestation is but the inevitable result of stipulation, and that there are contracts—loans, deposits, &c.—in which agreement and prestation are simultaneous is no proof to the contrary.

As regards the classification of contracts Hegel differs but little from Kant, and as it may be readily found by reference I shall not spend time in its exposition.

Hegel points out that in contract will is not will as such, not absolute will, but, as limited to, included in, an outer object—so to speak, transformed to it—is only formal will, individual will, self-will. That is, in contract the will is but natural will, the object but a natural object, and there is no necessity of reason between them: the will may express itself in the object, but it may also withdraw itself again. contract, then, the wills are self-wills, natural, individual wills; the one will that results is only one of community, and not of substantial universality; and the object, as at all alienable by self-will, is only an individual external object. Neither the State nor marriage, therefore, are matters of con-The State, for its part, is very evidently our natural absolute: we can neither enter it nor leave it by will of our own: it is no result, consequently, of any artificial reciprocal agreement; it is a natural growth, but a growth from reason; it is a realization in time of objective reason, of the rational will. The State is a single national spirit, and it is that spirit which is the substantial contents of every individual subject. These subjects are indebted to it then, and not it, in the first place, to them. The preservation of the State, consequently, is infinitely more than the preservation of the individual, and it is the latter's duty to perceive and acknowledge this. As regards marriage, there is a wonderful superiority in the teaching of Hegel to that of Kant. In fact, the sort of good old-maiden Kant is almost even disgusting here, and Hegel has a perfect right to speak of him as having exhibited the subsumption of marriage under the notion of contract in its "Schändlichkeit"; that is, in its shamefulness, or scandalously. Marriage to Kant, namely, is, in so many words, a contracted interchange of the use of the sexual organs, and his whole exposition in connection with it teems with offen-

sive expressions. It is only that old-maidenness of Kant, perhaps, that can supply any excuse for him. He has lived all his life, namely, at such a distance from the kindly mysteries of Hymen, that when he gets a chance in philosophy to approach them he cannot help extending a half-weak, half-wicked hand to the drapery. Hegel exhibits here an admirable contrast to Kant. To him the origin of marriage is ethical. The individual does indeed seek for himself the substantial existence of his own natural universal, the genus, the family, but the relation of sex in it takes on intellectual quality in a union of love and the spirit of trust. Sentiment, then—feeling—is still the element in which the family lives, and its rights and duties are moral or ethical rather than legal; for the individual constituents of the family are members of its one unity, of its one personality, rather than themselves persons, and the legal side is consequently subordinate to the moral. In this way Hegel deduces the necessity of monogamy, and presents the bodily union as rather a result of the ethical one. It is very true that we have all been much interested in certain views in regard to capture in marriage and other facts in its reference of an historical character, but the evolution in time neither dictates the evolution of the notion, nor renders it untrue. So far as time is concerned, religion may have begun in plant-worship, or brute-worship, or star-worship, or whatever worship you please; but, for all that, religion is a principle of reason, and has its own evolution of reason. The evolution in time generally is but—if we are to believe Hegel—the evolution of the notion in representation, as it were. As such external representation, history, then, is but necessarily a scene of contingency, which contingency gives to the evolution a scattered, partial, miscellaneous look—even a look of caricature; still, nevertheless, the evolution of the notion is but the evolution in time, stripped of its contingency. To arrange law, morals, and politics, according to the notion, therefore, is not really to fall into contradiction with the phenomena of history how motely soever.

Contract, as we have seen, then, is an agreement on the part of two wills—an agreement to a certain performance on the part of each. Now there are certain possibilities in this

relation. The one term may have mistaken the other; or expression may not have corresponded to inner intention on the part of either; or performance in the case of the one or the other may fail. Suppose, then, in the first place, a mistake. In this case there is a difference, but neither denies the right of the other: neither denies right as right; each on his own side only insists on his right. Nevertheless there is wrong here somewhere, though both are by supposition innocent in its regard. This, then, is the position of unintentional wrong, unintentional injustice, and the result is simply the civil suit, the action at law. The position is different, however, if we suppose expression in the case of either not to have corresponded with the state of his mind. Here the wrong, then, is no longer unintentional, but intentional; and the result is deception, fraud. But so the wrong is criminal: it amounts to a denial of right as right, at the same time that it acknowledges it in form.

But let us suppose, lastly, that there is intentional and express non-performance of the contract. In that case, the right of the other person is not only denied, but right as right is denied, and we have criminality in terms. Logically, as Hegel points out, in the unintentional wrong that gives rise to the civil suit, we have only a simple negative judgment; it is only denied in it that such and such particular is capable of subsumption under the genus, under the general rule; whereas, in the case of crime, it is the genus itself, the general rule itself, that is denied; and the judgment is of the kind that is called infinite. To say this rose is not red, is to deny a particular, but implicitly to admit a general; whereas to deny that fraud is crime, is to deny the genus itself, is to deny the person to be a person.

This, then, is the sort of external statement of the various positions, but how are they internally? how do they relate themselves to the notion? The notion here is that of will, particular personal will contracting with particular personal will under sanction and prescription of the universal will, of universal right. Now, the fact that it is particular will that is concerned, and in regard as well to a particular externality, some one article of property, introduces contingency, the possibility of accident. Neither will may deny the universal

will, and each may insist on its right as particular; but in its own contingency, one or other may err. Again, in the second instance, or in the case of fraud, universal will is formally maintained by both, but it is secretly denied by one of them. In the third case, lastly, universal right as right is denied, and the individual sets up his own will in its place. Now, it is from this last that the notion of punishment, penalty, evolves itself; and, believing the rest by implication intelligible, it is to this now that we shall confine our attention.

The criminal, then, has done two things: he has negated the universal will, and he has affirmed in place of it his own particular will. How is this disturbance of the true balance to be restored? To negate the universal will is to do something that is in itself null; and this null thing, to restore the affirmative, must be itself nullified. The criminal has resorted to force—a negation, and this negation can only be converted into the affirmative by being itself negated. negation of the negation, like a double negative, effects position again, affirmation; and punishment is the true remedy. But, again, the criminal has set up his own particular will in place of the universal will; and as a free being he has, in so willing, willed what ought to be, or what ought to be supposed to be, universal. It is but justice, then, that the criminal be subsumed under his own law-force. Nay, as a free being, it is universal will he must acknowledge to be his own true will; therefore it is but the affirmation of his own true will that he must recognize in the negation of his own false particular will.

The first result, in mere natural circumstances, of the assertion of a mere particular will as law, is the counter-assertion, and with equal positiveness, so to speak even, with equal right, of the opposite particular—this is revenge. But this counter-assertion, as itself proceeding only from what is private and particular, is itself a new offence, and so there is initiated a progress, or, better, a regress ad infinitum, as we see in the vendette of the Corsicans or of the Arabians. This continuity of an endless repetition is interrupted now by the judge, who, as disinterested representative of Right qua Right, rounds the action back into itself through

retribution, and restores the universal will—the true will that is, of the criminal himself. And we can readily see that the judge is the only proper administrator of any such function. His private feelings are not concerned—he is there for the universal only; whereas even the righteous man that would only revenge, that by retaliation would only restore the disturbed balance, acts, and can act, only under private feelings,—and probably under the private feeling that his wrong is wrong as wrong, and can only be atoned for by an utter negation-a negation that infinitely transcends the original negation of the criminal himself. The only legal compulsion, then, is the legal retaliation of the illegal compulsion. He who has forced or deforced the law, must be in turn forced or deforced, and that can be realized only where he is seizable, only in his person or property. Of course, the word force must be understood to have acquired a width of meaning here beyond its usual physical application: whatever is even passively illegal, as a negligence or even a mere omission, is, as infringement of the universal, capable of being regarded as force. In the same way it is allowable to view the sensuousness and mere nature of children as so much force which can be redressed only—raised into the universal of reason—by so much counter-force of training and restraint, discipline, and education. The natural will is to the rational will really in the relation of the particular to the universal, and the former must be negated into the latter. To the family as by law established, to the community as by law established, all untutored rude individualism of will or manner may be allowably said to stand as in a relation of force. Even suppose an entire society in a state of nature, that whole society may be convicted of force—force to its own universal, and the resultant bellum omnium contra omnes is but the necessary process for the discovery of the heroic will, which, instinctively universal, subjects the rest to itself. Mr. Grote would fain see this war of all against all brought back again; for he would have no standard for the individual but the individual. He is so much surprised, indeed, that any one should think otherwise that he cannot help referring him to what he calls "notorious facts"; and is thus absolutely blind to his own suicidal self-contradiction.

Not only are the "notorious facts" he affirms the universal standard he denies; but that he, an individual, and claiming to be amenable only to the individual, should express surprise at an individual simply for making good his own claim. this is the very naïveté of self-deception, the very naïveté of self-conviction, and the very naïveté of self-confutation. Only in the possibility of such confutation, indeed, is it that there is room for the very existence of the State. Were there no universal, were individualism all, then there were no State. It is the same possibility then, the same fact, that constitutes the very foundation and the origin and the reason of penalty. Many have found much difficulty in this. The Stoics, for example, in assuming only one virtue, necessarily implied also only one punishment, as realized in the laws of Draco, which made death the penalty of offences and crimes alike. Free-will is realized in a necessarily varied externality, however, and the infringements of it are subjected to a correspondent variety both as regards quality and quantity. Analogous variety of punishment, then, is but justice. It is gratifying to observe, however, that there is a decided tendency throughout all civilized communities to mitigate punishments, and all the more gratifying that this does not result from a laxer but from an exacter estimation of law and justice. It is because the many so correctly regard the law that we can afford to punish less the few who err. this way we see that the character and amount of penalty does not depend altogether on the notion, but on the actual historical condition of the particular people. That is the circumstance that explains the apparent paradox: the more a people abhors crime, the less it punishes it. Such a people is secure in itself, and stands not in need of extraordinary examples. It is probably this circumstance that has led some to oppose the punishment of death, and others all punishments whatever. Beccaria, for example, even denies the State any right of capital punishment, and he assigns for reason that it is not to be presumed that the social contract contains the consent of individuals to their own death. But the State is not a contract; and, as the established universal, it possesses a right to claim the sacrifice of the individual for its interests. To others, again, it appears absurd because

of one evil to will another. Accordingly they either reject punishment altogether, or admit it only because of its tendency to intimidate, deter, prevent, &c. Such views, as Hegel points out, however, resemble the lifting of a stick to a dog: they do not really respect man, they do not really respect him as a free being, but treat him as a dangerous animal, that must be kept under. But punishment is an idea on its own account, and has its foundation in the very nature of the will, in the very nature of reason. The true, even to realize itself, must destroy the false: so the false will of the criminal must realize the true universal will, and it lies in the very notion of the relation that the false will should contradict itself, negate itself, and how can that be done but by submitting it to its own law? This is to be borne in mind as against all that moral sublime which encounters us but too frequently in medical books now-adays. In these we find generally a thousand physiological reasons pleaded in proof that the criminal but obeyed his own necessity, but did what he could not do otherwise; and that the true punishment of the criminal is the rewarding of him by making him, through the infinite cares and privileges of public protection, a mere pampered pet, a sort of humanely and scientifically crammed animal! This is to pervert the very notion of will; this is to pervert the very notion of reason; this is to pervert the very notion of Nature herself; for Nature, when it is man that approaches her, is herself reason. No; let us return to health, let us abandon all these pillows and bolsters -- all these feather-beds of sentimentality on which vice is to fall soft, and let us tell men that they must be men, and that when they declare their self-will the universal will, they must be subsumed under it and abide the consequences. For this there is provided the universal law for this there is provided the judge, who dispassionately and disinterestedly knows the universal, and dispassionately and disinterestedly can subsume the wrong and the false under it. In the very criminal there lies the universal that is to do him justice. This universal, then, is his own; and in the very fact that it is his own, he has given his consent to its essential and necessary action even against himself. universal will has a right to negate what would negate it,

and that very universal will is the criminal's own. The kind of punishment, then, depends on the particular crime and on the particular condition of society, and that is an affair of understanding; but punishment itself depends on the notion, depends on reason, and is an inevitable and rational result. "An act of justice cannot be degraded into any mere means: justice is not exercised in order that anything but itself be attained and realized. The fulfilment and selfmanifestation of justice is an absolute end, an end unto its own self." It is precisely in punishment that the criminal himself is honored; and it is precisely by this that such punishment lies in his own act, that he is specially honored. The particular will that is only the particular will is an offence to the universal; and must be sublated through its own very self into the universal again, with restoration of the pristine, rational, and absolute unity.

Now, in the relation of crime and penalty, the edge of internality appears. The observance of law, namely, may, in many respects, be observance only -- an external and mechanical mode of conduct in certain references, without a thought further than the required externality; but this externality becomes deepened, becomes reflected inwards, becomes internalized into inner ideal principles of right and wrong, in the relation of crime and its consequences. This is the more apparent when we contrast physical necessity with moral freedom. Only because the sun, the planet, the rock, the river, the sea, the clod, the plant, the animal, cannot depart from the prescripts of its universal, is it bound, is it under necessity, and incapable of imputation; whereas it is only because the human being can contradict and oppose, and set himself against HIS universal, that he is free and within reach of imputation. It is in the relation of crime and its consequences, then, that the majesty of the universal will, which is one's true will, and the nullity of the particular will, which is only one's false will, appear and manifest themselves: and in this way Right passes into-Morality.

The rights which we have just considered are often named natural rights. There is involved here an essential and fundamental mistake, however. In a state of nature, that is, there are no rights—in a state of nature there are only the un-

rights of cunning and of strength. Only in the civil community is it that there are really rights, and these are such as we have just seen sketched in reference to the relations of Property, Contract, and Penalty. The sketch has been slight, but I trust it has not been altogether without true traits. I trust that you understand, also, that it has been limited to Right as Right, and that the Moral and Political sections of the book we have had always in view have only been incidentally alluded to.

I have said that for these lectures I had the advantage of the examination of a considerable number of authorities kindly lent me for the purpose; and that the result was to establish my confidence in the exposition of Hegel as regards depth and truth of insight. The consideration now of an objection or two will enable me, by the addition of a word on these authorities, to bring these lectures fittingly to a close.

Röder accuses the Hegelian exposition of "formalism," and of all nations praises the Italian for this, that it has "fortunately let the Hegelian goblet pass by," As regards "formalism," there is a certain outside show of reason, for the Notion may be considered something merely artificial; but as regards the Italians it is Röder who is "unfortunate," for in no part of the world at this moment is Hegelianism more in the ascendant than precisely in Italy: whether at Florence, or at Naples, or even at Rome, under Spaventa, and Mariano, and Vera, it is Hegelianism that, as philosophy, is taught. When Röder further, then, accuses Hegel and his disciples of "obscuring," "degrading," "distorting," "disfiguring," "caricaturing" "the simplest truths of Rights and Politics," "on the rack of an equally clumsy and unintelligible method," by the "trickery" of a new "scholasticism," &c., we have good grounds to suspect him of incorrectness, at the same time that we see internal ignorance to be the condition of the show of truth that applies to the outside. Röder, for the rest, though writing clearly and with much detail, is all too plainly wholly under the power of the biassed and subjective Pantheism of his master, Krause. Trendelenburg's is a good book, and by a very able man; but, though there is latently to be understood disagreement with Hegel, it is the spirit of Hegel that is the valuable element in it. This spirit,

too, is what informs the work of Michelet, at the same time that he must be pronounced largely original, and valuably so, especially in historical references. What Hildenbrand gives us is a history of the notions of Right, and not—at least as yet-a system. As a history, it is most excellent. In all German historical writers on philosophical matters now, there is a single common story, especially ie reference to the ancients; but it must be acknowledged that Hildenbrand. for his part, tells this story with perfect elegance and ease, and with the most careful accuracy. I come now to Lassalle, who is a writer at once of original power and great importance. In recent philosophy there are few works of greater mark than his work on Heraclitus the Dark. His work on the Erbrecht also gains more attention daily. But Lassalle is an Hegelian, and he glories in the name. Nevertheless, he has an objection to the Rechtsphilosophie of Hegel. This objection I believe to be a mistake, but, as it concerns the one pressing question of the day, I shall state it. It concerns, namely, the question of acquired rights of property, and Lassalle looks upon the ideas of liberalism, of the bourgeoisie, of what we know as the passive political economy of the middle classes, represented by Mr. Mill, say, as at once narrow and erroneous in regard to it. He surely is not wrong in believing this question to contain the "politico-social thought that underlies our epoch," what "forms the inmost ground of our political and social struggles" now. This it is, he says, that "thrills the world's heart at present"; and "the mere necessity just to refer to this only shows in what soulless platitude and superficiality political principles are understood by the spokesmen of the liberal bourgeoisie." "The isolatedness," he continues, "in which the liberal bourgeoisie places politics--it is that which characterizes its stand-point and its mental horizon, and conditions its performances. It is this isolatedness which gives at the same time to its political diatribes their astonishingly philistine color," "a dead isolatedness in which the soul has resigned its life and its vision, to lose itself in mere words, and with words, on words, for words, to battle." He would oppose to this world-cultus substantial thought, and he points out the necessity of reconsideration scientifically of

many particulars in the science of Right in order to attain to a scientific theory of acquired rights. He says, "It is now more than forty years since Hegel published his first edition of his Philosophy of Right," and remarks that this work, from its historical conditions, could only be a first attempt to exhibit right as a rational organism, and censures his disciples for not having regarded it as a mere logical foundation on which it was theirs to build further. He regards, with Hegel, the scientific evolution of will as alone capable of yielding a philosophy of Right; Hegelianism is to him the "quintessence of all Wissenschaftlichkeit," and Hegel's groundprinciples and method will, he believes, always remain. But the principles of Right are, as he also believes, no stereotyped logical category: they are substantial ideas that historically change and historically progress. Hegel himself did not, he thinks, sufficiently see this, otherwise he would have treated Law as he treated Religion, and would have demonstrated it in evolution through various historical stages. It is but Hegel himself, then, that must be used here to correct Hegel. Indeed "Hegel himself and his philosophy bear none of the blame here" is his slightly self-contradictory further avowal: "on every page of his works Hegel is never tired of making it prominent that philosophy is identical with the totality of empiricism, that philosophy stands in greater need of nothing than of penetration into the empirical sciences; reconciliation of natural and positive right, that was Hegel's object," but his disciples have neglected to carry it out into actual realization in the empirical or historical matter of law. In short, Lassalle would have Positive Law regarded as consisting of but successive historical transformations of natural law, and he proceeds with great eloquence and fulness to illustrate this idea, with special reference to property.

The progress of law, he remarks, is towards limitation of the individual's right to private property—towards the liberation of objects from individual dominion. We see this in the abrogation of Fidei Commissa even, though so much is this mistaken that it is generally regarded as an increase of the liberty of property—a removal of its restrictions. This abrogation, namely, lessens the power of a proprietor over his own property. The same is the case with the "free com-

petition" of the present day. That, too, is vaunted as a giving freedom to the right of property, whereas it is rather a restricting of the power of the private proprietor; for the thought in it is, there shall be no more monopoly, no longer any privileged individuals. The private property, then, that was once possible is now impossible.

Man - Lassalle substantially continues - at first like the infant, stretches out his hands to everything—would make all his-recognizes no limits to his self-will. The fetichworshipper breaks his idol when his desires are crossed, and thus treats his very gods as his property. Long after the rescue of these from such position, man himself continues to constitute to man an article of property. The conqueror regarded the life of the conquered as his; and slavery, at first unconditioned, then conditioned, has only in our own day been abrogated. Formerly one's wife was property, and could be bought and sold. Formerly one's children and one's debtors were so completely in the same category that the former might be put to death by us and the latter taken as slaves. In like manner, the power of disinheritance was but a fuller right of private property, while subsequent legislation has been all in restriction of it. So the slave rises into the serf, the serf from privilege to privilege into full emancipation. Here even the jus prime noctis is a restriction of property; the seigneur compounds for his right to the very life of the slave by accepting her virginity. The middle ages, though freed from slavery proper, are the very time when the human will can, in all its three moments, be set as private property. Public will is then an object of such property on many grades, and this he illustrates by the privilege of sovereigns and other feudal superiors to arrogate a property in everything, air and water, and things public, things religious, &c. As for particular will being in similar relations, monopolies, and guilds, &c., are referred to; and as regards individual will in the middle ages, lastly, we are reminded of villenage, and of such rights even over the personally free as the choice by the feudal lord of a husband for his female vassal. The French Revolution Lassalle conceives to have been the sublation of said private property, and in all its three moments. As regards the present, it is incorrect, he

says, to call this the age of individualism, and individualism the character of liberalism. Liberalism is particularism (as we may say), classism: it wants freedom, that is, not for the individual, but for the tax-paying, capital-holding particular, This is but a remnant of the middle and that is a class. ages, Lassalle believes, and must disappear. The social question now, he intimates in conclusion, is: whether, in these days, when there is no longer property immediately in another human being, such may exist mediately; and he proceeds to describe the relative positions of capital and labor as we must daily witness them. It cannot be denied, then, that Lassalle regards the historical progress as e mancipio—emancipation—that is, a release from private property; and that such release is equivalent to the positive realization of human liberty. Neither can we well doubt that there is much in what he says highly worthy of our very closest attention (it is curious that we should have here in Edinburgh so recent and striking an example of a portion of his doctrine in the changes we have seen effected on the Merchant Schools); still, what concerns us here is mainly the alleged correction of a defect in Hegel. And, so far as adhesion to the right of private property is a defect. Hegel must be pronounced guilty of that defect. Hegel undoubtedly signalizes the advantages—the necessity of the institution of private property. Still, it is to be borne in mind that it is the State that is to Hegel paramount—that to him the State is there with power to sist any contingent unreason of the lower spheres—that the State has a Machtspruch over all, and a perfect right of negation. This is manifest in almost every page he writes. Evidently, then, if Hegel, is averse to the one extreme, the individualism of such men as Lassalle and Fichte, he is equally averse to the other extreme, the superficial pedantry of those spurious, passive, political economists, who believe their laws to be laws of nature, not reason, that need only be allowed to work on like gravitation or a waterfall; and who look forward to that day of light, at length, when we shall parson, and doctor, and lawyer ourselves; and when the whole earth will be inhabited only by a single rational community of exchanging animals, with nothing but the buttons of the policeman to clear up

and shine away any foggy nodus of misunderstanding that That I take to be Hegel's position—a position, may arise. then, as it seems to me, that corrects the very correction Lassalle would offer it. It is not correct either to accuse Hegel's Rechtsphilosophie of being independent of history, or of dealing only in stereotyped categories, like those of Logic and Nature. The Rechtsphilosophie itself contains many references to history, and the whole "Philosophy of History" may be regarded as just such reference by itself and at full. Right, besides, is not Religion, as little as Religion is Art: the Rechtsphilosophie, and the Religionsphilosophie, and the Æsthetik, must be allowed to prescribe themselves each its own specific character. Neither can it be said that in Hegel's philosophy of law, Hegel would have all regarded as fixed and stereotyped—a Seyn, and not a Werden, a Being, and not a Becoming. Hegel, on the contrary, is so convinced of the truth of an historical Becoming that he does not regard Logic itself as fixed—in the sense, that is, of the impossibility of new categories. He will be found saying that all revolutions in science, no less than in history, depend on this, that man has changed his categories, and preciser proofs to the same effect might be readily adduced.

It is in place now to refer to Austin, and the remarkable contrast his opinions exhibit to those of Lassalle and Hegel. Of the public good, this writer speaks thus: "When I speak of the public good, or of the general good, I mean the aggregate enjoyments of the single or individual persons who compose that public or general to which my attention is directed. The good of mankind is the aggregate of the pleasures which are respectively enjoyed by the individuals who constitute the human race. The good of England is the aggregate of the pleasures which fall to the lot of Englishmen, considered individually or singly." This, you will observe, is the very voice of the modern English spurious enlightenment. cording to it, what is, is but the various motely individuals, and no universal exists, but only a motely aggregate; while good, again, is only enjoyment—pleasure. These are doctrines that know nothing of morals, nothing of the State, and nothing of the law: these are doctrines that, carried into effect, would, almost in an instant, scatter the race into an

incoherent atomism of unconnected and irresposible single savages. This really is the only word they deserve; yet in his peculiar Wahn, so sure is their author of the truth of them, that he says, "When it is stated strictly and nakedly, this truth is so plain and palpable that the statement is almost laughable." He ought to have said, not almost, but quite laughable, though for a very different reason. This he does not say, however; but continues, this "truism is unknown in that notion of the public good which was current in the ancient republics." "Agreeably to that notion of the public good, the happiness of the individual citizen is sacrificed without scruple, in order that the common weal may wax and prosper; the only substantial interests are the victims of a barren abstraction, of a sounding but empty phrase." The state of Mr. Austin's knowledge, as regards all that constitutes the philosophy of history, is so plain here that it is useless to point out more than the dependence of the individual on that universal—on that common stock which is his substance, and apart from which he is is little better than the gorilla our so enlightened modern science would make of him.

As regards the laboring classes, Mr. Austin speaks thus:-"It is certainly to be wished that their reward were greater, and that they were relieved from the incessant drudgery to which they are now condemned. But the condition of the working-people (whether their wages shall be high or low, their labor moderate or extreme), depends upon their own will, and not upon the will of the rich. In the true principle of population, detected by the sagacity of Mr. Malthus, they must look for the cause and the remedy of their penury and excessive toil. There they may find the means which would give them comparative affluence; which would give them the degree of leisure necessary to knowledge and refinement; which would raise them to personal dignity and political influence, from grovelling and sordid subjection to the arbitrary rule of the few." The rule of the few is arbitrary and bad, then, to Mr. Austin; but if only the working-classes would refrain from making children we should have a heaven on earth! This, with education, is Mr. Austin's panacea. Mr. Austin is, in many respects, a very worthy gentleman;

but it is his own wife (an admirable an amiable lady) who tells us that "the experience of the thirty years which have elapsed since the foregoing lecture was written, does not seem to justify the author's sanguine anticipations." I should like to read you several other extracts here which naively confute the doctrines involved by the wholly innocent but unthinking propos of a disciple who has got by heart only; but I must refrain from want of space. I was prepared also to give some consideration of Mr. Austin's views of Utility, as well as to discuss, at some length, his ideas of the principles of law; but I must now deny myself in these references also. If any gentleman, however, will consider that a command as such is to Mr. Austin the essence of law and morals, as well as in what he places this command to give it meaning, source. reason, and authority, he will be able to form some conception of what I might finally say of him. Mr. Austin, in short, is one of those finical, over-refined, almost female minds, that, without power in themselves, attach themselves blindly to the guidance of another or others; and his book is a work of infinite external verbal distinction, but it has not a vestige of internal thinking rationale. Heron's book is, to my mind, a book much more useful to the student, though it is very much of a pêle-mêle, undigested compilation. Here, too, I have to suppress much.

I have now to conclude these lectures by sincerely thanking you for the very kind and generous attention with which you have assisted me in a very dubious and difficult undertaking.

CONDITIONS OF IMMORTALITY

ACCORDING TO ARISTOTLE.

By Thos, Davidson.

As a proof of the soul's immortality it has been frequently urged that all peoples, in all times and under all circumstances, have believed it. Though the allegement is not strictly true, as has been shown by recent researches, it is nevertheless near enough to the truth to form a presumption in favor

of the doctrine specified. It is true that all tribes except the very lowest do believe in immortality of some sort, be it rude and material like the belief of the American Indians and the Ancient Egyptians, or sublimated and shadowy like that of the Buddhists - an immortality which many Buddhist philosophers hold to be equivalent to annihilation. Prevalent as this doctrine of immortality is, the notion connected with it has seldom been defined in the mind of a nation, and more seldom still have the conditions been stated under which immortality would be possible. As a result of this, nearly all the disputes which have arisen on the subject have been grapplings in the dark, neither party to the dispute having any very clear notion what he was disputing for or against. This is especially true at the present day, when the doctrine of immortality is extensively, though quietly, canvassed. Under these circumstances, it may not be uninteresting to attempt, without entering upon the question of human immortality, to discover under what conditions, if any, immortality would be possible, leaving it to others to say whether the human soul possesses these conditions.

Immortality is usually defined as Eternal Life. This, according to Aristotle, is incorrect,* on the ground that such a definition includes as a species that which is merely an accident. Immortality is not a form of life or a kind of life: it is something that happens to life—something higher than life, yet something whereof life is a condition. When life passes into immortality, it ceases to be life -- it passes beyond life into something higher. All life does not of necessity become immortal, and life, in the ordinary sense, cannot, as such, be immortal. Nevertheless, as we shall see, immortality answers all the conditions of life, although it includes This may seem to be a somewhat wire-drawn much more. distinction, still it means a great deal, and is very essential to an understanding of Aristotle's doctrine of Immortality. Life, as we shall learn, is, in Aristotle's view, essentially a physical process, in its very nature finite, utterly incapable of being eternal. There is, however, no great objection to using the expression Eternal Life, provided we bear in mind

^{*} Topica, J. cap. 5 ad fin. 126 b, 34 sqq. Edit. Bekker.

that, when life passes into the Eternal, when the mortal puts on immortality, it ceases to be life, in the ordinary sense, and mortal. In this way we may speak of the union of eternity and life. Indeed, in certain connections, Aristotle himself uses the world *life* in this sense.

Immortality being defined as life which has passed over into the Eternal, our inquiry resolves iself into three.

- 1°. What are the conditions of life?
- 2°. What are the conditions of eternity?
- 3°. What are the conditions of their union?

· First, then,

THE CONDITIONS OF LIFE.

The physical science of the present day, if it does not help us materially in finding out what life is, does throw some light upon the physical conditions of life, i.e. it shows us that life exists under conditions and in forms under which it had not previously been expected to appear.

The tendency of science in recent years has been to prove that in nature there are no gulfs or leaps; that all forces are but forms or manifestations of one force; that the changes in the inorganic world, the upheaval of mountains, and the depression of valleys, &c., proceed gradually and slowly; that between the organic and inorganic worlds there is no clear line of demarcation; that the plant and animal worlds have a common origin and merge into each other; that all animals, man included, instead of being distinct creations, are modifications of one primitive, very simple organization; and, finally, that matter and force, instead of being distinct. are perhaps identical in reality, and certainly correlative in thought. Indeed, it is not hard to see that the so-called development theory, or theory of evolution, will soon be made to account for all the changes in the Universe. These will be held to be mere forms, or stages, or moments, in the allembracing process of increasing individualization.

This general tendency to abolish distinctions, formerly recognized as absolute, attempts, amongst other things, to blot out the dividing line between the animate or living and the inanimate or lifeless, and to reassert—under another

form, indeed—the position of Aristotle, that the animate can spring from the inanimate.*

Physicists are wont to think that they have explained a thing, when they have shown that it is not essentially different from another thing, even when that other thing is admitted to be inexplicable. So it is in this case. They think they have in some measure explained the animate, by having shown (if, indeed, they have done so) that it is not essentially different from the inanimate, although what that is which causes the inanimate to pass into the animate they do not know. Moreover, they take it for granted that all essential difference between two classes of objects is abolished, when it can be shown that they merge into each other by insensible degrees. There is thus not only no essential distinction between the most cultured and the most savage of men, or between man and the lower animals, but there is none between man and the earth he treads upon. Of course, all such assumptions entirely ignore the active element in change and production, and consider merely the results. But, apart from this, there are many and serious fallacies involved. The mere fact that a thing can be shown to have had its origin in something quite different from itself, something from which it has ascended or descended by insensible gradations, proves nothing with regard to the nature of the thing now. The major premise underlying all such assumption is, that no amount of specific difference can produce a generic difference, which, in Natural Science at least, is admitted to be false. Some logicians, indeed, and notably the Hegelians, claim that logically all existence may be included under one genus, viz. Being; indeed, the whole fabric of the Hegelian logic rests upon this assumption. Aristotle, on the other hand, has most emphatically denied it even for Logic. + However this may be in Logic, in Nature there is no doubt whatsoever. It may be true, for example, that all animals are descended from a common ancestor; that proves nothing with regard to them know. There exist now species

^{*} De Gen. An., cap. xvi. ad init. 721, a, 6.

[†] Topica, J, cap. 6, 127, a. 26 sqq.; 998, b, 14 sqq.; 1053, b. 20 sqq. Cf. Brentano, Ueber die mannigfaltigen Bedeut, des Seienden, p. 6 sqq.

distinct enough to be unfruitful with each other, and, so far as we know, no amount of training will ever bring them nearer to each other. However gradual the differentiation may have been, there must undoubtedly have been a point at which this unfruitfulness began, and, from that moment on, there was a difference of species; in other words, two essentially, or generically different classes of animals. may be true that man has ascended by insensible gradations from an animal akin to the apes, and that there is but very little distinction between the highest apes and the lowest men; still this proves nothing any more than in the former case. We have a perfect right to say that there was a point at which man separated himself from the lower animals, the point, namely, at which self-consciousness, or reflection upon the process of thinking, began. It may not be easy to put our finger upon the point, or to say of any particular act that it is the outcome of reason as distinguished from instinct; this, however, does not interfere with the matter. Moreover, it is not so true, as some persons would have us believe, that there are no sudden leaps in Nature's processes. Some, indeed many, of the changes on the earth's surface are produced by sudden convulsions, and, in the animal world, we do sometimes find abnormalities of considerable degree, which perpetuate themselves notwithstanding that they have arisen suddenly. From very ancient times, we hear of people having six fingers on each hand and six toes on each foot. and we know that there are, at the present day, whole families having this peculiarity. Facts like these are usually got rid of by being styled freaks of Nature, and looked upon as if they were the result of a caprice for which it is not necessary to account. This may be correct enough in one sense, but why set such an arbitrary limit to Nature's freaks and caprices? If an appendage like a sixth finger, which is of no use, perpetuates itself, how much more is an appendage which is useful, and capable of being developed by use, likely to be permanent? If Nature has a freak to furnish an animal with six fingers instead of five, why may she not have a freak to furnish an animal with reason, or even with an immortal soul? There is a noteworthy point seldom borne in mind in speaking of the gradualness of Nature's processes.

Many of them, though very slow, produce a result which is very sudden. A land-slip, the fall of a house, or the plunge of an iceberg, is a very sudden thing; but it may have taken Nature a hundred or several hundred years to bring it about. Thus, although it could be shown that man has ascended from an ape-like condition, it would not follow either that the change from ape to man was gradual, or even that man is not a freak of Nature. The same will apply generally to all the stages of so-called development. The mere fact that a thing of higher order has sprung from a thing of lower order proves nothing with regard to the similarity of the two. The inorganic is not the organic any more than what is implied by the chemical symbols H₂ 0 is water, however closely related they may be. H₂0 is water only when we add electric action, and we may rest assured that the inorganic becomes organic only through the action of that or of some other manifestation of the universal agent. The majority of the popular mistakes into which natural scientists fall arise from a confounding of the essential nature of a thing with its material conditions. As Aristotle says, however, the true nature of a thing is its purpose.

But to return to life and its conditions. Recent researches have shown us that life exists in lower forms than we previously knew, and that the gulf which separates the animate from the inanimate, the organic from the inorganic, as far as material conditions are concerned, is very narrow. Let us see, then, what life is conceived to be by those who have thought most profoundly upon it.

BICHAT, the great French biologist, says life is "the sum of the functions which resist death" (l'ensemble des fonctions qui résistent à la mort).

HERBERT Spencer says it is "the continuous adjustment of internal relations to external relations."

Bastian, the author of a most remarkable work, *The Beginnings of Life*, enlarging the latter definition, says life is "the definite combination of heterogeneous changes, both simultaneous and successive, in correspondence with external coexistences and sequences."

Passing from the physicists to the great German thinkers, we find that

Kant says: "An organized product of Nature is that in which all is Aim and reciprocally also Means."

HEGEL says, "Life is a means, not for something else, but for the idea of life; it continually produces its infinite form."

After the opinions of the two great thinkers of modern times, we may cite that of the greatest thinker of ancient times:

ARISTOTLE defines life as a "nourishing, growth, and decay, through self." The principle of life is the soul, which is defined to be "the first actuality of a physical body having life in potentiality"; and the philosopher adds, "Whatever is organic is of this nature."

It has taken volumes and would take volumes to convey adequately to the modern mind what Aristotle meant when he used the words actuality (ἐνέργεια) and potentiality (δύναμις). There will be occasion to speak of them afterwards.

However different the above definitions may appear at first sight, if we examine them closely and hold them together, we shall see that they are not in any way at variance with each other. On the contrary, we shall find that they mutually supplement each other. If we adopt the very convenient Aristotelian division of airia or grounds, we shall find that the definitions can be distributed among them. These grounds are (1) Matter, (2) Form or Determination, (3) Efficient Cause, and (4) Final Cause.

Bichat's definition attempts to give the matter of life—"The sum of the functions that resist death"; Spencer's and Bastian's give the form—"The continuous adjustment of internal relations to external relations"; Aristotle's gives the efficient cause—"Nourishing, growth, and decay, through self"; Kant's and Hegel's give the final cause—"Life is selfaim." Perhaps, by taking them all together, we might frame an exhaustive definition of life: Life is the sum of those functions which, in a continuous adjustment of internal relations to external relations, through self-action, in the processes of nourishment, growth, and decay, resist dissolution for the sake of life. These are the conditions of life, not one of which can be omitted.

Bichat's definition is, logically, a very faulty one. We can never define a thing by saying that it resists its opposite. It

would be very foolish to define motion as the sum of the functions that resist rest, or waking as the sum of the functions that resist sleep; yet these would be as good as the other. Everything resists its opposite. The important part of the definition is, that life is a function or sum of functions. This states its βλη or matter; in other words, places it in a category—the ninth, namely, in the Aristotelian list, ποιείν or activity. It is important to observe that Aristotle's list of categories does not include actuality and potentiality, which, nevertheless, play a most important part in his philosophy. These, instead of being categories, run alongside all the categories, so that each of the latter may exist in the form of actuality or in that of potentiality. Life, therefore, is an activity either actually or potentially, and is not a quantity or a quality, or any other of the categories. The form of the vital activity is that of an adjustment of internal to external relations. It is, therefore, a λόγος or proportion, an activity which is a perpetual ratio, and it is only in this form that it is an Actual. A formless, indeterminate activity is really no activity at all; only when the form is added to the potentiality does it become a reality. Though Aristotle enumerates four airiae or grounds, he is quite aware that they are reducible to two—the two enumerated, namely. In that which is eternal, form, efficient cause, and final cause, are all one; only in φύσις, in Nature, as it presents itself to the senses, are they sundered. Objects in Nature have four grounds; the Eternal, which lies outside of Nature, has but one. Without going any farther, we might here obtain a formula for the Eternal, by finding out under what circumstances these three grounds become one; but we may reserve this for its proper place. So far, we have not treated of the eternity of life. We have merely found its material and formal grounds. The efficient ground of life is the soul (or ψυγή), "the first actuality of a physical body, having life in potentiality." Soul, with Aristotle, is a word of very wide application. Every organization is endowed with a soul, which is its distinctive essentiality. He says, for example, "If the eye were a distinct organization, vision would be its soul." The eye which has lost its vision, is no longer an eye in the same sense as before. Soul is the life principle. The final cause of life is

life itself. Aristotle knows this, as we shall see afterwards, as fully as Kant or Hegel.

Summing up these points, we may now reduce our definition of life to a more compact form: Life is activity, selfsupported for its own sake, through adjustment to the external. Here is the very kernel of the thing. From it you can draw all the phenomena of life, from the lowest even to the highest—from the monera of Dr. Hæckel to the most developed of the human race. And you cannot leave out one element of the definition. There is no life which is not an activity; none that is not self-sustained, else we might say that the magnetic needle is alive; none that is not for its own sake, else the planets would be alive; none, finally, that is not an adjustment to the external—for the moment that a living thing ceases to be able to adjust or adapt itself to external circumstances, it perishes. The Darwinian theory of Natural Selection rests upon this part of the definition, as applied to species. A species would, doubtless, be eternal that could adapt itself to all circumstances. This brings us to the second consideration,

THE CONDITIONS OF ETERNITY.

There are two ways in which Eternity may be considered,

- 1°. As endless perpetuity of time;
- 2°. As independence of time.

These however, properly viewed, are really one. A consideration of time and eternity involves a consideration of the two terms already mentioned, viz. δύναμες or potentiality, and ενέργεια or actuality. These are cardinal points in the thought-system of Aristotle. They underlie everything, and that, too, not only in his system, but, though often unobservedly, in many succeeding systems, notably in Christian Theology, in which, for example, the doctrine of the Presence, as has been abundantly shown, is but a transformation of the Aristotelian doctrine of ἐντελέχεια, a word nearly synonymous with ἐνέργεια or actuality. (Teichmüller, Aristot. Forschungen, vol. iii.)

The words δύναμις and ἐνέργεια stand related to each other as matter and form—form, in this instance, being made to include efficient and final cause.

When we examine the phenomenal world, we see unceasing change, unceasing movement.* When we reflect upon this, our first thought is: Why do not things remain at rest and unchanged? That must be their natural condition. is some time before we bethink ourselves that rest, being a compound of motions, is harder to explain than mere motion. What, then, is the ground of motion? What does it mean? Aristotle is ready with his answer. Motion, in whatever form it may appear, locomotion, change, &c., is the pathway from potentiality to actuality. The abstract matter of change itself is time. Time, therefore, in Aristotle's view, is not form, but matter or potentiality. Instead of conditioning changes, it is the absolutely conditionable. It becomes real only in change, which is its form. Before, then, we can understand what time, and, consequently, what eternity is, we must know distinctly what is meant by potentiality and actuality.

Pure potentiality, pure matter, as Aristotle asserts, is unknowable. This does not arise from any weakness or imperfection of our minds, as some modern philosophers assert in similar relations, but lies in the very nature of the potential. It is pure negation, in itself neither this nor that, absolutely predicateless and indeterminate. It is, nevertheless, not nothing: it is a form of Being, capable of becoming actual, and thus clearly distinguished from nothing, which can never under any circumstances become actual. Potentiality is the negation of actuality; nothing is the negation of potentiality. That which is not in any form, can never be. Ex nihilo nihil fit.

Many of our modern atomists assert that atomic matter and force are inseparable. Though Aristotle is too clear-headed to assume atoms, he nevertheless admits that pure matter has no existence apart from form, which is, of course, only another way of saying that it is unknowable. That which is unknowable has no existence, and *vice versâ*. Matter, as far as known, is always united with form, i.e. is something determinate. What, now, is this form? We have seen that form, according to Aristotle, has a wider and a narrower

veorces on vorulde ne vunath aefre.

(Alfred.)

^{*} Οὐοἐν ἐν ὰνθρώποισι μένει χρῆμι ἔμπεδον αἰεί. (Simonides.)
Εά lâ! That on cordhan auht faestlices

signification. It is sometimes merely the second of the four grounds of existence, and sometimes it includes the second. third, and fourth. In the latter sense, it is synonymous with ένέργεια or actuality. There are, however, a large number of stages of actualization, before ἐντελέγεια, perfection or complete actualization, is reached. If we consider the material world, in which there are no wholes but only parts, we shall convince ourselves of this. The lowest form of existence or actuality is so-called inanimate matter, conditioned entirely from without. It cannot move or change except as it is moved or changed. It has no endurance whatsoever. ists only in change, is a perpetual Becoming. Immediately above the material world is the plant-world, with its nutritive soul and power of reproduction within itself. The plant lives by adjusting itself to the external, and dies when it can no longer do this. To preserve itself it reproduces itself in forms wherein it can resist the external better. It thus ekes out its existence by becoming a species, which endures until a condition of things comes round which it cannot overcome. Question Nature:

> "From scarped cliff and quarried stone, She cries, 'A thousand types are gone.'"

In the plant, as elsewhere, matter is raised to a higher form. It becomes organized—becomes what modern physicists call protoplasm. In the plant, life is self-aim. The plant lives for itself. But there is aim and aim, and a lower aim must give way before a higher. The plant is liable not only to destruction, but to be used for a higher aim. The animal is a higher form of actualization than the plant. Accordingly, the plant's aim must give way before the animal's. Just as the plant presupposes unorganized matter as its 527 or potentiality, so the animal presupposes the plant with its protoplasm. The animal takes the protoplasm of the plant, and by means of it ascends to a higher actuality. The plant is really only a mass of individuals rather loosely held together by a common aim—so loosely that not only a large number of them can be detached without injury to the plant, but, in many cases, each individual part can be made to develope into a whole plant. Not only, indeed, will twigs become whole trees, but a large number of plants can be propagated from

a single leaf. In the animal, the organization is much higher and more centralized. In some low animal organizations, indeed, parts, when severed, will become wholes; still, these must always be definite parts. In higher organizations such a thing is not known. Under no circumstances will the leg of an ox or the arm of a man develope into an ox or a man. In the higher animals, the centralization is complete. But the animal and its species perish, as well as the plant and its species. The animal has, indeed, greater power of adjustment to the external than the plant. Endowed with sensation and power of locomotion, it can seek sustenance over a wide range, and likewise avoid occasions of destruction. Nevertheless, its power of adjustment is limited, and it finally perishes. It reproduces itself, indeed; but in vain. The adjusting power of the species even is limited.

We need not proceed farther in this direction, inasmuch as the meaning of the words "potentiality" and "actuality" are perhaps already, so far, clear. Pure potentiality is absolute negation of existence, though not of being; hence pure potentiality or pure matter has no existence. The lowest form or actuality is unorganized matter, which again is the potentiality or matter of organized matter; and we might go on and show that organized matter is the potentiality of nutrition, nutrition of perception, perception of imagination or conception, conception of understanding, and understanding of reason. The lower actuality is always the potentiality of the next higher, and the process by which the higher stage is reached is movement. Aristotle enumerates four kinds of movement, viz. locomotion, change, growth, and decay. The abstract potentiality of these is time. Without forgetting that a higher actuality may return into a lower - this, indeed, is decay as distinguished from growth — we may say that time is the abstract matter or potentiality of the passage of anything from potentiality to actuality. It will be easy now to state when eternity can be predicated of anything. First, however, we must rid ourselves of one difficulty which has puzzled and yet does puzzle many minds.

It seems to occur naturally to almost every one who begins for the first time to think of eternity, that the eternal must be the unchangeable, that which has absolutely no

potentialities, or rather no possibility of any actuality. It appears as if, by removing change from the Universe, we should remove also the possibility of destruction. This is no doubt true, if only we could remove change. If things could exist in an utterly quiescent state, in a state of entire negation of activity, every one of them would doubtless be independent of time, which, as being the abstract potentiality of change, would have no existence, not even a subjective one. Unfortunately, however, we know of no existence except as in a state of change, a perpetual hovering between potentiality and actuality. The essence of things is this activity, this limiting of themselves as over against other things. table is known to me only as affecting — that is, as limiting, and determining itself with reference to, my senses. Were this activity to cease, existence itself would cease, and the Universe would be reduced, not to primal matter $(\pi\rho\omega\tau\eta \, ^{g}\lambda\eta)$, for that is capable of actuality, but at once to absolute naught. Those, therefore, who look for the Eternal in the Unmoved, in the Unchanging, look for it in the absolute Naught. That, indeed, is independent of time; but it is not eternal, since it is not at all.

Being forbidden, therefore to look for the Eternal in the utterly Inactive and Unchangeable, we are driven to seek it in the Active. There, if anywhere, must be the Eternal. Not in unchangeability, but in some form of changeability, it must lie. We have seen that change—or, to use a more general term, movement—is the pathway between potentiality and actuality; we have found, moreover, that no actuality endures any longer than it can adjust and adapt itself to the External, and that lower actualities, being the conditions of higher ones, the former must give way before the latter. long, then, as any actuality is unable to adjust itself universally, or so long as there is any actuality higher than it, whereof it is the condition, so long it carries in it the germs of its own destruction. I have spoken as if lack of universal adjustability and subserviency to a higher actuality were two different things. They are not so, however, being only the same thing in somewhat different relations. Lack of universal adjustability is subserviency to the Universe as a whole; subserviency to a higher actuality is lack of adjustability to a particular part (if I may so speak) of the Universe. This being the case, we may say that the Eternal is the highest actuality, and, *vice versâ*, that the highest actuality is the Eternal. Thus, instead of being the negation of actuality, the Eternal is the highest actuality, the purest energy. How, then, can such an energy exist, and what are its conditions?

We have found that that which is incapable of actualization is absolute Nothing. If we were to apply the same reason to the utterly actualized, we should arrive at the same result. If there were anything entirely actualized, so that all its potentialities were actual at the same time, we should arrive at the same state of pure quiescence as in the other case. Thus pure actuality and absolute lack of actuality would be exactly the same thing. In both cases we arrive at the Unchangeable, whereas, as we have seen, the Eternal must be sought in the Changeable. There seems to be a difficulty here. It is one, however, not hard to remove.

Let us take, for example, a portion of unorganized matter, say a piece of coal. We can subject this to any known amount of cold, to some degree of heat, to a considerable amount of pressure, and so forth, and it remains, not, indeed, exactly the same - for, under the influence of cold and heat, it will contract and expand—but such that, when the influence to which it has been subjected is removed, it is the same as it was before. It returns, indeed, of itself to its former state. Let us apply to it, however, a certain amount of heat-let us throw into a flame, for example-and it will undergo a change from which it cannot return to its former condition. It is no longer coal, it is something else. In the same way, water may become ice or steam; but as soon as the influences cease that produce these changes, the ice and the steam again become water. Pass an electric current through your water, however, and it will enter into a state from which it cannot return of itself. It thus appears that both coal and water are capable of adjusting themselves, within a certain limit, to the external; when that limit is reached, they cease to be what they are. Even within those limits, the potentialities of water cannot be all actual at the same time. It cannot at once be water, ice, and steam; nor can it be which of them it wills at any time. In the plantworld, each individual plant is in a process of unceasing change. Potentialities are becoming actual continually until they are exhausted. Then the plant dies, and, though it gives birth to other individuals like it, itself ceases to exist. What is true of the vegetable world, is true with some modifications of the animal world. The animal has a larger number of potentialities, but they are never all at once realized. A lion is never at once old and young, or sleeping and waking. Nevertheless he can be all these without ceasing to be a lion. If, on the contrary, he fall from a precipice and shatter his skull, he actualizes a potentiality whose actualization destroys him,

But what has this to do with the question of eternity? It shows that there are two senses of the word "actual." This Aristotle recognizes in the clearest terms. Indeed we find him, in the definition of the soul, already alluded to, speaking of a *first* actuality, which, of course, implies that he recognized a second or even more. He speaks of the soul as "the first actuality of a physical body having life in potentiality." The difference between a first actuality and a second is this, that the former is not always real; the latter always. This may be made plainer by an illustration. In the mineral and the plant, neither sleeping nor waking is either potential or actual. In the animal, on the contrary, they are both actual, but not both at once. One is always a first actuality and the other a second. When the animal is awake, sleep is a first actuality, and waking, a second. In the same way with knowledge. Almost all knowledge is in a state of first actuality; only the small part we are conscious of at any time is in a state of first actuality.

The fact that there are two forms or stages of actuality solves the difficulty we encountered by finding that if all the potentialities of a thing were actualized at once, we should arrive at utter quiescence or annihilation, instead of eternity. Let us imagine now, for a moment, that all the potentialities of a thing had reached the form of first actuality, with a possibility of reaching the second at any time. It is quite plain that, although (say) only one of these could be actual in the second form at any given time, they might one and all become actual without the thing's losing its identity or being

annihilated. The passage from first to second actuality might go on forever. Such a thing and only such a thing would be eternal. There is, however, one proviso that must not be forgotten. The thing must be able at will to put anything out of the condition of first into that of second actuality. But this will be better treated elsewhere.

To recapitulate, before passing to our third and last point, the results arrived at concerning the Eternal. The Eternal is that which endures through all time, and is, therefore, independent of it. Time is the abstract potentiality of change. The Eternal is not, therefore, the Changeless, but that which is capable of changing forever without ceasing to be what it is. In order to possess this capability, a thing must have all its potentialities actualized in the form of first actualities, and be capable of turning any of them at will into second actualities. This brings us to

THE CONDITIONS OF THE UNION OF ETERNITY AND LIFE, OR THE CONDITIONS UNDER WHICH LIFE CAN BECOME ETERNAL.

We defined life to be an activity, self-supported for its own sake, through adjustment to the External. Applying to this the results just arrived at, we obtain the conclusion that life will be eternal only when it has all its potentialities in the form of first actualities, with the capability of raising them to second actualities.

We have found that Aristotle calls the passage from potentiality to actuality, movement. The passage from first actuality to second he calls by another name, energy. Things that are imperfect, things whose potentialities, not being in the form of first actualities, carry them, when actualized, outside of themselves, have motion, move; things that are perfect, whose potentialities are all actualized in such a way that every change is a change, not into something else, but into itself, have energy, energize. Thus life, to be eternal, must become an energy. But an energy, from its very signification, is self-supported, exists for its own sake, since it can subserve nothing higher—can be merged in nothing higher—and is, of course, capable of infinite adjustment. It is an entelecheia (ἐντελέχεια), as Aristotle calls it, having its end in itself.

We thus observe that life, as such, and energy, as such, have three important attributes in common. Why, then, is life, as such, not an energy, and therefore eternal? The answer must be: Because its potentialities are not necessarily all actual; it is therefore liable to pass outside of itself, and so to be destroyed. This brings us to the important result that while all life is not energy, all energy includes life. Though life will not answer all the conditions of energy, energy will answer all the conditions of life. We hence obtain the conclusion that all that is eternal is a higher form of living. We can thus understand why Plato and Aristotle, notably the former, asserted that the Universe was alive. The Universe is alive, according to any proper definition of life. Not only so, but the life of the Universe is an energy and therefore eternal. The modern atomist, too, whether rightly or wrongly, claims indestructibility, i.e. eternity, for his atoms and force. In one point, he is certainly right, viz. that atoms, apart from force, i.e. potentiality without energy, are absolutely unthinkable. If atoms are eternal, they must be endowed with energy, and, as we have seen, they must. à fortiori, be alive. Indeed, among German materialists, it is quite common to speak of matter as immortal. Dr. Büchner entitles the second chapter of his Force and Matter "The Immortality of Matter," and the third "The Immortality of Force." However, the whole doctrine of atoms is a mere hypothesis, not only unnecessary, but absolutely selfcontradictory and unthinkable. If the maintainers of the hypothesis would only analyze their own thought about atoms, they would soon abandon it. Aristotle was well aware of this, and is never tired of asserting that energyeternity of activity—implies the absence of matter. Matter, being mere potentiality, cannot, of course, exist in those things in which all potentiality has ceased by passing into actuality; that is, it cannot accompany anything that is eternal. The thought of energy excludes the thought of matter, and, therefore, to assert the eternity of force and matter is to assert a contradiction. Matter is a mere abstraction, the abstract potentiality of force.

But to return. Having found that all energy is necessarily life, and that all eternal life is energy, let us see what

we can deduce from the thought of energy. An energy having all its potentialities actualized, must, of course, have them in its own power. If this were not the case, the energy would be affected or determined from without, and, in that case, would have to wait for an external cause to call it into actuality; in other words, it would sink to the level of a mere potentiality. It is necessary to dwell upon this point, inasmuch as upon it rests the whole weight of what is to follow.

We have found that material objects, such as coal and water, can be made to actualize a certain number of their potentialities without being destroyed, and that higher organizations can be made to actualize a very large number with the same result. In no case, however, does any one arrive at a full energy. Not only can coal not be warm and cold at the one time, and not only is water incapable of being ice, water, and steam, at once, but they cannot through themselves be in any one condition. In other words, these can be affected, but cannot energize. Again, the plant and the animal, although possessing in themselves, to a certain extent, the principle of their own development or succession of actualities, nevertheless have no power over these actualities. The plant or animal passes from stage to stage: but it cannot recall any past stage or forestall any future one. The apple-tree cannot produce fruit under a frosty sky, or the lion renew his youth. All the processes in the mineral, vegetable, and animal worlds are movements: not one of them is an energy. An energy in which all is actual must be able to pass to any of its actualities at any moment; in other words, it must be able to energize completely in any of its forms, without depending upon any combination of external circumstances to determine it. But that which is not determined by any external circumstances is free: hence Pure Energy, the higher life, the true Eternal, is free, absolutely independent, determining itself. It is, as Aristotle says, pure form -είδος είδων, the form of forms-wherein there is no matter, no potentiality, itself being its own form. Thus Energy, the Eternal, grasps itself. But what is the form of that which grasps itself? Is not that the very form of selfconsciousness? And does not self-consciousness answer all the conditions of a pure energy, of an energy which is eternal? Is consciousness not able to pass from form to form at will, to be actual in any of its forms? It would be easy to show that self-consciousness in every point answers the conditions of eternity, and that Aristotle was aware of the fact. But quotations would be as wearisome as useless. The result is beyond all doubt. The Self-conscious, that which thinks itself, is the Immortal.

It would, perhaps, be proper to stop here. Setting out with the common notion of immortality, I have shown its deficiency, substituted a better, and sought to find out under what conditions such immortality would be possible, and have found that it is possible only in the form of free self-consciousness. We have reached the end of our inquiry, having obtained a reply to the question with which we started. We have arrived at a result by no means startling in itself, and yet one which is not usually reached in this way. It is customary to set out with the Conscious, and try to show that it involves the notion of immortality. This is a very difficult procedure, and is consequently almost uniformly unsuccessful. The true method, I believe, is to proceed in the opposite direction, as I have done—to find the conditions of immortality, and then to show that they involve the conditions of consciousness.

Though my task is thus ended, I hope I shall be pardoned if I add a few words to show the value of the result arrived at.

No one who has made the result of the last fifty years' linguistic research his own, is ignorant of the fact, that the land from the shores of the Indian Ocean and the Bay of Bengal, westward to the Pacific, is occupied by people of one blood, the so-called Aryan, or Indo-Germanic, or Indo-European race. The same blood flows in the veins of the Hindoo, the Persian, the Russian, the Greek, the Italian, the Kelt, the Teuton, and consequently the American. The gloomy, fantastic Hindoo was brother to the bright, clear-reasoned Greek. It has been often asked, what constituted this immense difference, and scientists and statisticians have been ready with their theories of climate, the influence of plains, and so forth. These have their influence no doubt; but it is much less than is usually supposed—far too little

to account for the immense difference to be explained. The true explanation of the difference lies in the difference between the views of the Universe held by the two peoples—as the Germans would say, in their different Weltanschauungen. It is hardly necessary to say that this difference depends mainly upon the light in which the Eternal is regarded. It was not original, but grew up after the separation of the Indo-Germanic race.

Let us consider for a moment some facts connected with the earliest records of the Hindoos and Greeks. Speaking of the former, Max Müller says:

"In the songs of the Rig-veda we find but little of philosophy, but we do occasionally meet with wars of kings, with rivalries of ministers, with triumphs and defeats, with warsongs and imprecations. The active side of life is still prominent in the genuine poetry of the Rishis, and there still exists a certain equilibrium between the two scales of human nature. It is only after the Aryan tribes had advanced southward, and taken quiet possession of the rich plains and beautiful groves of Central India, that they seemed to have turned all their energies and thoughts from the world without them to that more wonderful nature which they perceived within."

In another place, the same author says:

"In the Veda, life after death is not frequently alluded to, and it is more for the goods of this world, for strength, long life, a large family, food, and cattle, that the favor of the gods is implored."

We thus see that the Hindoo, in those ancient times, like the Greek, thought more of life than of immortality. Certain it is that, to both, the future life looked inactive compared with the present. But the Hindoo loved inactivity, while the Greek hated it. The thought expressed in a very ancient commentary to the Veda was, doubtless, very consolatory to the former:

"It is with us, when we enter the divine spirit, as if a lump of salt were thrown into the sea; it becomes dissolved into the water (from which it was produced), and is not to be taken out again. But wherever you take the water and taste it, it is salt. Thus is the great, endless, and boundless Being but one mass of knowledge. As the water becomes salt, and the salt becomes water again, thus has the Divine Spirit appeared from out the elements and disappears again into

them. When we have passed away, there is no longer any name."

Here the love for inactivity has imparted itself very strongly to the conception of immortality. Compare this with the famous words of the Greek Achilleus, which he speaks to Odysseus in the underworld:

"Noble Odysseus, speak not thus of death,
As if thou couldst console me. I would be
A laborer on earth, and serve for hire
Some man of mean estate, who makes scant cheer,
Rather than reign o'er all that have gone down
To death. Speak rather of my noble son,
Whether or not he yet has joined the wars
To fight among the foremost of the host." &c.*

The Hindoo love of inactivity developed, naturally enough, into the Buddhistic doctrine of *Nirvana*, while the Greek hatred of the same and love of activity developed into the Christian doctrine of immortality. Indeed, Buddhism and Christianity are the legitimate outcomes of the two different views of the Eternal. The Hindoo and the Greek equally desired and longed for immortality; but the one looked for it in utter inactivity, which, as we have seen, would be utter annihilation. This is, indeed, the meaning of the word *Nirvana*. As Max Müller says:

"No person who reads with attention the metaphysical speculations on the *Nirvana*, contained in the Buddhistic canon, can arrive at any other conviction than that expressed by Burnouf, viz.: that Nirvana, the highest aim, the *summum bonum*, of Buddhism, is the absolute nothing."

It is customary among superficial thinkers of the present day to belaud Buddhism at the expense of Christianity, and to speak as if the former were equal, if not superior, to the latter. It is true that there are many wonderful truths and beautiful sayings in the Buddhist books; but the religion, as a whole, stands infinitely below Christianity. If it could be shown that the Buddhist ethical system were superior in every point to the Christian, that would not alter the result. The speculative error maintained by Buddhism in regard to the Eternal vitiates the whole system beyond recovery. The condition of Eastern Asia to-day may be said to be the result

^{*} Bryant's Translation.

of a failure to find the true Eternal, while the infinite-seeming progress of the Christian nations is due to the fact that, in Christianity, the Aristotelian doctrine, that the Eternal is pure energy or self-consciousness, is acknowledged to the fullest extent. As Hegel says: "The world's history is a progress in the consciousness of freedom."

The Apostle Paul, speaking of Jesus Christ, says he "hath abolished death, and hath brought life and immortality to light through the gospel." It has often been asserted, in opposition to this, that the Greeks, as well as many other nations, believed in the immortality of the soul ages before the appearance of Jesus Christ. In a certain view, this is true, and yet the Apostle's remark is also true in a very striking sense. Though Aristotle had stated the conditions of immortality more than three hundred years before the Christian era, and had come to the conclusion that pure reason, νοῦς, being pure energy, was immortal, yet he cannot be said to have brought immortality to light. So far, indeed, was this from being the case, that many of his followers, down even to the present day, have doubted whether he held the doctrine of the individual soul's immortality at all. Admitting that he did even, we are, nevertheless, constrained to assert that Christianity first brought true immortality, or, as the Apostle says, "life and immortality," to light. Brought to light, in this passage, (φωτίσαντος,) means illuminated. Christianity first illuminated life and immortality. What Aristotle reached speculatively, Christianity reached intuitively and stated at first metaphorically. We hear it called "living water," "bread of life," "flesh and blood"; but again we are told, "It is the spirit that quickeneth, the flesh profiteth nothing; the words that I speak unto you, they are spirit and they are life." What the founder of Christianity reached intuitively and stated metaphorically, later reflection grounded speculatively. This was, of course, done from the resources of the existing philosophy, and chiefly from that of Aristotle. Thus while Christianity was the first system which recognized immortality as a great and important fact, indeed the great fact, it was from Aristotle that the doctrines respecting its conditions and nature were drawn. How very Aristotelian, for example, is the expression, "This

corruptible must put on incorruption, and this mortal immortality"! Immortality does not belong to life: it must be put on. He who puts it on, returns to the image of God. As Aristotle says:

"If God subsists eternally as perfectly as we do sometimes, that is wondrous; and if yet more perfectly, it is yet more wondrous. And even so it is. And life belongs to Him; for the energy of spirit is life, and that energy is He; but His energy is in itself best and eternal life. Hence we call God living, eternal, best; so that life and an zeon perpetual, eternal are His: for this is God."

MIDSUMMER NIGHT'S DREAM.

By D. J. SNIDER.

Midsummer Night's Dream is perhaps the most popular of Shakspeare's comedies. Its weird ethereal scenery captivates the purely poetical nature, its striking sensuous effects impress the most ordinary mind, while its faint rainbow-like outlines of the profoundest truths entice the thinker with an irresistible charm to explore the hidden meaning of the poet. There is no work of our author that is so universal, that appeals so strongly to high and low, to old and young, to man and woman. Its shadowy forms appear, disappear, and reappear in the wildest sport, and the critic may sometimes doubt his ability to track them through all their mazy hues. Nor can it be denied that there is a capricious play of fancy over and around the underlying elements of the drama. Still, like all of Shakspeare's pieces, it is based on thought, and must look to the same for its justification. Our attempt, therefore, will be to seize and fix these fleeting iridescent shapes in the abstract forms of thought. To be sure, the poetry of the play is thus destroyed; but criticism is not poetry, but prose. For if criticism were poetry, it had better keep silent in the presence of this piece, and not vainly attempt to imitate that which is inimitable, or say over again that which the Poet has already so adequately said. The only justification of the critic, therefore, is that he expresses the content of this drama in a new form—the form of thought

—for his reader, instead of the imaginative form which the dramatist has chosen, and in fact must choose.

I am aware that not a few people will regard any attempt to make out a consistent unity in this play as wanton and absurd refinement. Moreover, the great interpreters of Shakspeare will be pointed to, who call it a caprice, a dream without necessary connection in thought of its various parts. That is, the work is a chaos. But every person who reads this play with admiration must grant that there is a profound harmony pervading it throughout, that he feels all its essential parts to be in perfect unison with one another, that the effect of the whole is not that of a discordant and illassorted poem. Thus, however, the notion of caprice or of a dream must be abandoned as the fundamental idea of the work. Both these elements undoubtedly are present; there is a capricious ingredient in certain parts, and also the fairyworld is likened to the dream-world; but they are only subordinate members in the organization of the whole. If, then, it must be granted that there is a deep, underlying harmony throughout the entire piece, it must further be granted that the attempt to ascertain and state the law of such harmony is not only reasonable but necessary.

The procedure of this essay will be twofold. First, it will attempt to state the phases or stages of the entire action and their transition into one another; secondly, it will seek to trace the various threads which run through the whole play. The former divides the total movement of the drama into a certain number of parts, the latter unites the characters together into groups. This will give a complete analysis of the work, which must be the foundation for all future conclusions.

But after such preparatory labor of method, the chief part of the critic's work remains to be done. All the above-mentioned stages must be explained for thought; the transitions must be shown to be logically necessary; the different characters, if important, but particularly the different groups of characters, must be elucidated in their unity, in their fundamental idea. In other words, the language of imagination, which is that of the poet, must be translated into the language of thought, which is that of the critic.

Following the principles above laid down, we are now ready for the statement of the various phases or divisions of the total movement of the play. These are three: 1st, the Real World, which is embraced in the first Act, and which is called real because its mediations and its collisions are those of common experience, and are based upon the selfconscious Reason of man; 2nd, the Fairy World, the Ideal Realm which terminates in the course of the fourth Act—so named because its mediations and collisions are brought about through the agency of supernatural beings, the creatures of the Imagination; 3rd, the Representation in Art, which, together with the return from Fairyland to the world of reality, takes up the rest of the drama, except the final scene. In this last part, then, the first two parts mirror themselves, the action reflects itself, the play plays itself playing, it is its own spectator, including its audience and itself in one and the same movement. Thus there is reached a totality of Representation which not only represents something, but represents itself in the act of Representation. The very limits of Dramatic Art are touched here; it can go no further. In this reflection of the play by itself is to be found the thought which binds together its multifarious and seemingly irreconcilable elements.

The reader will notice that there is very little portraiture of character in the play. The sketches of persons are true, but light and superficial; there is no profound and intricate psychological painting, such as is to be found in other of Shakspeare's works. This is, therefore, in no sense a character-drama, and the criticism which proceeds from such a point of view would assuredly fall short of the true conception of the Whole. No doubt there is some characterization; there must be in a drama, but it is not the principal element. The chief interest is centered in the groups, in the transitions, in the different phases which are above called worlds, as the Real World, the Fairy World, and their Representation. We shall, therefore, indulge very sparingly in character-analysis, believing it to be quite out of place here. Our object will be to unfold and connect these various parts and threads logically, and unite them into one central thought. For the work of the poet moves in images, in individual forms which are apparently independent; but thought must unify all these distinct elements, and thus must free itself from the pictures of the imagination by exhibiting the underlying ground of their order and connection.

We shall, therefore, begin with the Real World, and carefully separate the various threads of which it is composed. The first of these threads is the part of Theseus and Hippolyta, whose love hovers over the whole drama, the beautiful arch which spans the entire action. In them there is no diremption, no collision; the unity is perfect from the start, and remains undisturbed to the end. They are thus the type of that harmony in which all the difficulties of the lovers must terminate, and in which all the complications of the play must be solved. But the essential function of Theseus is that he is the head of the State. He, therefore, represents the highest rational institutions of man-he is both judge and ruler—through him the Real World is seen to be controlled by an organized system of law and justice -- such is the atmosphere which surrounds him everywhere. Hence he stands above the rest and commands them, but does not himself become involved in their collisions. At first he sides with Egeus and asserts absolute submission to parental authority, but in the end he alters his mind and commands the daughter to be united to her chosen lover. The grounds for this change of judgment are carefully elaborated by the poet, and indeed the movement from strife to harmony lies just between the two decisions of Theseus.

Next comes the second thread, Egeus and the group of lovers. Here now the negative element, discord, is introduced, and the contrast to the preceding pair is manifest. Egeus comes before the Duke Theseus with his refractory daughter, who insists upon marrying the one whom she loves, without regarding the selection of her father. Thus it is the old collision, involving the right of choice on the part of the child against the will of the parent. It is a theme which Shakspeare has often handled, and for which he seems to have a particular delight. But this is not the only difficulty which arises. There begins also a complicated love-collision, by which is meant the struggle which takes place when individuals of either sex find out that their love is unrequited

by its object. Here two such cases are portrayed: Helena loves and is repelled by Demetrius, Demetrius loves and is repelled by Hermia; the reciprocal love being between Lysander and Hermia, which, however, has to endure the conflict with the will of the parent. Yet even this sole harmony will hereafter be destroyed for a time in Fairyland. Such are the collisions from which the action starts, and which must be solved by the play.

The law at Athens demands the most implicit submission to parental authority, under the severest penalties, and the Duke will abate none of its rigors. The harshness of Egeus, the father, and the decision of Theseus, the ruler, force the lovers to flee from their home and their city, from Family and State. But whither are they to go? It is just at this point that we must seek for the basis of their transition to a new order of things. We hope the reader will observe carefully the nature and necessity of this transition, for here lies the distinctive work of the critic. It must be borne in mind that the lovers do not run away from the world of organized wrong; on the contrary, it is the authority of the parent and of the law - certainly a valid authority - from which they are fleeing. Hence they abandon the world of institutions. in which alone man can enjoy a free and rational existence, and they go to the opposite, for it is just these institutions and the law which have become insupportable to them. They cannot enter another State, for it is the State as such with which they have fallen out, and hence the same collision must arise. Thus the nature of their place of refuge must be determined by what they reject. The next place we find them is in a new and strange world, called by the poet a "wood near Athens."

The similarity at this point to "As You Like it" is apparent. In that play there was also a flight from society and an entrance into a wood, the Forest of Arden. But mark the distinction; it was a flight from the world of wrong—society was without justice; while in the drama before us, it is the flight from the supremacy of law and just authority—in general, from the World of Right. Hence, in "As You Like it" those who flee must begin to build up society from its

foundation; they must commence with the primitive pastoral existence which developes into society. Such was the course of that drama. But here there can be no such movement, for society in its just and rightful form is already present, and the flight is from it.

On their entrance into the wood, the lovers must therefore leave behind them the realized world of Reason, the State, the Family, and the other institutions of society. Now, the object of all these institutions is to secure freedom to man, and to shield him from external accident. By them he is protected against incursions of enemies from abroad, against injustice at home, against every species of rude violence; through civil institutions brute force is shut out as it were by mountain-bulwarks. Man is only in this way secure of his freedom and can enjoy his existence as a self-determined being. For in the State all action is determined ultimately through Reason in the form of laws and institutions—in other words, is determined through man himself; thus it is his true abode, in which he sees everywhere the work of his own Intelligence, whose mediations are therefore perfectly clear to his mind, and not the work of some dark extraneous power. It is Theseus who represents such a world in the drama before us.

The lovers, therefore, enter a place where all these mediations of Intelligence no longer exist, but they are brought into direct contact with the mediations of Nature which determine them from without. Such a place is hence represented by the Poet as a wood dark and wild, a pure product of Nature, inhabited by a race of beings foreign to man and unknown in the world of Reason. The lovers are, therefore, at once exposed to all sorts of external influences. have now no State above them whose action is their own highest rational principle, hence clear to their minds; but the world which is now at work is beyond them, outside of their Intelligence, the world of Nature, of Accident, of Externality. Now it was seen to be the great function of the State to subordinate these elements hostile to freedom, and to protect man against them; but when the former is wiped out, or has been abandoned, the latter must have full sway. Therefore the

one fundamental property of the "wood near Athens" must be that it exhibits a world of unfreedom, of external determination.

But how is such a world to be represented by the Poet Here, too, there need be no doubt, for an adequate statement of this phase of consciousness has frequently been given in the course of human history. In certain stages of culture man's profoundest convictions repose upon a system of external determination; it is his deepest belief that he is the sport and the victim of extraneous powers, and consequently he must elaborate a corresponding expression of his faith. While he has not yet freed himself from the trammels of Nature by means of institutions and thought, what else can he do but portray himself as he really is? Such is the character of all Mythologies. The mediations of Nature and of man in relation to the same are conceived to take place by the instrumentality of supernatural agents; the most common phenomena have behind them the demon, angel, fairy, god, as producing cause. Man is not seized in his freedom, nor is Nature subjected to Law, but all mediations are performed by a power superior to both. Mythology is, therefore, the adequate expression of this world of external determination.

The mythopæic epoch of nations hence will furnish the poet numerous examples for his purpose. Which of the many mythologies will he then take? Evidently the one which has been elaborated by the nation which he is addressing. It is known as an historical fact that the belief in fairies was common, at the time of the writing of the play, throughout England. To this consciousness already existent the Poet appeals, and at the same time portrays it to itself.

But there are two more characteristics which follow from this one fundamental principle. In the first place, the Fairyworld is not the product of Reason, which is here the State and has been left behind, but of the Imagination, which objectifies the processes of Nature and Spirit in the form of images and external activities. It projects some personality behind every kind of mediation. Hence when it takes complete possession of the mind, all occurrences are transferred to the realm of the Supernatural. But the content of the Imagination is, nevertheless, the genuine expression of the consciousness of a nation, its statement and solution of the profoundest problems of existence. But, in the second place, this is also the world of poetry, since everything is transfused into images and external influences; the prose of real life, with its means and ends, its wants and utilities, is banished, man seems to live in a perpetual dream. The abstract Understanding, with its categories of cause and effect, laws of Nature, etc., has no validity here; all is pictured, abstract terms are quite unknown. Whole nations like the ancient Hindoos seem to have lived in this dreamy sensuous state. The Fairy-world is a phase of this consciousness, and hence the ethereal poetical existences which flit through it are not merely the capricious products of the poet's fancy, but strictly necessary.

These are the essential qualities with which the Poet has endowed his "wood near Athens." It is a world of external determination; it has a Mythology which is the product of Imagination, and thus resembles dream-land, where all rushes in without cause; it is poetic as contradistinguished from the prosaic life in society.

Such is the second thread of the drama, the love-collision and that which springs from it, namely, the poetic Fairyland. The third thread is the learning and representation of the theatrical piece by the clowns. This is motived on the first page of the play, in an external manner, by Theseus calling upon his Master of Revels to stir up the Athenian youth to merriments, to produce something for the entertainment of the court. That is, a demand for Art has arisen. For man's highest want is, after all, to know himself; he desires to behold his own countenance as it were in a mirror which Art holds up before him. Moreover, there is an official attached to the court, and generally to all courts, whose duty it is to provide for the above-mentioned want.

The theme will therefore be that which gives a picture of the Court, of its chief thought and business at this time, which is love. The content of the drama of "Pyramus and Thisbe" is thus a love-collision. Now, to exhibit such a work adequately demands the highest skill both in actor and poet. They must be gifted by nature with true artistic conception, they must polish nature by culture, Art must be their life and living, they must be professional. Such at least is the general rule, dilettantism beyond the private circle is intolerable, and never was it more happily ridiculed than just in these clowns. Shakspeare has therefore chosen not to give a poetic, ideal picture in this part, but a prosaic one. And necessarily so, for what would the second picture otherwise have been but a repetition of the first? In fact, this play of the clowns is the contrast to his own true play; he has exhibited thus in one and the same totality the negative side of his own work.

The idea of the third thread now before us may therefore be given in the statement: Prose is trying to be Poetry. The result is a burlesque of the legitimate kind, for it is not Poetry or any other high and holy thing which is wantonly caricatured, but the prosaic conception of Poetry. The contradiction is real, inherent; the Prosaic attempts to be what it is not and can never be, the Poetic; its efforts to put on such etherial robes,—are simply ludicrous. But we have also the True alongside of the Burlesque; genuine Poetry is to be found just here in the same piece; thus the Poet does not leave us with a negative result; after his wit has ceased to sparkle, there is not left merely a handful of ashes, but the positive side is present also.

In this connection, another distinction must be noticed which our Poet has carefully elaborated. It is not the cultivated, refined, prosaic Understanding which is here represented; that will be shown hereafter, and has quite a different manifestation. But it is the dull, uneducated, prosaic consciousness of low life, of mechanical employments, with a feeling only for the most gross sensuous effects, without even cultivated taste, not to speak of artistic sense. The lowest form of prosaic life thus proposes to undertake to represent the very highest form of the highest Art, namely, Dramatic Poetry; hence the clowns, too, must go to the poetic Fairyland, the mystic wood of the Imagination.

These are the three threads which the Poet has unfolded

These are the three threads which the Poet has unfolded in the first Act. They embrace the Real World, from which the play suddenly leaps into the ideal realm. The logic of this transition has already been given; the lovers flee from civil society with its manifold mediations, whose object is to secure freedom and enter a Wood whose characteristic was defined to be external determination. That is, man acts through influences from without, and not through the mediations of his own Intelligence, through institutions. The reader will note, therefore, that Theseus and his world here disappear and their place is taken by the fairies: the former cannot consist with the latter. Moreover, when Theseus reappears, the sway of these supernatural beings at once vanishes. If we now examine the nature and attributes of the fairies as here represented, it will be easy to discern their common characteristic. They work upon man, deceive him, lead him about by appearances, victimize his senses, in general manifest external determination. But it must not be forgotten that they only exhibit man himself; they are simply a portraiture of his own unfree stage of consciousness, of his own delusions. Such must be their interpretations, they are symbols of some phase of Spirit.

Let us now consider the organization of this Fairy-world, for it is a regular hierarchy. First comes the common fairy, with a description of her functions: she is the servant; she dews the orbs upon the green, spots the cowslips, hangs dewdrops in the flower's ear; that is, she performs the operations usually ascribed to Nature, which is thus mediated in its activity by the fairies. Next are told the doings of Puck, a servant of a higher order, having also a sphere of independent activity, in which he is the embodiment of mischief, and causes what are usually called accidents. He seems to stand in a nearer relation to man than the other fairies, and has a certain external power over him. Also the repulsive element of Nature is not forgotten; it stands in open hostility to these beings of beauty: snakes, newts, worms, spiders negative Nature, as it may be called for the occasion, is warned off once for all from the sleeping fairy queen; only Philomel with her melody may approach. The Beautiful cannot abide the Ugly. But the central principle of the fairy organization, and its chief figures, are the pair Oberon and Titania, to whom all the rest are subordinate.

The main fact here to be observed is that the highest fairies are king and queen; hence, are not only sexed but coupled, or, if the term is applicable to these beings, are mar-Such is not the case with the other fairies. will furnish the key to what follows, for the sexual diremption is the deepest contradiction of Nature, and the sexual unity is the profoundest harmony of Nature. The pair, therefore, are monarchs, and are placed on the apex of the physical world, whose highest effort is self-reproduction. At present, however, their unity has been disturbed—the two sexes are in opposition—Titania and Oberon have quarreled - what is the result? All Nature is out of joint, in strife with itself; the seasons do not come in their regular orderwinter is in summer and summer in winter; the waters have taken possession of the land and destroyed the labors of man: all of which evils are produced by the quarrel of the royal pair. The cause is explicitly stated by the Poet in the speech of Titania:

> "And this same progeny of evil comes From our debate, from our dissension; We are their parents and original."

For when the central and controlling principle of Nature is thus deranged and in contradiction with itself, the effects must be transmitted to all the subordinate parts. Such is the poetical conception of the hierarchy governing Nature.

But the cause of the unhappy separation of the fairy couple has not been forgotten; it is represented to be jealousy. This passion is based upon the absolute unity of man and wife; it asserts that each individual shall find his or her complete existence in the other. If a third person is taken by either, the tie is destroyed. Jealousy, therefore, rests upon the monogamic nature of marriage, and will and ought to be manifested in all its intensity when that relation is disturbed. The king and queen of Fairyland reproach one another with their gallantries, quarrel, and separate. Confusion and strife must now reign in the kingdom of Nature. Leaving out of account the mutual charges of infidelity as equally false or equally true, the fault of the separation would seem to lie with Titania. However this may be, Oberon resolves to assert the husband's right to be head of the family, and is determined to subordinate his refractory wife. aim is unity and peace, not only in his own domestic relations.

but in the entire realm of which he is the supreme ruler. Thus the action sets in towards the reconciliation of the conflict in Fairyland. Accordingly, he prepares the means for his purpose. It is by dropping the juice of a certain flower upon her eye-lids when she is asleep, in order to make her fall in love with some ugly monster, the opposite of her nature. The retributive character of this punishment is obvious: if you cannot live in peace with me, one of your own kind, then try the contrary, a horrid brute. Titania, therefore, becomes infatuated with Bottom the ass. It is the Poetic under the voke of Prose, the natural result of her separation from her husband, since she has abandoned for the time the beautiful world of the fairies and its monarch. In this service she undergoes the deepest indignity - in vain she lavishes her choicest love — her ideal perfections are soiled and unappreciated by the gross clown. The cause of the quarrel being at last removed by the submission of the wife, Oberon takes pity on her like a dutiful husband, releases her from her thraldom, and restores her to his bosom.

Thus the conflict which harassed Fairyland has been harmonized, and peace reigns. But mark! now occurs one of those transitions upon which so much stress was laid in the first part of this essay. Night flies away, the darkness of the Wood is driven off by the light of the day, the Fairy World disappears with its own reconciliation, the Real World dawns. But this is not all. Theseus the monarch is on hand, ready to judge—Egeus is here with his former collision—all transpires in the clear sunlight of consciousness—external mediation has ceased. Is it not evident that we have returned to the world of institutions which we left some time ago?

Having thus brought the first thread to its termination, we are now ready to take up the second thread, the lovers. They arrive from Athens, and enter the Wood in the height of the strife between Oberon and Titania. They also bring along collisions among themselves, for two of them have an unreciprocated love. Fairyland, therefore, is a picture of the condition of the lovers, for both have collisions, and indeed similar collisions, namely, those in the Family. Hermia has left her father, Titania has left her husband, and also the

conflicts of the rejected suitors may be reckoned under this head. Here is the point where the relation between the real and ideal worlds may be seen: the one reflects the other. The internal state of the lovers is thus pictured in the world of the Imagination, which was before said to be this Fairyland, the poetic abode of such forms.

It was also shown that the flight from society must be a flight to a world of external determination; here it now is in full operation. The lovers are wholly influenced by powers outside of themselves; the chief means, for example, is a flower wounded by Cupid's bolt. But these external forms, like the Fairy-world itself, are poetic, are symbolical of the inner spirit of man, and hence must be interpreted. The common and most natural view is that this flower represents the effects of what the Poet calls "Fancy," a combination of caprice and love, which chooses and changes with wanton whim the objects of affection. The part of the lovers in the "Wood near Athens" may thus be interpreted to be a play of fanciful, capricious love.

On account of the externality of the means, a mistake is possible; the mediation is not in the heart and emotions. Puck anoints the wrong person. The effect is quite the same as that of a comedy of Intrigue in which there is some form of disguise. This mistake, therefore, produces all the results of that very common dramatic instrumentality, Mistaken Identity. In fact, Shakspeare has in several places indicated that the influence of Mistaken Identity is like that of a dream, since it places man in such new and strange relations that he seems to himself to have been carried into an unknown world. The mistake destroys the only remaining reciprocal tie, the collisions are now completed, each individual hates his lover and loves his hater. There ensues a love-chase through the woods which furnishes sport for all Fairyland, till the parties, weary with fatigue, lay down on the ground and go to sleep. The solution of the collision is also external, and is brought about by command of Oberon, the central power, whose highest object has been all along the unity of the Family in his own case, and hence, to be true to his character, he must manifest the same trait to the lovers who have wandered into his realm. The separation cannot, therefore, continue, for, as before stated, the highest point and goal of Nature is the unity of the two sexes in which the two are made into a mysterious one. Such has been the aim of Oberon, or, if you please, the aim of Nature, from the beginning. To take another phase of the same interpretation, the lovers have run the course of caprice, and are now ready to experience the permanent affection upon which the Family reposes.

The lovers awake, and, their difficulty being harmonized, Fairyland disappears like a dream. Not that they have actually dreamed; on the contrary, the contrast is very distinctly drawn — they sleep, but do not dream, in this realm. In their waking state, they compare their night's experience to a dream on account of the external mediation. The fact is to be noticed, for critics have generally tried to explain the whole piece from this single element. The lovers now find themselves again in the world of institutions, before Theseus the ruler and Egeus the parent. But now the two pairs are in perfect harmony, their love is reciprocal; hence the rational basis of union is present in both couples. Theseus, therefore, reverses his former sentence; he decides in favor of the Right of Choice on the part of the daughter against the will of the parent—a solution which Shakspeare uniformly gives in all similar collisions. Nor can Theseus consistently do otherwise; for what is he himself doing but celebrating his own union with Hippolyta? The return of the lovers from the ideal to the real world is thus accomplished.

The third thread must now be resumed, the Clowns in Fairyland. Why are they, too, here? The question comes up, for this would seem to be a place most uncongenial to them. And so it is; the poetic world is certainly not their natural abode. But in the present instance they have left their prosaic occupation, they are transcending their own sphere, and are trying to represent a play, a work of Art, which lies far out of their comprehension. The attempt, however, brings them into the Fairyland of Poetry, which is soon found full of strange beings, and they are compelled by terror to leave it with precipitation. A man cannot make, nor indeed act, a drama without entering the mystic Wood, the world of the

Imagination. To be sure, the clowns themselves have only a common-place reason, "lest our devices be known"; since, if the plot should be revealed, then there would be no "surprise." But the principal thing to be noticed is how they reduce everything to the dead level of Prose. Their solicitude for the audience is touching; it must be perpetually reminded that these characters are not real, but that they are merely assumed: that I am not Pyramus, but Bottom the weaver; that I am not a lion-be not afraid!-but Snug the joiner. The clowns, therefore, have not the primary notion of the drama; they do not comprehend that it is a representation and not a reality. The imaginative form must be at once destroyed, and the illusion of Art is always extinguished by their prosaic explanations. This trait is common to all these "mechanicals," and lies deep in their nature; it forms the essence of their comic characterization. They reduce all poetic form to Prose. Thus their end is a nullity; they are simply destroying the object which they are seeking to produce, are annihilating their own end, which principle is the essence of comedy.

Another trait must not be forgotten. How realistic they are! how true to nature and probability! No sham moonshine for them; they must have the queen of night herself present in her own person, if possible; no pretended wall, or, if it must be represented by a man, let him be plastered. All is to be real, natural, probable. Thus, however, the thought is lost, for the attempt is not to portray Spirit, but to reproduce the meaningless forms of Nature in their fidelity. One might almost think that the poet was satirizing the modern generation of critics, so true does he hit their canons. But Nature has only to illustrate and portray mind in an artistic work; when it ceases to have this significance, it is worthless.

Their flight from the land of the Imagination cannot be long delayed. Bottom, the hero of the clowns, appears to them suddenly with an ass's head on, the appropriateness of which might be shown in various ways, but it will be manifest. Such does Bottom turn out to be in the realm of Art, and is thus represented even to his own comrades. Terrorstricken at his image, which is without question their own

too, they flee, lest they be "translated" also. Such is the lamentable outcome of the rude Prosaic, in its effort to reproduce the Poetic. How much of this satire was intended for his own age by the Poet cannot now be told. But since it was his special calling, the drama, which is here the theme, we may suppose that it had some foothold in the circumstances of his time.

One other phase of this realm remains to be mentioned. We have just seen with what effect the prosaic clowns woo Poetry; what, now, if Poetry should become the lover and servant of Prose? Such is the scene when Titania falls in love with Bottom-the queen of Fairyland with an ass. The contrast in all its ludicrousness is here portrayed, the two elements are brought out face to face. The motive for her strange conduct has already been stated to lie in her separation from Oberon. The Ethereal is thus subjected to the Gross and Sensual; Imagination and her handmaids, separated from beings of their own spiritual nature, must obey the behests of Prose, nay, be swallowed in its voracious appetite. Her rapt poetic utterances are reduced to grovelling common-places, her ambrosial food seems to excite no desire, her sweet caresses are turned into grossness, she has at last to tie up his tongue. When she returns to her first love, how she hates the brute. The result, therefore, of the clowns' visit to Fairyland, the realm of Art, is that they have produced and also beheld a picture, but a picture of their own assininity, and that they have been rudely driven off from the mystic Wood by its inhabitants. Thus they also have returned to the Real World.

We have now traced to their conclusion the three threads of the second grand division of the drama, the Fairy World. Again we are ushered into the presence of the old society from which we parted at the end of the First Act. The difficulty upon which a separation from it was based has disappeared, the collision which created the ideal realm has been harmonized; hence the ground of its existence has been taken away. Theseus, who represents the State, no longer gives absolute validity to the will of the parent; and since it was his adverse decree which caused the flight, there must now follow the return and the reconciliation with the Real

World. Here the work of the Poet might generally end—here it does end in the similar drama of "As You Like it." But in the play before us he he has chosen to make a higher synthesis; he wishes not only to portray an action to the spectators, but also to make the action portray itself.

Hence we must now pass to the third division of the piece, which has not yet been developed, the Representation. The Court has demanded Art in which to see itself, or at least by which to amuse itself. The two actions which have hitherto run alongside of each other are now to be brought up before Theseus and his company, who henceforth assume the part of audience and critics. The poem therefore, after beholding and reflecting itself, is to criticise itself. But these criticisms will only illustrate the points of view of the different speakers. The first thread of this division is the story of the lovers which has been told to the company, as we see by the words of Hippolyta at the beginning of the Fifth Act:

"'Tis strange, my Theseus, that these lovers speak of." .

Shakspeare, however, could not well repeat the same story in the same play, and hence it is here omitted. The main point dwelt upon by the Poet is the criticism of Theseus. How will he treat the Poetic as it was shown in the strange tale of Fairyland? His conception is purely prosaic; hence in him Prose again appears, but it is now altogether different from the grovelling sensuous form which was manifested in the "rude mechanicals." Here we see education, refinement, abstract culture. Theseus, therefore, represents in this connection the Prose of the cultivated Understanding, whose skepticism assails all poetic conception and tears its forms to pieces. He derides the "antic fables"; he scoffs at "the lunatic, the lover, and the poet," placing them in the same category; the Imagination itself is made the subject of his sneers - it is full of "tricks," and is placed in striking contrast with "cool reason." The poet's function is to "give to airy nothing a local habitation and a name"; that is, the poet's work is without any actual or rational content. Old Theseus was a downright Philister, as the Germans say. It is the prosaic Understanding attempting to criticise Poetry, whose essence is totally outside of its horizon. Theseus

will not acknowledge that under this fabulous form may be found the profoundest meaning; it is not his form, and hence worthless.

The reader will perhaps be surprised at this interpretation of the famous speech of Theseus, since the passages above mentioned, which are taken from it, have been quoted by critics of high authority as the most adequate definitions of Poetry and of the Imagination that have ever been given. The fact is, however, Theseus intends to ridicule both, and his language, on a careful examination, will be found to be that of skeptical derision. Look, too, at the answer of his wife and see how she understands him.

This wife, Hippolyta, is of quite a different character; she, with all the appreciation inherent in the female nature, is inclined to gently dissent from the negative judgments of her husband. She mildly suggests that there may be some content in these wild poetic forms of Fairyland; that the story of the night

"More witnesseth than fancy's images,
And grows to something of great constancy;
But, howsoever, strange and admirable."

With this quiet remark she ceases; she does not pursue the discussion further, for she is a woman, and possesses perhaps the immediate feeling and appreciation of Poetry rather than the ability to give the grounds of her judgment. Such is the contrast; Theseus has at his side the opposite form of consciousness; the husband and wife exhibit opposite phases of critical opinion. It may be added that the Poet does not represent and cannot represent the highest critical comprehension of his work, for that involves the statement of the entire content in an abstract form, while he must necessarily employ for the same content a poetical form.

But the second thread, the play of the clowns, now comes up for representation. It must also be subjected to the criticism of the audience, mainly composed of these two mental principles, Theseus and Hippolyta. The Duke wants to be amused—he rejects the old plays—he must see something new—he therefore chooses "Pyramus and Thisbe" both on account of its novelty and its absurd title, though against

the strong protests of his Art-critic. The clowns appear and go through with their play. We again observe in them the same elements which were before characterized: the destruction of all artistic form; the introduction of nature in its immediateness simply for its own sake and not as the bearer of any spiritual meaning; rant, which lays equal emphasis on what is important and unimportant, without any relief; ignorance of all technical requirements of acting, with a strong infusion of general stupidity and self-importance. Indeed, it may be said that the separation of the lovers in "Pyramus and Thisbe" rests not upon a moral obstacle, but a natural object; the basis of its collision is a wall. It exhibits the realistic style reduced to absurdity. The critical judgment of the audience serves to bring out more strongly the contradictions of the piece, beneath whose sneers it perishes, Theseus pronouncing upon it final sentence. It will be observed that the clowns have fared hard in their artistic After a very uncomplimentary picture of Bottom, and, in fact, of themselves, they are frightened out of Fairyland, and thus excluded from the world of Poetry; and now their work is torn piece-meal by the critical Understanding. Neither Gods nor Men, Poetry nor Prose, can endure mediocrity in Art, much less stupidity. It will also not escape the attention of the reader that the Poet has portrayed in the drama before us the two essential phases of the prosaic Understanding in its attempts to attain the beautiful realm of Poetry. Theseus and the clowns have thus a common element.

The three pairs of lovers retire to rest in perfect happiness and peace, and the Poet again allows the Fairy World to flit for a moment across the stage, as if to give one more hint of its meaning. This world is now, too, in harmony; Oberon and Titania, the ideal couple, beside the three real ones, enter with their train and sing an epithalamium whose content is the prosperity and concord of the Family. Thus Fairyland has done its last duty: it has reflected the peaceful solution of the struggle, whereas previously it had imaged the strife.

At this point the drama must end; its three divisions with their various threads have been wrought out to their natural

conclusion. My reader will probably consider some of the above explanations to be far-fetched, and it must be confessed that the faintest hint of the Poet has often been expanded in full. Such, however, is the duty of criticism; it gives what Poetry cannot, and Poetry gives what it cannot. Besides, in the present drama I feel satisfied that Shakspeare did not always adequately realize his conception; he wrestles with his idea, and sometimes does not succeed in embodying it with clearness and completeness. Especially the third part, the Representation, caused him great difficulty, and is the least perfect of the three parts. The thought of making the play reflect itself in the course of its own action never lost hold of him during the whole period of his dramatic career. The poem has other inequalities execution, and bears numerous traces of the youthfulness of the author. But the conception is one of his grandest, though not always clear and definite in his own mind, and hence the work is marred with some imperfections. been attempted in the foregoing essay to develope the complete idea of the Poet, not in his own beautiful poetic form, but in the abstract form of Thought.

Let us express the movement of this drama with other categories. In it is introduced the Mythological World, the adequate poetic representation of which, however, gives the Epos. The latter has as its mediating instrumentalities those beings of a realm beyond, the god and goddess, the nymph, fairy, elf, angel; or, to present its negative elements, devils, furies, goblins, griffins, etc. These supernatural powers are portrayed as influencing man externally. They, therefore, do not belong to the drama in its strictness, for it exhibits man as determined through himself, through his own internal being, through motives, ends, passions, thoughts. It is the most adequate expression of self-determination, of freedom, and hence it is the highest point of Art. The divinities of the Epos may, it is true, be only these internal determinations of man in an external form; but it is just this form which gives the basis of the essential distinctions of Art. The Epos, therefore, passes away in the culture of nations, when they come to a profounder self-consciousness, and the Drama takes its place as a truer and more adequate repre-

sentation of Spirit. In order to ascertain, therefore, the true position of the mythological element in the play before us, we must be careful to note that it also is transitory; it passes away, with the dawn of light, the most perfect symbol of consciousness; when the parties fully wake in the presence of Theseus, it is no more. In like manner it departs in the history of nations. The Poet has thus introduced an epical element into his drama, but only as a subordinate phase; the action moves out of this purely epical world, where, if it remained to the end, it would not give a true drama. A dramatic composition which employs only these instrumentalities of the Epos is a contradiction; it violates its own fundamental principle. Many dramatists have committed this sin against their Art, and thus debauched it; but Shakspeare always remains true to its highest thought; if he seems at times to wander, it is only to return with additional spoils. The External, though employed by him in all its shapes, he invariably transmutes into the Internal.

The views which have been held concerning the purport of this drama have been various, and have as a general rule seized some one side and considered it to be the whole. It has been thought to be an intrigue of capricious love, and certainly this is one of its elements, namely, the part of the lovers. It has also been called a romantic drama, as if the mythological world were its essential thread, whereas it is only one of the several threads which are woven together into a whole. But the most general explanation seems to be that it is a dream. To this view, however, the objections are so strong that it cannot be reasonably entertained. Granting that the world of fairies is the same as the world of dreams, the above-mentioned explanation leaves two entire movements of the play wholly unaccounted for, namely, the first and the third. More than half of the poem is therefore decidedly awake, and transpires in the Real World. next place, it is not pretended that the lovers dream these occurrences in Fairyland; on the contrary, they first go to sleep after all the events there have transpired. They only compare their experiences to a dream. Then, when we have called it a dream, what is explained, since the content of dreams is so various, and their product is not generally a

poem like "Midsummer Night's Dream"? Finally, the name of the piece is cited in support of this view; but it may be laid down as a general rule that the titles of Shakspeare's comedies have only the most remote reference to their contents; several have, in fact, names of quite the same signification. It is true that the world of Imagination bears a great resemblance to that of dreams, and it is just this resemblance and nothing else of which the poet speaks. Hence the necessity of seeking a higher synthesis which will account for every part of the drama, and will combine its diverse elements into a consistent unity.

BOOK NOTICES.

Liberty and Law under Federative Government. By Britton A. Hill. Philadelphia: J. B. Lippincott & Co. 1874. St. Louis: Gray, Baker & Co.

Contents.—A Discussion of the legal and political Organizations of the Jews, Greeks, Romans, Feudal States, Switzerland, Great Britain, and the United States; A Chapter on the Functions of the State, its affirmative powers regulating for each citizen his culture and behavior: its negative powers prohibiting from injuring others: including regulations adapted to secure (1) Public Hygiene. (2) Public Education, (3) Public Intercommunication; established by three codes, (1) a constitutional, (2) statutory, (3) federative and international. The design of government to secure for man (1) a physical body in the world of nature, (2) an intelligent being in the world of intelligence, (3) a social being in the state and world at large.

Public Hygiene is discussed under the following heads: I. Pure Air: II. Laying-out of Cities; III. Construction of Buildings; IV. Personal Cleanliness; V. Laying-out of Counties and Townships: VI. Pure Food and Drink.

Public Education: I. Relation of Morality and Law; II. The Right to Rest; III. The Right to Schools; IV. The Nature of Education; V. Classification of Schools; VI. School Exhibitions; VII. The Education of every Scholar for a Vocation; VIII. Analysis of this System of Schools.

Public Intercommunication includes a consideration of the subjects: I. Money, (1) its origin, (2) invention of banking, (3) creation of State debts. (4) interest a curse, (5) true nature of money, (6) history of paper money, (7) foreign exchanges and international clearing-house; II. Public Highways—(1) their nature, (2) mail and telegraph, (3) public roads, (4) rivers and lakes, (5) canals, (6) railroads; III. Taxation, Duties, and Imposts—(1) nature of taxation, (2) true rules for taxation, (3) limits of taxation, (4) the tariff; IV. Intercommunication by the Press—(1) the press, (2) its demoralization, (3) daily national newspaper: V. Police, Passports, Registration; VI. Domestic Relations—(1) marriage, (2) children.

It will be noticed by this index that Mr. Hill has discarded the theory of government that limits the scope of its functions to the maintenance of justice among men. He would have it also secure social well-being-nurture, if we may so call it. In the current philosophical view, the functions of nurture, social combination, and the maintenance of justice, are separated, and assigned respectively to one of the three institutions—the family, civil society, the state. It is quite evident that within the family, for instance, wherein the perpetuation of the race is cared for, a strict application of the principle of justice could not be expected. It would destroy the race if one were to treat all infants as though they were perfectly responsible beings, and with this view were to return upon them the consequences of their deeds. Nurture is the shape of a rational treatment of the race in its infantile years, and nurture is even the predominating feature of the most rudimentary states-e.g. that of China. Civil society is an organism whose function is the supply of human wants—food, clothing, and shelter. this organism, each man labors to produce a special product which he contributes to the general store (i.e. sells it in the market), and withdraws from the general store (i.e. purchases in the market) a quantity of special products measured by the value of his own contribution. Each works for all and all for each. But it is not done after the manner which Communism proposes. It is not equal contribution, neither is it equal distribution. In the family, however, there is community of goods: the wants of each are supplied from the common fund regardless of the source of the contributions to it. This is nurture. In civil society, on the other hand, each draws out of the supply created by the combined endeavor of all, only an equivalent of what he puts in. Hence each man is self-determined-receives the fruits of his own deeds. It is clear that this institution is governed by a principle which would destroy the race if it were applied within the family, and the infant were to receive only what he earned.

The state purely by itself, and apart from the family and civil society, would make no provision at all for the nurture of its people. It would not support hospitals or asylums, nor provide in any manner for the public health, the public morals, or the public intelligence. It would not provide means for the creation of wealth; it would not build roads or bridges, improve navigable streams or harbors. It would never undertake the "protection of home industry," nor regulate commerce, nor coin money — still less would it issue paper money. The sole direct function of the state as a political organism is to secure justice to its citizens. This implies that it protect them from foreign enemies and secure to each man the fruits of his deed at home. If the man does a good deed, he shall be protected; if he trespasses on his neighbor, thereby abridging his neighbor's freedom and doing violence to his will, the state will cause his malice to revert upon himself and abridge his own freedom instead of that of his neighbor. But the state, pure and simple, will not interfere and save the foolish or unwise man from the effects of his deed. That would be nurture. It will not make a "public improvement," for that would be to usurp the functions of civil society.

But while the state refuses to do the deed for the individual man, or to connive at his pecuniary profit directly, it finds itself forced into doing

both of these things indirectly in order to achieve its own proper function. Hence arises the collision in politics between those who hold to the ideal state and those who hold to the state as modified by the idea of the family and civil society. Some concession has to be made—the contest arises over the how much.

Right here comes in the phase of municipal organization and public corporations. The labor of the individual in producing special products for the market is limited to such special products as may be exclusively possessed and used by others individually. But there are thousands of modes in which the welfare of society can be promoted by the application of labor to the removal of general obstacles or to the creation of general facilities: the highway, the bridge, the railroad, the canal, the acqueduct, the sewer, the useful invention, &c. &c. No single person can consume, entirely, one of such products as these. They are valuable to a whole community and to a series of generations. In order that human labor may be applied to such substantial productions as these, there must be some form of guaranty that such labor shall be remunerative; that it shall be able to convert into money its present labor, expended not for special commodities, but for the general good of the community at large, and it may be for the generations that are to come; that it shall be able to realize for itself special commodities for such general productive activity. The device invented for this purpose is the chartered corporation, a semi-political, semi-social institution. It is clear that Mr. Hill would absorb, if not all, at least the greater part of this sphere into the state itself and make it solely political. What is for the public weal shall belong to the state, is the principle set up in his book. The public health, the public education, money, highways—even the newspaper—shall come into the hands of the state.

We have Socialism, Communism (the "Internationalist" association), where the function of civil society is made to absorb the state. latter is made to swallow up the former, we have a "parental" government and probably a despotism. To these two imperfect theories we may add the theory which isolates the state entirely from civil society. The latter theory is guite common in the United States, and indeed has been so ever since the establishment of the Union. Through the interference of the state with civil society arise corporations, and these become so powerful as to threaten the freedom of the private citizen. Moreover, by such interference one section is benefitted at the expense of another, or one species of industry is built up at the cost of another-manufactures "protected" and agriculture taxed. The national finances are deranged and the circular movement of industry by which the total of production determines the price of each commodity is stopped by the introduction of an arbitrary species of money which is not the production of the labor of the community and therefore does not complete the circuit. Irredeemable paper money prevents the labor of civil society from self-determination, or, in other words: the money which should measure the value of all other productions of labor, is itself not a product of labor and hence incommensurable as regards products of labor.

Mr. Hill recommends a national system of paper money, opposes the

issue of interest-bearing bonds by the state, suggests an international clearing-house.

Whatever may be said against the interference of the state in the affairs of civil society, there is no prospect of preventing such interference. A nation that refused would be speedily forced to interfere with and regulate the functions of society were it only to preserve itself from destruction. Mr. Hill sees this fact in all its scope. The questions of limitation and of method in such interference are the essential ones.

If we assume as self-evident that the money of a country which is to measure the products of labor must itself be a product of labor, or else convertible directly into such products according to definitely named quantities and qualities specified on the face of the convertible money, we must conclude that a strictly irredeemable currency would destroy civil society if continued for a long period. All such systems have collapsed, with great disaster to productive industry. But a national paper currency is not of this kind. It is receivable for government dues—taxes, imposts, postal service, &c. From one-half to three-fourths of the "greenbacks," for example, are thus taken up annually by the government. If receivable for all duties, they would be still further redeemable to that extent. Such redemption is also, and has been, practised by other nations. It is not a perfect form of redemption because it is not directly convertible into a perfect commodity. The precious metals form such a commodity; national bonds bearing a fixed rate of interest payable in coin are also a perfect commodity. A national paper currency should therefore be redeemable at the treasury for gold and silver, or interconvertible directly with bonds bearing gold interest.

A paper currency which represents specie on deposit of equal amount, dollar for dollar, is sound. But such is not the system of banking in vogue anywhere in the world, nor is it proposed by those who oppose the present system in the United States. The 1600 banks in the United States in 1860 had in circulation 200 millions of paper and only 38 millions of specie on deposit to redeem with. In case of a sudden and wide-spread panie, they could have paid 38 cents on the dollar in Louisiana, 15 cents in New York, 2 cents in Illinois, and 19 cents on an average throughout the whole country. Not any better than this is the condition of the celebrated Bank of England. Its resource in case of a wide-spread panic is to suspend and make its bills a "legal tender." Such banking as this, notwithstanding its great value to a community as compared with a system that uses only the precious metals, is a very imperfect institution, and is liable at any time to collapse in case of panic. Suspension means a forced "legal tender" Act, with the disadvantage that credits are everywhere shaken. The loss to the productive industry of the country in a suspension of work by the laborers amounts to at least 50 millions of dollars per week. In case of a general panic, the country is injured to the extent of several weeks of idleness of the whole laboring class, and is quite likely to equal the entire amount of all the specie in the country. And this loss is a dead loss, for it cannot be made up; it is not a change of ownership of property. Its demoralizing effects are still more formidable. Despair paralyzes the business energy of the community.

A paper currency based on the national credit, and convertible into bonds only, is the only kind that can withstand the "run" of a panic. A bond bearing gold interest is a commodity and will sell anywhere where profitable investments are sought. Its rate of interest and the resources of the government will determine its value in the precious metals. A currency convertible into bonds is redeemable, because it may be changed at will into a commodity. Money as money is not a commodity, but simply the general possibility of all commodities. When a commodity is used as money, its use as a commodity is prevented, and hence a waste made. But any commodity used as money acquires thereby an inflated value conditioned upon its usefulness as money. Gold is said to be inflated to ten times its nominal value in the arts by its use as money. However this may be, a commodity must be at the basis of a currency, and there are two kinds of commodities to choose from-corporeal, like gold and silver, and incorporeal, like a government bond. By far the most valuable to the community is the species of property resting on franchise. Improvements which benefit an indefinitely large community like a highway, a railroad or bridge, or a sewer system, or water works, &c. &c., cannot be initiated and carried out by a single individual, nor by a collection of private individuals. first requisite is an act of the State creating a franchise and vesting it. Capital may then be invested with the certainty that the stock based on the franchise will be a perfect commodity. Through such franchises, each individual of the community obtains the possibility of purchasing at merely nominal rates inestimable conveniences. Of a kindred nature to stocks based on franchises are interest-bearing bonds. Government bonds are based on the right of the state to tax all the property within its dominion even to the point of confiscation. They form the most stable species of incorporeal property, and hence the best form of commodity, into which to convert a paper currency. If, as Treasurer Spinner has proposed, the bonds bore 3.65 per cent. gold interest, and were not to be taken up by the government except when offered at the treasury for currency at par, said currency again being fundable in similar bonds at the will of the person holding it, it is clear that the wants of the community would regulate the supply of money in the community. When redundant, an investment in bonds would instantly reduce the amount of currency, and when scarce the bonds would be presented at the treasury and currency drawn. It seems strange that the distinguished financier Amasa Walker should speak of this system such words as these: "To invest in such bonds, from time to time, drawing interest at the rate of 3.65 per cent. as proposed, and hold them until the moment most favorable for an intended movement, and then at the shortest notice convert them into money wherewith to flood the local market, must be as great a convenience to one who is operating 'for a profitable corner' as any Wall-street operator could desire."

It is self-evident that no one could "flood the local market" except by investing in commodities at such a rate as to cause a rise in prices. But such a flood of currency would at once seek safe investment, and would flow directly to the subtreasury and buy 3.65 per cent. bonds again. The Treasury could supply any amount of bonds at this rate of interest—enough, in fact, to pay for gold sufficient to take up all of its 6 per cent.

bonds. It would save interest by the process, and could afford to reduce taxes. It could pay out greenbacks enough to take up every bond, in case the community needed it. In that case it would have no interest to pay. Mischievous speculation in securities would cease, because there would be a safe means of investment in "call loans" at the moneyed centres when glutted with money. What could keep gold at a premium under such circumstances? The tax on exchange from one part of the country to another—formerly 14 to 3 per cent. in St. Louis, now \(\frac{1}{2}\) to \(\frac{1}{4}\) per cent.—would become merely nominal.

Without a commodity at the basis of a paper currency, there could be no possible method of settling the interpretation of its unit of value. "Dollar" would not mean any specific amount of any commodity, and might mean what "dime" or "cent" does in coin. The "elasticity of the currency" demands that the needs of business shall determine the amount of it, and Mr. Spinner's plan meets the exigency. It also makes a "product of labor" the measure of value. The bond represents labor performed just as the share of stock in a railroad or other franchise.

The Logic of Hegel. Translated from the Encyclopedia of the Philosophical Sciences, with Prolegomena, by William Wallace, M.A., Fellow and Tutor of Merton College, Oxford. At the Clarendon Press. London: MacMillan & Co., Publishers to the University of Oxford. New York: MacMillan & Co., 38 Bleecker st. (For sale also by Gray, Baker & Co., St. Louis, or by Scribner, Welford & Armstrong. New York. 1 vol. Price \$7.)

We find this volume an excellent piece of work. It bears the evidence not only of long study but also of practical experience in the labor of teaching the Hegelian Philosophy to others. Hence its explanations are very adequate and admirable for the most part. It is to be hoped in the interest of Philosophy that the remaining two parts of the Encyclopedia may be translated also. The present translation is from the third edition of the Encyclopedia, and hence contains those interesting explanatory remarks added from the notes taken at Hegel's lectures by Professors Henning, Hotho, and Michelet. The easiest way to learn Hegel is to read these explanatory remarks first and gradually approach the severer definitions. No one who desires to know Hegel can afford to be without this book.

The Education of American Girls. Considered in a series of Essays. Edited by Anna C. Brackett. New York: G. P. Putnam's Sons. 1874. For sale by Gray, Baker & Co., St. Louis. Price \$1.75.

A valuable contribution to a department of the Philosophy of Education hitherto not sufficiently considered. Jean Paul's Levana had long ago offered most valuable thoughts on the education of girls, although not specially devoted to that phase of the subject. The present work finds no peer since the Levana in its application of the fundamental principles of education to the treatment of girls. One may well feel thankful for the advent of Dr. Clarke's book on "Sex in Education," when we find its counter impulse producing such books as this. Dr. Clarke attacks, by his facts and inferences, the system of class education for girls between the ages of fourteen and eighteen, leaving only the system of private instruction or of individual study, a system which would well deprive most girls of a respectable

education. The book above named presents, besides a general treatise on the subject by the editress, much carefully weighed matter to disprove the theory of Dr. Clarke. The tone of the book is not flippant and personal, but is pervaded by an air of quiet madonna-like dignity. The contributors are Mrs. E. D. Cheney, Mrs. C. H. Dall, Dr. Mary Putnam Jacobi, Mrs. Lucinda H. Stone, Miss Mary E. Beedy, besides the editress who is well known to the readers of this journal as the translator of Rosenkranz's Pedagogics.

Strauss: l'Ancienne et la Nouvelle Foi. Par A. Vera, Professeur de Philosophie à l'Université de Naples. Naples: Detken & Rocholl. 1873. (F. W. Christen, 77 University Place, New York.)

M. Vera attacks Strauss, in this work, from the stand-point of the older Hegelianism. To the abstract universal the negative all-devouring chaos into which every individual plunges and disappears, is opposed the concrete universal whose existence is personality, immortal and individual. This universal was defended by Hegel against the abstract universal which he called a "negative unity" because it is conceived as negating all particularity—as the ocean negates its particular waves and swallows them up. The negative unity is the principle of Pantheism, and of Strauss and Feuerbach. The principle of Personality, or the concrete universal, is that of Hegel, Aristotle, Plato, and Leibnitz. "Not substance, but subject is the highest principle," said Hegel. It is because of failure to think himself through to "subject" that Strauss arrests his development in the Saurian period of Pantheism.

In the London "Athenæum" for June 21st and 28th, 1873. Dr. Hutchinson Stirling publishes a most able and satisfactory review of this book of Strauss, showing up in his trenchant way the whole philosophic movement of which he forms a part.

We have also received a work bearing on the same subject from R. Mariano: Strauss e Vera. Saggio Critico. Roma: Stabilimento Civelli. 1874.

Von Magdeburg bis Königsberg, von Karl Rosenkranz. Berlin: L. Heimann's Verlag, 1873.

This is the first volume of the Autobiography of Dr. Karl Rosenkrauz, Professor of Philosophy in the University of Königsberg for the past forty years. It embraces the period from 1805 to 1834—a period of great interest in the development of German Philosophy. The charm of this volume lies in the portrayal of the gradual initiation of a genial and appreciative youth into the literature and philosophy current in that heroic period. In 1824 he became acquainted with the Hegelian Philosophy through Leopold Von Henning. His action and reaction with Romanticism, Spinozism, Kantianism, and Hegelianism, is told in a delightfully personal style. His relations with the great men of the time, and particularly with Hegel, whose biographer he was destined to become, are woven in and around the story of his growth and culture, and the whole furnishes material for twenty-one chapters as interesting to a student of Philosophy as a novel could possibly be. It is a work that would pay any American publisher who should get out a translation.

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SHAKESPEARE'S "TEMPEST."

By D. J. SNIDER.

The great and striking peculiarity of this play is that its action lies wholly in the ideal world. It differs, therefore, from every other work of Shakespeare in the character of its mediation. Our poet, in most of his dramas, portrays the real world, and exhibits man as acting from clear conscious motives, and not from supernatural influences. But here he completely reverses his procedure; from beginning to end the chief instrumentalities of the poem are external; its conflicts and solutions are brought about by powers seemingly beyond human might and intelligence. It should, however, be classified with "As You Like it" and "Midsummer Night's Dream," in both of which the ideal world is the grand mediating principle. But in these two plays the real world is also present, and there is in the course of the action a transition from one to the other. Hence, too, there follows a change of place and time, and the so-called unities must be violated. But the "Tempest" has not this double element: with the first scene we are in the magic realm of the island and its influences, which do not cease till the last line of the play. Hence it is more unique, more homogeneous, than the two dramas before mentioned; the unities of time and place can be observed, and the action lies wholly in the ideal world.

It is now the duty of the interpreter to translate these poetic forms and mediations into Thought. Thus he gives the same meaning, the same content, which is found in the play; but he addresses the Reason and Understanding instead of the Imagination. What Shakespeare expresses in poetry he must express in prose, and moreover must supply the logical nexus which the imaginative form cannot give. Hence, above all things, let him not fall into the error of merely substituting one poetical shape for another, whereby nothing is explained and only confusion is increased. Prospero is called Shakespeare, or by any other name, what is gained by the change? The same difficulties remain for Thought as before. The task is not easy, nor is it likely to give satisfaction at first to the reader; for these beautiful ideal shapes must perish before our eyes and be transformed into the dry, abstract forms of prose. The contrast is striking, perhaps repulsive; but, if we wish to comprehend and not merely to enjoy Shakespeare, there is no alternative.

Let us bring before our minds the leading elements of the play. First, Alonso and his company represent the real world; but they have arrived at a magic isle where they are under the sway of unknown external agencies. Within certain limits they still can act through themselves, but their chief movements are determined from without by the ideal world. Ariel and his spirits, who constitute the second element. Thus the fact is indicated that the ideal, supernatural world is master of the real, natural world. Thirdly, there is Prospero, a being who commands both, yet partakes of both these principles, the real and the ideal, the natural and the supernatural: he is connected by nationality and even by family with those in the ship, but is at the same time lord of Ariel and of the spirit-world, who fulfil his behests with implicit obedience.

Here appears the two-fold nature of Prospero, which is the pivotal point of the drama, and hence its comprehension must be our first object. He controls the elements, he is gifted with foresight, he possesses absolute power; yet he has been expelled from his throne and country. To be sure, there is the difference of time between his expulsion and his present greatness, but this cannot adequately account for the change. Let us try to explain these two elements of his character, as they have been elaborated fully by the poet in the course of the drama. In the first place, Prospero must manifest the finite side of his nature. As an individual, he comes in contact with other individuals and things; in general, with the realm of finitude in which he himself is finite. Limitation begets struggle; thus arise the collisions of life. Many men, it seems, have been his superiors in these struggles; his brother is a much more practical man-has dethroned him and driven him off. Such is Prospero the individual, and as such he collides with various forms of finite existence. He has been hitherto defeated in these conflicts. This is the one element. But Prospero also possesses the side of universality; he is spirit, intelligence, which comprehends, solves, and portrays all the collisions of the finite world. It is only through long discipline and devoted study that he has attained this power. His pursuit of knowledge, moreover, cost him his dukedom, and hence was the source of his chief conflict—that with his brother. He thus stands for spirit in its highest potence, the Universal, but he is at the same time individual, and hence is exposed to the realm of finite relation and struggle, which, however, his reason must bring into a harmonious unity.

But his spiritual activity is mostly confined to a special form of intelligence, that form which embodies its content in pictures and symbols, namely, the creative Imagination. Prospero does not employ pure thought, but poetic shapes and images. He must therefore be the Poet, who has within him the world in ideal forms, and hence possesses over it an absolute power. He calls up from the vasty deep whatever shapes he wishes in order to execute his purposes and perform his mediations. Thus he solves all the contradictions in which he as an individual is involved, and subdues all the influences which come within his magic circle. For he is this universal power, and in the sphere of ideality, in the realm of spirit, nothing can resist him. The revenge of Prospero is therefore ideal, for certainly our poet would never have taken such instrumentalities to portray a real revenge. Moreover, the play must end in reconciliation, the harmony of the Individual with the Universal; for spirit possesses just this power over the conflicts of finite existence: it must show itself to be master.

In this way we can account for the commanding position of Prospero in the drama. He is the grand central figure, the absolute power who controls ultimately the movements of every person and from whom all the action proceeds. form of mediation is therefore external; but, truly considered, Prospero is no deus ex machina, no merely external divinity brought in to cut the knot that cannot be untied. The interpretation must always exhibit him inside of the action; the clew is his double nature. As an individual, he is engaged in conflict; but then he steps back, beholds and portrays that conflict, and solves it through spirit in the form of Imagination. He is therefore the mediator of his own collisions; thus externality falls away. The solution is hence not external, which would be the case if the absolute power simply stood outside of the action, and commanded everything to take place. It is the special duty of the critic to explain these external mediations, of which the play is full, into a clear, spiritual signification.

Prospero is, therefore, the mighty spirit standing behind and portraying the collisions of his own individual life and of finite existence generally. But this is not enough to account for his activity. He could easily put his experiences and struggles in a drama without invoking the aid of the supernatural world. The necessity of this element must be seen. If he would give a complete picture of his own activity, he must not only portray the above-mentioned conflicts, but also portray himself as portraying them. In other words, he must depict himself as Poet, as Universal; he must give an account of his own process, and that account must also be in a poetic form. This will push the Imagination to the very verge of its powers, for thus it must do what abstract thought alone can usually do: namely, it must comprehend and portray itself. Hence comes the external form representing it as the absolute master over its materials.

The Drama thus attempts to account for itself in a drama, in its own form. Having swept over the whole field of life, and portrayed every species of collision, it now comes to

grasp itself, its own process. Thus it becomes truly universal, a complete totality; for it takes in the world and itself too. This play is often considered Shakespeare's last, and it may be regarded as a final summing up of his activity, or, indeed, that of any great poet. In his other works he has portrayed the manifold variety of collisions, but now he portrays them being portrayed. Here he reaches, if he does not transgress, the limit of dramatic representation; he can only use strange symbolical shapes to indicate his meaning.

It is now time to see the poem springing from the two-fold nature of Prospero. As individual, we must expect to behold him involved in some of the ordinary dramatic collisions. An analysis will reveal three of them all in regular gradation of importance. First, there arises the collision in the Family—Prospero the father, on the one hand, against the lovers Ferdinand and Miranda, on the other. The old conflict is depicted: the choice of the daughter is opposed by the will of the parent. Secondly, there is portrayed the collision in the State: Prospero, the rightful ruler of Milan, against the usurper Antonio, supported by the king of Naples, both of whom with followers are on board the newlyarrived ship. Thirdly, there is the more general collision which may be stated to be between rationality and sensuality, the former represented by Prospero and Ariel, the latter by Caliban with Trinculo and Stephano. The Sensual rises up against the Rational in all its forms, in institutions and even in Art, as well as in Intelligence. Such is the material for Imagination to work upon. But the other side must not be forgotten. The Imagination, at the same time, portrays itself elaborating this content. The Poet is not only going to make the drama, but is going to show himself making it. This gives the ideal element, representing Prospero as having the absolute power of mediating all the collisions of his individual existence.

Such are the threads which must be carefully kept before the mind in order to comprehend the organization of the play. Next, the entire movement of the action must be considered. It is three-fold. In the first place, there is the expulsion of Prospero by the rulers in the ship, who have now come into his power; this is the wrong done to Prospero, and constitutes the pre-supposition of the drama. Next follows the punishment of this wrong in the island, the realm of Prospero, through his spirit-powers. Lastly, the reconciliation of the two sides by the repentance of the guilty and forgiveness of the injured, when we have the final harmony resulting from the conflict. It, therefore, is connected with that class of Shakespeare's plays in which wrong is atoned for by repentance, and the criminal escapes by "heart's sorrow" the punishment of death, the legitimate consequence of his deed.

Let us now take the poem in hand and see whether these things, with a reasonable interpretation, can be found in it, or whether they are the absurd subtleties of the critic's fancy. First comes the tempest, from which the drama takes its name, the effect of which is to divide the ship's company into three parts, corresponding to the three threads above mentioned, and to scatter them into different portions of the island. But the peculiarity of this tempest is, as we learn in the next scene, that Prospero has brought it about through Ariel; it is, therefore, not a tempest which has taken place through natural causes, but through spiritual causes: it is, evidently, a poetical tempest. For certainly Shakespeare would not have us believe that storms are produced by spirits ordinarily; but this one certainly is. What, then, does the author mean? for his conduct here assuredly needs explanation. I think he tells us, in saying that Ariel, by command of Prospero, caused the tempest and dispersed the company, that tempests are called up by the Poet—that they are a poetical instrument employed to bring about a separation of parties, and to scatter them into different places as here. We are, therefore, led to inquire whether Shakespeare himself has ever employed this means in any of his dramas. Accordingly, we find the same instrumentality in "Twelfth Night" and "Comedy of Errors" used for the same purpose. It is an artifice of the Poet for scattering, or possibly uniting, his characters in an external manner. Here then, in the very first scene, the Poet is portraying his own process.

The second scene of the First Act, which now follows, is the most important one in the play, for it gives the key to the action. A careful analysis of all its elements will therefore be necessary. First appears before us the Family, the primary relation of man—here that of father and daughter, the latter of whom speaks in the first line of her parent's art, which she herself, being purely individual, does not possess, but still knows of. The relation is a natural one, not spiritual, between parent and child. She is excited by sympathy for the sufferers, when the father assures her that no one has perished—in fact, no one can perish—in the vessel. Again we ask the question, why this confidence of Prospero that all will be saved? The prevision in his art, which he speaks of, is that of the Poet, who ordains beforehand, by the strictest necessity, the course of the action and the fate of the characters, and knows what kind of a drama he is going to He lays down his magic mantle—that is, he assumes the individual relation to his daughter—and then begins to give an account of his life and conflicts as an individual. Here, then, he relates his first collision: a brother, with the aid of a foreign king, has driven him from his dukedom. Nor does Prospero conceal the cause of his banishment. He neglected the Practical for the Theoretical; he handed over the administration of his government to others, and devoted his time to his books, his study, his art. The logic of this transition is evident. He cuts loose from the real world, and the real word retorts by cutting loose from him-drives him off. Where, now, is he? Having severed all his individual relations, he is manifestly left just in his ideal realm. But there is one tie which he cannot break; he is a father: this bond still unites him to finite existence; or, if he must depart for the ideal world, the daughter must go along. The two, therefore, are put in a vessel together, and reach the magic island. Prospero intimates that it was this relation which saved him, otherwise he would have given that final stroke which dissolves all individual relations:

Mir. Alack, what trouble was I then to you!
Pro. O, a cherubim
Thou wast, that didst preserve me. Thou didst smile Infused with a fortitude from heaven.

The nature of the transition of Prospero from the real to the ideal world is thus made manifest. It differs, therefore, from "As You Like it," where there is a similar transition, based, however, upon the flight from the World of Wrong. It also differs from "Midsummer Night's Dream," where there is likewise a similar transition, based, however, upon the flight from the world of Institutions or of Right. But in the "Tempest" this transition is based upon the flight from the whole finite world of conflict, of individual relation, of practical activity; and hence necessarily lands Prospero in the magic island, in an ideal world.

It is furthermore to be noticed that both parties have their just and their unjust element. Prospero is wronged; he is dispossessed of his recognized rights by violence. Yet he himself is not without guilt; the real world has a claim upon him as ruler, which claim he has totally ignored. Hence the play must result in reconciliation and not in the death of the wrong-doers. Prospero as Poet must see both sides and represent them in their truth, and cannot avenge himself as an individual. This drama, therefore, will not have a tragic termination; it must, as previously stated, end in the repentance of the one party and forgiveness of the other.

Prospero thus brings the story of his life down to the tempest, embracing the conflicts of his individual existence. His enemies, wrecked in the ship, are now scattered over the island and in his power. Here begins the action proper of the drama. But behold! Miranda sleeps in the presence of the spirit-world; she is mortal, individual merely—she possesses not the vision and faculty divine. It is no wonder that she cannot choose but sleep in the invisible world, for eves cannot help her. But who appears here in this spiritrealm? An airy being called Ariel, who seems not to be restrained by any bonds of Space and Time, who flies abroad and performs on land and sea the behests of his master. He was the cause of the shipwreck we now learn, and he gives a vivid account of his feats in that work. Again an explanation is demanded, and we feel compelled to say that Ariel is that element of Prospero before designated as Imagination, which thus gives an account to itself of its own deeds in a poetic form. For Ariel controls the elements, is sovereign over the powers of Nature, and directs them for the accomplishment of his master's purposes. In general, he seems to perform every essential mediation in the entire poem. What possesses this power but Imagination? Yet we must not

press this meaning too closely, for Shakespeare does not allegorize, but always individualizes; he fills out his characters, whether they be natural or supernatural, to their sensuous completeness. We shall observe that there are many sides given which are necessary to the image, but not necessary to the thought even when the thought preponderates. Therefore these Shakespearian creations cannot be interpreted as allegories, in which each particular stroke has its separate signification, but rather the purport of the whole should be seized and its general movement.

But this dainty spirit Ariel is not wholly satisfied with his lot; he has that absolute aspiration of intelligence—nay, of Nature herself—namely, the aspiration for freedom. What is meant here by freedom? merely to get rid of labor and then be idle? We think not; it is rather to accomplish the work in hand—to embody itself in some grand result: this is the toil of Spirit, of the Imagination. The freedom is the realization of its end, when the Imagination has clothed itself in an adequate form, which process, it may be added, can only be completed at the close of the poem; then Ariel is dismissed to the elements. But he never could have been free unless he realized aspiration in an objective form. It will thus be seen that Ariel quite corresponds to that element of Prospero's character which was called Spirit, Intelligence, or the Universal as opposed to the Individual.

But the Poet Prospero proceeds further; he gives a history of Ariel. Once he was the slave of the hag Sycorax, who imprisoned him in a cloven pine because he would not perform her earthy and abhorred commands. Here is presented the conflict which is as old as man, spirit against flesh, Reason against Appetite. Moreover, we see its earliest form: spirit is overcome and is subordinate to flesh, to sense. Hence the groans of Ariel from his prison-house, till at length Prospero comes to the island and frees him. Now he is the servant of Prospero, and transforms himself into every kind of shape which Prospero commands, in order to perform the various mediations of the play. He is at once sent off on an errand, the nature of which will soon be seen.

But what is this other shape which now rises upon our view—a monster, half man, half beast? He is the slave of

Prospero, compelled to perform all the menial duties; in other words, his is the service of sense. His origin is not left in doubt; he is the son of Sycorax, and the heir of her character. Now we behold the opposite of Ariel in every way: Caliban is sense in all its forms, sensuality included. The peculiarity of their names, too, has been noticed by critics: with a slight transposition of letters, aërial becomes Ariel and cannibal becomes Caliban. But at present, under the rule of Prospero, sense is subordinated, is made to serve. Caliban is therefore the natural man whom Prospero has tried to educate, yet without altering his nature—who cannot be anything else but a slave. His knowledge is just sufficient to contest with Prospero the supremacy of the island. The rise of mankind from a state of nature, through language and education, is here indicated. The claim of Caliban to the sovereignty of the island by right of birth, against the right of intelligence, is a rather severe satire upon the principle of legitimacy, which may or may not have been intended by Shakespeare. This antithesis between Prospero and Caliban should be observed, for it will constitute hereafter one of the collisions of the play.

There can hardly be a doubt concerning the main signification of these two figures of the drama. They are not portrayed as human in form, but as unnatural, or, if you please, supernatural; they exhibit one side, one element of man in its excess: Ariel is spirit without sense, Caliban is sense without spirit. They are therefore not human, for man includes both of them. Or, to revert to our abstract terms, we behold the two principles of Prospero's character, the Individual and Universal, objectified into independent forms by the Imagination of the Poet. Moreover, the inherent antithesis and hostility - in other words, the collision between these two principles—is also indicated. Prospero has, so to speak, separated himself into the two contradictory elements of his character and given to each an adequate poetic form, and has also stated their contradiction. But he remains still master over both; they, though opposites, are still his servants, are still the instruments of the Poet, who stands behind and directs their acts. Such is their fundamental representation in the play.

Another relation has been indicated in the poem with distinctness, namely, the relation of the race of Caliban to Art. The foul witch Sycorax is the representative of the Ugly; she has even lost the human form, "with age and envy grown into a hoop." She came from Argier, a land beyond the pale of culture, where spirit is still enslaved in the bonds of sense. But even there she could not live on account of her negative character. She is put on the island, which remains a wild, untamed jungle till the arrival of Prospero. The fate of Ariel has been mentioned as well as his enfranchisement; but at present, under the rule of Prospero, nature is the servant of mind, and is the bearer of its forms; Art is therefore possible since the Sensuous is now controlled by the Spiritual. For Art is spirit expressed in a sensuous form.

So much is introductory. The Poet has elaborated all his instrumentalities, has brought the story of his life down to the time of the action, and is now ready to portray the collisions of the play. Our Ariel brings to the fair maiden a lover—the Poet never fails to do so. By his mysterious music, Ferdinand, one of the ship's company, is led to Miranda. Both fall in love at first sight; the natural unity of sex, which calls forth the Family, asserts itself on the spot. What else could happen? Ferdinand is alone in the world, Miranda is almost so-only her father is known to her. If man and woman belong together, certainly these two must feel their inseparableness, for there is nobody else to whom they can belong. It is the old climax: admiration, sympathy, love. "They are both in either's powers"; each one finds his or her existence in the other. But now appears the obstacle, for the course of true love can never run smooth—at least, in a drama. The collision so frequently portrayed by Shakespeare again arises for a new treatment, that between the will of the parent and the choice of the daughter. Prospero opposes the match, charges Ferdinand with being a traitor and spy, and lays upon him the menial task of removing "some thousands of logs." But Miranda is present with consolation and even offers to assist in the labor; the young prince bravely stands the trial - he is willing to undergo any toil for love's sake. The mutual declaration is made; then follows the mutual promise; the unity of feeling is complete. It is the essence of all love-stories.

The next time we meet with the father in this connection. he has yielded his objections and sealed their pledge with his consent. But all along we have been aware that his opposition was feigned, that he intended from the start to acquiesce in their marriage. In fact, he was the very person that brought it about. For his conduct he has adduced an external motive: "lest too light winning make the prize light." Still deeper is the design which he cherishes of not only restoring his daughter to his own possessions, but also of making her queen of Naples. But the true internal necessity for his opposition being feigned lies in his double nature. The Poet, who is none other than Prospero himself, interposes an obstacle—the refusal of the parent—which parent, also, is none other than Prospero himself. As father he stands in an individual relation to his daughter and comes into conflict with her; but as Poet he has brought about this conflict, and must solve it by giving validity to the right of choice. Such is the solution demanded by reason, and the one which Shakespeare universally gives to such a collision. Prospero knows, therefore, from the beginning that his daughter will triumph—in fact, that he must make her triumph. The key to his conduct is that the father or individual and the Poet or Universal are one and the same man.

The right of choice is therefore victorious over the will of the parent, a right which, though generally conceded at the present time, was once stoutly contested. Their love has been portrayed through its successive stages: the first predilection, the mutual declaration, the secret plight of troth, the consent of the father. But one thing more remains to be done: the ceremony with full and holy rite must be ministered. Upon this point Prospero lays the greatest stress; he speaks of it no less than three times in different places. Without the formal solemnization of marriage their union cannot be ethical; it can only bring forth the most baleful weeds—hate, disdain, and discord. Lust is not love; indeed it is the destruction of genuine love: a Caliban cannot truly enter the marriage relation. Moreover, the ceremony gives

reality to the Family, which hitherto existed only in the subjective emotions of the parties. Religion (or the State in our time) comes in with its sanction and objectifies their union—makes it an institution in the world.

The marriage rite is therefore not a meaningless and unnecessary formality. Yet the origin and primal basis of the Family is love, which the Poet has here portrayed in all its fervor. But by itself simply, and ungoverned, it degenerates into lust. Our author would teach the lesson, if we understand him, that the ethical element and the emotional element must both be present in true affection; for it is destroyed by the Ethical alone, which is the case when the daughter is wholly obedient, and simply follows the will of the parent, and lets him choose for her. She thus cannot have much intensity in her love, and hence Miranda insists upon her affection, and the father at last yields. On the other hand, passion alone without any ethical restraint is even more fatal to love. Now both these elements in their one-sidedness are represented by Shakespeare as antagonistic to the unity of marriage. The truth is, the Emotional must be regulated, restrained, and made permanent, by the Ethical; and the Ethical, which now takes the form of devotion to husband or wife instead of obedience to parent, must be filled, vivified, and intensified, by the Emotional.

Next comes the masque, whose connection with the rest of the play must be carefully studied, for it reveals more than anything else in the work the special character of Prospero as Poet. He calls up Ariel, who, it will be noticed, always appears when some important mediation of the drama is about to be performed. For what purpose is he now invoked? Mark the language of Prospero:

I must

Bestow upon the eyes of this young couple Some vanity of mine art; it is my promise And they expect it from me.

At once there rise up before us the goddesses of the ancient Greek world, the poetical forms of all ages. These, then, are the spirits over which Prospero has power through his minister Ariel; this, too, is his art, which has brought forth all the other wonderful shapes of the poem. They are the beau-

tiful forms of the Imagination, over which the Poet alone has control.

But let us notice the content of this little interlude: what will be its theme? Nothing else but what has already taken place, only in a new form for the lovers, who thus behold a representation of their own unity. The main-spring of the action is Juno, the spouse of the king of Gods and Men; therefore both the type and guardian of wifehood, of chastity, of domestic life. She sends Iris, her many-colored messenger, for Ceres—

A contract of true love to celebrate, And some donation freely to estate On the blest lovers.

Such is the object of the visit of the two goddesses, which is still more precisely expressed by each in their songs: Juno particularly confers marriage-blessing and honor—Ceres, physical comfort and prosperity. But mark that Venus and her blind boy are invited to stay away. They represent unholy lust; they plotted the means whereby dusky Dis, or devilish sensuality, carried off the innocent Proserpine, the daughter of Ceres, to the infernal regions. Thus the ethical element is again emphasized.

The relation of Prospero as parent, as individual, has now been portrayed, as well as the collision resulting therefrom and its solution. But he is also Poet, and hence must shadow forth the whole subject in the objective forms of poetry. It has already been pointed out that his feigning an objection to the love-match resulted from his poetical prevision, and hence that such an objection must finally be abandoned. Thus he has manifested in himself, and also depicted in the drama, the collision in the Family. But now, when consent has been given, and the hindrances smoothed over, a second time he appears as Poet, as if to leave no doubt of his nature in the mind of the reader or hearer. He steps back and reproduces in a new poetical dress the substance of the whole story before the lovers. This little play within the play thus has the effect of a double reflection of the action.

New beings appear in order to celebrate the contract of true love; Naiads whose crown is chastity, and the sun-burnt sicklemen whose trait is industry, join in a dance. But, while Prospero is busy calling up these beautiful shapes from the ideal realm, he suddenly thinks of the conspiracy of Caliban. A new collision against himself as an individual has arisen which demands immediate attention, the real world rushes in upon him, and at once the poetical world vanishes. He is thus reminded that there are other things to be done, other struggles to pass through, and finally other collisions to be portrayed. But he is highly vexed at the interruption, and in his anger he utters the doom of the whole finite world, which sounds like the Last Judgment. It is the most sublime passage of its length to be found in Shake-speare:

And like the baseless fabric of this vision. The cloud-capp'd towers, the gorgous palaces, The solemn temples, the great globe itself, Yea, all which it inherit, shall dissolve, And, like this insubstantial pageant faded, Leave not a rack behind. We are such stuff As dreams are made of, and our little life Is rounded with a sleep.

It is just this finite world which is so full of conflict and has caused him so much trouble. No wonder, then, that he almost curses it, and announces its utter perishability. But though the life and works of man, and also the physical globe, are transitory, he is far from saying that mind, the Universal, will thus pass away. On the contrary, he now invokes the latter against destruction, for it is the master over finitude, over the negative powers of the world. Again our Ariel must appear: "Come with a thought." Why? Only because he is thought. He answers, "Thy thoughts I cleave to." Why again? Because he cannot be separated from them. Thus Prospero and Ariel prepare for the conflict with Caliban, the account of which will be taken up in its proper connection.

Such is the first thread; the second is the collision in the State. This is the central movement of the play. Prospero as rightful duke comes into conflict with a usurper, his own brother, who is supported by the king of Naples. Again we see that Prospero, in his individual relation, falls into strife, and is overthrown. The history of his expulsion has already been given, and it must be noticed also that he relates the occurrence as something long antecedent to the play, and not

embraced in its action, though its necessary presupposition. Such has been the wrong done to him. But now the Universal element appears; his enemies are completely in his power; their punishment is to follow.

The tempest has conveniently scattered the ship's company into groups, in one of which are to be found all the offenders. But first there arises a conflict among themselves. There are three good characters—that is, those without guilt -Gonzalo, Adrian, and Francisco; opposed to these are the three wicked ones - Alonso, Antonio, and Sebastian. two latter show their hatred, especially of the honest Gonzalo, by bitter ridicule, while Alonso is beginning to feel repentance for his deeds through the loss of his son. Yet a deeper retribution appears to be impending over him: he has aided in dethroning a brother; a brother now threatens to dethrone him. The same man whom he assisted seems about to punish him. But his repentance will save him from final overthrow. So much for Alonso; Antonio is a much worse His conduct is consistent; he cannot stop in his negative career; he must continue dispossessing and assailing the rights of others, for that is the logical necessity of his character. Having wrongfully expelled his nearest relative, he very naturally begins to plot against his greatest benefactor, the king of Naples. But the poetical mediator Ariel is again on hand to prevent the consummation of the plan; the Poet cannot let the matter end in that way.

The main poetical mediation is next to be accomplished, of course through Ariel. It is reconciliation by repentance. Repentance means that man has the power to make his wicked deed undone, as far as its influence upon his own mind is concerned. He can free himself from remorse, from the consequence of his own negative act. But the repentance must be complete; it includes the confession of the wrong, contrition adequate to its magnitude, and an entire restoration of its advantages. Spirit thus becomes again at peace with itself, and is relieved from its own destructive gnawings. This reconciliation is therefore a spiritual process, and hence must be accomplished by the representative of spirit, Ariel.

The three criminals are in the presence of Prospero, who is invisible to them; they are hence in the presence of their

own wrong; retribution is at hand. Again we urge upon the reader to keep in mind the double nature of Prospero: as individual he has suffered these injuries, but as universal he is the Poet who mediates and portrays them. He therefore puts into operation his spirit-world, whose main object is now to excite conscience, to rouse remorse. They are hungry; a banquet is spread before them by several strange shapes. When the king and the rest begin eating, the banquet vanishes. Thus it is indicated to them that a power beyond their consciousness is at work in the isle. Here he is—Ariel—who now drops his invisible form and appears to them like a harpy, the symbol of vengeance. He calls himself Destiny, or a minister of Fate; his function is retribution. He comes to avenge the wrong done to Prospero,

The powers, delaying, not forgetting, have Incensed the seas and shores, yea, all creatures, Against your peace. Thee of thy son, Alonso, They have bereft; and do pronounce by me Lingering perdition—worse than any death—

So far it resembles that external power which the Greeks called Fate, and which even controlled Jupiter himself. But is there no salvation from the wicked deed? Hear Ariel again:

... whose [the powers'] wraths to guard you from—Which here in this most desolate isle else falls Upon your heads—is nothing but heart's sorrow, And a clear life ensuing.

What a wonderful change! Ariel is no longer the representative of Grecian Fate, but is a preacher of Christian Gospel, whose doctrine is repentance—"heart's sorrow and a clear life ensuing." Man can now avoid the retribution of ancient Destiny. Though Ariel has assumed this shape to the wicked three, yet the reader has all along known that it was merely a poetical form; that Ariel, in reality, is not a minister of Fate, but of Prospero, of spirit, of self-determination.

Thus the three "men of sin" are brought to a consciousness of their crimes; they wax desperate at their guilt, which now reacts negatively upon their minds—"like poison, 'gins to bite the spirits." The innocent three weep over them, "brimful of sorrow and dismay." When the guilty have

sufficiently atoned for the wrongs which they have committed, Prospero is ready to grant forgiveness; he declares that their repentance is "the sole drift of his purpose." The frenzy begins to subside after they enter his charmed circle; gradually reason returns, and Prospero, though invisible, tells to their innermost conscience the nature of their crimes and the consequent punishment. All is now plain to them subjectively. But, to remove the last doubt, Prospero presents himself to their eyes looking just as when he was Duke of Milan, and confirms his previous utterances. Alonso, in particular, repents in the most heartfelt manner, surrenders the advantages of his wrong, and asks pardon; he makes his deed undone as far as lies in his power. Therefore his son is restored to him: the marriage of Ferdinand and Miranda receives blessing; thus it is ethically complete, having received the sanction of both parents.

It is evident that the ability which the mind possesses of healing its own wounds, of cancelling its own negative deeds, is here portrayed. Spirit alone can reconcile itself with itself and come to inner harmony. For if it is truly universal, it must have the power to mediate all its conflicts. Therefore the play cannot have a tragic termination, as was before stated. It must end in reconciliation, mediation. Prospero himself, in his highest potence, represents this absolute might of spirit, which cannot succumb to any struggle, but must overcome every conflict. Though Shakespeare has to a certain extent employed the heathen form of Fate, he has truly expressed the Christian doctrine of Repentance.

We are now ready to take up the third thread, the collision between Prospero and Caliban. The character and origin of the latter have already been noticed; it was stated that he represented the natural man—man still immersed in his senses and not yet elevated to a rational existence. He therefore must collide with the world of spirit represented by Prospero, for the reason that it necessarily subordinates him and even reduces him to a slave. Such is the function of the senses—they are the pack-horses of intelligence; and the physical man, even if he constitute the whole man, must follow the same law. Caliban is therefore a menial of the lowest type, and is set to performing the most degrading

services for Prospero. His ignorance and utter slavishness to the External are manifest from the fact that he cannot comprehend either the mediations of Spirit or of Nature; he regards them as ghosts and goblins sent to torment him.

But Caliban has not always been in this condition of servitude. Prospero found him on the island, treated him with the greatest kindness, taught him to speak, and admitted him to his own family. The result was an attempt to violate the honor of his daughter. Prospero has now learned the very important distinction that an animal is an animal and must be subordinated, at least not admitted to social equality. There is a difference between a man and a brute notwithstanding our so-called humanitarians. By ignoring this distinction we do not elevate the lower, but inevitably degrade the higher. "I had peopled else this isle with Calibans" is the threat of the beast. Thus passes away the high-pressure humanity of Prospero when it comes in contact with the reality.

Such is the man-monster in the family relation; our author is now going to bring him before us in his political and also in his religious character. Every American can study the picture with profit at the present time. Caliban is in deadly enmity with Prospero. The ship also — or the real world, if you please - has its sensual element as well as the island or the ideal world. The next thing, therefore, is the appearance of the representatives of this element, Trinculo and Stephano. They, too, have been separated from the ship's company by the tempest, and from a natural attraction of character have been brought together with Caliban. Here we see the sensual trio made up from the ship and the island. The two strangers bear the stamp of reality, are men of flesh and blood, belong therefore to prosaic life and speak in prose; while Caliban, since he is a native of the island, is strictly a poetical being and speaks in verse. There is also a distinction between Trinculo and Stephano, the former being not so much jester as coward, craven in spirit, with the fear of the External always before his eyes; the latter being a drunkard, the slave of appetite. Caliban represents both persons, for he is mortally afraid of the imaginary spirits, and he swallows with the wildest ecstasy the contents of Stephano's wine-bottle.

Caliban's religion now appears also; he deifies the man who has gratified his appetite. Yet he himself remains a slave and performs the same servile duties; he will kiss the foot of the new deity, dig pig-nuts for him, and carry all his wood—a task which is so irksome to do for Prospero. he thinks he has obtained freedom, which to him means the reign of sensuality. The mob seems to have broken loose from the strong hand of Prospero, lust and violence hope now to rule triumphant, and the ominous shout of drunken bestiality falls upon the ear: "Freedom, hey-day, hey-day, freedom! freedom, hey-day, freedom!" It is curious that Shakespeare has endowed two beings so completely opposite as Ariel and Caliban with the same aspiration for freedom. He has thus indicated the two great definitions of that word which have always divided mankind. The one means unrestrained lust and anarchy, the other means liberty through institutions; the one is the realization of sensuality, the other is the realization of reason.

But the political side is still further developed. Such beings must have some conflict among themselves, which Ariel, our poetical mediator, does not fail to bring about. It only ends, however, in a beating given to the coward Trinculo, who is innocent. But they have a common enemy, the present lord of the island, against whom they now conspire. It is King Stephano against King Prospero, the Sensual trying to dethrone the Rational. Stephano is not without his worshippers to-day. He represents the demagogue in the political world, who rules the rabble by gratifying their passions, himself being the incarnation of those passions. He thus unites the worst elements of society in a crusade against all established order and right. It will be noticed, also, that not the least attraction for their "freedom" is the fair Miranda; both Family and State are to be subjected to unbridled lust. But their very nature is turned against them; their innate tendency to theft leads them aside from their purpose, and they are caught in their own toils. Still they cannot reach Prospero; he is spirit, knows of their schemes, and sends

upon them retribution in the shape of dogs and houndsturns against them their own passions. He is thus victorious in this final collision—all his enemies are now in his power - he has mastered the conflicts of his individual existence. Nay, farther, he has not merely punished, but even reconciled, all his enemies. Caliban himself submits, manifests hearty repentance, and is cured of his delusive worship. Sense thus yields to reason. Such is the truly positive function of spirit: to bring all into harmony with itself, to make all reflect its own image. It may crush out with its power; but that is a negative result, and really no solution of a conflict. The highest attainment of intelligence may be expressed by just this word—reconciliation. The colliding individuals of the play are now united in spirit, and the harmony is perfect. They all have come to see the nature of their deeds; this is their common insight, and therefore their common concord: furthermore, they hasten to make their deed undone. Hence, when the criminals arrive at this island, their destiny is to rise above their hitherto selfish, individual existence, and become reconciled with the Rational, the Universal.

Thus Prospero has changed all his enemies into an image of himself, and has made them participate, to a certain extent at least, in his own double character. Each person through repentance reflects Prospero, and places himself in unity with him. Nor must his double nature be considered anything strange or unknown. It is found more or less developed in every soul. As a moral, and particularly as a thinking being, man must solve the conflicts of his individual existence. Indeed, the sum of all conflicts, and the greatest of all contradictions, is the one above mentioned which in abstract language was called that between the Individual and Universal. Nay, the mightiest of men-for he was a manwhose spirit, however, raised him to be a divinity - Christ himself—was he not the embodiment of this contradiction? A celebrated sarcasm was once uttered concerning him: "Yes, Christ was able to save the whole world, but couldn't save himself." True, and his chief merit. Christ as individual was necessarily involved in the struggles of the world and perished; but as spirit he created it anew, and made it,

so to speak, a different world, for its history since his time is the history of Christianity. So, too, Prospero as an individual is overwhelmed with the collisions of life, but as spirit he has mastered and portrayed them, and even converted his enemies into his own image.

Prospero's career is now at an end, his work is done when the reconciliation is completed. He calls up once more the world of spirits who have been his faithful instrumentalities, in order to bid them farewell forever. He abjures his rough magic, his art; and soon he will break his staff, bury it in the earth, and drown his book. For the present Ariel is retained, who brings together the entire company, and restores even the ship. "Then to the elements," the play ends, his poetical activity ceases.

The relation of the play to Shakespeare himself has frequently been discussed. Long ago a critic suggested that Prospero was Shakespeare. But the mistake has been that the play was supposed to represent Shakespeare's individual life. It might be taken as a portraiture of his poetic, universal life, or that of any great poet. Other mighty individuals have been suggested in place of Prospero, but in such cases there is merely the substitution of one name for another, whereby however nothing is explained. We can only say, as we began, Prospero is the Poet generically, who, in the first place, embodies the manifold themes of his art in a dramatic form; and, in the second place, portrays himself in the act, portrays himself performing his own process also in a dramatic form. The drama can go no further; it has attained the universality of Thought.

Here also can be found the reason why it is impossible to give a theatrical representation of this play. What form shall we assign to Ariel and Caliban? A child for the one, and a low human shape for the other? Then we feel the impassible chasm which shuts off the poet's creation from the stage. The illustrative art is equally impotent in reaching these conceptions. Why is this? Because Ariel and Caliban are thoughts more than images; they are not only far beyond the realm of sensuous representation, but even begin to transcend the realm of pure imagination; hence we can read them and think them, but cannot image them with

clearness; they lie too far in the sphere of unpicturable thought.

If we now put together the beginning and the end of the drama, we find that Prospero departs from the Real, passes through the Ideal, and returns to the Real. The middle stage is alone portrayed in the play. It would seem, therefore that Prospero, being forced to abandon the practical world on account of his devotion to his books and his art, solves in his theoretical domain all the contradictions of finite existence, and thus returns in triumph to the practical world. Thought therefore, though at first antagonistic, finally restores action. Here we behold the theme of Goethe's "Fanst," yet treated in a very different manner. But, though it touches the real world at both ends, its action lies wholly in the ideal world.

We have now arrived at the point where we can see the unifying principle of three of Shakespeare's most important works, namely, "As You Like it," "Midsummer Night's Dream," and "Tempest." That principle is mediation through an ideal world. In "As You Like it," this world is idvllic, exhibits a primitive pastoral existence, hence approaches what is actual; but in the remaining two it is wholly supernatural. The three constitute a new species of drama, which belongs to Shakespeare alone. Though other poets have used similar materials and means, yet their products have been entirely different from these plays not only in degree of excellence but also in kind. The general movement is the same in all three: a breach in the real world, a transition to the ideal world where the breach is healed, and a return to the real world. The fundamental distinction between them—though they are not at all alike in details—lies in the fact that in "As You Like it" there is no self-reflection of any kind, hence it is the simplest in structure; that in "Midsummer Night's Dréam" the objective dramatic action reflects itself in the "play within the play"; that in "Tempest" the subjective process of the Poet reflects itself along with the action. Taken together they constitute a dramatic cyclus, and may be called the ideal dramas of Shakespeare.

THE MUSIC OF COLOR.

By C. E. SETH SMITH.

"There's not the smallest orb that thou beholdest
But in his motion like an angel sings

* * * * * *
Such harmony is in immortal souls."

Merchant of Venice, Act V., Scene 1.

The music of the spheres is an ancient story standing in evidence of an apprehension which has always obtained of the harmony of physical phenomena. That the heavenly bodies as bestowers of light give at the same time the harmonies of sound is the notion thus vaguely signified.

This conception, which has for so long a time haunted the human understanding, is by the evolution of scientific facts no longer vague. That there is an analogy between the impression produced by a musical composition and that produced by a painting is undoubted, and has from time to time occupied the attention of both musicians and painters. It remains only for a collocation of such facts as have been in very recent times obtained by the study of the elementary principles of Music and, by means of the prism and spectroscope, of the properties of Light, to demonstrate not only the dependence of both color and sound upon analogous vibration, but that between the laws regulating the *composition* of the one and the other there exists a definite and systematic relationship.

It is the purpose of this paper, through the means now available to science, to give the theory of this relationship; thereby placing beyond the region of doubt the existence of a precise mathematical harmony between the Arts which appeal most potently to man's æsthetic nature—Music and Painting.

Light and Sound are known as attributes of motion, called by one or the other name as the respective organs translate that motion in different ways to the brain; a certain number of regularly recurring motions combined into a single impression giving the sensation of Sound, another set in more numerous proportion giving that of Light. It must be remembered that these wave-motions have limits, at either end of which certain other vibrations exist, which are untranslatable by the brain either as color or sound.

This limitation, however, is not constant, and differs in various species of animals, in individuals, and even in the dual organs of the man.

Within the recognized limits in the case of sound, those having vibrations from 16 to 38,000 per second, there are some which individual ears detect, which to others are unheard.

Doctor Wollaston has shown that the power of the ear varies much in different persons, and that to many the shrill notes of the cricket and the bat are inaudible.

One ear is often less sensitive than the other in the same person.

The range varies in animals also, and with it the power of producing as well as hearing sounds.

M. Savart has pointed out that the ear of a calf is so constructed that the lowest sounds only are heard, and that its limit must necessarily be beneath ours. The lowing of cattle, doubtless, impresses themselves far differently from the impression made on us. Their quick detection of movement inaudible to human beings assists this conjecture. At the higher limit, too, we may instance many insects who both hear and produce sounds shrill beyond our cognizance.

The same variation is found in the power of sight; waves at each end of the spectrum have been demonstrated—heat rays at the lower or red end, and actinic or chemical rays at the higher or violet end, both of which are quite powerless to affect the retina of the eye. Tyndall has shown by experiment that some of these invisible calorific rays brought to a focus, and energetic enough to raise platinum to a red heat, do not cause the optic nerve, placed at the same spot, to be conscious of either light or warmth.* With this "personal" equation distinctly in view, where can the absolute limits of Sound or Light be placed? How rapidly or slowly must motion vibrate to produce that which is neither Light nor Sound? Logically such limits are impossible; that there is a limit to

^{*} Science for Unscientific People, p. 194.

the eye and ear, to each organ, is true; but the fact that this limit so varies in individuals admits the hypothesis, that to a perfect organ the perception of motion is illimitable.

A tuning-fork in agitation, held loosely in the hand, yet produces sound—inaudible, indeed; but, placed upon a firm, resonant base, from the same play of the limbs of the fork a clear full note swells out. The fibres of the wood or other substance are also imbued with motion, and take up and repeat with greater force the silent note of the tuning-fork.

It is to this power of sympathy or synchronism in various bodies and in the air that the impressions translated to the brain as sound are due; and by this synchronism may we understand the true nature of all sensations.**

The vibration of a column of air in a jar responsive to an approaching tuning-fork, and the dancing of "sensitive flames," are due to this power of synchronism. † These vibrations, communicated through various channels, eventually reach the brain, where they are conceived and called Sound.

Chladni has shown that, though the ears be stopped, two persons may converse by stretching a thread between the teeth, or pressing a stick against the breast or throat. Thus may the true manner in which sonorous motion is conveved to the brain be understood.

By watching the strings of a piano, it may be noticed that whenever a note is sung in a room, that note which represents the same note is thrown into vibration. A deaf man may be so placed as to hear every note that has been sung.

An instrument which acts under the same influence has been discovered in the ear by the Marchese Corti, and which is shaped like the harmonicon. Wedge-like in structure, it divides the cochlea of the ear, and is so constructed that the individual fibres can execute vibrations without throwing the remainder of the membrane into vibration. This wedgeshaped structure is stretched in the direction of its breadth, so that its fibres form a series continually diminishing. These fibres were examined in 1869 by Professor von Heusen of Kiel, and by Helmholtz proved capable of executing the movements suggested.

^{*} Tyndall on Sound, p. 321. † Philosophical Magazine, 1867.

We are thus led to conclude that it is the limit of the organs in the ear which alone limits the vibrations of motion being translated by it as sound—since all motion is in a condition to produce Sound; all Motion is Rhythmical, a series of undulations of waves to and fro.

Herbert Spencer* proves the rhythm of motion by illustration of natural effects—by the waving of pennants, the vibration of cordage, the sound from an æolian harp, the waving of water-weeds, the rippling of shallow streams and the serpentine course of rivers, the rapid rhythm of the screw of a steamer, and the lateral and vertical oscillations of a railway carriage.

All known forces, too, serve as examples; for Light, Heat, and Electricity, are all propagated by undulations.

The Northern Aurora and the stratification in vacuum tubes shows that the current is not uniform, but comes in gushes of greater or less intensity. In Sound we have interference and beats; in Light, the twinkle of the stars—both resulting from the same cause.

From the production of little ridges in the sand, when the tide is running down, to the rolling of the planets as they alternately present each pole to the sun, all motion is traceable only in a state of vibration.

Even in sensations which expend themselves in the production of Music, Dancing, or Poetry, this is seen—strong muscular efforts in dancing being alternated with weaker—Bars, Piano-forte, and the primary and secondary beat, marking out the Rhythm of Music.

Poetry, even, may be said to be "a form of speech which results when the emphasis is regularly recurrent—that is, when the muscular effort of pronunciation has definite periods of greater or less intensity, periods which are complicated with others of a like nature answering to the successive verses."

Pain has fits of intensity, and Passion comes in bursts.

Since, then, it must be granted that all motion is in a State of Rhythm, a state capable of producing sound—were the organ of hearing sufficiently extended—the following question

^{*} First Principles, Part 2, chap. xi.

arises: are the *pleasing combinations* of these motions such as might be inferred from a study of Musical laws? Will experiment bear out the inference and show that *all* harmonies result from obedience to similar conditions?

To define our terms: since musical combinations which form harmony are not the result of fortuity or accident, but are the consequence of obedience to well-defined mathematical laws, a short statement of these conditions is necessary.

Pythagoras, 500 years before Christ, recommended to students of Music the simple monochord, and with it all the fundamental laws may be illustrated.

A string stretched and then divided into three equal parts, and fixed at one point of division, will, when sounded, give two notes; that portion of the string whose length is just half that of the other will give the octave of the longer portion.

The string again divided into two parts bearing to each other the proportion of 2:3, when sounded will give notes which are separated by an interval called α *fifth*.

Thus dividing the string at different points, Pythagoras found the so-called consonant intervals in music to correspond with certain lengths of the string, and made the extremely important discovery that the simpler the ratio of the two parts into which the string was divided, the more pleasing was the harmony of the two sounds.

Two notes one of which is the octave of the other blend the most pleasingly together—their ratio is written down as 1:2; next to them, a note and its fifth, written as 2:3; the next most pleasing, a note and its fourth, whose ratio of vibration is 3:4—and so on, each combination growing gradually from incipient roughness to absolute discord, until, when the ratio of 13 to 14 is reached, interference is marked by beats, and the ear testifies its repugnance to so complex a relation of one note to another. The question to be mooted now comes in: since the harmonies—that is, the pleasing combinations of Music—follow a regular mathematical law, will not the result of Motion in other forms—in that of Light—exhibit in its harmonies any obedience to the same or analogous laws?

Modern Scientific investigation already proves how all known forces act in accordance with similar laws, the phenomena of any one illustrating the others, the difference being only in degree. Analogies between Nerve-force and Electricity, Electricity and Heat, Heat and Light, Light and Sound,* are everywhere admitted; why not, then, an analogy between the Arts built upon those scientific laws if one exist between the forces themselves?

Since obedience to the laws of Sound produces in Music pleasurable harmony, and obedience to the laws of Light produces in Painting a pleasurable composition, is not an analogy between Music and Painting as truthful as one between Sound and Light?

The means of producing both sound and light are in comparison alike. By striking a tuning-fork, by plucking a string, by hammering, Sound is produced, as Light by striking flint and steel, or by rubbing together two pieces of wood or quartz.

Light is motion, for it may impart motion to solids, and by its inseparable heating powers it can be made to turn wheels and lift weights.

Waves of sunlight are of different lengths mixed together, and producing, when so mixed, a sensation upon the optic nerve called "white light." This nerve, like the musical instrument in the ear, spreads out to form the retina, and has upon its terminal filaments most minute bodies termed the "rods and cones." Each of these, Melloni has suggested, accepts only the vibrations of that impinging Light-wave which synchronizes with its own; sympathetic vibration, in short, being the cause of the sensations of both Light and Sound. The waves of sunlight, by means of the prism, may be separated from each other and spread out upon a screen, with the longest, or red waves, at one end, the shortest, or blue waves, at the other, and the intermediate gradations orderly arranged between the two extremes.

Color is, in fact, but a phenomenon of wave-length, just as higher and lower notes are the product of shorter or longer Sound-waves.

But there is a great interval, it is said, between the highest Sound and the lowest Color-wave; and another difficulty, in

^{*} Quarterly Journal of Science, January, 1870; and Color and Sound, Dr. Macdonald, F.R.S.

the small range of but one octave which Color possesses, while Sound, taking a much wider range, extends over nearly eleven octaves.

But this difference is only one of degree; each scale is obedient to the same laws, though the vibrations of the one are so vastly more delicate and subtle than those of the other.

It is possible that a painting by Raphael, or the delicate play of colors on a pigeon's breast or on a shot-silk dress, may express as truly a Musical theme as one of Bach's fugues or a symphony by Beethoven. And although the relations causing the latter vary but from 100 to 3,000 times in a second, while in the former they pulsate from 500,000,000,000,000 to 700 million million times in the same period, still the precise relationship existing between the two scales may be so worked out that Painting and the coloring of dress shall be elevated to the status of a science based like Music upon mathematical principles.

The first step towards this definite analogy was discovered by Newton, who found the spaces occupied by the seven principal colors to be similar to the relative intervals between the seven musical notes comprising an octave. And recent investigation has shown that the actual ratio of sound wave-lengths to each other compare with the ratio to each other of wave-lengths of colored light.

New tables have appeared of the wave-lengths of different parts of the solar spectrum,* which require only to have the various wave-lengths reduced to a common ratio and compared with those of musical notes reduced to the same ratio to show a most marked correspondence.

The first column in the table here given represents the actual wave-length of the different *colors* as determined by Professor Listing; the second column gives the ratio of one set of wave-lengths to another taking 100 as the mean; the third column gives the wave-length in inches of the *notes* of the middle octave; the fourth, the ratio of one note to another, taking also as the mean 100.

A most remarkable table is the result, given as follows:

^{*} Transactions of the Royal Society of Upsala, 3d Series, vol. vi.

	Mean.										Mean.
Red waves	are	e 68 5 c	of a milli	m. in leng	th, 100	Ch	as wav	res 52 i	n. in	lengtl	h, 100
Orangė "	•	616	4.		89	D	" "	$46\frac{1}{2}$	"	"	89
Yellow "	61	560	**	" (81	\mathbf{E}	• 6	42	66	4.6	80.8
Green "	٤.	513	46		75	\mathbf{F}	6.6	39	46	44	75
Blue "	66	456	46	4.6	$66\frac{2}{3}$	G	66	35	44		67
Violet "	٤.	410	4.	• 6	60	A	"	31	44	**	60
Ultra-violet						\mathbf{B}		$27\frac{1}{2}$		44	53

And, doubtless, could we distinguish colors beyond the violet they would repeat themselves, and like the musical scale advance octave by octave with precisely similar notes. We have the high authority of Sir John Herschel and Professor Grassmann* in support of this inference.

The æsthetic analogy between Color and Sound, Painting and Music, is thus founded, and the intuition of this fact, to which Language is already a witness, proved to be truthful.

"Loud," "criard," "Schreiend," appear identical expressions, applying in English, French and German both to glaring colors and forcible musical sounds.

"Tone" is a term both of coloring and of sounds.

"Dim" and "dumb" in Anglo-Saxon appear closely related, expressing feebleness to either voice or sight.

Max Müller's researches show that in Sanscrit the word "Purûravas," which means the same as πολυδευχής—endowed with much light—has a root (ru) which, although meaning originally "to cry," is applied also to color in the sense of a loud or crying color.† Thus it is said, "The fire cries with light"; and the rising sun, in the Veda, is said to "cry like a new-born child."

From time immemorial, indeed, the sister arts have gone hand in hand, and a genius for the one seems to have been inseparable from a genius for the other. The great masters in painting were often at the same time good musicians;

"Not merely painters dwarfed in all their aims, But men who painted, builded, carved, wrote Whole diapasons, not a single note."—Story.

But this analogy must be carried further than similarity of production, than innate perception, or than agreement of

^{*} Philosophical Magazine, April, 1864.

[†] Chips from a German Workshop, vol. 2, p. 101.

ratios of wave-lengths, and an absolute identity be shown between the laws laid down by the masters of each art.

The identity in number of the seven notes in the visible prismatic scale and the seven notes of the musical scale already noticed, and the fact that the three principal colors—Red, Yellow, and Blue—which occur respectively on the first, third, and fifth intervals, and so answer to the chord admitted by all musicians to be the ground-work of harmony, strengthen the analogy.

The most pleasant combination of sounds next to that of unison is of a note and its octave, answering in painting to what is termed Reflection, where the expanse of color in the upper part of a picture is repeated, though in less extent at the foot.

The next combination of sounds in the scale of pleasurable sensations is formed by a note and its fifth, called from its predominance in Music "the Dominant," and answering in the Key of C to G: its analogue will be Blue. Then a note and its fourth, giving Red and Green.

In natural colors, these are the simplest and most accurate combinations. As a broad principle, it may be assumed that alternate colors produce common chords—Red, Yellow, and Blue, answering to C, E, and G; and Orange, Green, and Purple, to D, F, and A.

Given one note—C, for instance, supposed to be the analogue of Red—it should be supported by the other two either separately or in its *complementary* color, Green, answering to F. Purple should have its complementary Yellow, or be supported by Green and Orange.

Thus any key may afford examples, the working out of which will be of great service to those diffident of their own taste. For although good taste in dress, in the arrangement of flowers, and what is called *gusto* in painting, seem intuitive in the same manner as musical taste is a natural gift, yet an æsthetic rule may be most useful to those not so highly favored, and surprising results developed.

The juxtaposition of two colors nearly alike is distasteful to the eye, and, as adjacent notes sounded together, produce discord; suggesting that the indifference of yellow to green, red to orange, or blue to violet, is like the "beats" pro-

duced by sounding C and B together—the result of "Interference."

To this is due the green appearance of blue when strongly contrasted with yellow or viewed in a yellow light, and the likeness of purple to red when placed in proximity to blue.

Colors have a knack of calling out—or, more correctly, intensifying—their complementary colors from white. This should be borne in mind in the choice of dress, and those colors avoided whose opposites are unbecoming to the complexion of the wearer. A red dress is apt to tinge a pale face with green, and a purple dress to render it yellow.

In practically working out this theory, and translating the mental music of a group of colors into the audible music of life, the suggestion may be valuable that the instrument most capable of producing parallel sensations is the Organ; the "Diapasons," the "Flute," the "Principal," and the "Swell," being necessary to represent Loudness, Force, and the Tone of pictorial effect.

Colors vary as much in *quality of tone* as do sounds of musical instruments. C on the Trumpet and on the Flute are the same note, yet how different in character and effect!

The Organ represents most instruments in imitation by its stops varying from the "15th" to the "stop diapason"; one being soft, another sweet, another coarse.

With Colors this is perhaps the most difficult subject in the whole inquiry; for whatever quality may be observed in a single Red, Crimson, Scarlet, Indian Red, or any other kind, a similar quality should pervade its own scale, and all the other colors should be akin to it.

Shades or gradations of color may be symbolized by semitones; thus C-sharp for cherry-color, F-sharp for greenish-blue, and so on.

The expression to be conveyed will regulate the choice of key, one with many sharps to signify joy or light and merry movement, whilst a minor approaching as it were by a low wail almost to discord will give the idea of deep and suppressed sorrow.

The pitch in sound, then, has its equivalent in the tint or hue of color; loudness of note corresponding to "loudness"

or depth of the color, higher octaves representing fainter and lighter-tinted hues.

Since any two colors complementary to each other produce white, white may be harmoniously used with any color; for wherever two such colors may be necessary to complete a full chord, white may be truthfully substituted.

In a general sense, the lower the refrangibility of a color the nearer it will appear to the eye, and the greater the refrangibility the greater the apparent distance. Thus, in Nature, red—the least refrangible color—predominates in the foreground; yellow, green, and the intermediate tints, lie in the middle distance; and blue, with every variety of grey, forms the background of mountains, vapors, and sky.

As in singing it is the invariable custom to add power to the voice in the upper notes of a song, thus producing artificially a larger volume of sound, so in Nature the grey or violet of distant mountains or sky is greatly in excess of the naturally lower and stronger notes of the red cottage-roof, the peasant's cloak, or red tree trunk, that are more forward in position.

In such minute particulars is this analogy of sound and color strengthened that we look in vain to modern scientific researches for counter-evidence.

Certain chemical changes are attended by alteration of color, and when such is the case it invariably occurs in consecutive order, and either ascends or descends the scale; thus the green Iodide of Mercury under the action of heat yields a yellow sublimate, and subsequently becomes red. The red Iodide changes under the same condition from yellow to chrome and from yellow ochre to light-red.

Autumnal tints, descending the scale, may also admit some such analogy of cause and effect.

Spectrum analysis shows that new lines make their appearance in the spectra of certain elements when the temperature is increased. When, for instance, Lithium is heated a splendid blue band is obtaind in addition to the red and orange rays, showing that the undulations of this particular set of vibrations have become more intense.

The same phenomena are observed in the case of the Strontium spectrum, where no less than four red lines $(\varepsilon, \gamma,$

 \varkappa , λ) make their appearance on increasing the temperature of the metal.

Professor Roscoe* remarks that "The analogy between the production of these more highly refrangible rays and that of overtones, or harmonies of a vibrating string," must be patent.

M. Lecoq de Brisbandeau,† quoting also Plucker and Hittorf, notices similar results with the spectra of Azote, and finds strong analogies to musical harmonies.

From this discovery it is possible that the music of the spheres may no longer remain a mystery; it would only be necessary to write down the score of each star by spectrum analysis, and convert it into the corresponding musical chords, to realize how

"Each smallest orb * * * *
In his motion like an angel sings."

The sensations of taste and smell may also be the result of appreciated vibrations, and pleasing combinations have some general law of harmonies to govern them.

Between the voice and temper of the speaker an analogy has long been supposed to exist,; and indeed theories of the kind have their foundation in scientific fact.

There is an approximation to a law of distances between one planet and another from the primary bearing a strong resemblance to a musical ratio, which gives us some clue guiding us into the Pythagorean idea of the music of the spheres. The distances between Mercury, Venus, the Earth, the group of Asteroids, Jupiter, Saturn, and Uranus, and from the Sun, are closely analogous to the distances between eight octaves in succession. So, too, the four visible moons which revolve around Jupiter bear in the ratio of their revolutions or vibrations to each other a resemblance to harmonical notes. The first moon revolves in 42 hours, the second in 85, the third passes through its phases in 170 hours, and the fourth in 416 hours—giving the following series for the number of hours required for one revolution: 42, 85, 170, 416,

^{*} Spectrum Analysis, p. 144.

[†] On the Constitution of Luminous Spectra. Paris, 1870.

[‡] Philosophical Transactions published in 1700. See Curiosities of Literature, by D'Israeli.

the longest time corresponding to the lowest note. By imagining some fixed time wherein to count the revolutions of these satelites, and calculating them for the sake of example by the number of vibrations per second producing musical notes, the second is found to correspond to the octave below the first, the third to the octave below that, and the fourth to the dominant or 5th of the fourth octave below the first.

Speculations of this kind are necessarily vague, yet not the less truthful. Again and again have the discoveries of a future day been first but dimly seen and faintly outlined. A strong effort of moral courage is required to overstep the bounds of approved philosophy and to start a new theory with all its necessary imperfections and difficulties. "Philosophical guesses" are often censured, and this regardless of the fact that all our best established theories were guesses once. Men in a former era give the clue, others follow it into the Labyrinth. What if some of these guesses prove wrong? The spirit of Investigation, the life of Science is aroused; and if the "Light," Goethe so earnestly prayed for, be given, the silent music of flowers, sunlight, and the stars, may not forever remain unheard.

INTRODUCTION TO SPECULATIVE LOGIC AND PHILOSOPHY.

By A. VERA.

CHAPTER IV. (Continued.)

§ 3. On Ideas as the Essences of Things.

If we admit that all things rest on a corresponding idea, the next question is whether idea constitutes the essence of things, or whether there is above idea a higher principle, of which idea would be only the *form*—a force, the inward nature of which we are unable to reach, issuing forth from the divine essence, or, to speak more accurately, constituting this very same essence. This is, I need hardly say, the decisive and crowning point of the problem. All those who have sufficiently attended to the subject concur in admitting that ideas are necessary elements of things, that they are eternal

and immutable, and that their origin must be traced to the Absolute. But are ideas so identical with the Absolute as to constitute his whole Being? Or is there, besides ideas, some principle or essence of which ideas would be only forms or attributes? This is the point upon which opinions are divided. For, according to some, ideas are only forms, modes, or attributes; according to others, they constitute both the form and the substance—the very nature of the Absolute. Now, the following are the reasons which, in my opinion, establish the second doctrine:

First of all, if it be true, as we have demonstrated, that thought and idea are inseparably connected, so much so that they suppose each other; that obscure force, or that undefinable substance which is held forth as the source and substratum of ideas, cannot be thought but through an idea, and an idea which is adequate to it. And, as it is admitted that idea is the essential form of things, it follows that the idea of this substance will be its essential form, and as absolute and eternal as the substance itself. The idea of a substance is consequently adequate to this very substance; which means that this substance is thought as it is, and cannot be otherwise than it is thought. Thus, for instance, if gravity be an essential form of matter, this latter must be attracted towards the centre, and, if gravity thought, it would think itself as necessarily attracted towards the centre. If God is the Perfect Being, or the Absolute Spirit, &c. &c., he must think himself as such, and, vice versa, he must be as he thinks himself. This shows how deeply idea is involved in the inward and substantial nature of things. And this connection will become still more manifest if we consider the whole idea—I mean each idea in the whole range of its qualities and relations; if we describe and determine, for instance, the various and general properties of the triangle, or of organism, or of the soul. For one cannot see then what other character or substance may exist besides and above idea.

The difficulty we find in apprehending the true and complete nature of ideas is to be attributed, in a great measure, to the arbitrary selection I have pointed out*—a solution

^{*} See preceding section.

circumscribing the sphere of ideas, assigning ideas to one order of beings and withholding them from another, and leading thereby to the conclusion that this latter must rest on other principles than the former. For example, suppose any one admitting the idea of the Beautiful, and that it is this idea which imparts to the work of art its beauty,—if he do not admit at the same time the idea of matter, this he must derive from another source, and in this case the idea of the Beautiful will only possess, in his opinion, the power of stamping matter with a certain form. Again, it will be admitted that the operation of the mind must be performed according to certain fixed and invariable laws, i.e. ideas. But if we do not admit at the same time the idea of the thinking subject or of the Self, this also must be derived from some other principle or essence than idea, and then the laws or ideas which govern the mind will be only forms. It is the same process and mode of arguing we make use of in considering the nature of God; for we will fain acknowledge that ideas are inseparable from God's nature. But here also we argue with regard to God as we do with regard to the Self. And as we refer the Self and ideas to distinct principles, so likewise we separate in God ideas from his being and substance. But if there be the idea of the Self, there must be also the idea of God, and God cannot be and think himself but according to this idea. And when we endeavor to grasp the divine essence, and we think we soar above the sphere of ideas by attributing to God Consciousness, Personality, Goodness, Ubiquity, &c., we in reality are gathering merely ideal elements to build up the nature of God. Now these and similar elements must represent the real and objective nature of God, otherwise we would make up the nature of God of mere words and shadows. And, in saving that they represent God, I do not mean to say that they are only symbols or images, but component parts and elements, of his essence. For if we realize the Being of God as differing from the Thought of God, we are drawn into the same difficulty; and this difficulty does not only affect the human but the divine thought also. In fact, if Being and Thought be separated in God, or if the idea of God be not identical with his essence, the unity of the divine nature will be

broken, and neither God in thinking himself nor man in thinking God will think God, but a shadow of God—in fact, anything but God. Consequently, thought in God, or the thought of God, is identical with his Being; it is his Being intellectualized, if I am allowed the expression. But if there be, it might be objected, as you assert, a stage of existence where thought and being become identical, the thought of a thing would not differ from its being, and consequently to think happiness would be to be happy, to think the Good would be to be good, and so forth. Now this is not only at variance with language, but with vulgar and daily experience, as we think happiness without being happy, and the Good without being good.

This objection, which at first sight seems unanswerable, but which we have already implicitly considered, rests on an erroneous notion of the nature of Science and ideas, as well as on an inaccurate observation of experience itself. In fact, even if we confine ourselves within the limits of experience and of *subjective* thought, we shall see that if the thought of a thing is not the whole thing, it is at least its starting-point or its essential condition. Thus one is not happy and good unless he seeks after happiness and the good, i.e. not unless he thinks them; so that by abolishing the thought of them we would abolish the seeking after them, and consequently their possession and the sentiment attached to it.

However, this is not the proper way of viewing the question; for the essential and decisive point is whether there are absolute thoughts or absolute ideas of good and happiness, and whether these ideas be the principles from which the imperfect and individual good and happiness are derived. It little matters, then, that such individual should think happiness without being happy, or that happiness should assume different forms and vary with the different individuals, or that it be realized only in a certain number of individuals and in a certain sphere of existence. For from the fact of there being an idea of happiness, it does not follow that all must be happy, or that all must be equally so, no more than it does follow that all must possess beauty because there is an idea of the Beautiful, or that all bodies must be luminous because there is the idea of Light. It is rather the contrary

that must take place, and this because ideas determine each other, and can each of them fill up only a limited province and sphere in the whole system.

But here the difficulty principally arises from the mistake created by the confusion of individual and subjective with universal and objective thought, or of thought accidental with thought necessary and absolute. To think accidentally the triangle or the solar system is not to be either the triangle or the solar system. But the essential point is to know whether, besides the idea, the eternal and objective thought of the triangle or of the solar system, there can be another and higher essence of these beings. And if, to establish this latter opinion, we appeal to individual consciousness and experience, we do not only place ourselves without the pale of Science, but we are necessarily led to a result contrary to that which we aim at. In fact, we will not admit that ideas constitute the ultimate principles of things, and we raise above ideas being and essence, apparently on the ground that the notion* we form of the Absolute surpasses the region of ideas, and then we transfer to this essence the data of psychological experience, and make absolute consciousness in the image of individual consciousness. Now, to form such a conception of the Absolute is to deny it. For if God thinks as I do think in the capacity of a finite and individual being-if my individual consciousness is the type according to which I must represent to myself absolute consciousness,— God is finite and imperfect like myself. And it will be in vain for me, in order to reach the absolute, to combine such imperfect elements, to add to or to subtract from them, or to enlarge them indefinitely, so as to make up by their aggregate the notion of God; for I shall not be able to overstep the limits of the finite and the imperfect. Consequently, the principle to be laid down is not that God is such a thought, or such a will, or such a personality, but thought, will, and

^{*} This shows the inconsistency involved in all doctrine rejecting Idealism. For when we pretend that ideas are not the essences of things we must base our opinion on some rational ground, and this rational ground must need be some notion we have formed of essences and principles; which means that in rejecting ideas we make use of them, and that the very arguments and reasonings by which we pretend to overthrow idealism rest on some idea from which they derive whatever value they possess.

personality, or the idea of thought, of will, and personality.

Again, the argument which is put forth to prove the distinction of idea and being, namely, that we possess the consciousness of thinking — of thinking light, for instance, without the consciousness of being light-nay, that we feel conscious that the being of light is totally different from the thinking of it; this argument, I say, is to no purpose. For, as we have already observed, either there is a consubstantial connection between the thought and the being of light, or there is none. If we admit the latter position, we may say that in the thought of light there is no apprehension of real light but a mere delusion. Moreover, we ought to bear in mind that here the question does not turn upon individual existence, or any contingent and particular phenomenon, but upon essences and principles—a point which we lose sight of when we appeal to observation, self-consciousness, and sentiment. For essences, let them be ideas or any other principles, can be thought, but cannot be felt. And, far from their coming within the apprehension of sentiment, we must rise above the sphere of sentiment, of observation, and individual consciousness, to contemplate them in the purity and reality of their immutable and eternal nature. Thus, for instance, when we inquire into the nature of the soul, it is not a soul, but the soul we purpose knowing; and we do not think we possess the science of the soul until we have attained such a knowledge. And having attained it, it is not necessary that we should be such or such individual soul, or that we should feel so, to apprehend its being and qualities. On the contrary, the sentiment of the individual soul would dim the perception of the soul, depriving thereby the mind of the criterion by which the individual soul itself can be known. Thus to think the soul, the triangle, light, organism, &c., is, in the highest acceptation of the word, to think and to be all these objects. And this identity of idea and essence will be more clearly perceived by considering the nature of God. In fact, we hold that God is the ultimate principle of things, of Nature as well as of Spirit; of matter, light, &c., as well as of justice, liberty, good, &c. Now, either these words are destitute of all meaning, or they mean that God is all beings in general

without being any individually, and consequently that essences are merely *intelligible* elements, principles that pure and speculative thought alone can reach, and transcending the region of sentiment, of self-consciousness, and experience.

§ 4. Idea as the Ultimate Reason of Things.*

If ideas and essences are, as we pretend, identical, it follows that ideas contain the why and the ultimate reason of things. Why are there organic beings, or such a function or property in organism? Or, why do bodies move? and, what is the reason why they cannot move but in time and space, swiftly or slowly, or in a certain direction? Why such a phenomenon, or such a sensation? Or, what is the ultimate reason of the union of the soul and the body? The answer to these and similar queries will be derived from ideas, namely, that the body and the soul are united because there is the idea of such a union, and that they are united conformably to such idea; or that there are organic beings, phenomena, movements, because there are ideas of organism, phenomena; and motion. Such a doctrine, I know, we are unwilling to admit, and this for the same reason we object to assigning ideas to all things. Here also we are wont to make a solution, and explain one order of facts and beings by ideas, and another by some other principle. When asked, for instance, why such an action is good, or such a conception right, or such a thing beautiful, we answer that they are so because they are conformable to certain ideas of justice. truth, and beauty; which means that whatever justice, truth and beauty is in them they borrow from these ideas. But if any one hold that the ultimate reason of sensation, of organism, of the union of the body and the soul, lies in ideas, we will not listen to him, and will reject his doctrine as possessing

^{*} I need not remind the reader that in this and the preceding section I have considered all questions relating to ideas in their abstract and general form, and confined myself to showing in a general manner the necessity and nature of ideas without determining the nature of any particular idea, and this because such an inquiry belongs to particular branches of Philosophy. For instance, the idea of Religion belongs to the Philosophy of Religion, as the ideas of time, space, light, &c., come within the province of the Philosophy of Nature. Moreover, the value and meaning of ideas cannot be apprehended unless each idea is systematically deduced.

no meaning, and substituting mere and empty words for real and substantial causes. It is, as we may say, the same inconsistency we fall into. For if we give as ultimate reason of the justice of actions the idea of justice, we must also acknowledge idea as the ultimate reason of the union of the body and the soul; or, if we reject the latter, we must reject the former also. Therefore, for the very reason we admit other ideas, we must admit the idea of the soul and the idea of the body, and then the idea of their mutual communication. All the explanations contrived on the subject—the hypothesis of a plastic mediator (Cudworth), or that of physical influx (Euler), or that of occasional causes (Cartesius), or that of preëstablished harmony (Leibnitz)—are but various expressions of one and the same conception, namely, that there is an intermediate principle or essence by and according to which the soul and the body are united. The theories of preëstablished harmony and of occasional causes, which seem to point to another solution inasmuch as they seem to place the principle of this union in the power and will of God, rest, when attentively examined, on no other foundation. In fact, the divine will is not an arbitrary and contingent will, but finds its rule and guidance in the laws of God's nature, which are nothing else than the very essence of things. And this is proved by the fact, that even those who would attribute to God a contingent will and liberty—a liberty of choice or of indifference, as they name it—are compelled by a rational necessity to place above these attributes the nature itself of God, and acknowledge that God acts, and cannot but act, according to the laws of his nature. Therefore, it would be no explanation, or at least it would not be to give the ultimate reason, to say that the soul and the body are united because God has willed it; but we must go beyond this, and say that he has willed it because this union is conformable to the laws of his reason and wisdom, and that he has willed it but in conformity with these laws: which means, in other words, that there is in God's nature a certain idea, a certain essence, where the two substances are eternally and absolutely united, which ideal union is the ultimate reason of their actual communication. In fact, the ultimate reason of a thing is that internal and ideal necessity which makes the

thing what it is, and that it cannot be otherwise than it is; and this is its essence. And it must be remarked that when we have attained that degree of knowledge, we cannot proceed further and inquire for a higher reason. Thus, for instance, it would be illogical to ask why bodies fall, should it have been demonstrated that gravity is their essence. And all attempts to answer the question would prove vain, or would lead to the begging of the question. This explains also why it is irrational to ask the reason of the existence of God. For God is essence and absolute necessity; and in this respect what can be said of him is, that God is because he is.

These remarks may be easily applied to other ideas. Let us take life, for instance. All physiologists tacitly admit the idea of life: for when they investigate the laws of living nature and strive to determine their essential character and condition, it is in reality the idea of life they aim at, as it is this very same idea looming, so to speak, before them that guides them through their inquiry. But being unaccustomed to pure speculation, and unable to set their mind free from images and material representations, they expect to derive from observation and experience that which from speculation alone can be derived, thereby obtaining facts and consequences which they mistake for causes and principles. They are thus led to materialize ideas, and to seek the principle of life, some in animalcules (infusoria), a kind of material types by which are engendered all living beings; others, like Buffon, in an organic substance spread from eternity through the Universe, and stamped in succession with limited and individual forms. In reality, what they have in view is idea - a purely intelligible principle by which all living beings are produced, as all particular good emanates from the Good, and all particular beauty from the Beautiful. Of this principle they possess a presentiment, a glimpse as it were; but they are unable to reach it in their real and absolute existence.

§ 5. Idea is Force.

This is a consequence naturally flowing from the preceding considerations. For, if idea be essence and the ultimate

reason of things, it is also force, and the force the most irresistible, which may be called also necessity. The force that produces the plant, and according to which the plant grows and dies, is its idea. The real and absolute germ is not the individual and external germ we touch and see, but the idea by which the external germ is created and endowed with the necessary force for its growth and preservation. The force which every being is possessed of, as well as the *form* or law according to which it acts and displays its powers, lies in its very nature, i.e. in its idea. The difference of forces is owing to the difference of ideas. Matter is a force, and the soul is a force, and, as forces, they are the product of one and the same idea, and both produce similar effects; for instance, the soul moves the body, and a body moves another body. Their difference is to be found in their specific elements, or in what constitutes their special idea: for instance, space and time, extent, attraction and repulsion, &c., for matter; imagination, will, thought, &c., for the soul. Or, to quote another example, matter in its mechanical and matter in its chemical state are both force, which are only diversified by their specific typical structure. As idea is force, and the source of all forces, so the permanency and preservation of force do not rest on any quantitative (mathematical) formula or conception, such as, for instance, the quantitative absorption and reproduction of force, but in the permanency and immutability of its principle. For instance, with regard to the falling of bodies we may ask the question, whence comes the force that makes the body fall, and what becomes of the force that has been thus expended in producing the fall? Perhaps it will be said that the force is inherent in the body that falls, and that the amount of force that body employs in falling is absorbed by other bodies, which in their turn reproduce it, thus forming a circle—an alternate movement of absorption and reproduction, in which, the loss and the gain being balanced, there would be no actual dependition of force. Now this explanation, even were it correct, does not reach the real and ultimate source of the permanency of gravity. The absorption and reproduction, the quantity of force absorbed, and the quantity of force reproduced, are subordinate states or forms of force, and are depending on its very

nature and essence. Let us suppose the whole of the force of gravity in the Universe to be = 1,000, and this sum to be equally divided among say 100 masses, and this in such a way as, when one of these masses expends its 10th part, this is to be absorbed and preserved by the others; and, as we may suppose also that each mass is continuously supplying its share of force, there would be in the whole system an uninterrupted reciprocation of forces, absorbed and reproduced. Now it is clear that the permanency of the fact rests on the permanency of the principle that produces it, and that if there be no diminution in the quantity of force it is because its principle—its idea—is liable to no deterioration.

Mathematical formulæ symbolizing the law of gravity, or any other law, possess a real and rational value, in their abstract and general form, on the condition only that they are the expression of an absolute idea, independent of all phenomena of gravity, and to which these very phenomena owe their existence. When we say that force is inherent in matter, we use an expression which conveys a correct idea neither of matter nor of force; for it represents matter and force -- or the force that is in matter -- as things separable, whereas they are inseparable. Such is, in fact, the ordinary mode of viewing matter and force. We place matter on one side, so to speak, and force on the other, realizing the former as complete of itself, or as possessing its being and its essential qualities without the force of gravity, and the latter as something extraneous and superinduced; and this on the ground that we can conceive matter without such a force, from which we draw the consequence, or rather the assumption, that matter would not cease to exist even were the force of gravity subtracted from it. According to this view, gravity becomes a mere law of matter, as it is called; a certain form imprinted, as it were, upon matter, but neither matter itself nor an essential and component element of it. Now, if we give the subject the proper attention, we shall see that Being and Force are inseparable; that Being destitute of Force is no Being, and that Force possessing no Being is no Force. By Being I mean here that which constitutes a thing, and without which it could neither exist nor be conceived. What to an inaccurate observer often appears as an

accidental or external form, is in reality an integral element of a being's nature, as integral as its substance, and consequently is itself a force. For instance, thought and the forms of thought are inseparable, so that thought could neither be or act without forms, nor could these be or act without thought. So likewise in the body form and matter are so interwoven that whatever force is in it springs from the association of both; so much so, that, were either of them annihilated, being and force would be at once annihilated in the body. And so it is with all things. Consequently, gravity, attraction and repulsion, motion, &c., are not forces and forms added to, but essential elements of, matter; they are not forces acting upon the molecules, as one is wont to realize them, but forces that constitute the molecules and matter.

The doctrine that resolves matter into atoms or indivisible molecules, representing the latter as coalescing under the action of an additional and extraneous force,* cannot be supported on any experimental or speculative grounds. In fact, experience nowhere shows the existence of such elements; indeed, according to experience, matter would be indefinitely divisible, and there would be no such indivisible principles. Nor is the atomistic doctrine more justifiable on theoretic grounds; for either atoms are absolutely formless, or they possess a form—polarity, or weight, or volume, &c. In the first hypothesis, they are phantoms of the imagination, or rather empty words, as nothing could be affirmed or thought of them; not even that they are indivisible, indivisibility being a manner or form of being. If they are endowed with a form, this form constitutes with their substance, and as well as their substance, their inward and inseparable force. Whence it follows—1°. That force is not superinduced, but is one of their constitutive elements. In fact, if we consider extent, or the filling up of space in matter, we shall see that it presupposes both attraction and repulsion, and that it presupposes them as generating principles of matter; for if we suppress attraction there will be nothing to repel, and if we suppress repulsion there will be nothing to attract. 2°. That force and form, be it extent, or weight, or whatever it may

^{*} Molecular forces.

be, are the common properties of all such pretended atoms, or of all parts of matter; which means that there is a common principle—an idea—from which all parts of matter borrow whatever force or any other quality they possess.

If I have dwelt at some length on the idea of matter to show that idea is force, it is to have the opportunity of pointing out the inconsistencies and errors into which the Philosophy of Nature is necessarily drawn, the arbitrary and artificial theories to which it is obliged to resort when it attempts to explain Nature, its forces and laws, by any other principles than ideas. Yet such is the aversion of the Natural Philosopher to ideas, that he will prefer inconsistencies, or any irrational and untenable theory to Idealism. He must use ideas, for he cannot advance a step without their assistance, and he must use them to prop up his own theories; but he will look with suspicion, nay, with contempt, upon any doctrine teaching that ideas are realities, forces, and principles. Thus, for instance, instead of acknowledging the ideas of organism and generation, he will have recourse to hypotheses such as the engrafting of organism upon organism (epigenesis), or to the concentric envelopment of germs (emboîtement des germes), or to spontaneous generation (generatio primaria, spontanea), or perhaps to the will of God. Now these and similar hypotheses explain nothing, or, if there be any meaning in them, this they draw from some idea, and consequently they are rational and correct inasmuch as and to the extent in which the idea is so. fact, the will of God, when set forth as the ultimate reason of things, is the Deus ex machina, which, for the very reason that it may be used for all purposes, in reality demonstrates nothing. For a principle which may arbitrarily and indiscriminately be brought forward to explain the motion of my arm as well as the motion of the Sun, or any other order of phenomena, is no principle at all, and no Science can be founded upon it. Moreover, the will of God, as we have already observed—and the will of God more absolutely than any other will-must be ruled by law, and by an absolute law, which law is at once the essence of things and a part of God's nature.

As to spontaneous generation, if by spontaneous it is

meant that things-phenomena, individuals-are produced, or do produce themselves, without any previous and independent cause or principle that produces them, this is equal to saving that they come from nought. In any other sense, spontaneity presupposes a preëxistent principle, and therefore explains nothing. The same applies to epigenetic generation, and to the collateral hypothesis of the concentric involution of germs; for, even granting that the germ be endowed with an inexhaustible power of begetting similar individuals, or that it should contain, like some infinitesimal quantity, an infinite number of germs, such hypotheses will explain neither the initial germ, nor the unity of the species, nor even the grown up and complete individual. For the complete individual is not the germ, and though it may be supposed to be potentially involved in the germ, as the whole picture is involved in its outline, yet there are additional elements, properties, and processes, through which only its full growth can be accomplished. Besides, the germ cannot constitute the species, for the production as well as the relation of germs can only be explained by a distinct and separate principle. To say that the various germs or individuals are issuing from a common stock, and then to realize this common stock as an individual—the various plants from an individual plant, for instance, or men from a primitive manis to say that this individual being is at once the individual, the species, and the genus. Now let us suppose the fact to be so; let us suppose that there was a primitive germ or individual from which all subsequent germs or individuals have sprung. It is evident that there would have been two natures involved in the nature of such individual, namely, its own individual nature coupled with the common and general, i.e. the species. Now, if we suppress in the supposed individual its individual, limited, and perishable nature, what will be left in it is the common and universal nature, or the generating principle of all subsequent and similar individuals. And if we add to this that the supposed individual must be itself the product of a principle which embraces both the individual and the common nature, we shall arrive at the conclusion that here also idea constitutes the commou

stock, and the ultimate principle to which the individual, the species, and the genus, owe their origin and existence.

The fact is, the Natural Philosopher, if consistent, cannot escape Idealism; for he cannot even think force in general, or any particular force, such as gravity, light, &c., without ideas. And, when he comes to consider the objective nature of forces, if he rejects Idealism, he will be obliged to adopt Nominalism, and to realize force either as an empty word flatus vocis—or, like Kant, as a merely subjective form of thought; or to divide force and scatter it into infinitesimal divisions, i.e. to adopt Atomism; or to substitute mathematical quantities and formulæ for physical forces; - which means, in other words, that the Natural Philosopher, by rejecting Idealism, raises insurmountable difficulties, nay, he contradicts himself, and brings about a result opposite to that which he is aiming at. For he rejects Idealism on the ground that idea, in his opinion, is not a real principle, an essence, a force, and then he builds up forces and beings with merely subjective elements, with empty sounds, or with mathematical formulæ; in other words, with materials either destitute of all reality and force, or deriving from ideas all the reality and force they may possess.*

^{*} Has vires (attraction and repulsion), says Newton, non Physice sed Mathematice tantum considero. (Phil. Nat. Princ. Math., Defin. VIII.)—These words show that, in the opinion of Newton, there are two essential elements of which gravity consists, namely, the Physical and the Mathematical. It is not my object to examine here the purport of this division, or whether it is conformable to a strictly rational and scientific method to divide a being, substance, or force, into two parts, to consider one and to leave off the other. Here, confining myself to the present subject. I will only observe that if the Natural Philosopher admit that the mathematical element is an integral part of force, he cannot without inconsistency reject Idealism, as the pure mathematical element is nothing but idea. If, on the contrary, he consider force as independent of mathematical notions, his formulæ and combinations possess no value whatever, nay, they are delusive and fallacious, as they create the belief that mathematical notions constitute a real element of force. (See on this question my Introduction to the Philosophy of Nature, of Hegel, vol. I.)

THOUGHTS ON THE INTELLECT

IN GENERAL AND IN EVERY RELATION.

Translated from the German of Arthur Schopenhauer by Charles Joséfé, M.D. (Chapter III. of the "Parerga and Paralipomena.")

§ 27. Every procedure in philosophy pretending to be without any presupposition is nothing but boasting, for we always must regard something as given in order to proceed from it. This is what is meant by the $\partial \delta \zeta$ $\mu o \varepsilon \tau o \tilde{\nu}$ $\sigma \tau \widehat{\psi}$, which is the indispensable condition of every human operation, even of philosophy, because we neither mentally nor bodily are able to float in the pure ether. But such a point of procedure of philosophising, which we meanwhile have assumed as given, must afterwards again be compensated and justified. It either will be something subjective, as perhaps the self-consciousness, the imagination, the subject, the will; or it will be something objective, something that represents itself in the consciousness of other things, as the real world, the objects exterior to us, nature, matter, atoms, even a god, even a mere idea thought out at leisure as the substance, the absolute, or whatever it may be. Now, so as to make up for the arbitrariness committed with this, and to rectify the presupposition, we must change aftewards the stand-point and proceed to the opposite, from which we now derive, in a supplementary philosopheme, that which at first had been assumed: sic res accendunt lumina rebus. If, for instance, we proceed from the subjective, as did Berkeley, Locke, and Kant, with whom this manner of reflection reached its height, then we shall become possessed of a philosophy which is partly very one-sided (although, on account of the immediateness of the subjective, this way has the greatest advantages), yet it is not wholly justified unless we supply the deficiency by taking once more the conclusion as the point of departure, and thus from the opposite stand-point derive the subjective from the objective, as we did before the objective from the subjective. This completion of the philosophy of Kant I believe I have given in outline in the twentysecond chapter of the second volume of my principal work, and in the "Will in Nature," under the title of "Physiology of Plants," where I, proceeding from external nature, derived the intellect.

But if, on the contrary, we proceed from the objective, and immediately assume much as given—as, for instance, matter -together with the powers as manifesting themselves in it. then we soon have the whole nature, as such a mode of contemplation gives the mere naturalism, which I more accurately called absolute Physics. The laws and powers of nature, together with matter in which they inhere, constitute here the given, and consequently the absolute real, taken generally; but regarded specially, as innumerable suns and planets, floating in infinite space. These are therefore, as the result, everywhere, nothing but balls, a part of which are shining, the rest illuminated. Upon the last, life has unfolded itself in consequence of a process of putrefaction, which, in gradual succession, produces temporary organic beings, rising and perishing through generation and death according to the laws of nature governing the power of life, which, like all the others, make up the reigning (and from eternity to eternity) existing order of things, without beginning or end, and without giving account of themselves. point of this succession is occupied by man, whose existence also has a beginning, in its course many and great miseries, few and parsimoniously granted joys, and after this, like everything, has an end; after which it is as if it never had Our absolute physics, which here governs the contemplation and plays the part of philosophy, now explains to us how, according to those absolutely existing and valid laws of nature, one phenomenon constantly brings on the other or supplants it; everything here goes on very naturally, and consequently is perfectly clear and intelligible; so that we may apply to the whole of the thus explained world a phrase which Fichte used to express with deep, earnest, imposing accents, and a mien exceedingly perplexing to students, whenever he displayed his dramatic talents at the lecturing-desk, thus: "It is because it is, and is as it is because it is thus." Consequently, it would seem to be a mere freak, from this stand-point, if one sought still for other explanations of a world which has been made clear in a

wholly imaginary metaphysics, upon which again morals have been put, which, as they are not to be confirmed by physics, would have their only support in those fictions of metaphysics. From this arises the marked disdain with which natural philosophers look upon metaphysics. But, in spite of all the self-sufficiency of this merely objective mode of philosophising, the one-sidedness of the stand-point and the necessity of changing it, to make the object of investigation the recognizing subject, together with its faculty of recognizing, in which alone all these worlds, first of all, are present, will declare itself sooner or later, and under many forms and motives. Thus, for instance, at the foundation of the expression of the Christian mystics, who call the human intellect the light of nature, which they in a higher instance declare to be incompetent, lies the recognition that the validity of all such cognitions can be only a relative and conditional one, but not an absolute, for which, on the contrary, our present rationalists take it; who, just on account of this, disdain the deep mysteries of Christianity, as the natural philosophers disdain metaphysics; take the dogma of original sin to be a superstition, because their Pelagian common-sense has happily found out that one is not responsible for the sin of somebody else six thousand years before him. For the rationalist confidently follows his light of nature, and thinks therefore in all earnestness that he, forty or fifty years ago, was absolutely nothing, and afterwards originated from nought; for only in this way can he free himself from responsibility, that sinner and inheritor of sin!

Thus, as we have said, speculation, following objective cognition in many ways, but mostly in the unavoidable philosophical one, will begin to understand that the wisdom which was obtained on the objective side must be taken on credit of the human intellect, which for all that has its own form, functions, and manner of representing things, consequently must be entirely conditioned by it; from which follows the necessity of changing the stand-point, and of exchanging the objective procedure for the subjective one, that is, to take it once as subject of investigation, and to institute an examination into the authority of the intellect, which till now confi-

dently erected its dogmatism and with the greatest boldness judged à priori of the world and all things in it, even of its possibility. This brings us, first of all, to Locke; then it leads us to the Critic of Pure Reason, and lastly to the recognition that the light of nature is directed only towards the external, and that this, if it would bend itself back and illuminate its own internal, cannot do it, consequently cannot disperse immediately the obscurity which there prevails, but only receives with great difficulty a mediate knowledge of its own mechanism and its own nature by following the sideway of reflection which those philosophers have taken. But after this it will become clear to the intellect, that it from the beginning is destined to the comprehension of mere relations, which suffices to the service of an individual will; that it consequently is mainly directed towards the external, and even that it then is only a superficial power, like electricity; i.e. it only comprehends the surface of things, but does not penetrate into their interior, and therefore cannot understand or discern thoroughly and from the foundation a single nor the most simple of all these beings; though they are real and objectively clear to it, rather the main thing remains in all and everything a secret to it. This now will lead him to the deeper understanding which the name of idealism expresses, namely, that that objective world and its order, as it conceives them with its operations, is not unconditionally and in itself existing, but originates by means of the functions of the brain, and consequently exists first of all in this, and furthermore has in this form only a conditional and relative existence, therefore is only a mere phenomenon, mere manifestation. If up to this time man has investigated the reasons of his own existence, whereby he presupposes the laws of cognition, of thinking, and of experience, to be purely objective in themselves and absolutely existing, and only by means of these himself and everything else to be, then he now recognizes that, on the contrary, his intellect, consequently also his existence, is the condition of all those laws and whatever follows from them. Then at last he will also understand that the ideality of space, time, and causality, now clear to him, will leave room for a wholly different order of things than that of nature, which last however he is obliged to regard as the result or the hieroglyph of the former.

§ 28. How little in general the human intellect is qualified for philosophical reflection is exhibited, among other ways, in this, that now too, after all that has been said on the subject since Descartes, realism still confidently appears against idealism with the naive assertion that bodies not only existed in our imagination, but were also really and truly extant. But just this reality itself, this way and manner of existence, together with all that it contains, is just the thing, of which we assert it exists only in the imagination, and is nowhere else to be found, because it is only a certain necessary order of the combination of our conceptions. Notwithstanding all that former idealists, especially Berkeley, have said, it is only through Kant that we reach a real profound conviction of it: because he does not settle the matter with one stroke, but descends into the particulars, distinguishes that which is à priori, and accounts everywhere for the empirical element. But to him who has once comprehended the ideality of the world, the assertion appears really senseless that such a one could be present, even if nobody imagined it, because it expresses a contradiction; for its being present only means its being imagined. Its existence itself lies in the imagination of the subject. This is the significance of the expression: It is object.* In consequence of this, the older and better religions—that is, Brahminism and Buddhism—place, throughout, idealism at the foundation of their teachings, and require therefore its recognition by the people. Judaism, on the contrary, is a genuine concentration and consolidation of realism.

An innovation, introduced by Fichte and since reproduced, lies in the expression, the Ego. Here, namely, the mainly and absolutely subjective becomes changed into the object by means of the substantive form of expression and the prefixed article. For, in truth, "the Ego" signifies the subjective

^{*} If I look at any object—for instance, a prospect—and imagine I should be decapitated in this moment, then I know that the object would remain unmoved and undisturbed. But this only implies at bottom that I likewise would be there. This will be clear only to few, but for these few it may be said.

as such, which therefore never can become object, namely, that which recognizes, in opposition to and as condition of all that which is recognized. The wisdom of all languages has expressed this by not treating Ego as substantive; therefore Fichte had to do violence to the language so as to be able to carry out his intention. A still more bold innovation by this same Fichte is the insolent abuse he has carried on with the word "posit" (setzen), which, instead of being censured and exploded, is still in full use up to this day, as a standing expedient for sophisms and fallacious teachings, with nearly all dabblers in philosophy after his example and on his authority. To posit (ponere, whence propositio) is, from olden times a purely logical expression, which signifies that one, in the logical frame-work of a disputation or other discussion, meanwhile admits something as being true, presupposes it, confirms it, and thus gives it in the interim logical validity and formal truth, whereby its reality, material truth and real existence remain perfectly undecided and untouched. But Fichte by-and-bye obtained surreptitiously for this "posit" a real, but naturally dark and obscure meaning, which the simpletons let pass and the sophists continually used: since, namely, the Ego posited first itself and afterwards the non-Ego, positing comes to signify as much a creating, a producing, in short, to posit in the world, one knows not how, and everything what one without reasons would like to assume as existing and impose upon others, is then posited, and then it stands, and is there, wholly real. This is the method still recurring in the so-called post-Kantian philosophy, and is the work of Fichte.

§ 29. The ideality of time, discovered by Kant, is, properly speaking, contained already in the mechanical law of inertia; for what this expresses is, in truth, that mere time is not able to produce any physical effect, in consequence of which it, for itself and alone, does not alter anything in the rest or motion of a body. From this it naturally follows that it is not something physically real, but something transcendentally ideal, i.e that it has its source not in the thing but in the recognizing subject. Did it inhere, as a property or accidence, to things themselves and in themselves, then its quantity—that is, its length or shortness—would be able to

change something in them. But this it cannot do; rather it passes over things without leaving the slightest trace. For only the causes are efficacious in the course of time, but not at all time itself. Therefore, if a body is withdrawn from all chemical influences—as, for instance, the mammoth in the ice of the Lena, the fly in amber, a precious metal in a perfectly dry air, Egyptian antiquities (wigs even) in the dry tomb formed in the rocks-thousands of years do not affect or change them in the least. The absolute inefficacy of time therefore it is which, in mechanics, appears as the law of inertia. If a body is once set in motion, no time can take the motion away from it, or even diminish it: it is absolutely endless, if physical causes do not counteract it; just as a body at rest will rest to all eternity, if no physical causes enter to put it in motion. From this it follows that time is something which has no relation to bodies, nay, that the two are heterogeneous in nature; that reality which belongs to bodies cannot be attributed to time, hence this latter is absolutely ideal, i.e. belongs to the mere imagination and its apparatus; while, on the contrary, bodies show, by the manifold variety of their qualities and their effects, that they are not only ideal, but that at the same time something objectively real, a thing in itself, manifests itself in them, however different the thing in itself may be from this its appearance.

Motion is, first of all, a mere phoronomic occurrence, i.e. one whose elements are all taken from time and space alone: matter is that which is movable; it is already objectivation of the thing in itself. But now its absolute indifference towards motion and rest, by virtue of which, as soon as it has taken the one or the other, it will remain in it forever, and just as well is ready to fly through all eternity as to rest for all time, proves that space and time, and the contraries of motion and rest originating purely from them, do not at all belong to the thing in itself, which exhibits itself as matter and gives it all its forces, but rather are perfectly extraneous to it, consequently did not come into the phenomenon from that which manifests itself, but from the intellect conceiving them, to which they, as its forms, belong.

Let him who would form a lively image of the here mentioned law of inertia imagine himself to be standing on the

edge of the world, before empty space, and to fire a pistol into it. The ball will fly through all eternity with an unchanged direction; billions of years will never tire it, never will it be in want of space to fly farther, nor will it ever want time for this. Add that we know all this à priori, and are therefore perfectly sure. I think the transcendental ideality, i.e. the cerebral phantasmagoria, of the whole thing is here exceedingly perceptible.

A contemplation of space, analogous and parallel to the foregoing one of time; could perhaps be attached to this, that matter, through all division extending it, or also through pressing it together in space, can become neither increased nor diminished; as also in this, that in absolute space rest and right-line motion fall phoronomically together, and are one and the same.

An anticipation of Kant's teaching of the ideality of time shows itself in many sentences of the elder philosophers, of which I have already collected what is necessary in another place. Spinoza says without hesitation: "Tempus non est affectio rerum, sed tantum merus modus cogitandi." (Cogitata Metaphysica, C. 4.) Properly speaking, the consciousness of the ideality of time lies even at the foundation of the ever-existing notion of eternity. This, namely, is really the opposite of time, and thus all who understood it have constantly conceived of it, something they only could do in consequence of the feeling that time dies in our intellect only, not in the essence of things themselves. Only the want of sense on the part of the wholly incompetent has allowed them to explain the idea of eternity as an endless time. Just this led the scholastics to such utterances as, "Æternitas non est temporis sine fine successio, sed Nunc stans"; even Plato said in the Timeus, and Plotinus repeated, "liwios εὶχών χινητή ὁ χρόνος." According to this view, one might call time eternity drawn asunder, and found on this the assertion, that if there is no eternity, there also can be no time. Since Kant, in the same sense, there has entered into Philosophy the idea of a being which trascends time; but one should be very careful in the use of this, because it belongs to those which still might be thought, but by no intuition can be supported or realized.

It could easily be understood that time everywhere and in all heads runs on at the same rate, if the same were something purely external, objective, perceptible through the senses like bodies. But this it is not; we can neither touch nor see It also is by no means the mere motion or some other change of bodies: all this is rather in time, which therefore already is presupposed as a condition of it; for the clock goes too fast or too slow, and not the time with it; but the synchronistic and normal, to which this slow and fast is referred, is the real course of time. The clock measures time, but it does not make it. If all clocks stopped, if even the sun himself stopped, if all and every motion stopped,—the course of time would not be delayed for a moment, but it would proceed in its regular course, and pass now without being accompanied by change. Notwithstanding all this, time is not something perceptible, not something externally given and operating on us, therefore nothing really objective. Nothing then remains except what lies within us, and which is our own undisturbed advancing mental process, or, as Kant calls it, the form of the inner sense and of all our conception; consequently it forms the undermost scaffold of the stage of this objective world. This symmetry of its course in all heads proves, more than anything else, that we all are imbedded in the same dream, even that it is one being that dreams. (If one should wonder at this subjective origin of time, or even at the perfect sameness of its course in all heads, there would be some misunderstanding at the bottom: for the sameness here would mean, that in the same amount of time the same amount of time would pass; consequently the absurd presupposition of a second time would be made, in which the first, fast or slow, would pass.) The same can be proved in space, so far as I leave behind me all worlds; however many there may be, I still never can get out of space, but always bring this with me, because it adheres to my intellect and belongs to the perceiving machine in my skull.

Now time is that mechanism of our intellect by virtue of which what we take as the future now does not seem to exist at all; this illusion disappears as soon as the future has become present. In some dreams, in clairvoyant somnambulism, and in second-sight, this illusion becomes put aside; therefore the future presents itself as being present. This explains why all trials which have been made to frustrate, sometimes, were it only in accessory circumstances, what had been foretold by the seer of second-sight, must fail; for he has seen it in the reality of it, being present already at that time—just as we only perceive that which is present;—it therefore possesses the same unalterableness as the past. (Examples of experiments of this kind are to be found in Kieser's Archives für thierischen Magnetismus, vol. 8.)

Corresponding to this, the necessity of everything that happens, i.e. enters successively in time, presenting itself to us by means of the chain of cause and effect, is only the way in which, under the form of time, we perceive the one and unchangeable existing; or, also, it is the impossibility that the existing, although we perceive it to-day as future, to-morrow as present, the day after to-morrow as past, should not be identical with itself, be one and unalterable. As in the conformity of the organism to its indwelling purpose the unity of the will objectivating itself in it presents itself, though in our apprehension limited by space, this is perceived as a multitude of parts and their correspondence to the end; in the same way, the necessity of everything that happens, brought on by the causal nexus, forms the unity of the being, objectivating itself in it, but which in our apprehension, limited by time, is conceived as a succession of conditions, that is, as something past, present, or future; while the being itself knows nothing of all that, but exists in the "Nunc stans."

Separation in space is very much more easily annulled in the somnambulistic clairvoyance than separation in time, as the merely absent and distant are much oftener brought to perception than what is really still future. In the language of Kant, this could be explained from this, that space is only a form of the external, but time that of the internal sense. That space and time, according to their forms, are contemplated à priori, Kant has taught; but that this also can be done according to their content, is taught by the clairvoyant somnambulism.

§ 30. The clearest and at the same time most simple proof of the ideality of space is this, that we cannot annul space in our thinking, as we do all else: we can only empty it. Everything we can think away from space we can let disappear, we even can imagine the space between the fixed stars to be absolutely void, etc. Only space itself we never can get rid of in any way; whatever we do, wherever we may place ourselves, it is there, and has nowhere an end: for it lies at the foundation of all our thinking and is its first condition. By this is proved undeniably that it belongs to our intellect itself, forms an integral part of it, and indeed that part which furnishes the warp of the web upon which the variegated world of objects then is woven. For it presents itself as soon as there is imagined an object, and accompanies afterwards all movements, turns, and efforts, of the contemplating intellect just as constantly as the spectacles which I have on my nose accompany all turns and movements of my person, or as the shadow accompanies the body. If I remark that something, everywhere and under all conditions, is with me, then I conclude that it belongs to me; thus, for instance, if a certain odor, which I want to escape, presents itself wherever I go. The same is true with space: whatever I may think, whatever world I imagine, there always is first space, which never yields. Now if this is, as it plainly follows from this, a function—yea, even a fundamental function of my intellect itself—then the ideality following from this also extends itself over everything spatial, i.e. everything presenting itself in it, no matter whether this in itself have an objective existence; but in so far as it is spatial, so far as it has figure, size, and motion, it is subjectively conditioned. The exact and just calculations of astronomy are possible only through this, that space, properly speaking, is in our head. Consequently we do not recognize things as they are in themselves, but only as they appear. This is the great doctrine of the great Kant.

It is the most absurd, but in a certain sense the most fruitful of all thoughts, that space is independent of us, that it in itself is existing, and that a mere picture of it as of something infinite through our eyes should penetrate our head; because, whoever really perceives the absurdity of this; will

recognize immediately with this the mere apparent existence of this world, in conceiving it as a mere phenomenon of the brain, which, as such, will vanish with the death of the brain, and leave remaining quite a different world, the world of things in themselves. That the head is in space does not prevent one from conceiving that space after all is only in the head.*

ROBERT SCHUMANN.

By E. Sobolewski,

Schumann was a singular phenomenon both as a man and as an artist. All-absorbed in the world of tones, he would sit for hours in the company of friends without uttering a word. His whole life was a dream, often a very beautiful one.

Schumann made his first appearance in the musical world as Editor of "The New Musical Gazette" of Leipsic, the finest articles by his pen being signed "Florestan" or "Eusebius"; "Florestan" always floating in the seventh heaven, and "Eusebius" in a somewhat lower sphere.

The object of this "Gazette" was to propagate and promote the new Romantic School, in opposition to another "Gazette," advocating the Old School, and edited by Fink, in Leipsic. Schumann called this opposition the "Combat of David with the Philistines." For this reason artists and amateurs who contributed to his paper received the name of "Davids-Bundler."

In a composition by Schumann entitled "Davids-Bundler Dances," which is small in volume but great in spirit and originality, he painted the different characters of his friends the "Davids-Bundler."

Many of Schumann's compositions owe their creation to similar circumstances. Thus the grand Fantasy in C for the

^{*} If I say, "in another world," it shows a great want of sense to ask, "where is this other world?" For space, which only gives a meaning to all wheres, is just what belongs to this world: out of it there is no where. Peace, rest, and happiness, are only where there is no where and no when.

Piano, Op. 17, originated in the following manner:—It was resolved that a monument should be erected in memory of Beethoven; but how obtain the necessary means? The publishers of Beethoven's music could have solved the problem, as they had gathered riches by these publications, hardly paying Beethoven sufficient to make his living; but, calculating that the dead knew no necessities, they contributed nothing towards the monument.

The object was taken in hand by a few poor musicians and amateurs, and Schumann wrote this Fantasy for the occasion, intending to call it "Obolus," signifying the smallest silver coin of Athens, about two cents in value. He chose this title because he supposed, and but too correctly, that this composition, although worthy of Beethoven, would not be rated and paid for very highly by music publishers. It turned out even worse than he feared, for they refused to publish "Obolus" at all, not even as a gift!

Schumann then renounced the project and cast his "Obolus" aside. It was afterwards published by Breitkopf and Haertel under the title of "Fantasy." The performer of this and later compositions of Schumann will better understand the import and idea of these pieces by knowing their origin.

Schumann's Carnival Scenes, which Liszt executed with so much success at Vienna, owe their existence to the following circumstance:

These very interesting Genre-pictures, so full of life and spirit, of epigrammatic crooks and witty hooks, are all founded on the four notes—a, e flat, c, and b; constituting in the German language the four letters—a, s, c, and h,—Asch being the name of a small town in Saxony, the Residence of the Light of Schumann's soul! His heart was all love—it is expressed in every tone of his music. This love was not loud and passionate, not a la Verdi, nor in the least like the passion of Arditi's "Bacio." It was so silent, Platonic, and pure, that his bride, the celebrated Pianiste, Clara Wiek, afterwards his wife, was never jealous.

Many who performed these compositions did not discover that every one of the parts begins with these four notes, robed in entirely different fashions by time and rhythm. Schumann's Fantasy pieces, already very celebrated, were brought to still greater notice by Miss Ladlaw, a young English lady and a very distinguished piano player, while at Leipsic. These pieces, dedicated to her, are very beautiful, and not as difficult to perform as the "Carnival," which was written expressly for Liszt.

Yet the finest of Schumann's small Compositions for the Piano are his "Children Scenes." By a half prophetic, half poetic intuition, and that spiritual flexibility which is particularly a quality of objective power, the Composer rendered in tones the temper, situations, and different moments of child-hood to such a degree, that a sensitive soul in listening to them is touched to the inmost core of the heart. Critics often ask, "Whence comes this uncommon effect? what brings the hearer into such perfect illusion?" Nothing but the verity of the picture, the true representation and coloring of Nature, because the tone-poet was lost entirely in his object; in a word, because he found the naïveté, sweet carelessness of real childhood. This is the reason.

These compositions do not require much mechanical drill of the fingers, but a fine sensitive feeling and musical intelligence.

The amateur who desires to become familiar with Schumann should begin with his later compositions. The first productions of this artist are far more difficult in melodical and harmonical relation in spirit and form, and calculated more for players like Liszt and Thalberg than amateurs; for in the beginning of his musical career he expressed the deepest and most original thoughts of which he was master, and for this very reason often gave too much.

His whole power at that time, however, was not yet fully developed. He studied counterpoint, fugues, and canons, at a later period. Yet, with his eminent talent and intellectual power, he soon surpassed all his predecessors, excepting the old Italian masters and Händel and Bach.

Schumann was a master in every species of music. At his time there still existed Organists who condemned not only all Concert and Opera music, but all music in general which was not full of prolongations, suspensions, imitations, coun-

terpoint in all its intervals, and other such things belonging to the fugue style; yet even upon these Schumann imposed respect.

Once a friend of Schumann praised his compositions for the piano to one of these men, a young and talented artist— Granzian, organist at Dantzic, and composer of a very good "Crucifixus" in the style of Capella. Granzian glanced over Schumann's composition and said contemptuously, "Yes," pretty sweet and nice melodies, but not a bit of the right art in all those pieces; the smallest of Bach's preludes is worth more than the whole of Schumann!"

"But have you," replied the other, "looked minutely into their structure? Did you perceive that the smallest part of these compositions is based upon a very skilful canon?"

"Canon!" said Granzian, "let me see and play these wonders again."

He did; and a tear rolled from his eye, and in tears he spoke: "Your Schumann is a great master; the depth of Art in his works can scarcely be discerned!"

It was so, and always should be so. The study of Art must never be paraded in music. Counterpoint, fugue, and canons, are good servants, but should never rule as masters.

Euler, the celebrated Professor of Mathematics, composed, without the least knowledge of Music, by mere calculation, a very long vocal fugue. This fugue on paper looks very nice, but executed is horrible.

The celebrated philosopher Herbart also composed a sonata for piano and violin, wherein an adagio is in $\frac{5}{4}$ time, i.e. one accented part (the first) to four unaccented in the bar—difficult to perform and hard to enjoy. The apparent $\frac{5}{4}$ time sometimes found in Operas, as in Boieldieu's Dame Blanche, is in reality no $\frac{5}{4}$ time at all, but merely a combination of $\frac{3}{4}$ and $\frac{2}{4}$ time in one bar. Though mathematics is beyond question a very high science, yet it constitutes neither a principle nor a requirement for a composer of music. For this reason, but few, and often the best of them, have been little versed in this art, and often fell short in their reckonings in daily life—yea, being mostly in embarrassed circumstances, as Beethoven, Franz Schubert, and many others.

Schumann himself devoted and spent an inherited fortune for his art, and left his wife and children in no enviable circumstances when he died. He overlooked the necessities of this world in experiencing the wonders of the other, the world of tones, to which his soul belonged and where it sought its home: his greatest happiness was to soar to heaven and revel in the etherial paradise of the tone-world. For this reason his greatest success was achieved in compositions of a free, visionary nature; whenever his imagination was limited, his productions were not so perfect.

This we may notice in the overtures to Byron's Manfred and in Genovefa, operas composed by him. In this kind of music he reaches neither Mozart, Beethoven, nor Mendelssohn. Yet in his symphonies he excels the latter, not being confined to any definite limit, as is the case in the composition of overtures to operas or dramas.

The symphony, according to the old theorists, requires great and bold thought, free treatment of the harmony, strongly marked rhythms of different kinds, powerful bass melodies, free imitations, sometimes a theme treated as a fugue, sudden modulations, strong contrasts of forte and piano, crescendos,—which, by a melody rising in expression, are of great effect. For all this is needed talent and capability to combine all parts in such manner that the one does not destroy the other. Such a symphony is like an ode of Pindar; it elevates the soul to heaven, and needs the same inspiration, the same sublime imagination, and deep science of Art, as the works of this great poet.

Such compositions are Beethoven's and Schumann's symphonies: not so Mendelssohn's, whose symphonies are rather more like string-quartettes, with addition of brass and wind instruments, than compositions for instrumental masses. They are too fine and their character too sweet, and should never be placed on a programme for a great musical festival; excepting, however, the so-called Scottish symphony, wherein the original Scottish theme is well preserved.

Schumann's vocal compositions likewise embrace much grace. Some are a little broken, like Heine's poems; but many are very beautiful, as "Thou, my life! O thou, my

soul!" "Grudge me not"; "Mignon's Song," and many others. In compositions of this kind he approaches Beethoven and Schubert nearer than Mendelssohn ever did.

Schumann's greatest and best work in vocal music is "Paradise and Peri." Before he composed this upon the poem of Thomas Moore he intended to have chosen "The Prophet of Khorassan." Concerning the latter he wrote to me: "I have carried this dreadful fellow in my head for nine months, and now you step in and compose him as opera before me. So I must take 'Paradise and Peri,' for 'Lalla Rookh' is too beautiful, and has troubled my brain too much! I must pour out music for one or the other of these sublime Oriental poems!"

This composition is entirely new in its form. It is neither oratorio nor opera, yet approaching nearer to the latter. Its solos and choruses are of the most exquisite beauty. The instrumentation is magnificent—never too much for the singer, and never enough for the hearer. Every tone produced by an instrument appears to be a new star on the clear blue sky; even when the triangle sounds, though but a single tone, we look upon it as an important instrument, and consider its player an artist, whom before we thought but little superior to a bellows-treader.

Thus Genius understands how to transform a triangleplayer into an artist, who needs but little more than one note to be master of his entire musical science; and thus it transforms every musician into an Apollo, and the soprano and alto singers into Muses, even as Napoleon I. transformed his whole Italian army into heroes.

RECOGNITION.

By JOHN ALBEE.

Led by the thread which destiny unrolls,

Before our eyes have seen or ears have heard,
We feel the presage of familiar souls

And all our being is with longing stirred.

Partly I saw but more I felt her fair.

Such brows of gleaming white! and gleamed as well
Her ear transparent half hid in her hair,

As shines in seaweed a small rosy shell.

Was any hope or fear in her begun

That raised her eyes and breathed through all her breast?

Ages ago her soul with mine was one,

Nor even halved by a corporeal vest.

At last the hour was come in which I sought
To cross her path, borne on by Fate's design;
But, held by all the power of subtle thought,
I only told her eyes what shone through mine.

How soon with one quick thrilling glance she turned!

How well she knew this late, this old embrace!

The spirit's legend in the strange light burned,

And all the past was easy to retrace.

Our life's dark paths all lead one certain way; Love draws us on to all that is our own; We think we miss so much—so oft we lay Our hearts in hands that leave us still alone.

So many things just hint the real thing.

Too long I dallied with a phantom face

That only taught me how this soul to bring

Nearer to thine and its appointed place.

HERBART'S RATIONAL PSYCHOLOGY.*

Translated by H. HAANEL.

FIRST SECTION.

Principles of Metaphysic and Philosophy of Nature.

FIRST CHAPTER.

Of Soul and Matter.

150. The hypothesis of a soul, upon which suspicion has been cast by modern systems without just reason, must be restored; not, however, without qualifications, formerly unknown. The soul is a simple substance; not only without parts, but without any and every multiplicity of qualities. Hence it is *spaceless*; although, by the action of thought, it necessarily is grouped with other beings located in space, and, for every moment of time, in a definite place, yet such place is what is perfectly simple in space, or nothing in space, a mathematical point.

Note.—There are certain necessary and logically consistent fictions, where, in behalf of doctrines of natural philosophy, and hence of physiology, though not of psychology, that which is simple is considered as if parts could be distinguished in the same. Such fictions must also be applied to the soul in reference to its union with the body, without thereby attributing properties, really belonging to space, to the soul itself. Somewhat similar are geometrical fictions, e.g. when curves are viewed as consisting of rectilinear parts.

- 151. The soul is, for the same reason, timeless. Although in the mind, by which it is comprehended in company with other substances, it must take its place in time, or rather in endless eternity, such eternity, after all, or any duration of time in general, does not furnish a predicate really inherent in the soul itself.
- 152. The soul has no innate ideas or faculties either to receive or to produce. It is, therefore, no *tabula rasa* in such a sense as if impressions could be made upon the same foreign to it; nor is it a substance, within the meaning of Leibnitz,

^{*} J. F. Herbart's Complete Works, edited by G. Hartenstein. Vol. V., pp. 103-117.

endowed with unconditional spontaneity. In and of itself, it has neither perceptions, nor feelings, nor desires; it knows nothing of itself and nothing of other objects; it is in possession of no form of intuition or thought, of no laws of volition or action, and of no kind of predisposition to that effect however remote.

- 153. The quality of the soul, as absolutely simple, is completely unknown, and must remain so forever; it is no more an object of rational than it is of empirical psychology.
- 154. There is a relation between several simple and dissimilar substances which, with the help of an analogy from the material world, may be designated by the terms of pressure and resistance. For, as pressure is motion obstructed, said relation consists in this, that something would be altered in the simple quality of one substance by another, provided the first did not resist and preserve its quality against the perturbation. Self-preservations of this description are exclusively the one thing which is truly going on in Nature, and it is this which furnishes the connection between the changes we observe and the changeless substances.
- 155. The soul's self-preservations are (at least in part, and as far as we know) intuitions and simple intuitions, because the act of self-preservation is as simple as the substance which preserves itself. An infinite diversity of such acts is consistent therewith, for they are as diversified as are the perturbations. Accordingly, the variety of intuitions and their infinite combinations present no difficulty whatever. We are not speaking here of feelings and desires. These appear to be a compound of something objective, on one hand, and, on the other, of the act of preferring or rejecting; which will be explained hereafter. Nor are we already speaking of self-consciousness, or of anything that may be referred to the inner sense.
- 156. Opposition between soul and matter is not opposition of the quality of substances; it is opposition of our mode of viewing them. Matter, viewed as a substance of space, with forces of space such as we are in the habit of conceiving the same, belongs neither to the sphere of that which never changes, nor to that which always changes, but is a mere

phenomenon. Such matter exists solely as a *sum* of simple substances; and in each of these substances something is really enacted, the effect of which is the phenomenon of a (definite) existence in space.

Further explanation of matter consists entirely in showing how certain relations of space, as unavoidable modes of observation, correspond to the inner states of substances (selfpreservations), and how those relations, not being substances, are necessarily governed by these states in such a manner that an appearance of attraction and repulsion is produced. The proportion of the two latter prescribes to matter its degree of density, its elasticity, its form of crystallization by free condensation; in a word, its essential properties, which, in this sense, are absolutely dependent upon the qualities of simple substances. Matter never fills space with absolute identity of all parts (this geometrical continuum cannot be construed of simple parts), but it fills the same with an incomplete and mutual interpenetration of its contiguous simple part. (Compare note under § 150 in regard to this contradiction.)

A given kind of matter is impenetrable for those substances only which are not capable of altering the proportion of attraction and repulsion existing in the same. It can be penetrated by all its solvents.

Note. — To account for the preceding and following propositions, the author must refer to his Metaphysic, with which his Philosophy of Nature is connected.

SECOND CHAPTER.

Of Vital Forces.

157. Vital forces (it is best to speak of them in the plural number, as they could not originate or operate otherwise) do not exist unconditionally, and there is nothing similar to them in the simple quality of substances. Only a system of self-preservations in one and the same substance is capable of producing them, and they are to be considered as the inner culture of simple substances. They usually take their origin in the elements of organic bodies, the arrangement of which is fit to call forth systems of self-preservations in the individual elements. This is exhibited by the assimilation of nutritions matter.

158. The peculiar vital force, once acquired, is retained by the element after separation from the organic body to which it belonged. This appears from the fact that higher organisms need those of a lower order, and that plants need the decomposed parts of other organic bodies for assimilation.

Note.—All generation must be referred to the same cause without exception, including that of lower organisms from matter apparently crude, i.e. from matter which does not possess an organic structure—a sign from which the absence of vital force cannot be inferred. To see in this fact, on the other hand, original vital force, is a hasty conclusion. Within the sphere of our experience, there occurs no matter which could be safely affirmed to be crude. The whole atmosphere is full of elements which have acquired vital force in some organic body previously, and the number of such elements increases in Nature incessantly. Indeed we do not know whether such matter is not exchanged between the astronomical bodies.

- 159. All human investigation necessarily terminates in referring the organic forces to Providence, to the designs of which they owe their origin. No metaphysic and no experience reaches beyond; but every hypothesis, according to which lower organisms have been developed from crude matter and higher organisms fron those of a lower order, may be refuted by argument.
- 160. Psychology exhibits a preëminent internal culture in the example of the soul. The internal culture of every other substance, though devoid of conscious acts, is to be understood in accordance with this type, and, in connection with the above remark, that, where several beings constitute a material whole, their internal state will always produce a corresponding external situation. For this reason vital forces usually appear as moving forces; but their motions cannot, for the same reason, be comprehended by chemical or mechanical laws. (Internal culture is set aside in considerations of the latter class.)

The relation between psychology and physiology is herewith indicated: Psychology is the first, the preceding science; the other, unless content with undigested experience, is the second; for it has to learn what is internal culture from the first. A true definition of life cannot be obtained without the help of psychology.

Note.—Treviranus' Biology (vol. 1, p. 16) may be compared, among others, with regard to the difficulty of defining life. The plainest empirical

sign is, probably, assimilation, and we mentioned it, therefore, first. If an organism should be found without this characteristic property, we might have reason to doubt whether it is living or not, though it should be possessed of a soul (a case which, in general, may be conceived to be possible).

161. In accordance with the above, it is a matter of course that vital forces may be very different with respect to properties as well as to degrees. For a system of self-preservations may be different in different substances; it may appear changed in like substances according to the different perturbations; finally, there may be a greater or less number of self-preservations corresponding to the perturbations.

This explains the variety of what is prepared from the same kind of nutriment. The elements of which heart and nerves consist are, chemically considered, certainly not as widely different as they are by internal culture.

The causal connection between different parts of the same living body, or between this body and the outside world, presents no general difficulty. All causality, and in particular all cohesion of matter, depends upon the dissimilarity of elements. Consequently, the influence e.g. of nerves upon muscles cannot excite special surprise; nor is there any need of hypotheses of electrical streams, polar forces, and the like empty fancies which owe their existence to the most modern idiosyncrasies of physicists. There might be something true in them, and yet the most important points of the problem remain unanswered; and one puzzle is, after all, replaced by another.

THIRD CHAPTER.

Of the Connection between Soul and Body.

162. The connection between mind and matter in animals, and particularly in man, contains much that must be referred to the wisdom of Providence; but the miracle is not where we are in the habit of seeking the same, because we, on the one hand, suppose matter, as extended in space, to be a real substance, and because, on the other hand, we consider the human mind to be an innate thinking, feeling, and volition: so that every term of comparison is missing. Let us seek behind matter, as a phenomenon of space, the simple substances capable of internal culture and of which the pheno-

menon is composed; let us consider the mind as a soul with conscious actions (self-preservations); let us remember that self-preservations in other substances (directly in the elements of the nervous system) must correspond to the intuitions or conscious self-preservations of the soul,—and we shall understand that the chain of correlated self-preservations may stretch beyond even through an entire system of substances which present themselves as one body, and we shall not any longer find it enigmatical if a series of internal changes reaches forward and backward from the end of the toe to the brain and into the soul, without succession in time and without motion in space, though both may occur as accompanying phenomena.

163. But now a question reappears which has hitherto been unjustly neglected, the question concerning the seat of the soul. It is known that, on physiological grounds, not a place, but a region (between brain and spinal cord), may be assigned to it with probability. Nor is there any need for a fixed seat, for the soul may move in a certain region without finding the least intimation of the fact in consciousness, and without leaving the least trace of it to be apprehended by anatomical researches; moreover, this change of seat might afford a very fruitful hypothesis for the explanation of anomalous facts.

Note I.—This passage has created much astonishment. Let physiologists remember that their sphere of observation is confined to the limits of space, and they may leave it to the metaphysician to take care that no more is yielded to space than rightfully belongs to it. But, if they desire to share these cares, let them study metaphysics.

Note II.—There is no good reason for assuming the seat of the soul to be precisely in the same place in animals and man. It is probably in the spinal cord of animals, especially of the lower order. Nor is this all. It is not to be supposed that every animal has only one soul. The contrary is probable with regard to worms, parts of which continue life when cut off. There may be a great number of elements in the nervous system of the human body, the internal culture of which far exceeds that of the souls of animals of lower degree. (Besides, it should be borne in mind that signs of life are not yet signs of a soul. Life continues for a time without a soul in parts separated from their organism.) If disposed to attribute several souls to one human body, we should guard against distributing the mental faculties among them; on the contrary, they should be entire in every one; next, the most perfect harmony is to be presupposed among them, and to

such extent that they would appear exactly identical copies of the same original; but this is improbable in the highest degree, and the whole suggestion, on that account, entirely objectionable. If, in the conflict between reason and passion, it sometimes would appear to man as if he was possessed of several souls, he will find it to be a psychical phenomenon, the explanation of which will occur below, and which should not be confounded with the paradoxical opinion just mentioned.

- 164. The entire nervous system of the human body is, therefore, servant to a single soul; by means of that it is planted into this body, more a burden to the same than a help; for, if nourishment and a convenient place is provided, as is done in the case of complete idiots, it may vegetate like a plant. (Some stories of born idiots suggest the idea that these, possibly, were only vegetating bodies, without souls.)
- 165. The causal connection between all parts of the entire system, called man, being so close, it cannot appear strange that the mind is dependent upon the body in many ways. But it is certainly surprising that the nervous system, upon the whole, seems to have been created for the office of a servant, and we recognize this fact the better the more we see how few physiological suppositions are required to explain mental states and actions. It is, however, only in health that the nervous system serves; the same appears disobedient and self-willed in sickness; and in mental diseases, especially in fools, the relation between soul and nerves is completely reversed. This may serve as a hint not to consider the state of health as a mere phenomenon of Nature which could not well be different, but to behold in it with reverence a beneficent arrangement of Providence.
- 166. It would hardly be necessary to make mention of the communication with the outside world afforded to the soul by the body and limited by it, if I did not feel obliged to remark, that the popular opinion of a general organic connection of the entire universe should not be associated with the propositions here advanced, unless there is a desire to contaminate conceptions perfectly heterogeneous by each other.

Note.—There are no satisfactory reasons *a priori* for a universal causal connection, and experience ends with the faint glimmer of light exchanged by distant suns.

REVISAL OF KANT'S CATEGORIES.

By Stephen Pearl Andrews.

The categories of quantity, quality, relation, and modality, as developed by Immanuel Kant in his Critique on Pure Reason, lie so directly at the basis of the entire fabric of modern speculative philosophy, that any work done, either to render the application of these fundamental discriminations of thought more extensive and lucid, or to remove any lurking error in the classification itself, could not be otherwise than important. I propose in this communication to attempt both of these objects.

In respect to the first, the better understanding of the categories themselves, and especially outside of or beyond the abstract metaphysical aspect of the subject, the carrying of them over from being merely categories of the understanding into some objective sphere, and proving them in that manner to be also categories of Universal Being, what I shall attempt is only what is greatly needed in respect to the whole domain of abstract and transcendental thinking. is alike characteristic of the transcendental Metaphysicians and of the modern Positivists, or the school of external Scientists, that they have kept mutually so well asunder from each other. If the former have carried their abstract truths into the realm of objective science at all, it has been feebly, and only, as it were, for the purpose of illustration or defence; and, if the Positivist School of investigators have drawn upon the Metaphysicians, as, in fact, they often have, and largely, for the better statement of the laws which they are formulating in the realm of Nature, and indeed for the discovery of the laws themselves, it has been for the most part without credit and often quite unconsciously. be the work of the thinkers of the future to narrow and to span this gulf which severs Philosophy from Science, and to demonstrate the identity of law in both spheres. The abstractions of transcendental logic must be carried forward and outward into the domain of Nature on the one hand: and the observations, investigations and reasonings of the objective scientists must and will more consciously, and in

the end gladly, come into subordination to the governing influence of metaphysical, logical and transcendental thinking.

At the moment, I have in view, however, nothing more than to point out with, as I hope, some accuracy, the actual expression, correspondentially, of the Kantian categories in the domain of ordinary school grammar—language, of which grammar is the mere presentative science, being, as it were, the middle ground between the metaphysical and the physical domain; so that what is here accomplished in respect to language, may, by an ulterior application of the same analogy, be carried forward into the outer world.

The three categories* of quantity are Unity, Manifoldness, and Universality, which are no more than the same ideas which in respect to grammar we indicate by the terms "singular," "plural," and "common." These discriminations are made to apply, in the first instance, to nouns and pronouns, which are the entical parts of speech; but they are carried over thence into a formal relation with the verb, and are again expressed, at least as to the singular and plural, in the forms of the verb as they occur in Sanscrit, Latin, Greek, and the other more complex languages; and, in some slight measure, in all languages which can be said to have any grammatical development.

The verb, when analyzed and stripped of its connection with participial forms, is reducible entirely to the single verb to be, predicating existence, or serving as copula (of being or existence), expressing itself in the coupling of the substantive with the attributive idea. "I love," "I read," "I speak," signify merely, as is familiarly known, "I am loving, "I am reading," "I am speaking"; so that the true verbal part of every such expression resolves itself into the idea of being; whence it is that the verb, as the core of grammar, is, at the

Quantity.
Totality,
Multiplicity,
Unity,

Relation.
Substance and Inherence,
Cause and Dependence,
Reciprocal Action,

Quality. Reality. Negation. Limitation.

Modality.
Possibility and Impossibility.
Being and Not-Being.
Necessity and Accidence.

^{*} The categories, as in Seelye's translation of Schwegler's History of Philosophy, are as follows:

same time, the core of logic; and its subject-matter is being itself, separating into the "Seyn" and "Nicht-seyn" of Hegel, or into the Reality (otherwise, and better, termed Affirmation) and the Negation of Kant's categories of quality.

We are thus conducted to this second considerable group of the categories. The affirmative locution, as "I love," the negative locution, as "I do not love," and the interrogative locution with its double form, affirmative and negative, "do I love?" and "do I not love?" are the first distinctive and most important modifications of the verb, prior even to considerations of tense and mode, and so obvious, direct, and simple, that grammarians have overlooked them, and have not provided any technicality for the expression of these peculiarities. So far as affirmation and negation are concerned, it is quite obvious that we are here again in exact accord with the Kantian discrimination in question. It is not quite so obvious, but equally true, that the interrogative locution involves what Kant intends abstractly by the term "limitation." Spencer says rightly, "All distinction-is limitation." To discriminate in thought, as in any affirmation or negation from its opposite, is to insert mental limitation between them. Interrogation implies doubt, and dubitation is the discrimination and the holding in the balance before the mind of opposite propositions. "Do I love?" stands always in correlation with the opposite form, "do I not love?" The mind balances or wavers along the line of difference between the two ideas; and, in this manner, interrogation implies and corresponds with "limitation" as exactly as "Reality" with negation and "Affirmation" with negation.

We pass, in the next place, to the categories of relation. These forms are double. The first, which is inherence and substance (substantia et accidens, or, better here, accidens et substantia), is denoted in grammar by the adjective and the substantive in their mutual relation, the former as accessory to the latter. It needs only to be observed that the idea of adjectivity must, however, be so extended as to include the accidents, or case-relations, of the noun-substantive; that is to say, substantives in all other cases than in the nominative or vocative, which oblique cases are then denominated, in the technicalities of grammar, accidents, and are as really adjec-

tives as the words to which the name is usually restricted. It should be further observed that this relation is static, or occurs in space merely, and, as such, it has a relation to the modes of the verb, as will be pointed out subsequently.

The next of these categories is that of causality and dependence (of cause or agency, and operation or effect). has a similar relation to the tense of the verb, which appears best when the verb is in the active voice. The "causality," cause, or agency, is then represented by the nominative which names the agent, and the "dependence" by the verb which names the operation. The relation here is what I denominate motic, and thence it has the same relation to time, and so to tense, as that which the preceding static relation holds to space, and thence to the mode of the verb. relation of the tenses of the verb to time is universally recognized. That of the static relation of substance and accidents to modes of the verb is more obscure, but will be brought into some lucidity by the following considerations. The oblique cases of the noun, really, as we have seen, adjective in character, pass readily, by contraction and condensation, into the class of words called adverbs. "Rarely" means, for example, "at rare times"; "often," at "frequent times," &c. All adverbs may, in this manner, be reduced to oblique cases of nouns; and yet it is the function of adverbs not now to qualify substantives as static objects in space, but to qualify verbs as motic processes in time; and so preeminently it is the office of the adverb to modulate or modify the meaning of the verb—a function, therefore, the same in kind as that which, in the more general way, and with regard to certain modes that can be so indicated, is fulfilled by the socalled mode or mood of the verb itself. Mode is merely adverbiality wrought into the form of the verb. It is seen, therefore, that the verb—now meaning the compound verb, including the participle—denotes "the becoming" (Werden), and that the mode of the verb is the transfer to this motic aspect of being of the first double category of relation which belongs primarily to mere substantive and static form of being (Seyn).

The third and final one of this group of categories is reciprocal action (the interworking between objectivity and passivity). In this there is clearly nothing else than what we denominate the voice of the verb and its changing form from the active to the passive voice, with its double or reflected form in the middle or reflected voice, and its quiet subsidence into indifference in the so-called neuter verb.

We come now, in time, to the categories of modality, in which we are simply to take up, ex professo, the consideration of that which has been previously alluded to, and partially provided for, as the modes or moods of the verb. etymological identity of the names here, and throughout this exposition, is so striking and convincing that I have hardly deemed it necessary to advert to the subject, and nowhere more striking and convincing than in the case now before us. These are also double categories; and it is in respect to this group that I have the twofold undertaking in hand, first, to point out the grammatical analogies, and, in the second place, to establish certain important inaccuracies in the exposition of this class of discriminations as made by Kant himself; and I shall now couple these subjects with each other, The first of these categories is named by Kant that of possibility and impossibility. It will be seen, on slight reflection, that what is here meant is no more than bringing forward, in a new and special point of view, the same dubitation, now appearing as the potential mode of the verb which was previously expressed under the name of "limitation" and which appeared as the interrogative locution of the indicative mode. "I do not know whether I shall go or not," the last clause falling into what is denominated sometimes potential and sometimes subjunctive modality, is very closely related to the interrogatives, "shall I go?" or "shall I not go?" This intimate relationship is curiously and strikingly indicated in the Latin language by the force of the conjunction "an," which serves equally to introduce an interrogatory, or a clause involving this subjunctive dubitation.

But what is here said by Kant is by no means what is intended, or should be intended, by him. "Impossibility" is very far from being the true dubitative *antithet* of the term "possibility"; for nothing can be more certain *not to happen* than that which is impossible. What is meant, or should be meant, is not "what *cannot* be," but simply "what *may* not

be"; or "may happen not to come to pass." The compound relation is not between "may be" and "may not be" in the sense of "must not be," but that between "may be" and "may happen not to be." The antithesis is expressed in the phrase "whether is" or "is not," or by the phrase "may be" and "may be not"; and not by the phrase "may be" and "may not be," meaning "must not be," as when in peremptorily forbidding an act one says "that thing may not be," which last is the form that involves the idea of impossibility; and this notion of impossibility belongs not under this category at all, but, as we shall see presently, under the subsequent and final one relating to necessity.

The second of this series of categories is that of "being or existence" (the Hegelian difference between Seyn and Daseyn had not yet been insisted on) and "not-being or non-existence." Here again we have simply brought, in the performance of a new rôle, a category with which we are familiar under the name of reality, or affirmation and negation, and so close is the identity that there seems to be no other reason for the repetition than that affirmative and negative modality affect subjunctive and potential forms of thought in this case; whereas, under the categories of quality, it is the direct or indicative assertion or denial which is in question.

We come in the end to the third of this series of categories, which is stated by Kant as necessity and accidentality. But attention is now to be directed to the important fact that this also is a false antithesis. The real accidentality, as affecting the verb, is expressed in the affirmative and negative alternation. A thing may be or may not be, and occurrence or non-occurrence may be attributed to chance; whereas whatsoever is necessary is excluded from all connection with chance or accidentality. The true antithesis here, that which is meant, or should be meant, by this double category is "affirmative necessity" and "negative necessity"—the necessity to be or the necessity not to be (or to not be), one of which is just as peremptory as the other. The antithesis placed before us by Kant is really between the third and the second of this series of categories, and is not that which is intended. And now it will appear, on closer attention, that

negative necessity is exactly that impossibility which Kant has erroneously placed as the antithet of possibility. The true expression of the category here, therefore, is "affirmative necessity," called rightly by Kant "necessity," and "negative necessity" synonymous with impossibility.

The three categories of modality, as amended in accordance with these suggestions, will therefore stand thus:

- 1. Possibility and possibility not (to be).
- 2. Affirmative form and negative form of possibility and possibility not.
- 3. Affirmative necessity (command, imperative mode) and negative necessity = impossibility (inhibition, prohibition, negative form of the imperative mode).

Or, expressed verbally in the forms of the verb—1. "May be" and "may be not." 2. "May be" and "may not be"; or hypothetically "is" and "is not." 3. "Must be," "let it be," be"; and "must not be," "let it not be," "be not."

But affirmative and negative necessity are not confined to the imperative mode, or to the modal form of the verb. They glide in, in a very subtle manner, in connection with alternative locutions in a way which is now to be pointed out. Positive necessity lurks in the compound alternative proposition, "either is, or is nor"; that is to say, it is an affirmative necessity by excluded middle that one or the other be This predication may be made with positive certainty of everything, either that "it is" or "is not." The alternative involved is therefore affirmative necessity, and we are, as it were, commanded to bide by the one or the other proposition. On the contrary, negative necessity is involved in the similar logical inhibition, or negative command, not to affirm that a thing "is and is not" (meaning to be understood in the same time and the same sense), for this involves the logical principle of contradiction. Either "is" or "is not" as an unavoidable alternative is therefore an expression of affirmative necessity; and "not (i.e. don't say) is" and "is not" is a similar expression of negative necessity.

These considerations lead us to another important observation in close connection with logical accuracy and true definition, not so directly, however, involved in the subject of Kant's categories. I refer to a prevalent, if not indeed, as I believe, a universal inaccuracy in the use of the terms "positive" and "negative." Nothing is perhaps better established in the common idea, even with those most versed in critical discriminations, than that these two terms, positive and negative, are legitimately antithetical to each other, while yet this is not the case. The term truly antithetical to "negation" or "negative" is "affirmation" or "affirmative." "Affirmative" and "negative" make therefore the true coupling of terms in this sense. The true antithet of "positive" is, on the contrary, "dubitative" or "doubtful." A negative proposition is just as positive as an affirmative one. We deny as positively as we affirm; and that which is unpositive or non-positive is simply undecided or doubtful.

There remains much to be said, in this connection, of the relation of the objective case to Objectivity, of the dative case to Teleology, etc. But, to avoid making this communication too long, I omit these additional considerations—saying merely, in general terms, that Grammar repeats Logic throughout in a sense which has not heretofore been clearly expounded, or, so far as I am aware of, even intimated.

NOTES AND DISCUSSIONS.

As a continuation of the discussion of Trendelenburg's critique of Hegel, Professor Vera of the University of Naples sends us the *Avant-propos de la deuxième édition* of his French translation of Hegel's Logic now printing in Paris. The following extract he thinks will clear up some points controverted by Professor Morris in our January number.

Criticism on Trendelenburg.

Translated from the French of A. Vera, by Anna C. Brackett.

I will speak here of Trendelenburg's Logical Investigations; and I speak only of his work, because the other works on this subject—such, for example, as that of J. S. Mill—seem to me to possess no serious or scientific importance.* I have already examined this work of Trendelenburg

^{*} What is Mr. Mill's Logic? Is it formal Logic, or is it rather objective Logic? What name shall be given to it? Is it deserving of the name of Logic? I maintain

in the Preface to the second edition of my Introduction to the Philosophy of Heyel [p. 26 of vol. vii. J. S. Ph.], where I think that I have demonstrated that it is -I will not say an imitation and a reproduction, but a falsification of Hegel's Logic. I propose here to complete this demonstration.

Those who are not strangers to the works of German philosophy well know that Trendelenburg, after having adopted the meaning and the objective and absolute form of the Logic of Hegel, took the liberty of substituting for the first Hegelian triad (I mean the first in the order of abstraction), i.e. Being, Non Being, and Becoming, another triad, Being, Thought, and Movement. In examining this triad, the first question which naturally arises in our minds is this: "What has become of Non-Being in this dialectic, and how have Thought and Movement and then all the rest arisen without Non-Being? For it is plain that, in order to make any progress, Non-Being is quite as necessary as Being, and indeed even more necessary. But the reader can take courage. Non-Being is not lost, and it will appear at the proper time and place. However, it will not appear by the front door, but by a side door and in a kind of disguise.

After having, in the first part of his Investigations, given a certain number of categories, Trendelenburg seems to have discovered that all these categories could not have been developed without the intervention of a certain other category. And what is this? Listen to our author:—"We have shown," he says,† "in what precedes, the fundamental active notions (categories).‡ But with these categories there was implicitly (stillschweigend) bound up another category which we ought to consider as co-operative (in dieser Mitwirkung). This category is Negation (Verneinung)."

Thus Negation is placed here as an auxiliary of other categories. And what has it done? It has been active, but only implicitly. Are we in the sphere of Logic or in imaginary spaces? We must say that this implicit or silent work of the category under consideration is not its work, but a work which exists alone in the imagination of the author. For behold how, in the author's imagination, the work would be done. "While," he says, "Movement was producing definite formations (Gebilde), at first figures (Figuren) and numbers, there appeared in this work (in dieser That) a negative moment. There can be no figure unless there is a point of rest (Hemmung) in the generating movement. The unities of different numbers are posited as distinguishing them from each other. Each of them is

that the only reply possible to these questions is that it is a confused, undigested, and superficial collection from all the spheres of knowledge; which is only saying that it is the exact opposite of Logic, and the exact opposite of what it should be.

⁺ Negation. — The chapter entitled "Negation" is placed in the two great classes of categories designated by Trendelenburg by the names Real and Modal, and he gives us in these categories only the following remark as to the notion of Negation: — "We have already spoken of the fundamental active categories. With these categories there was implicitly bound up a notion which we ought to consider. This notion is Negation." Truly this is a very unceremonious way of disposing of it. But such bravado we know is often put on to conceal desperate situations.

[‡] They are logically active in the sense that, according to our author, they are developed from the category of Movement.

the work of an activity which at the same time collects and separates them (einer zusammenfussenden und zugleich ausschliessenden Thätigkeit). When determinate results come forth from general movement, and when categories spring from this action and from these results, determination appears as a limitation and limitation as a negation. Each determination in itself implies the negation of that which is not itself. Thus negation acts like an element of the thing; not like an original (ursprüngliches) element, but like a consequence; not as an end, but as a means; it acts in a positive term, but not as an independent element (ein selbstandiges für sich)."

Thus speaks Trendelenburg; and we reply that the more he says, the more he condemns his own theory. To begin with: Could there be anything more strange than for one to say to us, "Behold a category without which nothing would have resulted from Movement, but which, although Movement by its aid brought forth other categories, such as Number and its unities, kept itself aloof and worked only in secret"? We ask again whether there was ever made a stranger statement than this. It requires no great effort to see that into the development of the categories this category directly enters: that it works in quite as plain and active a manner as Movement itself, and asserts itself quite as loudly, nay, even more loudly, since without it we should have only an indeterminate Movement, even if we had any Movement at all. But why does Trendelenburg introduce this category here in so arbitrary and singular a manner, and why, at the same time that he assures us that it appears here, is he nevertheless obliged to make it interpose in advance, although he makes it interpose in dumb show? It is because this category is neither more nor less than Non-Being.

But notice the skill of the author: We know that Trendelenburg does not wish to have any Non-Being. He desires neither the name nor the thing. And it is precisely for this reason that he calls by the name of Negation what in reality is nothing else than Non-Being. But why will he not have Non-Being? Because if he had admitted Non-Being he would have been obliged to place it side by side with Being, and thus all the scaffolding for his logic would have been demolished. But since truth is stronger than skill, he has been obliged to have recourse to the negative element—to an element which in its highest abstraction is exactly Non-Being. Trendelenburg then brings in Non-Being; but instead of calling it Non-Being he calls it Negation; instead of putting it in its proper place as the opposite of Being, he makes it enter—one cannot imagine why—at the end of a series of categories which presuppose it, and which could have had no existence without its co-operation. After this, of what consequence is the silent and passive work which Trendelenburg attributes to Negation, and which should commence in the train of Movement, for the reason, he says, that Movement must have certain points of rest in order that it may be determined? To begin with, it is not correct to say that Negation comes in in the train of Movement either silently or loudly. Movement itself is Movement only because it is neither Being nor Thought (the other two terms of Trendelenburg's triad), and this means that Movement presupposes Non-Being. And not alone Movement, but Thought itself, presupposes Non-Being, in that it is Thought only because it is that which Being is not.

And now how can any one say that this Non-Being, without which neither Movement nor Thought would have any existence, and by whose aid they are determined, is a passive element, and that it is not an original element? Doubtlessly Non-Being is a passive and derived element, in comparison with higher determinations like Matter, just as Matter is passive in comparison with the more concrete spheres of Nature. This is an elementary point. But Non-Being-or, if it must be so called, Negation-is not passive and derived in the sense in which the followers of Trendelenburg must understand it, i.e. in the sense that Non-Being is less active, less essential, and less original, than Being. Being and Non-Being are equally active and equally passive. They are equally passive in that abstract and indeterminate Being; or Being-in-itself is worth no more than Non-Being; equally abstract and indeterminate as Non-Being by itself. They are equally active in that they both enter on equal terms into the constitution and development of more concrete terms, such as Movement or Thought. Movement is not Movement through Being and because it contains Being, but also through Non-Being and because Non-Being negates Being, and in negating Being makes Movement possible. In other words, Movement is, and is Movement quite as much because of Non-Being as because of Being, and because it contains them both, and, in containing them both, constitutes their unity.

Thus this passivity and this silent and subordinate work of Negation are not reasonable. They have no more reason and are no more founded on reason than Negation itself as Trendelenburg conceives it, or than that triad which he substitutes for the Hegelian triad, and on which he tries to rear the scatfolding of his Logic.

Immortality.*

Mr. Editor :

The speculative interest which attaches to the discussion of the purely rational grounds of a belief in immortality is not, it seems to me, shared in any great degree by the practical interests of life; for, apart from the fact that immortality has been brought to light by other than speculative ways for the satisfaction of men's ethical and emotional needs, that sort of immortality, be it said with respect, which the transcendentalist makes probable, is not of a nature to work powerfully upon the imagination either for good or bad. This consideration emboldens me to offer a few strictures upon the reasoning and presuppositions of Mr. Kroeger, and upon your own remarks, Mr. Editor, in the last number* of the Journal.

The "practical proof" which Mr. Kroeger adduces, and which seems to be a very peculiar modification of the Kantian doctrine, amounts apparently to this:—First, that the moral impulse or conscience could not exist unless it were an absolute imperative. Now all impulses considered in themselves are unconditioned, pure impulse, and in that sense absolute; but if it is meant, as seems, that the moral impulse differs in demanding all or nothing, the proof is called for, as we are certainly conscious of degrees of moral inclination: second, "that no individual can attain this complete and abso-

^{*} A continuation of the discussion in the July number of last year.—Ed.

lute subjection except at the completion of an infinite time"; which certainly means that no individual ever can.

As a conclusion from these astonishing premises, we learn that we can not act morally at all unless we "postulate" for ourselves an infinite continuance of our individual lives! It might be hard to show how the postulate helps so hard a case, especially so impractical a postulate as that about what shall happen at the end of an endless time. Mr. Kroeger, it seems to to me, instead of proving our immortality, has, if anything, proven our immortal immorality.

But the conscience does not make conditions—if it did it were no conscience—but simply acts in different individuals with different energy against the non-moral forces when they exceed their bounds.

As to the disturbance in the moral world consequent upon his or any one's removal from it, how can be think it would be greater than that consequent upon his advent? The physical universe would be as likely to blow up on the accession of a pebble to its matter as to collapse if one were removed; but it does not seem to me that anything can be added to or taken from the moral world, which is not the world of time, but of absolute relations.

I agree with you, Mr. Editor, as to the inadequacy as a first principle of every negative unity however obtained; I also concur in the definition of Individual by which you describe it as involving its own negative unity—that is, I conceive—as a self-related process. The individual therefore is immortal because self-determined, but then the demonstrandum comes to be that there exists a number of such entities. In your own words, "in the act of self-consciousness one realizes his identity wit—pure universality or Ego in general," and all particulars are annualled—y which we are distinguished as Tom, Dick, and Harry; so that it is a surreptition of the point in issue to say that Tom or Dick is conscious of himself, meaning to imply a discrimination of persons in the supreme reflective act. Empirically we are conscious of ourselves and much besides, but the speculative self-consciousness is not a determination of Tom, Dick, and Harry.

All unconscious individuals, you say, are transparent determinations of the absolute, and annulled as easily as determined, but conscious individuals have their own negative unity within them and alone remove their own limitations, &c. Again, I ask for the legitimation of the plural. Is it given in self-consciousness? It seems not. Is it reached by the dialectic? This seems to be the bearing of the theory of cognition by recognition and the doctrine of monads which you adduce here as illustrating the nature of the individual. But the monad remains an hypothesis; no legitimate dialectic can compass it; for there is no logical transition from a moment of comprehension to a self-developing monad, the only dialectical movement being by synthesis back to the negative unity of the comprehension. The monad is not logical, Leibnitz himself ascribing it to arbitrary creation and subjecting it to the possibilities of an equally super-rational destruction, while speaking of it as an effulguration of the Deity for lack of a deductive conception. Monadology differs from subjective Monism only by an hypothesis. Again, the self-realization of the Absolute cannot be inadequate, as you seem to say, because there is not virtually another or many other Absolutes in which to mirror itself; but, if speculative thought has any truth, the Absolute realizes itself by annulling its particular determinations, and the realization of this in our own consciousness is the moral task of life. Again, the stand-point of the Idea differs, it seems to me, from that of the Comprehension [Begriff] in embracing, not the negative unity of moments in either position of the absolute reason, but their vital unity in the three positions of the reason—its thesis, externality, and return to self. All that you declare of the individual's sovereignty of the conditions of time and space—that is, of law—is true, but not of the particular.

We are free only in our conscious identity with the Absolute—that is, free to do what is perfectly reasonable and good. There is no other freedom than that of reason, as Spinoza has shown; and I think, too, that I speak ex sententia magistri when I say that the only immortality he accorded the particular individual is that which inheres in all res singulares sub specie externitatis concepte.

B. C. SMITH.

University of Kansas, Lawrence, Kan., August, 1873.

Freedom of the Will.

From Kirksville, Missouri, where one of the State Normal Schools is located, and where some of the most vigorous thinking on Educational Psychology is done, Mr. O. P. D. writes regarding the Freedom of the Will: "I so frequently hear men, who pretend to be philosophers, speak of a 'part of the cause,' when really I could gain no idea of what they intended to convey. Again, frequently it is said (with reference to willing) that were there no motive there would be no volition; whence they conclude that the motive is at least a part of the cause of willing or volition."

The constraint of the will through motives is frequently urged by people who are caught in the meshes of fatalistic thinking. And all thinking is fatalistic so long as it thinks only in the form of determination through others and cannot think under the form of self-determination. The reduction of the illusion of motive-constraint may perhaps be accomplished best as follows:

- (a) A motive is an idea in the mind—it is a possibility seen as desirable.
- (b) As such, it must be formed by the activity of thought; thought must be its cause. It must be formed by the process of abstraction; for unless one abstracts from things as they are, he cannot form an idea of things as he would desire to have them.
- (c) An abstraction (i.e. a motive) from what is really existent cannot constrain or control an existent (i.e. the will, for example); for that would be to say that a somewhat (a motive or abstraction—something which is desired to be) can act before it exists, or that a possibility can cause a reality to change.
- (d) The causal relation of this is as follows: The Ego as thinking activity causes or originates a motive. Now if the motive *could* be said to cause or originate a volition, the volition would in fact be caused by the thinking activity through the motive as agent, and not by the motive as an independent entity.

Briefly stated: a motive has its being in the totality which thinks it, and does not possess reality until the mind gives it to it by realizing it through volition. The motive arises through the thinking, which abstracts from some reality its potentiality and thus makes a motive. If the motive becomes actualized it ceases to be a motive. To say that a motive constrains the will, is to hold that a non-existent constrains an existent. But to say that the motive constrains the will, and to acknowledge that the motive is caused by the mind, is to make the mind in volition causa sui in very deed. For mind initiates the act, which reflects back upon itself though the motive. Unless the archetype of the act exists for consciousness in the form of motive, the act, though spontaneous, is not for the Ego, and may be called involuntary, like the action of the heart, lungs, &c.

At the outset one must settle whether all things are externally constrained or determined. Finding that self-determination is the highest fact, he then can approach the subject of the Will. He must next investigate the ideas of Efficient and Final Causes. A confusion of these two species of causes prevents a solution. Efficient cause is the first principle of fatalism, Final cause is the first principle of freedom.

The excellent reflections on this topic in "Hazard on the Will" (published by the Appletons) are to be recommended to those interested. (See Book Notices in this Journal, vol. iv. p. 95.)

Editor.

We have received the following communication regarding Professor Vera's recent review of Strauss's book, noticed in our last number:

M. le rédacteur du J. S. P.—Ce qu'un grand homme a affirmé à l'égard des langues est encore plus vrai à l'égard des philosophies; celui qui n'en connaît qu'une n'en connaît aucune. C'est le cas du professeur Véra, qui, regardant, pour des raisons suffisantes, sans doute, la philosophie hégélienne comme la seule vraie philosophie,* et, par conséquent, la religion chrétienne comme la religion absolue,† vient d'entreprendre la réfutation ou plutôt la démolition de l'ouvrage récent du docteur Strauss, L'ancienne et la nouvelle Foi.1

Quoi que l'on pense des principes ou des résultats philosophiques du docteur Strauss, personne ne s'avisera probablement de nier que ce ne soit un écrivain excellent, un logicien profond, un érudit des premiers, et comme il n'est pas tenu d'accepter les principes de Hégel, l'attaque de M. Véra ne

^{*} Si la vérité est une vérité determinée, la philosophie aussi doit être une philosophie determinée, et, s'il n'y a qu'une vérité, il n'y a ni ne peut y avoir qu'une philosophie. Et cette philosophie, je ne me lasserai pas de le répéter, et, autant qu'il est en moi, de le démontrer, est la philosophie hégélienne. (P. 2.)

[†] Nous prétendons que la religion chrétienne est la religion absolue en tant que religion, et cela parceque, d'une part, c'est l'unité de toutes les religions, et que, d'autre part, son principe est celui qui se rapproche le plus de la philosophie, de telle façon que la christianisme est virtuellement la philosophie. (P. 73.)

[‡] STRAUSS, L'Ancienne et la Nouvelle Foi. Par A. Véra, Professeur de la Philosophie à l'Université de Naples. Naples: Detken et Rocholl, Place du Plébiscite, 1873.

saurait être que très-faible, ce qu'elle est en effet. Bien que nous ne soyons pas de ceux qui refusent à la religion toute validité,-elle a, bien entendu, sa valeur et sa place à elle, dans les cœurs de ceux qui ne peuvent monter à un point de vue philosophique-cependant, nous affirmons que la religion, comme telle, ne saurait jamais être absolue, ni virtuellement ni autrement, et qu'à mesure qu'elle devient philosophique, c'est-à-dire, qu'elle se rapproche de l'absolu, elle cesse d'ètre religion et devient philosophie. Aussi, sur ce point, nous sommes parfaitement d'accord avec Strauss, qui, selon nous, ne fait que combattre, dans l'intérêt de la philosophie, une religion devenue obstructive au progrès et, partant, plus qu'inutile. Cela ne veut pas dire que nous approuvions la philosophie par laquelle Stranss désire remplacer le christianisme; tant s'en faut. Enfin nous prendrons la liberté de rappeler à la mémoire de M. Véra une chose qu'il paraît avoir oubliée, savoir, qu'attaquer un ouvrage avec des armes tirées de l'arsénal d'un système que l'auteur de cet ouvrage ne reconnaît pas, n'est pas du tout dans l'esprit de la philosophie de hégélienne dont il se déclare le disciple dévoué.

St. Louis, le 10 Avril, 1874.

THOMAS DAVIDSON.

Is Inorganic Matter Dynamical?

Mr. Elitor:

I read in your journal, and have read before, that both Kant and Hegel define inorganic nature as dynamical; it is simply mathematical. "Dynamics appear in organic nature as well. Is not our idea of power from our own consciousness in organic nature? If not, that of horse power certainly is derived from organic matter.

In inorganic nature, form or structure (e.g. crystallization), composition (witness the law of definite proportions), motion, force in its development and in its distribution, harmony, and so forth, are all regulated mathematically. Organic nature breaks loose from these conditions and limits, and is emphatically teleological. Here form, composition, motion, and the outgoing of force, is according to the end in view. In both departments the properties of matter are the same. In each, these properties are made to work out all that can be educed from them under their respective limits. Take, for instance, the properties of elasticity and of muscular contractility. The former is cohesion with a to and fro movement among the cohering molecules according to mathematical law; the latter is cohesion with a to and fro movement of the cohering molecules according to volition. The highest attainment of the first is perhaps the production of musical sounds. The last stops not here; but while it loses nothing that it has attained in inorganic nature, strives through all inferior animated nature till it reaches its final goal in the human voice, viz. in the production of articulate language. Thus, with the greatest economy of means, the same apparatus that distributes the air to the blood to enable it to avail itself in the most perfect manner of its chemical properties, so modifies itself in this very act of distribution as to compel the mechanical properties of the same substance into subservience to the highest and latest function which mind performs in connection with matter.

* * * * * my question is this: is not the order of inorganic nature strictly a mathematical order, with the same life or spiritual activity underlying it as that in which we live and move and have our being?

Rockport, Mass., Dec. 4, 1873.

BENJ. HASKELL.

Mr. Editor: Can Matter Produce Mind?

Another absurdity wherein materialistic philosophers choose to involve themselves is this: they first sneer at the notion that thought could have produced any matter, no matter how fine, ave, though as fine as the finest gases or the thinnest other; and the next moment we find them engaged in discovering some sublimated sort of matter, phosphorus if you please or anything else, the gases whereof finally culminate in thought. You cannot take hold of any Popular Science work now-a-days without meeting notices of attempts that have been made to get at this final link whereby matter is changed into mind, and other notices abusing all who dare to talk of mind's producing matter. As if either statement were not equally absurd and foolish! It is generally pretty laughable to watch a dog trying to eatch his tail; but for men who acknowledge that they have passed beyond the gorilla stage of life, and that they have consequently lost their tails altogether, to attempt the same problem is a little more than ridiculous. No sensible mind lays claim to the power of producing matter, and hence no matter, whether fish-like or otherwise, should be so recklessly bold as to assert its power to produce mind. That it may produce idiocy is clearly illustrated every day, and will be disputed by no attentive reader of popular books on physical science.

Can Thought make Granite?—A remark very characteristic of the aver age Englishman's notion and comprehension of the nature and object of Speculative Philosophy was recently noticed in the Journal in an article by Dr. J. Hutchinson Stirling. A great English thinker put to Dr. Stirling, as a final extinguisher, this question: "Can thought make granite?"

With this simple question the materialistic Briton must have thought he had crushed the idealistic Professor beyond all chance of recovering; nor is it to be supposed that the supreme idiocy of asking such a question ever entered the interrogator's mind, since he doubtless belonged to the same school of English philosophers that daily propound to themselves seriously another question just as absurd, "How does beefsteak make thought?" and use their microscopes and other ingenious instruments in attempts to solve that question, to the infinite amusement of those who perceive the absurdity.

The materialistic Englishman—and for that matter we may add American of the same notable school—knock their idealistic opponent down by asking an absurd question; and then go and ask themselves another question, its exact counterpart in idiocy, and knock their own heads against it, as if it were not from its absurdity equally unsolvable.

Meanwhile the idealist is content to confess that thought cannot make granite; though he also would like to claim that neither beefsteak nor the accompanying onions can ever make thought.

St. Louis, March 25, 1874.

A. E. KROEGER.

Πάντα ρεῖ.

By Austin Bierbower.

Not all that is, is in full being now;
Its other half has been, its future half will be;
All time is needed for a thing's full self,
Which is not, but becomes, and passes by degree.

One point of time, no more than point of space,
Holds all things in its compass, or holds one;
Things are extended both in date and place,
And what is here is there, and what is now's anon.

Nought is, nought was, and nought will ever be,—
All time summed up alone must give the thing;
To have been, be, and be-about-to-be, 's
Its way,—past, present, future, in its form of being.

What is is wanting where it joins the past,
And needs a cause to make its being full;
'Tis wanting when it joins the future too,
And straight demands th' effect to be full fact at all.

Things are not, but are changing, and the whole, (If whole there be where things are infinite,)
No more than single part can be at once,
But all's becoming, and is never self-complete.

They are not, but are passing; not to be 's
Their nature, or remain in stable state, but going, unbecoming and becoming, passing hence
And hither coming in perpetual flow.

Each point with all in some connection stands;
Twofold it reaches into space and time,
And through the worlds and through eternity expands,
Exists not in itself, but with the whole combined.

Attraction holds it to the sun and stars,
Causality to other days and years,
(Whose force still in it makes it partly past,)
And in its latent germs exists in future years.

One mighty whole through space and time dispersed, With everywheres its parts and nowheres all, The universe in two dimensions spread, Attraction and causality uniting them a whole.

BOOK NOTICES.

Föreläsning om Nyttan och Befogenheten af Allmänna Föreläsningar, hållen i Warbergs Högtidssal den 7 April 1872; jemte Grundschemat till ett Philophiskt System i populär framställning af Emanuel Hvalgren. Köping: J. F. Säfberg, 1873.

The author of the above paper, Emanuel Hualgren of Warberg, Sweden, expects to publish a large work unfolding completely his "Theocosmic System," an outline of which is before us. Some idea of the system may be arrived at by studying the articulation of the categories in the following scheme:

A. The Idea-Spirit (Godhead) [Creator].
B. Spirit (the Universe) [or the Creation].
I. Elementary Spirit (material life).
a. Barotic Spirit (gravity).
b. Photeric Spirit (light).
II. Biological Spirit (spiritual life).
a. Erotic Spirit (love).
b. Eleutheric Spirit (freedom).

The antithesis of weight (centripetal force) and light (centrifugal force), or of contraction and expansion, reappears continually in Nature. Its analogue in the spiritual world is the antithesis of love and freedom. Love is centripetal and freedom centrifugal. The æsthetic and religious phases of Spirit are centripetal; the practical (i.e. legal and political) and theoretical phases of Spirit are centrifugal. Arranged in the order from highest to lowest, the phases of Spirit (mental and material) are as follows: (a) Logical (reason), (b) Noëmatological (wisdom), (c) Thelematological (will), (d) Themistiological (justice), (e) Pathiological (feeling), (f) Psychiological (powers of the soul), (g) Phantasiological (imagination), (h) Harmoniological (order), (i) Phenomenical (illuminating), (j) Chaotic (nonbeing), (k) Genetic (formation), (l) Chemical (becoming), (m) Crasiotic (heat), (n) Ontologic (being), (o) Chromatic (colors), (p) Stereotic (thing).

Die Neue Zeit. Freie Hefte für vereinte Höherbildung der Wissenschaft und des Lebens. Herausgegeben von Dr. Hermann Freiherrn von Leonhardi. Prague: F. Tempsky. Publisher.

We have received the first three numbers of the third volume of this most interesting publication, the general scope and tendency of which we have described in a previous number of the journal. We then promised at some future time to give our readers a sketch of the philosophical system of Professor Leonhardi, based upon that of Krause, but various reasons have compelled the postponement of such a work. It would require, indeed, not an essay, but a good sized book, to convey an idea of the various features of the Krause-philosophy in its constant intermingling with the affairs of human life. Though a part of it claims to be pure Science of Knowledge—a term, by the bye, which Krause has revived from Fichte's terminology—it almost everywhere overleaps the barriers of theoretical knowledge and enters those of practical life, in which it proposes to effect a thorough reformation. Hence all the agitations of our present social condition, from the woman movement down to the Kindergarten system,

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are, in one way or another, considered in their general relation to the development of humanity by the philosophers of the Krause school, and treated in the *Neue Zeit* with constant reference to their latest phases.

The numbers before us open with a lengthy article by Dr. II. Ahrens, Professor in Leipzig, upon "The False Paths in the last German Intellectual Development and the Necessary Reforms in Our System of Education," an article as timely for the Germans, in their new and unsettled political and social condition, as it is instructive for foreigners. Then follows an article, by Professor Leonhardi himself, on the "Science of Rights and the Necessity of Establishing a System of International Law for all the Nations of the Earth." The Professor demonstrates pointedly how the Geneva Convention has shown the possibility of such an international judicial tribunal, and that there is really nothing impracticable in its execution.

Dr. Hohfeld of Dresden furnishes a contribution on the importance of Julius Froebel for the present age, while Dr. Roeder discusses the relation of Morality and Law, and Dr. Stamm writes on the relation between Labor and Capital. Two excellent articles are devoted to showing up the absurdity of the Darwinian theory; but probably the best essay in the volume, of a purely philosophical character, is the last one, on Space, by Dr. Leonhardi. There are, however, so many good things in this periodical that it is impossible to notice them all in a mere sketch. We can cordially recommend the *Neue Zeit* to all students of philosophy as well as to all those who desire to keep themselves posted on the advancement of social, political, religious and intellectual life in Germany.

Transactions of the Wisconsin Academy of Sciences, Arts, and Letters, 1870-72. Madison, Wis.: 1872.

The contents of this volume are, first, an able Report by the President, Dr. J. W. Hoyt, embracing a lucid statement of the basis on which the Academy is organized, its general plan, and a report of what has been accomplished. The system of classification adopted by the President in order to tabulate his results is a notably excellent one, and deserves the careful study of all who are attempting to organize an institution of the kind.

Under the department of Social and Political Sciences we observe an able paper on "The Relation of Labor and Capital," from the pen of Dr. Chapin of Beloit College. Under the department of the Natural Sciences are found ten able articles. The volume is a credit to the intelligence and scientific interest in Wisconsin.

The Principles of Science: A Treatise on Logic and Scientific Method. By W. Stanley Jevons, M.A., F.R.S., Fellow of University College, London; Professor of Logic and Political Economy in the Owens College, Manchester. In two volumes. London: MacMillan & Co. (38 Bleecker street, New York.) For sale by Gray, Baker & Co., St. Louis. Price \$9.

This work discusses (1) Formal Logic, deductive and inductive; (2) Number, Variety, and Probability; (3) Methods of Measurement, including the law of error: (4) Inductive Investigation; (5) Generalization, Analogy, and Classification. It is a work of great labor, great erudition, and of a life of experience in the concrete fields of scientific research. It impresses us as a Titanic upheaval through the heterogeneous strata of for-

mal logic, mathematics, physics, sociology, and modern skeptical and evolutional theories toward the universal and necessary truth of an exhaustive theory. It deserves careful study at the hands of thinkers.

Transactions of the Albany Institute, vol. vii. Albany: J. Munsell, 1872.

This volume contains, besides other papers, a remarkable article on the "Theory and Calculus of Operations," by John Paterson. His attempt to reach a cosmical philosophy deserves to be sketched in full, and we hope at some future time to do it justice. His subtle calculations are based on the hypothesis of radiating molecular centres of force, whence arise static forces or solid matter from their mutual limitation. Each reaction leads to a higher, more complete and concrete synthesis. In his "Digression First" he polemicizes against the prevalent method of conducting experimental philosophy on statical principles alone. "Under this method," he says. "everything, every phenomenon is weighed, measured, and classified; the dead results being strung on a thread of antecedents and consequents, like night invariably followed by day, with habit for interpreter of the connection. A true method of theorizing has scarcely dawned upon us. Anvthing like an anvailable notion of Cause is positively repudiated. The shrine of the Protean god Force attracts devotees few and far between. and is glanced at askance by those who profess to be wise in their day. The fundamental conceptions of space and time are stifled in darkness that cannot be felt; are, in fact, believed to be created by each customer at his own convenience, for his own use, and to perish as soon as attention to their content ceases.

"It would appear that the notion of matter, unless transformed into that of force, is a stale, flat, and unprofitable conception, ending in non-entity. Abstract from matter its qualities, and nothing is left but the conception of an inconceivable subject of inhesion * . Matter or substance is a perpetual or ceaseless Energy, in the original Aristotelic signification of the word, constantly acting and reacting throughout the domains of the * . It may be said that the amount of physical world * force in the universe is constant. Equilibrated forces are constantly destroved and constantly replaced in maintaining and restoring equilibrium when interrupted. Substances of different density, that is, forces of different intensity, come to interference and force is liberated. The liberated forces circulate through trajectories peculiar each to its genus and the specifying conditions it encounters, and finally all return to their source and keep the cosmical measure full. Everything resolves into force and force re-dissolves, but dies at last."

The Philosophy of History in France and Germany. By Robert Flint (University of St. Andrews). Edinburgh: Wm. Blackwood & Sons, 1874.

Our author treats the philosophic histories of France in fourteen chapters. I. Bodin and Cartesianism; II. Bishop Bossuet: III. Montesquieu; IV. Turgot; V. Voltaire; VI. Condorcet; VII. The Theocratic School; VIII. Saint-Simon and Fourier; IX. Cousin and Joutfroy; X. Guizot; XI. The Socialistic School—Buchez and Leroux; XII. Auguste Comte; XIII. The Democratic School—Michelet and Quinet; XIV. The Democratic School—De Tocqueville, Odysse-Barot, De Ferron, and Laurent.

The German contribution to the Philosophy of History is treated under the following heads: I. The Progress of Historiography in Germany; II. Rise of Historical Philosophy in Germany—Leibnitz, Iselin, Wegelin, Schlözer, Von Müller; III. Lessing; IV. Herder; V. Kant and Schiller; VI. Fichte; VII. Schelling; VIII. Schelling's School—Stutzmann, Steffens, and Görres; IX. Frederick Schlegel; X. Krause; XI. Hegel; XII. Schelling, Bunsen, and Lasaulx; XIII. Lazarus, Lotze, and Hermann.

Such a table of contents could not but introduce a work of the intensest interest. Even a bungler would bring together from such sources scraps of the greatest value. But the author is no bungler, even if we deny to him an altogether adequate critical acumen or ability to dissolve the several stand-points into one central one.

He uses the following language regarding Hegel: "It is very possible, after honest study of Hegel, to doubt altogether the legitimacy of his method, to disapprove of many of his conclusions, to be conscious of great defects, to be often unable to make out what he means; but quite impossible to deny him an extraordinary wealth of thoughts which can be understood, and which are of the most profound and precious kind. It is a simple matter of duty to recommend students of philosophy to make themselves acquainted with Hegel; for, however anti-Hegelian they may find reason to become, he, if they would ever form for themselves a philosophy worthy of the name, is the thinker of the century from whom they will require to borrow most; and in philosoppy no less than in the special seiences much borrowing is indispensable even to the most original—a truth which Hegel well knew, and fully acted on, borrowing the thoughts of every man whom he believed to have had much thought in him, and by re-thinking making them always his own, and often truer and completer than they were before."

The author promises a continuation of the work treating the philosophies of history that have appeared in Italy and England.

Final Cause as Principle of Cognition and Principle in Nature. By Professor G. S. Morris, M.A., Michigan University

This paper is a contribution read before the Victoria Institute, or Philosophical Society of Great Britain, May 18th, 1874. Professor Morris, translator of Ueberweg's History of Philosophy, is well known as an able defender of the views of Trendelenburg. When a philosopher reads the words "Final Cause," he thinks of Aristotle and "his philosophic family," prominent in which sits Trendelenburg. As the doctrines of Fatalism and Free-will are founded respectively on the idea of efficient cause and that of final cause, there is no investigation in pure thought of more importance, morally, socially, or politically, than this of the nature and grasp of Final Cause.

The Anæsthetic Revelation and the Gist of Philosophy. By Benj. Paul Blood, of Amsterdam, N. Y.

Any one desiring to read this remarkable essay, which professes to unfold the theory of the true method of insight, can obtain a copy by writing to the above address. In our "Notes and Discussions" we propose to allude to the ideas of Mr. Blood at some future time.

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INTRODUCTION TO SPECULATIVE LOGIC AND PHILOSOPHY.

By A. VERA.

CHAPTER V.

§ 1. Idea in itself and without itself.

If idea be the essence and the ultimate reason of things, it necessarily follows that it exists in itself and without itself, or, to use another expression, that it exists in thought and out of thought in Nature, and that it does not exist out of itself and in Nature as it exists in itself and in thought. However startling and irrational this proposition may appear at first sight, it will be perceived, when properly considered, that it must be admitted under any supposition, and from whatever point of view we look upon the subject; nay, that we admit it in many instances, only we admit it, in another form, unconsciously and in a desultory and unscientific manner.

The popular sayings that God is the principle of the World, but that he is not in the World; or that idea and its realization, theory and practice, though connected by a close relation, are distinct and cannot become identical; or that the artist perceives idea, but is unable to embody it in all its beauty and perfection; or that Nature and the visible world are but images and symbols of the invisible,—all these and similar propositions are but various expressions of one

and the same principle, namely, that idea is in itself and without itself in the things of which it is the idea, and that it is not in the things as it is in itself. For when we say that God is the principle of the World, but that he is not in the World, we do not mean to say that there is no consubstantial connection between God and the World—there is no proposition more untenable and more absurd than this—but that God, who is the principle of the World, exists in a twofold manner, namely, in himself and without himself, and that he does not exist in the latter as he exists in the former manner. So likewise in saving that the visible world—the world of phenomena—is only the image of the invisible one, we mean that the latter manifests itself but imperfectly through the former, as sound or any outward sign is unable to represent thought in the clearness and fulness of its meaning, though both sound and thought are linked together in the same subject.

What language is to ideas in general, the external world is to Art. Languages as well as works of Art are symbols, imperfect and obscure adumbrations of ideas. They embody ideas, or, to speak more correctly, ideas embody themselves in them; but as the body both manifests and veils the soul. so ideas, by giving themselves an external existence, must need create Nature, or bring themselves in contact with Nature, and consequently dim the purity and transparency of thought, and conceal the unity, the infiniteness and immutability of this essence. For Nature is time, space, and motion; it is the field of perpetual change, of ever-recurring renovation and destruction; where everything is not only dissimilar to another but to itself at each moment of its existence; where beings and forces form mere aggregates, and are merely juxta-posited, without being internally connected, and conscious either of themselves or of the relation in which they stand to each other.

Therefore the Being that either creates Nature, or uses Nature as a means, or stands in any relation to Nature, must needs partake of it, and adapt itself to its laws and constitution. Thus what in itself is one and undivided must become plural and divided, what is immutable and eternal must become mutable and temporal, and what is beneficial and

harmonious must be made to appear hurtful and inharmonious. This is the relation in which ideas and Nature stand to each other, a relation involving a contradiction, an affirmation, and a negation.

It may be said of God that he affirms Nature inasmuch as he is the principle of it, and that he denies Nature inasmuch as Nature cannot contain him. And so it is with thought and ideas - God, Thought, and Idea, being identical in the highest sense of the words. Consequently we stand, like God, to Nature in a similar relation. For inasmuch as we are thinking beings, and bear an ideal world within us, Nature cannot contain us; so that we also affirm Nature-we live in it, we adapt it to our wants and purposes, and associate it with all our works and enterprises, and all our enjoyments and sufferings; and then we destroy it as a useless and unmeaning instrument, and as a hindrance to the furtherance of other purposes and the attainment of other enjoyments. The inward and inextinguishable yearning after something better, absolute perfection; the feeling of discontent and weariness which is inseparable from all human things, however accomplished they may be; progress, reforms, revolution—history, in one word—is the work of the ideal world that is in thought, and which the external world is unable to express and realize. The working of thought is unceasing; nay, it is the very life and essence of History; and the appearing and disappearing of individuals, nations, and civilization, are but its actual results—the only results visible to the external eye, and to the inattentive mind to which the latent causes are hidden—by whose incessant and combined action events are brought to maturity.

This alternate movement of life and death, of renovation and destruction, of adaptation of Nature to the requirements of Spirit, and of annihilation of Nature, is the work of ideas and thought, which, like the double-edged weapon of the Greek hero, inflicts the wound and heals it; showing thereby their infinite and irresistible power, before which Nature is something like nought—an instrument they create and annihilate at will and according to their purposes. This power may be seen at work incessantly, and in every part of time and space; but never is it more visible, or surrounded

with more tremendous attributes, than in those great historical changes and revolutions when the times are full for humanity to advance another step in the consciousness of itself and in the path of truth. Then we see the world thrown into, as it were, a state of disruption and confusion. We see beauty becoming ugliness, wisdom folly, truth untruth, patriotism and heroism sterile and powerless virtues, and institutions upon which had been bestowed the thought and labor of centuries and generations, and which in former times had proved a source of strength, of glory and triumph, now turning into a source of weakness, defeat, and humiliation.

The middle ages are looked upon as times of barbarism. And it must be owned that when compared with the Greek and Roman civilizations, with their extraordinary men and achievements, and the imperishable monuments raised by them-monuments from which we derive, even now, the highest instruction and the purest enjoyment, nay, which will live as long as there will be a human mind to admire and revere them; -when compared, I say, with these high civilizations, the middle ages are rightly called times of darkness and barbarism. For if we consider them separately and apart from the general movement of history,—if we consider their institutions, their languages, and the moral, social and intellectual state of their societies, even taking Christianity into account, we are perplexed to see what humanity had gained by the overthrow of the ancient world. And yet the middle ages prevailed against ancient civilization, and they prevailed because the new spirit of the world was with them. As life begets death and death life, as the organic being must fall into a state of inorganism and corruption to bring forth a new organic being, so ancient civilizations—their forms, their creeds and institutions — what in other times they held as true and holy, what had inspired their bards with immortal strains and had been the main-spring of great actions—all must be broken and dissolved.

The middle ages are the new-born infant whose birth is death to its parents; they are the plant and the flower that break to a new life through the rotten seed and feed upon rotten matter. The darkness that surrounds them is the

darkness that precedes the new morning light, and the rate of violence, instability and confusion into which soci ies were thrown at that period, is the chaotic state that must precede all new birth and formation; it was the crucible in which were melted the elements of the old world, to be mixed afresh and purified by the breath of the new Spirit. And so it is, under various forms and in various degrees. everywhere, in all points of time and space, and at all periods of history. Everywhere there is life and everywhere there is death, everywhere there is darkness and everywhere there is light springing out of it. What is the darkness and light of to-day is the light and darkness of the morrow, and what is or is not to-day shall not or shall be to-morrow. This perpetual change in Nature, these evolutions and involutions of forms and beings, this passage from being into nought and from nought into being, visibly demonstrates both that idea—the Absolute and the Eternal—is in Nature and that it is not in it. For idea alone can work the change either in destroying or in producing the being, and it can only work it from its being itself impervious to all change, diminution, and destruction. Whence it follows also that the Absolute exists and can be apprehended but imperfectly in Nature, and that it is as pure thought only that it exists, and through pure thought that it can be apprehended in the reality and fulness of its essence.

In the above remarks, if properly applied, will be found the elucidation of objections directed against Idealism from a sensualistic point of view. It is said, on the one hand, that ideas do not possess any positive, but a merely negative, value and existence, and, on the other, that they cannot be reconciled with the infinite variety of beings, institutions, creeds, and opinions. How is it, it is objected, that if there be one and the same idea for one and the same class of beings, ideas vary with individuals, times, and external conditions; that Europeans and Chinese, for instance, form different notions of beauty; or that different peoples take different views of right, of justice, and religion; nay, that individuals belonging to the same community and nursed in the same doctrines hold conflicting opinions upon one and the same subject?

With regard to the first objection, it may be easily perceived that it is founded on the assumption that the only positive (which here means real) beings are those that fall under the senses, which is the sensualistic assumption, and, consequently, that ideas possess no reality—the meaning we must attach here to the word negative. In fact, if we start from the principle that nothing save that which falls under the senses possesses reality, then idea would possess no positive existence. But to assume that ideas do not possess any positive and objective reality because we cannot picture them to our imagination, or embody them in any external form, is to assume that the only real beings, forces, or principles, are those that can be apprehended through the senses. For the argument does not only apply to ideas, but to all principles in general, as there is no principle, whatever be its nature, its object, and the notion we form of it, that can be brought under the senses and imagination; indeed, it is contradictory to the very nature of principle to be sensibly representable. For as soon as a principle falls within the limits of experience it is no longer a principle. And we may observe, by the way, that it is on this erroneous view and assumption that not only the sensualistic, but the Kantian doctrine also, is founded; the real and main purport of Kant's theory being that we are not rationally allowed to affirm metaphysical and transcendental realities, because we do not meet in the field of experience with any being or phenomenon which we can bring these transcendental realities to coincide with. Thus, for instance, according to Kant's argument, we cannot demonstrate the existence of God, or of the Perfect Being, because the objective reality of the Perfect Being is not contained in the notion of the Perfect Being; which means that the notion or the Idea of the Perfect Being possesses no objective or actual reality. As the precedent inquiries show the untenableness of this and similar positions, I will not enter again into a lengthened discussion of the question, but I will confine myself to a few remarks.

The sensualistic as well as the Kantian doctrine starts, as we have just observed, from the assumption that the only realities are those that come within the reach of the senses

and imagination; from which the inference is drawn, that, as ideas can be neither felt nor imagined, ideas possess no reality. But then the question arises as to what ideas may be; and how it is, if ideas are equal to nought, that the external world cannot be apprehended save through ideas, and that there is no being which our mind, or any mind we may possibly conceive, can apprehend without ideas. Must we say that the phenomenal world which is apprehended through ideas is the highest, nay, the only reality, whilst ideas by the aid of which the latter is known would be destitute of all reality? But it would seem that it is the contrary we ought to admit. For to ideas, through which not only a single individual being, but all similar beings are, and can possibly be, thought and known, must need appertain a higher nature than these beings themselves. Besides, it will be acknowledged, under any supposition, that phenomena are manifestations and effects of principles, and that these principles must be possessed of a higher reality than their effects. Now, principles, whatever they may be - let them be called God, or the Absolute, or the Infinite—cannot be made the object of sensible perception any better than ideas, as we have demonstrated. In fact, the highest reality is the invisible reality, which is the highest for the very reason that it does not fall under the senses and the conditions to which all external reality is necessarily submitted. Therefore, to hold that ideas possess no reality because this reality is not proved by experience, is to hold that the Infinite does not exist because it does not exist like the Finite, or because the reality of the former is not the reality of the latter.

As to the other objection, drawn from the variety of opinions, customs, and institutions, as well as the products of Nature, it will be observed that the difference does not affect idea, but its external manifestation. Viewed in itself and in its essential existence, idea is one and the same, and is not liable to either alteration or division. It is only as Idea in Nature that it assumes various forms, and that its unity appears as broken and as a plurality. And yet even variety reveals the unity and the infiniteness of ideas. For the numberless individual forms and the ever-changing scene of external objects show the inexhaustible activity of this

principle, whilst the invariableness and community of their essential character show its unity. It is one and the same thought that stamps Nature with different marks, it is one and the same mind that manifests itself in the variety of its works. The difference between Chinese and European, or between ancient and modern Art, does not reach this principle. For were they sprung from different sources there would be no relation between them, nor could they be compared; nay, one of them could not even come within the same denomination. And so it is with laws, institutions, and languages. This difference begins with their external manifestation - the temporary, limited, and local forms in which they are necessarily embodied. As one and the same sun produces different effects according to different latitudes and to the different elements with which it is combined—as one and the same object multiplies with the points from which it is viewed and the eyes that view it-or as one and the same voice awakens different feelings in different ears and different hearts,—so likewise, and in a still much higher sense, idea, in its contact with Nature, splits itself into infinite forms and numberless beings.*

The most striking illustration of this self-diversifying power of ideas is supplied by language. Of all external manifestations of ideas, language is one of the most perfect. Its affinity to thought is so intimate, that some have been led not only to confound them, but to see in language the origin of thought.† In fact, language is the most immediate offspring of the ideal world; it is the echo which externally reverberates the internal sound and breath of Spirit. In other stages of its existence Nature is dumb and silent, and where it possesses a voice it is a voice whose meaning is obscure, undefined, and destitute of all connection and unity. Thus it

^{* &}quot;Et erat Lux vera quæ illuminat omnem hominem venientem in hunc mundum." Now this light which embraces man, though one and the same light, does not illumine him in the same manner, but adapts itself to space and time and to local requirements. Even within the pale of Christianity, this inward and eternal light is externally broken up into fragments, sects, and denominations, which represent as many aspects of one and the same thing.

[†] Hence the superficial theories of Condillac and M. de Bonald, summed up in the well-known propositions, "Penser c'est parler" (to think is to speak), and "La science est un langage bien-fait" (Science is a well-made language).

may be truthfully said that we are the organs of Nature, and that Nature speaks through us a language superior to its own essence, attaining thereby, even externally, a perfection which it does not possess in itself. The roaring of thunder has no meaning for the thunder, or for Nature in general, so long as it has not reached the region of Spirit, and has been marked with an external sign conveying the internal signification of the phenomenon. Likewise the roaring of thunder, the whistling of wind, the flashing of lightning, &c., are scattered and isolated sounds that find their connection and unity in the voice of Spirit. Even the animal—the brute creation—though possessing a soul and a voice to give utterance to its internal wants, is refused a language; and this, because the animal, though the product of the same principle as man, does not bear it within itself, and consequently does not perceive it or feel a desire for it. Being thus debarred from the contemplation of the ideal world, the animal is invariably kept within the bounds of Nature and of a limited number of physical wants, for the manifestation of which a limited number of inarticulate sounds are required; and as Nature is by its very constitution the field of uniformity, of unchanging, ever-recurring and self-repeating wants, the animal's wants as well as the mode of expressing them must be invariable. But the being that possesses thought—and the thought of the Eternal and the Absolute, and of the Unity of the Universe-must also possess a means adequate to the outward expression of this internal world. And this is language. The highest and final object of language is not to associate men; for language is like ideas, the double-edged weapon which associates and dissociates men, engenders both peace and war, and creates and overthrows societies; but to give utterance to the internal world of thought, or to express ideas, and, by expressing ideas, to unite and disunite men, to found and overthrow societies, according to the requirements of truth. Now, as language is the most immediate and direct product of thought, it must imitate thought; or if it must imitate Nature, it is Nature as it reflects itself in thought. Indeed thought transfers at will, and according to its own perceptions and purposes, the internal world into the external and the external into the internal; for in this double sense language is metaphorical. But the creative power of thought in language is mainly shown by this, that words cannot represent things except through thought; that they possess no other meaning, or being, but that which thought imparts to them; that it is from thought they derive their beauty, their power, and duration; and that as soon as thought retires from them they become a dead letter, a soulless body.* Thus the same sounds which in former times had delighted the ear, had stirred the soul, and been the incentive to mighty deeds, lie now unmeaning and powerless; or, if they still retain some of their former substance, it is because they enshrined thought, or because we ourselves infuse into them a breath of the living Spirit. Here we can see the common source of all languages, as well as the cause of their diversity.

In fact, if thought is the soul of the word, the internal verbum by which the external is created, thought is the principle of all languages, and it is because languages all flow from this same source that thought is able to understand them all. Therefore, the unity of languages does not lie in any primordial language, but in the unity of thought and ideas expressed by words. Whatever explanation may be contrived of the origin of languages, it is towards this common centre that all suppositions and inquiries must ultimately converge. For, either man has taught himself, or he has been taught to speak. In the first hypothesis, language is evidently the product of man's thought and ideas. If, on the contrary, language was communicated to him, in whatever manner the communication was made it must be admitted that the being that made the communication thought what he communicated, and that the communication was the

^{*} The less language is representative, the more correct, faithful, and appropriate to the free and full manifestation of thought. Even in poetry, figures and images must be made subservient to ideas. They must not be the literal, but the ideal, transfer of a natural phenomenon to the thing we want to describe; so much so, that, if a literal construction were put upon the words, the intention of the poet would be perverted or become unintelligible. If, for instance, we were to take literally the words $\beta o \tilde{\omega} \pi \iota \zeta$, $\varkappa \iota \nu u$, $\tilde{\alpha} \rho \gamma \nu \varphi \dot{\sigma} \sigma \upsilon \zeta$, &c., Greek goddesses, nymphs, and heroes, would become unseemly or ludicrous objects. The letter of the word must, then, be idealized, i.e. must be diverted from its natural sense to that of the ideas the poet intends to express through it.

product of thought and in conformity with it; and, on the other hand, that the being which received the communication possessed thought, and thought consubstantial with that of the being by which the communication was transmitted, and that he spoke also in consequence of that thought and in conformity with it. In other words, he who teaches and he who is taught must possess a common nature; and the higher the teaching, the more intimate and inseparable the connection must be; so that, if I teach either to speak or to think, my teaching would be of no avail; in fact, it would be no teaching unless the being I teach possesses the very same faculty of thinking and speaking I use in teaching him. But if he possess this faculty, my thought and his thought, my and his vocal organs, flow from one and the same principle, from one and the same essence. This is the idea of language—an idea in which the internal and the external, thought within and thought without itself, are intimately and immediately connected. For to speak is neither thought without voice, nor voice without thought, but thought and voice penetrating each other and forming an indivisible whole. As the body is the external form and instrument of the soul, so the word is the external form and instrument of thought. Thus viewed, language appears as the highest form of external existence, as the highest degree to which Nature can attain. The other powers and functions of the body are limited in time and space, and mainly intended for the satisfaction of physical appetites or inferior wants of the soul; whilst language, being in immediate intercourse with thought and issuing directly from it, strives to become identical with it; and as thought is absolute; eternal, and immortal, so there is in language an inward effort, a longing after perfection, eternity, and immortality. Yet it is a longing which shall never reach its object. For the word being a sound and an image of thought, and not thought itself, i.e. falling within the sphere of Nature, must, like all images, be limited, perishable, and deceptive. Hence the dispersion of thought in various languages. Hence the necessary transformation and dissolution of languages. Hence also the errors of which language is the source.

In fact, as there are two elements involved in the word, the internal and the external, the idea and the sound; and as

the sound, which is imperfect and finite, cannot render idea, which is infinite, in the unity and fulness of its essence,—it follows that thought creates another sound, other vocal forms and combinations, to express this very same idea; which forms and combinations, being themselves necessarily limited, prove inadequate for the expression of thought, and call, in their turn, for other forms, which fall under the same conditions as the former, and so forth. Now, if we contrast the various languages, we shall see that, for the very reason that they are limited and external embodiments of thought, each of them must represent a different aspect of one and the same thought, different relations and combinations of one and the same idea; so that what one expresses, the others will be unable to express, or to express in the same manner, with the same degree of clearness, accuracy, and perfection—a fact we experience in translating. For not only is a translation always dissimilar or inferior to the original, although both the original and the translation spring from one and the same thought, but it frequently happens that both the original and the translation are utterly inadequate to the rendering of thought; so that here we can discern, and feel, as it were, thought in itself in the unity and perfection of its existence, and thought without itself in the limited form in which it is externally clothed. This finiteness of languages, which, by stamping limited forms with ideas and by concentrating thought in a limited number of sounds, is, on the one hand, the source of their power and beauty, and, on the other, the source of their transformation and decay. For, in consequence of their inability to embrace and express the infiniteness of thought, they must either modify and transform themselves, or, if they do not possess the necessary vitality and aptitude to embody the new developments and wants of Spirit, they must disappear and make room for other and more appropriate organs of truth.* For this same reason

As a general criterion, it may be laid down that as soon as a language ceases to be spoken it ceases to be a *living* being—the representative of the living Spirit. Yet a language, although inwardly dead, may continue to be spoken by keeping

^{*} Ut silvæ foliis pronos mutantur in annos,
Prima cadunt: ita verborum vetus interit ætas;
. . . . mortalia facta peribunt,
Nedum sermonum stet honos et gratia vivax.—Hor. Ars Poet.

language is a source of error and delusion, and may become a hindrance to the progress of science and truth. Language is fallacious, not only when false representations are embodied in words, but even when words—single or combined—express right notions and real objects. For from the fact of the words being limited and disconnected symbols of things, they represent a part of a thing instead of the whole thing,

up a kind of factitions and galvanic life, within which the soul of the present and living spirit of the world does not beat. The Eastern languages, the Chinese, and the Hindoostanee, may, in this sense, be considered as dead, though still spoken by millions and hundreds of millions of human beings. Indeed, in the eyes of History, they are more dead to Science and civilization than Latin and Greek, which we inhale, as it were, from the cradle with our native tongue. They are to Greek and Latin what Oriental history—i.e. Philosophy, Science, Art, Law—is to Greek and Roman history in general. The study of Oriental languages possesses, like any other study, its usefulness and importance, and may also be required for political or commercial purposes. But it could never be a substitute for Latin and Greek, and it would be irrational and anti-historical to make Chinese and Hindoostanee the basis of classical education in the room of Greek and Latin.

In considering the history and present state of the Eastern nations, it must be borne in mind, that, though still in existence, they in reality belong to the past, to the ancient world, where they were far outshone by the two great luminaries of that period. Since that time, whilst the European and Occidental nations, inheriting the spirit of their forefathers, have been fighting the battle of civilization, promoting the common interests, and raising the common level of mankind, the Oriental nations have stood immovable, and kept aloof from the movement of history. So they are, in substance, what they were two thousand years since, and as, two thousand years since, we have seen a handful of Europeans conquer them and hold them in subjection. Therefore, their language and institutions possess only an interest for the antiquarian and the historian.

With regard to the Greek and Roman languages, it is a remarkable fact that they continued to be written and spoken long after the Greek and Roman nationalities had ceased to exist. This is owing to Christianity having adopted the two languages as organs of its doctrines and teaching. The unsettled state of the world in the middle ages, the absence of any newly constituted nationality and language, coupled with the high degree of perfection to which the Greek and Latin languages had been brought, made it necessary for the Church to adopt them. And as, on the other hand, the Church, especially the Latin, was at that time the representative of the new Spirit -a spirit embodied in a Code upon which the nationalities then in a state of formation were to be foundedand, moreover, as Science and Law were so intertwined with Theology as to be inseparable from it—the very fact of the Church having adopted them must have prolonged their existence. For the Church constituted, in some manner, their centre and nationality. Then came the Renaissance, which infused again into them some of their native vigor. However, as the new nationalities, and the languages sprung up with them, were developing themselves, assuming a fixed and individual shape, and attaining maturity, Greek and Latin became more and

or as divided and plural what is united and one*; so that the mind, which is guided by the literal and conventional signification of the word, considers as a whole what is only a part,† or as divided what is united.;

more dead languages. The Reformation, the popular use of the Bible. Science asserting its independence of the Church and using the vulgar tongue, the daily press, the necessity of a more rapid intercourse between men and nations, new discoveries and wants, physical and mental habits requiring new signs and forms of expression,—all these causes must have made and are making ancient languages more and more foreign to our mental and social requirements, however beautiful—nay, even superior, in some respects, to those by which they have been superseded—ancient languages may be.

- * Or vice versa.
- † For instance, the expressions, "My hand presses upon the table," "That body adheres to that other body," "The Sun attracts the Earth," when taken literally and according to the usual representation of the meaning involved in them, convey to the mind the notion that by representing to ourselves the hand pressing upon the table, or body A adhering to body B, or the Sun attracting the Earth, we conceive and embrace the whole phenomenon or law, whilst we perceive only a part of it. For in the phenomena of pressure, adhesion, and attraction, not only the hand presses but is pressed upon, not only A adheres to B but is adhered to by B, not only the Sun attracts but is attracted also by the Earth; so that the right perception of the whole object is not in the perception of either term considered singly and apart from the other, but in the perception of both considered singly as well as in their mutual connection—the two conditions of pressure, adherence, &c., and without which such phenomena could not take place. "The whole is made up of parts" is another expression producing a similar error, as it makes one believe that in possessing the parts one possesses the whole, whilst, in reality, the whole and the parts are different, though inseparable. Similar expressions can be easily found.
- t The natural tendency of language is to separate what is united, thereby preventing the mind from perceiving the internal unity of things. Words, being images and external representations of thought, resolve themselves into sensations; and as the natural tendency of sensation is to divide and to circumscribe, in time and space, both the subject that receives the impression and the object that produces it, so it is with words. Thus, unless the mind-disregarding the word, so to speak, and going beyond it-directs its attention towards the objective and invisible connection of things, the Universe will appear as made up of fragments, of units or atoms. For instance, the words luminous, opaque, Sun, Earth, motion, rest, cause, effect, general, individual, will, imagination, reason, taken singly, or even united in propositions, such as "The Sun is luminous," "The Earth is opaque," "The cause is not the effect." "The effect is not the cause," "The general is not the individual," &c.. offer to the mind a series of merely opposite or disconnected beings. It has been already observed by Condillae that language is an analytical process—un moven d'analyse. In reality, if we consider the word—the external sign of thought—in itself, language is neither an analytical nor a synthetical process, as it is thought that divides and unites. But, from the very fact that the word is a limited and particular repre-

But what chiefly brings about the decline and dissolution of languages is that a time arrives when not only they are unable to accomplish the object for which they are instituted, namely, to express truth and to spread and promote science, but they become the most stubborn opponents of truth and science. The language of a nation is part and parcel of its being. The long usage and elaboration of a language bring this result, that, whilst they evolve all their native vitality and beauty, and create a more perfect instrument for mental operations, they gradually petrify the mind by encompassing it within fixed sounds and forms, so that the words and thought become identified, and local, limited and imperfect truth becomes the universal and absolute truth. The god of the Romans was not the invisible and eternal God, but the Jupiter optimus maximus, seated in all his majesty and glory on the Capitolium, surrounded with the Dii majores and all the attributes and formulæ which constituted the Roman religion. So likewise morality. justice, glory, eloquence, were for the Roman inseparable from the words and sounds that expressed them and the national meaning affixed to them, nor would any other sound move his heart or captivate his ear. Consequently, when by the inward and incessant working of thought a new Spirit breathes upon the world, and new wants and aspirations issue forth from the depths of the mind, the old sounds and formulæ in which are embodied the institutions, the wisdom and life of a nation stand up in formidable array to oppose them as false, pernicious, and impious. And it may happen that the higher the civilization of a people, the more obstinate the opposition. For glory and power beget pride and stubbornness, harden the heart, and blind the mind, and lead gradually a nation to the belief that she is the representative of the absolute truth. In this delusion mainly lies the cause of her decline and dissolution. For in this contest between the limited and mortal spirit of a nation and the spirit of the world-which is the Spirit and Providence of God-the for-

sentation of ideas, it has a tendency towards distinguishing and analyzing: so that the mind, from inadvertency or from an inadequate philosophical training, misled by the word, is apt to overlook the connection of things.

mer must either follow or succumb. It must either become the apostle of the new doctrine and the organ of the new truth, or, if it be unable to utter the new sounds and spell the new words, it must withdraw from the contest and yield up the arena to a more youthful, more vigorous, and Godinspired race.

Since language, which is the most direct and faithful external manifestation of thought, is unable to render it in all the depth and fulness of its meaning, it follows that thought can only be apprehended by thought and idea by idea; and that words, images, representations, whatever they may be, are but imperfect and deceptive adumbrations of truth. If, therefore, in listening to words, the mind, instead of fixing its perceptive power upon their objective and internal value, let itself be captivated by the sound and by its outward form and beauty, it will mistake the shadow for the reality, the image for the thing, and the perishable for the eternal being. For the Absolute is unutterable, and there is no language that can adequately express it save the internal and silent language of thought, a language which is the reverse of the former, and that can only be spoken by him who is able to forget his native and mortal and learn the universal and immortal tongue through the contemplation of ideas as perceived in the reality of their nature and existence, i.e. in their unity and as a system. For this is speculation, or speculative thought, in the strict Hegelian sense; as speculative thought is not the thought which apprehends abstract ideas, ideas in their isolated, partial, and fragmentary existence. but thought that apprehends ideas as they are in the absolute idea, which is absolute for the very reason that it is a systematic unity without which nothing can either rationally be thought or exist.

KANT'S CRITICISM OF PURE REASON.

AN INTERPRETATION AND CRITICISM,

By SIMON S. LAURIE.

TRANSCENDENTAL DOCTRINE OF ELEMENTS.

FIRST PART.

TRANSCENDENTAL ÆSTHETIC.

[The object of transcendental æsthetic is to prove the possibility of \hat{a} priori synthetic judgments in the region of sensible perception. That is to say, in the mere act of sensibly perceiving objects I affirm with respect to each a certain predicate which I do not obtain from the sensible object or presentat itself, and which is therefore synthetic or ampliative, and which also is necessary and therefore \hat{a} priori. I say therefore \hat{a} priori as the contrary of \hat{a} posteriori, the primary ground of his notion of \hat{a} priori is the feeling (so to call it) of "Necessity" in a judgment. We must in estimating his argument, however, give him the credit of both conceptions as contained in the notion \hat{a} priori—the conception of Necessity and the conception of "not \hat{a} posteriori," that is to say, "not-given-in-Sense."

Kant's motive in this investigation (the word "motive" is used of course in an intellectual and not a moral signification) is to explain the necessary and synthetic character of mathematical judgments, which he assumes he has already shown to be à priori synthetic. I think he failed to do this, and consequently the motive disappears so far as I, the student, am concerned. The necessity or (apriority) has been explained as analytic, and it is of no importance to me that the predicates Space and Time should be found to be given not in sense but as à priori (that is, here, native and necessary) Forms of sensible Intuition or Perception.]

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TRANSCENDENTAL DOCTRINE OF ELEMENTS.

1. Transcendental Æsthetic.

Knowledge is immediately related to objects through Perception (or Intuition), Anschauung.

But the object must be given or presented to us, and this it can be only by affecting our mind (Gemüth) in a certain way.

The capacity for so obtaining percepts (*Vorstellungen*) or presentats is called Sensibility (*Sinnlichkeit*).

Through Sensibility therefore it is that percepts (Anschauungen) are delivered to us.

[Here Anschauungen seems to mean substantially the same as Vorstellungen.]

These Anschauungen are thought by the Verstand, which thus gives us Begriffe (Concepts or Notions). All Begriffe ultimately rest on Anschauungen (percepts).

The action or effect of the object on the Sensibility we call Sensation (*Empfindung*). The perception which reaches the Sensibility through Sensation is called empirical, and the object of this Sensation is called Phenomenon (*Erscheinung*).

[It is a pity thus to limit the "empirical" to outer sensible

perception.

The above passage, though introducing the Kritik of Sense in a free and almost easy-going way, is very important. The terms used demand close attention. Anschauung is for the most part more general in its use than Vorstellung; when applied to a particular object, however, these terms are each synonymous with perception and percept. But, again, Vorstellung has a more limited meaning when strictly used, inasmuch as it properly signifies only Sensible percept—actual or reproduced in memory. In truth, however, I perceive an operation of the understanding as well as a fact of Sense.]

The matter of the Phenomenon is that which corresponds to the Sensation; while by Form of the Phenomenon is meant that which reduces to order the manifold in the phenomenon. That which reduces the manifold of the Phenomenon in sensation to order, and gives it a certain form, cannot be itself again Sensation; and is therefore previously existent à priori in the mind as a Form.

Those percepts are pure in which there is no element of Sensation. The *Form* of sensible perception is to be found (as has been already said) in the mind à priori (we see this before we see the body, as Kant elsewhere says); and this Pure Form may also be denominated Pure Perception (Anschauung). E.g. take from a body all that the Understanding puts into it—Substance, Power, Divisibility—and also all

that is the product of Sensation—Impenetrability, Hardness, Color, &c.—something still remains, namely, Extension and Figure. These, then, belong to Pure Perception; they are the à priori product of the mind, and constitute the mere Form of Sensibility apart from any actual object of sensibility or Sensation.

[The above is the interpretation rather than even the substance of Kant; but it is true to the substance. It is only by putting the points in greater relief than they are put by Kant that we can see the importance, or at least the precise significance, of these passages and their relation to what follows. Note first: that Kant truly enough says, that that (power) which gives unity, definite relations, &c., to the multiform phenomenal, cannot be itself a second underlying sensation. But he makes an enormous stride when he says that therefore it is an à priori Form native to the intelligence. Criticism by starting with such an assumption starts in fact with Dogmatism. It is not a fundamental treatment of the subject. Note secondly: that, having occupied this position, it follows that the Form being à priori is pure. It is not à posteriori: it is given in and with Perception, and is Pure Perception. This conclusion we may, if we choose, accept, but it is not critically ascertained. Note thirdlu: that it is further affirmed that Sensation or Sensibility does not give us the extension or figure of a phenomenal object, although it gives everything else vulgarly supposed to be given à posteriori (except, as we shall afterwards see, Time). Consequently, Extension or Space is a Pure Percept furnished by the mind itself as Form of the Sensible. We may readily admit that if not given à posteriori, it is given à priori, and is Pure and so forth: but thus far the à priori and pure character of this or any percept is a mere hypothesis. We yet look for the demonstration. (Kant is here for the moment using "à priori" in its proper signification.)]

The Science of the à priori Forms of Sensibility is Transcendental Æsthetic, while that which deals with the principles (Forms) of Pure Thinking is Transcendental Logic.

Our first duty, then, is to isolate the Sensibility from the Verstand and its Begriffe; and then, secondly, to take away from the Sensibility everything given through Sensation, and leave nothing but pure à priori Perception, or Forms of Sensibility. We shall find that there are two such à priori Forms of Sensibility which give us à priori knowledge, viz.,

SPACE AND TIME.

First Section.

OF SPACE.

2. Metaphysical Exposition of this Begriff.

[The form Begriff is either used loosely here, or it signifies the perception or intuition of Space as held in and by the Verstand as a notion, applicable to the individual "many," as opposed to Space as an à priori Pure Perception or Vorstellung.]

By means of the outer sense objects are presented to us as outside us in Space: the inner sense perceives objects as in Time, under which Form the perception of our inner mental state is alone possible. We cannot see Space inside ourselves any more than we can see time outside.

What, now, are Space and Time? Do these predicates belong to the things an sich, or are they, as subjective Forms, applied to things in necessary obedience to the constitution of our mind? To ascertain this let us expound first the Begriff of Space.

(1.) Space is not a *Begriff* resting on outer (sensible) experiences. For my sensations cannot be related outside me, that is, to anything in another part of Space than that in which I am; and in like manner objects cannot be perceived as respectively outside one another in various parts of space, except on the presumption that the perception of Space already lies at the bottom of the whole procedure. The perception is therefore not due to the relations of the phenomenal as given in experience, but, on the contrary, outer and phenomenal experience is itself first of all possible through the Percept (*Vorstellung*).

[I cannot see the force of this argument. Suppose Space to be a condition of the existence of things an sich or für sich external to me; I open my eyes and perceive or feel, first, indefinite Space, and, secondly, things spaced and placed in indefinite Space—What can be answered to this? "You cannot," Kant would say, "perceive relations of Space without first having the intuition or percept of Space." True in a certain sense; but I get my sensation of indefinite Space from without in the first instance, and then gradually mark off spaced bodies one from another in Space, that is to say, I place them. Is not this a valid position to take up? Granted

that I cannot "place" bodies without a prior perception of Space, it does not follow that that percept must be a "Form" of my Sensibility. It may be given from without in Sensation after all.]

(2.) Space is a necessary à priori percept (Vorstellung), the ground of all outer perception: and this is shown by the fact that you cannot image (eine Vorstellung machen) the absence of Space, although all objects in Space may be extinguished. Phenomena are possible to Sensibility only under this condition of Space; but they do not yield Space to our cognition as a determination (of themselves).

[To say that I cannot eine Vorstellung machen of the non-existence of Space, is simply to say that I cannot imagine the outer save as spaced. This is true: but may I not say that it is true, because to think the outer is to think Space, for all outer is Space? "Outer" and "Space" are identical terms. The condition or Form of the externalized life of Deity is Space; and I in knowing this external, know Space as the universal condition.]

(3.) Space is not a discursive general notion or concept (Begriff) drawn from the relations of things, but a pure perception; for you perceive it only as one and uniform Space, and if you speak of "Spaces" you mean only parts of the same one continuous Space (alleinigen Raumes): and you think these "Spaces" not as constituent parts of universal Space and prior to it, but as in it. Space is essentially one, and the notion of "Spaces" rests on the perception of limitations of Space. From which it follows that an à priori perception lies at the root of all notions of Space. Thus it is that all fundamental mathematical theorems or propositions (as that two sides of a triangle are greater than the third) can be deduced out of an à priori perception with apodictic certainty, and could not be deduced out of general notions of a line and triangle.

[That is to say, Space is not an Abstract general resting on particular extended objects, for you can perceive it only as one, uniform, unique, universal Space, and not as made up of parts. On which I remark that, according to an important distinction, which I would suggest here, Space in so far as it is a Begriff is not an Abstract concept at all, but an abstract

Percept (universal), and that if Abstract Space $qu\hat{a}$ Space were not uniform, one, unique, it would not be a universal abstract percept at all. Is it not this oneness which is the essential characteristic of an abstract percept as such? Take even "hardness" as an Abstract, which is unquestionably based on empirical observation. In so far as it is a "general," it is one, unique, and not to be divided into constituent parts. It may be said that it is not, like Space, a universal condition of all presentation or representation of the outer, but, strictly speaking, only a general resting on a definite number of particular experiences. I might question this; but I content myself with merely here pointing out that, in so far as it is an abstract general, it is one. If Space is not only one, but also a universal one, this may merely mean that Space is a

Form of universal external existence.

As to the mathematical propositions regarding which Kant exhibits so much anxiety that I believe they motived his whole theory of Space and Time, I have already spoken of them. It is by no means apparent that where three lines enclose a space, even the largest side must be less than the other two taken together, until the case is presented to perception (as *Vorstellung*); in which event (unless we choose to go through proof on the basis of certain demonstrata and axioms as in Euclid) it can be shown that the two sides must be greater than the third, because, on close inspection, they traverse a greater space: or, again, that since a straight line is the shortest from A to B, and as two lines are not a straight line, their length on the way from A to B by the route C, or any other route, must be longer than that traversed by the straight line.]

(4.) Space is not a Begriff, because it is present to consciousness as an endless given quantity. A Begriff contains, or may contain, endless Vorstellungen under it, but as such it cannot contain endless Vorstellungen in it. Space, however, is so thought; therefore it is not a Begriff, but a Perception à priori.

[There is much force in this argument, but I think it only proves that the presentat Space is not a Begriff or concept. It is not built up out of a series of observations of a certain quality common to all sensible objects. But it is not on this account therefore a Perception à priori, so far as I can see. It is a Perception of what actually is outside, and in its first presentation to the Sensibility is one, uniform, indefinite, endless.]

3. Transcendental Exposition of the Begriff of Space.

[By "Transcendental" is meant the mode of \grave{a} priori object-cognition.]

Transcendental exposition is the explanation of a Begriff as a Principle out of which the possibility of \grave{a} priori cognition can be discovered.

[Metaphysical exposition, again, is the exhibition of the Begriff as given à priori.]

We have to show (1) that such \hat{a} priori cognitions do flow out of the given Begriff; and (2) that the cognitions are possible only on the presupposition of a given explanation-mode of this Begriff.

Geometry has such \grave{a} priori synthetic propositions of Space. Inasmuch as such propositions cannot be got out of a Begriff—they being synthetic or ampliative and not analytic—they must rest on a perception or intuition (Anschauung), and this perception must be \grave{a} priori (prior to all actual perception of objects) pure and not empirical, because otherwise their necessity could not be explained, e.g. "Space can have only three dimensions."

[That mathematical propositions are necessary (and if the term "necessary" be identical with "à priori," therefore à priori) is certain. But the necessity, as we have already maintained, is analytical. We can draw a necessary conclusion analytically from Percepts as well as from Concepts, and this is a point of much significance. Therefore, even in geometrical propositions necessity does not carry with it apriority.]

How now can an external intuition (Anschauung) which precedes objects themselves, and determines the notion [Begriff] of them, exist in the mind (dem Gemüthe bewohnen)? Manifestly, this external intuition can so exist only in so far as it exists in the Subject as the formal Disposure (adaptation) of the same for being affected by objects, and through that affection acquiring immediate presentats (Vorstellungen) of these—that is to say, acquiring intuition (Anschauung). Accordingly, it can exist only as the Form of the outer Sense (des aüsseren Sinnes).

Our explanation, accordingly, alone makes conceivable the possibility of Geometry as a synthetic à priori cognition.

[By the "Form of the outer Sense" Kant does not mean a moving force in Sensation itself which so and not otherwise interprets the outer, but a Form of the Sensibility (Sinnlichkeit). Translate the word Anschauung above as Perception and not Intuition, and the argument may be reduced to this:

(1) External Perception exists prior to the perception of

actual objects.

(2) It can so exist only as a disposure of the subject to receive affections from objects and so to get perceptions (actual).(3) It is therefore a Form of the outer Sense: i.e. of the

Sensibility (of the subject) in its outer relations.

On all which I might remark, that, if Space be given as *External*, it could not reach the Subject at all there to be cognized unless there was an innate disposure or fitting capacity of the sensibility to receive it. This of course: and, Thus far, all will say there is a Form of Space resident in the Subject-Sensibility. But so to use the term "Form" would be an abuse; for, if it has any distinctive meaning at all, it means that the Subject does not receive the outer at all, but only a subjective interpretation (not even a translation) of it.]

4. Conclusions from the above Begriffe.

(a) Space is not a property of things in themselves or of their relations. It does not remain if the subjective condition (Form) of Perception is taken away. For neither absolute nor relative determinations of the outer object can be perceived prior to the existence of the things to which they belong.

[But these determinations are so perceived, Kant means, or, at least in their principle, perceived; consequently they do not belong to the outer object.]

(b) Space is nothing but the Form of all Phenomena of the outer Sense—the subjective condition of Sensibility under which alone outer perception is possible. Just as the capacity of the subject to be affected by objects must precede perception of the objects, so may we easily understand how the Form of all phenomena can be given in the mind à priori, prior to all actual perception; and how as a pure perception in which all objects are determined it can contain the principles of the relations of the same prior to all experience.

[This is important as showing beyond doubt that Kant distinguishes between the Disposure or constitutional adap-

tation of the Subject to receive affections of objects and the Form in which it envelopes these phenomena.

Extension and extended things are, as such, true to man only. If we lay aside the subjective condition of external perception, the sensible percept (Vorstellung) *Space* has no meaning at all.

The permanent Form of our Receptivity (which we name Sensibility) is a necessary condition of *all* relations in which objects appear as outer. If it be abstracted from objects, it is a pure Perception bearing the name *Space*.

Space or Extension is not a condition of things (at least we have no ground for saying so), but only of things being known to us phenomenally [that is, in sense]. "All things are beside one another in Space" is a valid and universal proposition if taken with the limitation—"in so far as these things are objects of our sensible perception."

Observe, then, that the Reality of Space—that is to say, its objective validity—is affirmed with reference to all which can be present to us as external object [this is, of course, no reality at all, except that it is really in our consciousness]; but, at the same time, in relation to things in themselves as estimated by Reason and without regard to our Sensibility, Space is Ideal. In other words, Space has an empirical reality, but a transcendental ideality.

[In brief, it is affirmed that in so far as there is Extension, and by consequence all the relations dependent on Extension, such as dimension, figure, locality, that extension and those relations are imposed by the knowing mind on certain Somewhats in themselves quite unknown. To which, may I not fairly say, "if a particular stone or tree gets all its sense-properties from me, what is the stone or tree save a dependent on my Ego?" Again, how is it that this unknown, undetermined somewhat stirs into activity in me the Space-form of the Sensibility, which, though not dead, is yet still not alive until this external "somewhat" teaches it to live and to know its own powers? It is evident that, according to this doctrine, we are involved in greater difficulties than we can escape from by means of it. We are driven by it to posit an infinite number of external points of causation which by affecting us effect their own form and their own existence to us. Each of these points of causation is in itself different from every oth-

er, and by virtue of this difference affects our sensibility differently: so that, while stimulating into life the Space-form, it also at the same moment determines both the quantity and the quality of that Space relatively to itself the particular

object!

The universe of things must reach a knowing subject somehow, and it does so by means of sense or feeling, which is broken up into various forms (viz. seeing, touching, &c.) If there is to be uniformity and certainty—anything which can be called Knowledge—in the knowing of the world, there can be but one general mode of sensibility; that is to say, Sense must be true to itself. The intelligence cannot say of an object at one moment "it is square," and at another "it is round"; now it is "black" and also "white," and so forth. Given a general mode of knowing the external, that mode must have subjective permanence, or subject and object would be involved in an insane whirl of perpetual contradictions. The necessity of this proposition, "An external object must be extended," simply means that I cannot know an external object save through Sense. If, however, this mode is created in and with the subject-knowing, it is as true and necessary for hearing, smelling, &c., as it is for extension. For it merely comes to this, that at one moment the object stirs in me the sensation or mode of sensation which I call Extension, and at another the mode of sensation which I call Sound or Color. Both are equally valid objectively and subjectively, and so must be. To the extent to which they differ, they differ only in their respective universality, but not at all in their objective validity. They are equally un-Kant feels this difficulty as presented by the secondary qualities; and how does he deal with it?]

Besides Space there is no other subjective percept (Vorstellung) which can be called "à priori objective." Color, Sound, Warmth, &c. &c., belong to the subjective constitution of the Sense-manner (des Sinnes-art) just as Space does. But they are in sensation (Empfindung) and are not perceptions (Anschauungen), and give us a cognition of no object in itself—at least, à priori. [Why?] Because from none of these Vorstellungen [of secondary qualities] can we deduce à priori synthetic propositions as we can from the perception, Space.

[Here again comes in the mathematical motif to which we have already referred as determining all Kant's æsthetic doctrine.]

I point out this lest any one should be induced to illustrate by such examples [i.e. by means of the secondary qualities] the Ideality of Space, since colors, &c., are not to be regarded as part of the constitution of things, but merely as changes effected in our subject, which may be different in different people. The color of a Rose may be different to different people; but the Rose itself is to the *empirical understanding* always a thing in itself.

[This is particularly unsatisfactory. First, it is admitted that the so-called Secondary qualities are known through a subjective constitution of the Sense just as Space is, but that they have not even *empirical* validity, but are merely varying and uncertain affections of the Sense. To which the remark offers itself that the senses of Hearing and Color, &c., if normal, and Sound, though more easily disturbed by our own physical conditions than the sense of Space, are not more variable, speaking absolutely, than the sense of Space. There are diseases which utterly distort the sense of Space, just as there are diseases which distort the sense of Color or Smell. "Yes," it may be urged, "but the sense of Space itself is always there under every variety and distortion." To which the rejoinder is, "So also is the sense of Smell, &c., except when disease or mal-formation altogether extinguishes it." Secondly, it is admitted that Space as well as Color is dependent on a subjective constitution of Sense or Sensibility; but that the latter is a Sensation, the former a Perception, and hence the difference. Kant here, however, manifestly begs the question, or rather proceeds on the assumption that the apriority of Space as a perception has been proved: whereas we are entitled—nay, bound—so far as the origin of secondary qualities is concerned, to presume this very point to be still at issue; and to ask, in what respect does our knowledge of Space, in so far as it is dependent on a process in sensation (for that there is a process is not denied), differ from our knowledge of Color and Sound? They both may be on equal evidence (apart from the argument about necessary propositions) affirmed to stand on the same basis — the basis, viz., of a certain change effected in our nerves. That the one is purer and more direct than the other, does not alter the essential fact.

THOUGHTS ON THE INTELLECT

IN GENERAL AND IN EVERY RELATION.

Translated from the German of Arthur Schofenhauer by Charles Joséfé, M.D. (Chapter III. of the "Parerga and Paralipomena.")

- § 31. What light is for the external world of bodies, the intellect is for the inner world of consciousness. For this is to the will (therefore also to the organism, which is only the will objectively conceived) about as light is to combustible bodies and oxygen, at whose union it breaks out. And as this is so much the purer the less it mixes itself with the smoke of the burning body, so also the intellect is the purer the more perfectly it is separated from the will from which it arose. In a bolder metaphor, it even could be said: life is, as everybody knows, a process of combustion; the formation of light taking place in it is the intellect.
- § 32. That our recognition, like our eye, only looks without, and not within, so that, if the recognizing tries to direct itself within so as to recognize itself, it looks into a perfect darkness, gets into a perfect vacuity,—this depends upon the following two reasons:
- (1.) The subject of cognition is not something self-subsisting, no thing in itself; it has no independent, original, substantial existence; but it is a mere apparition, something secondary, an accidence at first conditioned by the organism which is the apparition of the will; it is, in short, nothing else than the focus in which all powers of the brain converge. Now, how should this subject of cognition recognize itself, as it in itself is nothing? It directs itself within; then, of course, it recognizes the will, which is the basis of its essence: but this is, after all, for the recognizing subject no proper self-cognition, but cognition of something else different from it, but which now, already as something recognized directly, is only phenomenon, but such a one as has time only for its formnot, like the things of the external world, space besides. But, aside from this, the subject also only recognizes the will, like external things, in its utterance, that is, in the single acts of will and other affections, which are comprehended under the

name of wishes, affections, passions, and feelings: consequently it recognizes it always as phenomenon, although not under the restriction of space, like external things. But, for the above-mentioned reason, the recognizing subject cannot recognize itself simply because there is nothing to be recognized in it except this, that it is the recognizing, and just for that reason never that which is recognized. It is a phenomenon which has no other expression but to recognize; consequently no other can be recognized in it.

- (2.) The will in us is of course a thing in itself, existing for itself, something primary, self-subsisting, that whose manifestation represents itself as organism in the spatially intuiting apprehension of the brain. But still it is not capable of a self-cognition, because it is in and for itself only something that wills, but does not recognize; for the will as such does not recognize anything at all, consequently not itself. The recognizing is a secondary and mediated function which does not belong to it, the primary in its own nature.
- § 33. The most simple, unprejudiced self-observation. together with anatomical researches, leads to the conclusion that the intellect, as well as its objectivation, the brain, together with the apparatus of senses attached to it, is nothing but a highly increased susceptibility for influences from without, but that it does not constitute our original and real inner nature; thus, that the intellect within us is not what in the plant is the impelling power, or in the stone gravity, or chemical forces: only the will shows itself as this. But the intellect within us is that which in the plant is mere susceptibility to external influences, to physical and chemical influences, and whatever else may increase or hinder their growing and thriving; only that within us this susceptibility is so very highly increased, that, by virtue of it, the whole objective world—the world as conception—presents itself, consequently takes thus its origin as object. To make this clear, one may imagine the world to be without animal beings. Thus it is without any perception, consequently objectively does not exist at all; nevertheless we take it to exist thus. Now, let us imagine a number of plants sprung up from the soil closely side by side. Many things will influence them, as light, air, the contact of one

plant with another, moisture, cold, warmth, electric tension, etc. Now let us increase, in thought, the susceptibility of these plants to such influences more and more; then at last this will become sensation, accompanied by the ability to refer it to its causes, and thus results perception: directly there is the world presenting itself in space, time, and causality, but it remains none the less a mere result of the external influences upon the susceptibility of plants. This allegorical contemplation is very well adapted to make intelligible the mere phenomenal existence of the external world. For who would think after this of maintaining that the circumstances which have their existence in such a contemplation, arising from mere relations between external influences and living susceptibility,—who would think that they represent the truly objective inner and original nature of all those potencies of Nature which, as is admitted, influence all the plants, that is, the world of things, in themselves? We therefore can by this picture make it intelligible to us, why the human intellect has such narrow limits, as Kant points out in the Critique of Pure Reason.

But the thing in itself, on the contrary, is the will alone; consequently it is the creator and bearer of all properties of the phenomenon. Without hesitation it is charged with the moral; but also the cognition and its power, that is, the intellect, belongs to its appearance, consequently mediately to it itself. That narrow-minded and stupid men always experience some contempt may, at least partly, depend upon this, that the will has made the burden so easy, and, for the furtherance of its aims, has assumed only two drams of the cognitive faculty.

§ 34. Not only, as I have said above (§ 25), and also already in my principal work (vol. i. § 14), is all evidence intuitive, but all true and real understanding is so too. This is proved by the innumerable tropes in all languages, which are all efforts to reduce what is abstract to something visible. For mere abstract notions of a thing give no real understanding of the same, although they enable us to speak of it as many people talk of many things: yea, many need for this purpose not even notions, but only words; for instance, technical expressions, which they have learned, suffice

them. But, on the contrary, to understand really and truly, it is required that one conceive intuitively; that he receive a clear image, if possible, from the reality itself, but at least from the imagination. Even that which is too large or too complicated to be surveyed at a glance, must, to be really understood, be either visibly represented, or represented by something that can be surveyed; but that which does not admit of this, one must at least try to represent under some intuitive visible picture and allegory. So far intuition is the basis of our recognition. This is also shown by this, that we indeed can think in abstracto very large numbers, and also very great distances, which can be expressed only by such as, for instance, the astronomical ones; but that still we do not really and immediately understand them, but have only a notion of their proportion.

The philosopher should, more than any one else, gather from that original source the intuitive cognition, and therefore constantly fix his eyes on things themselves, on Nature, the world, and life; take them, and not books, for the text of his thoughts, and also constantly examine and control all notions that pass, already prepared, over to him; and take books, therefore, not as sources of cognition, but only as an assistance. For what they give he only receives at second hand, and generally also somewhat distorted - perchance only a reflection, a likeness of the original (that is, the world), and rarely is the looking-glass perfectly clear. But Nature, the reality, on the contrary, never lies; for it is she who makes all truth to be truth. The philosopher, therefore, has to make his study of her, and it is principally her great and distinct features, her chief and fundamental characteristics, whence his problem arises. He therefore will take as the object of his consideration the principal and general phenomena, those which are everywhere and at all times; but the special, particular, rare, microscopic, or passing phenomena, he will leave to the natural philosopher, to the zoologist, the historian, etc. More important things occupy him: the totality and the greatness of the world, its essential part, the fundamental truths, they are his aim. He therefore cannot at the same time occupy himself with its particularities and minutiæ just as he who, from the top of a high mountain, looks over the land, cannot at the same time ascertain and examine the plants growing down in the valley, but leaves this to him who botanizes among them. To devote oneself and all one's faculties to a special science, one must of course like it very much, but must also have a great indifference towards all others; for the former is only possible under the condition of remaining ignorant in all others, just as he who marries one renounces all others. Spirits of the first rank will therefore never devote themselves to a special science; for the understanding of the whole lies too much at their heart. They are generals, not captains; leaders of an orchestra, not individual performers. How should a great spirit find its satisfaction in knowing perfectly, and in all its relations to others, one field, one certain branch of the community of things, and in leaving out of sight everything else? It, on the contrary, is directed to the whole; its aim is the whole of things, the world in general, and there must nothing remain unknown to him: he consequently cannot spend his life in exhausting the minutiæ of a single department.

§ 35. That the lowest of all mental operations is the arithmetical is proved by this, that this is the only one which may also be performed by a machine, as there are now in England already such calculating machines in frequent use. Now, in truth, all analysis, finitorum et infinitorum, traces back. to counting. After this, one will understand the mathematical penetration of the mind at which Lichtenberg makes himself merry in saying: "With mathematics it is almost as with theology. Just as those following the last, especially if they fill an office, lay claim to a special credit for holiness and a nearer relationship to God, although very many amongst them are nothing but idle rogues, so the so-called mathematicians very often wish to be taken for deep thinkers, although there are amongst them the greatest blunderheads that ever can be found, unfit for any business which requires reflection, if it cannot be done by means of that easy connection of signs which are more the work of routine than of thinking.*

^{*} Every understanding is an immediate one, and therefore an intuitive apprehension of the causal connection, although it must readily become changed into abstract notions so as to become established. Calculation is consequently no

§ 36. The eye becomes weak from long straining at one object, and does not see any more; in the same way the intellect becomes unable, by continually meditating over the same things, to find out and to comprehend more of them; it becomes weak and embarrassed. It is necessary to quit them, so as to return to them again, when we shall find them again fresh and with clear outlines. Therefore, when Plato relates in his Banquet that Socrates was standing motionless and like a statue for twenty-four hours meditating over something he remembered, we must not only say to thisnon è vero; but also add to it, e mal trovato. From this want of rest of the intellect is also explained this, that if we, after any longer pause, look as it were anew into the common course of the things of this world, and thus cast a fresh, really wholly unprejudiced glance at them, their connection and their significance become most pure and most deeply clear to us, in such a way, that then we see quite plainly things, and only cannot understand how it is possible that they are not perceived by all those who constantly move amongst them. Such a clear moment, therefore, can be compared with a lucid interval.

§ 37. In a higher sense, even the hours of inspiration, with their moments of enlightening and proper conception, are nothing but the lucid intervals of genius. It therefore could be said that genius lodges only one story higher than madness. Even the reason of the reasonable operates only in lucid intervals, for he also is not always reasonable. Also the prudent man is not always thus; for sometimes he will

understanding of things. This only can be obtained in the way of intuition through correct cognition of the causality and geometrical construction of the process, as Euler gave such better than anybody else because he understood the things from the foundation. Calculation, on the contrary, has to deal with nothing but abstract notions of quantity, the relation of which to each other it fixes. By these means not the least understanding of a physical event can be obtained. For to understand such a one it requires intuitive visible comprehension of the spatial relations by means of which the causes operate. Calculation defines the how much and how large, and is therefore indispensable in practice. It even can be said: where calculation begins, understanding ends. For the head, occupied with numbers while calculating, alienated from the causal connection and the geometrical construction of the physical event, is full of mere abstract notions of numbers. But the result never tells more than how much, never what.

not be able to recall himself and to collect things most familiar to him. All this seems to paint a certain ebb and flood of the fluids of the brain, or an extension or relaxation of its fibres. Now if, at a spring-tide of this kind, some new and deep intelligence rises suddenly before us, whereby of course our thoughts attain a very high degree of vivacity, then the motive to this will always be an intuitive visible one, and an intuitive understanding always lies at the foundation of every great thought. For words awaken thoughts in others, pictures in us.

§ 38. It is understood by itself that one should write down as soon as possible valuable original meditations; for we forget sometimes what we have experienced, and much more that which we have thought. And thoughts do not come when we wish, but when they wish to come. On the contrary, whatever we receive finished from without, that which we merely have learned, it is better not to write down, therefore to make no collections; for to write down something means to consign it to oblivion. But one should treat his memory vigorously and despotically, so that it may not forget obedience; for instance, if one cannot recall to his mind anything, a verse, or word, he should on no account look for it in books, but should for weeks systematically torment his memory with it until it has done its duty. For the longer one has to think of it, the better will it stick afterwards. What one thus with great exertion has worked out from the depths of his memory, will at some other time be much readier at one's command than if one had renewed it again by means of books. Mnemonics, on the contrary, rests on this as a foundation, that one trusts more to his wit than to his memory, and therefore transfers the services of this to the former. He must substitute for something that is hard something that is easy to remember, and translate it afterwards again into the former. This mnemonics is to the natural memory what an artificial leg is to a real one, and is, like everything, subject to the expression of Napoleon: tout ce qui n'est pas naturel est imparfait. It is convenient to make use of it at the beginning with things newly learned, or words, like a temporary crutch, until they are incorporated into the natural, immediate memory. How our memory sets about to find

each time, out of the often immeasurable compass of its stock, just what is wanting-how the sometimes long, blind search after it goes on-how the, at first, vainly looked for comes to us generally whenever we have discovered a little thread attached to it, but at other times after hours, sometimes after days, quite of itself, without any motive, as if it were whispered to us,—all this is to us ourselves, who are active in it, a riddle; but it seems to me indisputable that those subtile and mysterious operations, on such an enormous quantity and variety of the matter to be remembered. can by no means be replaced by an artificial and conscious play with analogies, with which the natural memory, after all, always must remain as the primum mobile, but now has to keep in memory even two instead of one, the sign and the thing signified. At all events, such an artificial memory can take only a proportionally very small stock. Altogether, there are two modes in which things become impressed on our memory: either through intention, as we intentionally memorize them, whereby we meanwhile can also make use of mnemonic arts, if they are only numbers or words; or they impress themselves, without our assistance, by themselves, by virtue of the impression they make upon us, for which reason we may also call them lasting ones. But just as we generally do not feel a wound at the moment we receive it, but only afterwards, so also many a thought makes a deeper impression upon us than we are directly conscious of, for afterwards we remember it again; the consequence of which is that that we do not forget it, but it becomes incorporated in the system of our thought, to step forward in the right hour. To this is plainly requisite that, in some relation or other, it interest us. It therefore is required that one have a lively spirit, which eagerly takes up the objective, and aspires after knowledge and understanding. The surprising ignorance of many scholars, in things of their own department, has as its ultimate reason their want of interest for the objects of the same; consequently the observations. remarks, inspections, etc., make no vivid impression upon them, and therefore do not cling to them, as they in general do not study con amore, but under self-constraint: the more things there are a man takes a vivid and objective

interest in, the more will fix itself in this spontaneous mode in his memory; therefore also mostly in the youth, where the novelty of things heightens interest in them. This second mode is much surer than the first, and selects besides, quite of itself, what is most essential for us, although it will with stupid heads confine itself to personal affairs.

§ 39. The quality of our thoughts (their formal value) comes from within, but their direction, and through this their material, from without: so that what we think in any given moment is the product of two fundamentally different factors. The objects are therefore for the spirit only that which the plectron is for the lyre; consequently the great diversity of thoughts which the same aspect excites in different heads. When I still stood in the flower of my spirit and in the point of culmination of its powers where the brain had its highest tension, then whatever object my eye could meet talked revelations to me, and a series of thoughts arose which were worthy to be written down, and accordingly were. But in the progress of life, especially in the years of failing powers, those hours became less and less frequent; for the objects are, it is true, the plectron, but the lyre is the spirit. Whether this be well and highly tuned—that is what makes the great difference in the world's representation of itself in every head. Now as this depends upon physiological and anatomical conditions, thus, on the other side, Chance, in bringing forward the objects which shall occupy us, keeps the plectron in its hand. Nevertheless, here a great part of the matter is placed in our caprice, in so far as we, at least partly, can design it by means of the objects with which we occupy or surround ourselves. Upon this we therefore should devote some care, and proceed with methodical intention.

The excellent little book of Locke On the Conduct of the Understanding gives us instruction on this point. Good, serious thoughts on worthy objects, however, cannot be called up arbitrarily at any time: all that we can do is to keep the road open for them by scaring away all futile, insipid or common-place ruminations, and by averting all tricks and farces. It therefore can be said, that, to think something judicious, the first means is to think nothing absurd. Leave

the plain free only to good thoughts: they will come. For the same reason, one should not in every moment in which he is not occupied directly take a book in hand, but he should get settled in his head; then easily something good might rise in it. Very judicious is the observation Riemer made in his book on Goethe, that original thoughts almost only come while walking or standing, hardly ever in sitting. Now, because generally the rising of vivid, impressive, worthy thoughts is more the consequence of inner than of outer conditions, it becomes explicable from this, that of such thoughts several, regarding quite different objects, will appear quickly one after another, and often at the same time, in which case they cross and interfere with each other like crystals,—even that may happen to us which happened to him who hunted two hares at the same time.

§ 40. How narrow and poor the normal human intellect is, and how small the clearness of consciousness is. may be judged from this, that, in spite of the ephemeral shortness of the life of man cast into an endless time, of the uncertainty of our existence, of the innumerable riddles urging themselves everywhere, the important character of so many phenomena, and the thorough insufficiency of lifeyet all are not constantly and unremittingly philosophizing-nay, not even many, or even only some, only few; no, only one now and then, only the rare exceptions. rest live on in this dream not much different from the animals, from which after all they only distinguish themselves through foresight for several years in advance. For the metaphysical want which perhaps could announce itself has been taken care of from above in advance by means of religions; and these, no matter how they may be, do suffice. However, it may be that secretly there is more philosophizing than is apparent. For, truly, a dubious situation is ours! to live a span of time, full of trouble, misery, anguish, and pain, without knowing in the least wherefrom, whereto, and what for; and to have, in addition to all this, the priests, of all colors, with their respective revelations on the matter, together with their threatenings against infidels.

THE GRAMMAR OF DIONYSIOS THRAX.

Translated from the Greek by Thos, Davidson.

[This famous little pamphlet, the first attempt at a systematic grammar made in the Western World, and for many generations a text-book in the schools of the Roman Empire, appears, I believe, now for the first time in English. Pretty nearly all that we know about the person of Dionysios is what we are told by Suidas, who says:

"Dionysios the Alexandrian, called the Thracian from [the native country of] his father Teros, was a disciple of Aristarchos, and a grammarian. He was a public professor (ἱσοφίστενσεν) in Rome in the time of Pompey the Great, and was preceptor to Tyrannion the Elder. He composed a very large number of grammatical works, as well as set treatises and commentaries."—Cf. Max Müller, Lectures on the Science of Language, 1st Ser., p. 90 (English ed.); Lentz, Herodiani Technici Reliquiæ, Præf. p. clxvi.; Steinthal, Gesch. der Sprachw. bei den Griechen und Römern, pp. 478, 568 sqq.

The Grammar of Dionysios was first printed (I believe, though Lersch says "zuletzt abgedruckt") in 1816, in Immanuel Bekker's Anecdota Græca (pp. 629-643) along with the scholia of Chæroboskos, Diomedes, Melampous, Porphyry, and Stephanos (pp. 647-972). The genuineness and authenticity of the work have been impugned, but have been defended by Lersch, Die Sprachphilosophie der Alten, Pt. II. pp. 64 sqq., and are now generally admitted. Cf. K. E. A. Schmidt, Beiträge zur Geschichte der Grammatik des Gr. und des Lat., pp. 81, 189, 216, 519.

To my very literal translation I have added a few explanatory notes which seemed necessary, and a number of references for the convenience of persons who may wish to pursue the subject further.—*Translator*.]

1. ΟΝ GRAMMAR. (γραμματική).

Grammar is an experimental knowledge (ἐμπειρία) of the usages of language as generally current among poets and prose writers. It is divided into six parts:

- 1°. Trained reading with due regard to Prosody.**
- 2°. Explanation according to poetical figures.
- 3°. Ready statement of dialectical peculiarities† and allusions (εστορίω).
- 4°. Discovery of Etymology.
- 5°. An accurate account of analogies.‡

^{*} Prosody $(\pi\rho\sigma\sigma_w^{p/a})$, in the Greek sense, includes everything designated by diacritical marks—aspiration, accentuation, quantity, and sometimes pauses. Vid. Bekker. Anecdota Graca, pp. 679 sqq.: K. E. A. Schmidt, Beiträge zur Geschichte der Grammatik, pp. 181 sqq. Prosody had nothing whatsoever to do with verse-making, although it was related to music.

[†] Vid. Waitz, Aristotelis Organon, vol. i. pp. 323 sq.

[‡] Here came in all that we generally understand by Grammar. The whole of the first part of Lersch's *Sprachphilosophie der Alten* is devoted to the question of Analogy and Anomaly.

6°. Criticism* of poetical productions, which is the noblest part of grammatic art.

2. ΟΝ READING (ἀνάγνωσις).

Reading is the rendering of poetic or prose productions without stumbling or hesitancy. It must be done with due regard to expression, prosody, and pauses. Through the expression we learn the merit $(\hat{a}\rho\epsilon\tau\hat{\gamma})$ of the piece; from the prosody, the art of the reader; and from the pauses, the meaning intended to be conveyed. In this way we read tragedy heroically, comedy conversationally, elegiacs thrillingly, epics sustainedly, lyric poetry musically, and dirges softly and plaintively. Any reading done without due observance of these rules degrades the merits of the poets and makes the habits of readers ridiculous.

3. ΟΝ ΤΟΝΕ (τόνος).

Tone; is the resonance of a voice endowed with harmony. It is heightened in the acute, balanced in the grave, and broken in the circumflex.

4. ΟΝ Ρυνοτυλτίον (στιγμή).§

There are three punctuation marks: the full stop, the semicolon, and the comma. The full stop denotes that the sense is complete; the semicolon is a sign of where to take breath; the comma shows that the sense is not yet complete, but that something further must be added.

5. Wherein does the full stop differ from the comma? (τίνι διαφέρει στιγμή, δποστιγμής;)¶

In time. At the full stop the pause is long, at the comma, very short.

^{*} Such Criticism apparently did not include a discussion of the poetical merits of a piece (κρίνει δὶ τὰ ποιίμιστα σὰχ ὑτι καλά ἐστιν ἡ κακά· ποιητοῦ γὰρ ἀν είη τὸ τοιοῦτον.)

[†] Expression (ἐπόκρισις) is defined as being equivalent to μίμησις or Imitation.

[‡] Tone is what we usually call accent. The Latin *accentus*, however, formed in imitation of the Greek $\pi\rho\sigma\omega\rho\delta ia$, was undoubtedly intended to have the same width of meaning as the latter. Vid. Schmidt. *Beiträge*, pp. 190 sqq.

[§] On this whole question, vid. Schmidt, Beiträge, pp. 506-570.

^{||} These terms are hardly accurate: the sequel explains their meaning.

[¶] It will be seen that in practice Dionysios distinguishes only two punctuation marks, the $\sigma \tau v_2 \mu \dot{\mu} \mu i \sigma \eta$ (semicolon) being really not one at all.

6. ΟΝ RHAPSODY (δαψφδία).

A Rhapsody is a part of a poem including a certain (definite) argument. It is called a rhapsody, that is, rhabdody, because those who recited the Homeric poems were girt with a laurel branch $(\delta d\delta \delta o_{\varsigma})$.*

7. ΟΝ ΕLEMENTS (στοιγεῖα).†

There are twenty-four letters from α to ω . They are called letters $(\gamma\rho d\mu\mu\alpha\tau\alpha)$ from being formed of lines and scratches. For to write $(\gamma\rho d\psi\alpha)$, among the ancients, meant to scratch $(\xi \upsilon \sigma \alpha)$, as in Homer:

νίν δέ μ' ἐπιγράψας ταρσὸν ποδὸς είχεαι αὐτως.

They are also called elements $(\sigma \tau o \iota \gamma \epsilon \tilde{\iota} a)$ from being in a certain series $(\sigma \tau o \iota \gamma \delta \varsigma)$ or arrangement.

Of these letters, seven are Vowels: α , ε , η , ι o, υ , and ω . They are called vowels ($\varphi\omega\nu\dot{\gamma}\varepsilon\nu\tau\alpha$) because they form a complete sound ($\varphi\omega\nu\dot{\gamma}$) by themselves. Of the vowels, two are long, η and ω ; two are short, ε and υ ; and three are doubtful, α , ι , υ . They are called doubtful, because they may be either lengthened or shortened. Five of the vowels are prepositive, α , ε , η , υ , ω . They are called prepositive because, when placed before ι or υ , they form a syllable, as $\alpha\iota$, $\alpha\upsilon$. Two are subjunctive, ι and υ . ι is sometimes prepositive to ι , as in $\mu\upsilon\dot{\iota}\alpha$, $\delta\rho\pi\upsilon\iota\alpha$, $\upsilon\dot{\iota}\dot{\iota}\dot{\upsilon}\varepsilon$, and the like. There are six diphthongs, $\alpha\iota$, $\alpha\upsilon$, $\varepsilon\iota$, $\varepsilon\iota$, $\upsilon\iota$, $\upsilon\iota$, $\upsilon\iota$.

The remaining seventeen letters are *Consonants*, β , γ , δ , ζ , ϑ , x, λ , μ , ν , $\tilde{\varepsilon}$, π , ρ , σ , τ , φ , χ , ψ . They are called consonants because by themselves they have no sound, but produce a sound only when they are combined with vowels.§ Of the

^{*} Cf. Grote, Hist. of Greece, vol. ii. p. 141, note; Wolf. Proleg., pp. 58 sqq. (Edit. Calvary); K. O. Müller, Hist. of Lit. of Ancient Greece,, pp. 33 sqq.

[†] On Στοιχείοι, vid. Aristotle, Metaph. I. 1 (1026, b. 12): Bonitz, Aristotelis Metaph. pp. 225 sq.; Schmidt, Beiträge, pp. 80 sqq., 126. Aristotle's definition of στοιχείοι, as meaning a sound, is: "An element is an indivisible sound, not applicable, however, to every such sound, but only to those which are capable of entering into the formation of intelligible speech."—Poet. cap. xx. Cf. Steinthal, Gesch. der Sprachw. bei den Gr. und Röm., pp. 248 sq

[‡] Δίχρονοι = of twofold time. Cf. Rossbach und Westphal, Metrik der Griech., vol. ii. pp. 66 sqq.

[§] Aristotle, *Poetics*, cap. xx., makes three divisions of sounds—το τε οωνήεν καὶ τὸ ἡμίφωνον καὶ ἀφωνον—vowels, semivowels, and mutes. Cf. with the whole of Dionysios' classification, Schleicher, *Compend. der verg. Grammatik der*

consonants, eight are Semivowels, ζ , $\dot{\xi}$, ψ , λ , μ , ν , ρ , ε . They are called semivowels because, being less easily sounded than the vowels, when attempted to be pronounced alone, they result in hisses and mumblings. There are nine Mutes, β , γ , δ , θ , κ , π , τ , φ , χ . They are called mutes because they are more disagreeable in sound than the others, just as we say that a tragedian with a disagreeable voice is mute ($\check{\alpha}\varphi\omega$ - $\nu o \varepsilon$ = voiceless). Of these, three are smooth, κ , κ , τ ; three are rough, κ , κ , κ , κ , and three are medial, κ , κ , κ . The last are called medials because they are rougher than the smooths, and smoother than the roughs. And κ is the medial between κ and κ , κ between κ and κ , and κ between κ and κ . The roughs stand related to the smooths thus:

 φ to $\pi - a\lambda\lambda d$ $\mu\omega$ ei φ , $\delta\pi\eta$ $\xi\sigma\chi$ es $i\omega\nu$ ederate $\nu\eta a$.

χ to x — αὐτίχ' ὁ μὲν χλαῖνάν τε χιτῶνά τε ἔννυτ' 'θδυσσεύς'

 ϑ to $\tau - \vartheta \varsigma \, \check{\epsilon} \varphi a \vartheta$, of $\delta \check{a} \varphi a \, \pi \acute{a} \nu \tau \varepsilon \varsigma \, \check{a} \varkappa \check{\gamma} \nu \, \check{\epsilon} \gamma \check{\epsilon} \nu \sigma \nu \tau \sigma \, \sigma \iota \omega \pi \check{\gamma}$.

8. On Syllables (συλλαβαί).‡

A Syllable is properly the combination of a vowel $\$ with a

Indoger. Spr., pp. 54 sqq. et passim; Curtius, Grundzüge der griech Etymologie, pp. 85 sqq.; Max Müller, Lectures, 2d Series, Lect. III.

[†] Cf. Aristotle, Metaph. A 9 (993^a 5), 1 6 (1093^a 20); Kühner, Ausführ. Gram. der Gr. Spr., vol. i. p. 55.

[‡] Cf. Aristotle, *Poetics*, cap. xx.; Schmidt, *Beiträge*, pp. 126-180; Steinthal, Sprachw. bei den Gr. und Röm., p. 254.

[§] Or diphthong, evidently.

consonant or consonants, as $K\tilde{a}\rho$, $\beta o\tilde{\nu}\zeta$. Improperly we speak of a syllable as composed of a single vowel, as \tilde{a} , $\tilde{\eta}$.

9. On Long Syllables (μαχραὶ συλλαβαί).

A long syllable may come about in eight ways, three by nature and five by position*: by nature, when it is represented by the long elements, as $\tilde{\gamma}\rho\omega_{5}$ —or when one of the doubtful elements is assumed as long, as $\tilde{\gamma}\rho\omega_{5}$ —or when it contains one of the diphthongs, as $\tilde{\beta}\omega_{5}$; by position, either when it ends in two consonants, as $\tilde{\delta}\lambda_{5}$ —or when a short or shortened† vowel is followed by two consonants, as $\tilde{\delta}\rho\gamma\dot{\phi}_{5}$ —or when it ends in a single consonant and the next syllable begins with a consonant, as $\tilde{\epsilon}\tilde{\epsilon}\omega$ —or when it is followed by a double consonant, as $\tilde{\epsilon}\tilde{\epsilon}\omega$ —or when it ends in a double consonant, as $\tilde{\delta}\pi\alpha\tilde{\epsilon}$.

10. On Short Syllables (βραχεῖαι συλλαδαί).

A syllable becomes short in two ways, either when it contains a vowel naturally short, as $\beta\rho\dot{\epsilon}\varphi o\zeta$ —or when it has a doubtful vowel assumed as short, as " $\Delta\rho\eta\zeta$...‡

11. On Common Syllables (χοιναὶ συλλαβαί).

A syllable is common in three ways, either when it ends in a long vowel while the next syllable begins with a vowel, as

Οὐτί μοι αἰτίη ἐσσίν δεοί νέν μοι αἰτιοί εἰσιν—

or when a shortened vowel is followed by two consonants, whereof the latter is an unchangeable, while the former is by itself a mute, as

Πατροκλέ μοι δείλη πλείστου κεχαρισμένε θυμώ-

or when, being short, it stands at the end of a part of speech and the next syllable begins with a vowel, as

Νέστορα δ'ούκ έλαθεν ίαχὴ πίνοντά περ έμπης.

^{*} Position (Φεσις), in this connection, does not mean, as is generally supposed, place, but convention, arbitrary imposition, as opposed to nature (σίστς). Vid. Lersch. Sprachphilosophie, Pt. I. p. 5: Rossbach und Westphal. Metrik der Griechen, vol. ii. p. 74. This shows the utter absurdity of the rule, laid down in so many Greek and Latin grammars, that a vowel followed by two consonants is long.

[†] A short vowel is either r or o; a shortened vowel is a doubtful vowel (a, i, r) assumed as short.

[‡] Cf. Hom. II., v. 31:

Αρες, "Αρες, Βροτολοιγέ, πιαιφονέ, τειχεσιπλήτα.

12. On the Word ($\lambda \dot{\epsilon} \bar{\epsilon} \iota \varsigma$).

A Word is the smallest part of an ordered sentence.*

13. On the Sentence $(\lambda \acute{o} \gamma o \varsigma)$.

A Sentence is combination of words, either in prose or in verse, making complete sense. There are eight parts of speech: Noun, Verb, Participle, Article, Pronoun, Preposition, Adverb, and Conjunction. The proper noun, as a species, is subordinate to the noun.

14. On the Noun (orona).

A Noun is a declinable part of speech, signifying something either concrete or abstract (concrete as stone; abstract, as education): common or proper (common, as man, horse; proper, as Socrates, Plato).§ It has five accidents: genders, species, forms, numbers, and cases.

There are three *Genders*, the masculine, the feminine, and the neuter. Some add to these two more, the common and the epicene—common, as man, horse; epicene, as swallow, eagle.

There are two *Species* of nouns, the primitive and the derivative. A primitive noun is one which is said according to original imposition, as $\gamma\tilde{\chi}$ (earth); a derivative noun is one which derives its origin from another noun, as $\gamma\alpha\alpha/\omega\zeta$ (earthborn). There are seven classes of derivatives: Patronymics, Possessives, Comparatives, Diminutives, Nominals, Superlatives, and Verbals. A *Patronymic* is properly a noun formed from the name of a father, improperly a noun formed from the name of another ancestor, e.g., Achilleus is called both

^{*} Cf. Aristotle, Poetics, capp. xix.-xxii.; Waitz, Aristotelis Organon, vol. i. pp. 323 sq.; Steinthal, Gesch. des Sprachwiss., pp. 285 sqq.; J. Vahlen, Aristoteles Lehre von der Rangfolge der Theile der Tragwdie, in Symbola Philologorum Bonnensium, pp. 180 sqq.

[†] Aristotle (De Interp., cap. iv.) defines horog as "significant sound, whereof any one part is separately significant as an expression, but not as an affirmation." Cf. Schmidt, Beiträge, pp. 218 sqq.; Steinthal, Sprachwiss. bei den Gr. und Röm., pp. 568 sqq.; Lersch, Sprachphilosophie, Pt. II., passim.

[‡] Directed against the Stoics, who made the $\pi\rho\sigma\sigma\eta\gamma\sigma\rho\dot{\alpha}$ a distinct part of speech.

[§] Aristotle (*De Interp.*, cap. ii.) says: "A noun is a sound significant according to convention ($\theta \ell \sigma \eta = \text{position}$), timeless, whereof no part is separately significant." Cf. Schmidt, Beiträge, p. 227 sqq.

Peleides and Aiakides. Of masculine patronymics there are three forms, one in $\partial \eta \zeta$, one in $\omega \nu$, and one in $d\partial \omega \zeta = e.g.$ Atreion, Atreides, and the form peculiar to the Æolians. Hyrradios. (Pittakos was the son of Hyrras.) Of feminine patronymics there are likewise three forms, one in 45, as Priamis; one in ας, as Pelias; one in νη, as Adrastinê. From the names of mothers, Homer forms no species of patronymics; later authors do. A Possessive is a noun which denotes possession and includes the possessor, as Νηλήιωι ἔπποι (Neleian mares), Έχτόρεος γιτών (Hektorean robe), Πλατωνικόν βιβλίον (Platonic book). A Comparative is a noun making a comparison of one individual with another individual of the same genus, e.g. Achilleus braver than Aias; or of one individual with many of a different genus, e.g. Achilleus braver than the Trojans. Of comparatives there are three forms, one in τερος, as δξύτερος, βραδύτερος; one in ων pure, as βελτίων, καλλίων; one in σων, as χρείσσων, ήσσων. A Superlative is a noun used to express the superiority of one individual over many in a comparison. There are two forms of it, one in τατος, as δξύτατος, βραδύτατος; and one in στος, as μέγιστος, ἄριστὸς. Α Diminutive is a noun expressing a diminution of the primitive word without comparison, as ανθρωπίσχος (mannikin), λίθαξ (stonelet), μειραχύλλιον (stripling). A Nominal is a word formed alongside a noun, or as from a noun, as Theon, Tryphon. A Verbal is a noun derived from a verb, as Philemon, Noëmon.

There are three Forms of nouns, simple, compound, and super-compound—simple, as Memnon; compound, as Agamemnon; super-compound, as Agamemnonides, Philippides. Of compounds there are four kinds; 1°. those compounded of two complete words, as Cheirisophos; 2°. those compounded of two incomplete words, as Sophokles; 3°. those compounded of an incomplete and a complete word, as Philodemos; and 4°. those compounded of a complete word and an incomplete, as Periklês.

There are three *Numbers*, singular, dual, and plural; singular, as " $\theta\mu\eta\rho\sigma\varsigma$ (Homer); dual, as $\tau\dot{\omega}$ " $\theta\mu\dot{\eta}\rho\omega$ (both Homers); plural, as " $\theta\mu\eta\rho\sigma\iota$ (Homers). There are some singular designations used of plural objects, as $\delta\tilde{\eta}\mu\sigma\varsigma$ (people), $\chi\sigma\rho\dot{\sigma}\varsigma$ (chorus); and plural designations used of singular and dual

objects — of singular, as 'Αθηναι, Θηβαι (Athens, Thebes) — of dual, as $\grave{a}\mu\varphi\acute{o}\tau\varepsilon\rho\omega$ (both).

There are five *Cases*, the right, the generic,* the dative, the accusative, and the vocative. The right case is called also the nominative and the direct; the generic, the possessive, and the patrial; the dative, the injunctive; while the accusative is named from *cause*, and the vocative is called the allocative.

The following terms, expressive of accidents belonging to the noun, are also called *Species:* proper, appellative, adjective, relative, quasi-relative, homonym, synonym, pheronym, dionym, eponym, national, interrogative, indefinite, anaphoric (also called assimilative, demonstrative, and retributive), collective, distributive, inclusive, onomatopoetic, general, special, ordinal, numeral, participative, independent.

A Proper noun is one signifying a peculiar substance, † as Homer, Sokrates. An Appellative is one that signifies a common substance, as man, horse. An Adjective noun is one that is applied homonymously; to proper or appellative nouns, and signifies either praise or blame. It is derived from three sources, from the soul, the body, and external things: from the soul, as sage, licentious; from the body, as swift, slow; from external things, as rich, poor. A Relative noun is such as father, son, friend, right (hand). quasi-Relative is such as night, day, death, life. A Homonym is a noun predicated homonymously of many things, as of proper nouns, e.g. Telamonian Aias, Oilean Aias; of aplative nouns, as sea-mouse, land-mouse. A Synonym is a noun which, by several designations, signifies the same thing, as glaive, sword, bludgeon, blade, brand. A Pheronym is a name given from some accident, as Tisamenos and Megapenthes. A Dionym is a couple of names applied to the same proper noun, as Alexander and Paris, without there being any reciprocity in their signification; e.g., if one is Alexan-

^{*} Perusi, on no account to be rendered by genitivus (genitive), as the Romans did. Vid. Max Müller, Lectures, 1st Series, p. 180 sq. (Eng. edit.); Schmidt, Beiträge, pp. 320 sqq.

[†] Cf. Aristotle, Categ., cap. v.

[‡] Cf. Aristotle, Categ., cap. i.: "Things which have a common name, but whereof the notions corresponding to that name are different, are said to be homonymous."

der, it does not follow that he is Paris. An Eponym (also called Dionym) is a noun which, along with another proper noun, is applied to one object, as Poseidón is called Enosichthon, and Apollo, Phebos. A National name is one showing to what nation an individual belongs, as Phrygian, Galatian. An Interrogative (also called an Inquisitive) is so called from being employed in interrogations, as $\tau i \varsigma$; (who?)— $\pi o \tilde{\iota} o \varsigma$; (of what sort?)— $\pi o \sigma o \varsigma$; (how great?) πιλίχος; (how old?) An Indefinite is a noun placed in opposition to an Interrogative, as ὅστις (whosoever), ὁποῖος (of whatever sort), ὁπόσος (however great), ὁπιλίχος (of whatever age). An Anaphoric noun (called also an Assimilative, a Demonstrative, or an Attributive) is one signifying similarity, as τοιούτος (as great), τηλιχούτος (as old), τοιούτος (such). A Collective noun is one which, in the singular number, signifies a multitude, e.g. δίμως (people), γορός (chorus), όγλος (crowd). A Distributive noun is one having a relation to one out of two or more, as ετερος (the other), εχάτερος (each), ε̃χαστος (every one). An *Inclusive* noun is one that shows what is contained in it, as δαςνών (laurel-grove), παρθενών (virgin's abode). An Onomatopoetic noun is one formed imitatively from the peculiarities of sounds, as cλοῖσδος (dashing), δοίζος (whistling), δρυμαγδός (rattle). A General noun is one that can be divided into a number of species, as animal, plant. A Special noun is one of those into which a genus is divided, e.g. ox, horse; vine, olive. An Ordinal is a noun showing order, as first, second, third. A Numeral is a noun signifying number, as one, two, three. A Participative is a noun partaking of a certain substance, as golden, silvern. An Independent noun is one which is thought by itself, as God, Reason.

The Dispositions of the noun are two. Activity and Passivity; Activity, as the judge, the judging; Passivity, as the judgeable, the judged.

15. On the Verb (δημα).*

A Verb is an indeclinable word, indicating time, person

^{*} Aristotle (*De Interp.*, cap. iii.) says: "A Verb is that which adds a time-specification, of which no part separately signifies anything, and which is always asserted of something else." Cf. Schmidt, *Beiträge*, pp. 344 sqq.; Harris, *Hermes*, Book I. cap. 6.

and number, and showing activity or passivity. The verb has eight accidents: Moods, Dispositions (voices!), Species, Forms, Numbers, Tenses, Persons, Conjugations. There are five Moods: Indicative, Imperative. Optative, Subjunctive, and Infinitive. There are three Dispositions*: Activity, Passivity, and Mediality—Activity, as τύπτω (I strike); Passivity, as τύπτομαι (I am struck); Mediality, marking partly activity and partly passivity, as πέποιθα (I trust), διέφθορα (I waste), εποιησάμην (I became), εγραφάμην (I registered). There are two Species: Primitive and Derivative — Primitive, as ἀροδω; Derivative, as ἀρδεύω. There are three Forms: Simple, Compound, and Super-Compound—Simple, as grova; Compound, as zατας ρονώ; Super-Compound, as αντιγονίζω (I Antigonize), ωιλιππίζω (I Philippize). There are three Numbers: Singular, Dual, and Plural-Singular, as τύπτω; Dual, as τύπτετου; Plural, as τύπτομεν. There are three Persons: First, Second, and Third. The First is the person from whom the assertion is; the Second, the one to whom it is; and the Third, the one concerning whom it is. There are three Tenses: Present, Past, Future. Of these, the Past has four sub-species - Imperfect, Perfect, Pluperfect, and Aorist—which stand in three respective relations: the Present is related to the Imperfect, the Perfect to the Pluperfect, and the Aorist to the Future.

16. ΟΝ CONJUGATION (συζυγία).

17. On Circumflexed Verbs (περισπώμενα).

Of Circumflexed Verbs there are three Conjugations, of which the First is characterized in the second and third persons by the diphthong ε_{ℓ} , as $\nu o \tilde{\omega}$, $\nu o \tilde{\varepsilon} \tilde{\zeta}$, $\nu o \tilde{\varepsilon} \tilde{\zeta}$; the Second by

^{*} Διαθέσις, the word which Roman stupidity rendered by Vox (voice).

the diphthong q, as $\delta o \tilde{\omega}$, $\delta o \tilde{q} \xi$, $\delta o \tilde{q}$ (the ι being added in writing,* but not pronounced); and the Third by the diphthong $o \iota$, as $\chi \rho \nu \sigma \tilde{\omega}$, $\chi \rho \nu \sigma \tilde{\omega} \tilde{\xi}$, $\chi \rho \nu \sigma \tilde{\omega} \tilde{\xi}$.

18. ΟΝ VERBS ΙΝ μι (τὰ εἰς μι).

Of Verbs ending in μ there are four conjugations, of which the First is characterized from the first of the Circumflexed Conjugations, as from $\tau\iota\partial\tilde{\omega}$ comes $\tau\iota\partial\eta\mu$; the Second from the second, as from $\iota\sigma\tau\tilde{\omega}$, $\iota\sigma\tau\eta\mu$; the Third from the third, as from $\partial\iota\partial\tilde{\omega}$, $\partial\iota\partial\omega\mu$; and the Fourth from the sixth of the Barytone Conjugations, as from $\pi\eta\gamma\nu\dot{\nu}\omega$, $\pi\dot{\gamma}\gamma\nu\dot{\nu}\mu$.

19. ΟΝ ΤΗΕ ΡΑΚΤΙΟΙΡΙΕ (μετοχή).

A Participle is a word partaking of the nature both of nouns and verbs. It has all the accidents which belong to nouns as well as those which belong to verbs, except mood and person.

20. On the Article ($\check{a}\rho\partial\rho\sigma\nu$).

An Article is a declinable part of speech prefixed or subjoined to the various cases of nouns, taking, when prefixed, the form δ , and, when subjoined, the form $\delta \zeta$.† It has three accidents: Gender, Number, and Case. The Genders are three, as δ $\pi \omega \eta \tau \eta \zeta$, η $\pi \omega \eta \sigma \omega \zeta$, $\tau \delta$ $\pi \omega \eta \eta \omega \omega$. The Numbers are three: Singular, Dual, and Plural—Singular, as δ , η , $\tau \delta$; Dual, as $\tau \omega$, $\tau \delta$; Plural, as $\omega \zeta$, $\omega \zeta$, $\tau \delta$. The Cases are— δ , $\tau \omega \zeta$, τ

21. ΟΝ ΤΗΕ PRONOUN (ἀντωνυμέα.)‡

A Pronoun is a word assumed instead of a noun, and indicating definite persons. It has six accidents: Person, Gender, Number, Case, Form, and Species.

^{*} It was not subscribed till the twelfth century of our era. Vid. Kühner, Ausführ. Gram. der Gr. Spr., vol. i. p. 59, note (2d edit.) Chæroboskos (Bekker, Anec. Græca, vol. p. 1186) says: "It must be understood that grammarians, whose attention is directed to pronunciation, say that the ℓ is unpronounced when it is found with (follows) a long, η , or ω , * * * * ; but musicians, who stickle for accuracy, say that it is pronounced, but is not distinctly heard on account of the length of the [preceding] long vowels."

[†] The ancient ἀρθρον included both the article and the relative pronoun. Cf. Lersch, Sprachphilosophie, Pt. II. pp. 132 sqq.; Steinthal, Sprachw. bei den Gr. und Röm., pp. 660 sqq.; Harris, Hermes, Bk. II., cap. 1.

[‡] Lersch, Pt. II. passim: Steinthal, pp. 663 sqq.: Harris, Hermes, Bk. I. cap. v.

22. On Primitive Pronouns.

The *Persons* of the Primitive Pronouns are $\exists \nu \dot{\omega}, \sigma \dot{\nu}, \dot{\iota}$; those of the Derivative Pronouns, $\xi\mu\delta\varsigma$, $\sigma\delta\varsigma$, $\delta\varsigma$. The Genders of the Primitive Pronouns are not expressed in speech, but by the indication which they make, as $\hat{\epsilon}\gamma\dot{\omega}$ (I), whereas the Genders of the Derivatives are expressed in speech, as $\dot{o} \xi \mu \dot{o} \zeta$, ή ἐμή, τὸ ἐμόν. The Numbers of the Primitives are—Singular, έγω, σύ, ἴ; Dual, νωϊ, σφωϊ; Plural, ήμεῖς, ὑμεῖς, σφεῖς: those of the Derivatives—Singular, $\hat{\epsilon}\mu\delta\varsigma$, $\sigma\delta\varsigma$, $\delta\varsigma$; Dual, $\hat{\epsilon}\mu\delta\omega$, $\sigma\delta\omega$, $\delta\omega$; Plural, ¿μοί, σοί, οί. The Cases of the Primitives are—Direct, έγω, σύ, ἴ; Generic, έμου, σου, ού; Dative, έμοί, σοί, οῖ; Accusative, $\xi \mu \dot{\varepsilon}$, $\sigma \dot{\varepsilon}$, $\tilde{\varepsilon}$; Vocative, $\sigma \dot{\upsilon}$: those of the Derivatives are $\hat{\epsilon}\mu\dot{o}\varsigma$, $\sigma\dot{o}\varsigma$, $\delta\varsigma$; $\hat{\epsilon}\mu\dot{o}\tilde{o}$, $\sigma\dot{o}\tilde{o}$, $o\dot{o}$; $\hat{\epsilon}\mu\tilde{\omega}$, $\sigma\tilde{\omega}$, $\tilde{\phi}$; $\hat{\epsilon}\mu\dot{o}\nu$, $\sigma\dot{o}\nu$, $\delta\nu$. There are two Forms: Simple and Compound — Simple, ξμού, σού, ού; Compound, ξμαντού, σαντού, ξαυτού. There are two Species, inasmuch as some are Primitive, as $\frac{1}{2}\gamma\dot{\omega}$, $\sigma\dot{\nu}$, $\ddot{\iota}$, and others Derivative, as are all the Possessives, which are also called Bi-personals. They are thus derived—from Singulars, those designating one possessor, as ἐμοῦ, ἐμός; from Duals, those designating two, as from νωξ, νωίτερος; from Plurals, those designating many, as from ημείς, ημέτερος. Of the Pronouns, some are [used] without the article and some with it—without the article, as $\hat{\epsilon}_T \hat{\omega}$; with the article, as $\hat{\epsilon}_T \hat{\omega}_S$.

23. On Prepositions (πρόθεσις).*

A Preposition is a word placed before any of the parts of speech, both in Composition and in Syntax. The number of Prepositions is eighteen, whereof six are monosyllabic, $\hat{\epsilon}\nu$, $\epsilon\hat{\iota}\zeta$, $\hat{\xi}\xi$, $\pi\rho\dot{\delta}$, $\pi\rho\dot{\delta}\zeta$, $\sigma\dot{\delta}\nu$ —which are incapable of anastrophé—and twelve are dissyllabic, $\hat{\alpha}\nu\dot{\alpha}$, $\varkappa\alpha\tau\dot{\alpha}$, $\delta\iota\dot{\alpha}$, $\mu\varepsilon\tau\dot{\alpha}$, $\pi\alpha\rho\dot{\alpha}$, $\hat{\alpha}\nu\tau\dot{\iota}$, $\hat{\epsilon}\pi\dot{\iota}$, $\pi\varepsilon\rho\dot{\iota}$, $\hat{\alpha}\pi\dot{\delta}$, $\delta\pi\dot{\delta}$, $\delta\pi\dot{\delta}$, $\delta\pi\dot{\delta}$, $\delta\pi\dot{\delta}$, $\delta\pi\dot{\delta}$.

24. ΟΝ ΤΗΕ ΑDVERB (ἐπέμοςμα).†

An Adverb is an indeclinable part of speech, said of a verb or added to a verb. Of the Adverbs, some are Simple, and others Compound—Simple, as $\pi \delta \lambda \omega$; Compound, as $\pi \rho \delta \pi \omega \lambda \omega$. Some are indicative of time, as $\nu \partial \nu$, $\tau \delta \tau s$, $\omega \delta \partial c$: to these we

^{*} Lersch, passim; Steinthal, 671 sqq.; Harris, Hermes, Bk. II. cap. iii.

[†] Lersch, passim: Steinthal, 672; Harris, Hermes, Bk. I. cap. xi.; Schmidt, Beiträge, pp. 485 sqq.

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must subordinate as species those that connote particular times or seasons, as σήμερον, αύριον, τόφρα, τέως, πηνίχα. Some indicate manner, as χαλώς, σοςώς, δυνατώς; some, quality, as πύξ, λάξ, βοτρυδόν, αγεληδόν; some, quantity, as πολλάχις, δλιγάκις, μυριάκις; some, number, as δίς, τρίς, τετράκις; some, place, as ἀνω, zάτω—of these there are three kinds, those signifying in a place, those signifying to a place, and those signifying from a place, as οίχοι, οίχαδε, οίχοθεν. Some Adverbs signify a wish, as εἴθε, αἴθε, ἄβαλε; some express horror, as $\pi a \pi a i$, $io\dot{v}$, $\varphi \epsilon \tilde{v}$; some, denial or negation, as $o\dot{v}$, $o\dot{v}\gamma i$, $o\dot{v}$ $\partial \tilde{\chi} \tau a$, οδδαμῶς; some, agreement, as ναί, ναίχι; some, prohibition, as μή, μη δήτα, μηδαμώς; some, comparison or similarity, as ώς, ωσπερ, ήθτε, καθά, καθάτερ; some, surprise, as βαβαί; some, probability, as ἴσως, τάγα, τυχόν; some, order, as έξης, ἐφεξης, γωρίς; some, congregation, as ἄμδην, ἄμα, ἤλιθα; some, command, as εία, ἄγε, φέρε; some, comparison, as μαλλον, ήττον; some, interrogation, as $\pi \dot{\alpha} \theta \epsilon \nu$, $\pi \sigma \dot{\nu}$, $\pi \gamma \nu \dot{\nu} \alpha$, $\pi \ddot{\omega} \varsigma$; some, vehemence, as σφόδρα, ἄγαν, πάνυ, μάλιστα; some, coincidence, as άμα, όμου, άμυδις; some are deprecative, as μά; some are asseverative, as νή; some are positive, as άγνωστέον, γραπτέον, πλευστέον; some express ratification, as δηλαδή; and some enthusiasm, as εὐοῖ, εὐάν.

25. ΟΝ CONJUNCTIONS (σύνδεσμος).*

^{*} Aristotle, Poet., cap. xx.; Lersch, passim; Steinthal, pp. 673 sqq.; Harris, Hermes, Bk. II. cap. ii.

KANT'S ETHICS.

By JAMES EDMUNDS.

[Continued from Vol. V., p. 307.]

V .- The Ethical End and Aim.

§ 85. "Superadd to the will of one sensitively affected (who would like to lie, because somewhat may be earned by it), the moral law. Then it is as when the experimenter adds an alkali to a solution of muriate of lime: the acid deserts the lime, combines with the alkali, and the earth is precipitated." Most extraordinary Kant!

However interesting such experiments are, we are not like to fall into the belief that morality is valid for man because it interests him. On the contrary, it interests solely because of its obvious and odions validity. The kaleidoscopic charm of exhibited virtue were surely insufficient to startle us out of placid resignation to the drift of nature, were not militant autocracy enforced by the native energy of the naked law. The obligation to descend into hell is expressed in the precept "Know thyself"; and the man who goes down voluntarily must know well that the precipitous way is the sole (however unwelcome) path of supreme duty. Not until he has thoroughly learned that in his own person unite the roles of Orpheus and Euridice, does he in search of himself valorously explore and with no backward glance immediately reconduct himself up the facilis descensus Averni.

§ 86. This VALOR (fortitudo moralis) is the true ethic strength (§ 53), manifest in the unflinching fulfilment of duty; and KANT acutely remarks that it were not VIRTUE (the strength of man) "unless it were brought forth by the firmness of man's resolution when combatting such mighty withstanding appetites."

As there is in genere but one reason, but one law of reason, and but one freedom (§§ 43, 62, 76), so there, can be but one virtue, the strength of resistance to whatever determinator may propel toward injustice. But as the law (in application by means of the ethical schema) directs upon material ends and thereby constitutes particular duties, so it may be said that the one true virtue, thus (in the fulfilment of these duties; applied, becomes different practical virtues, corresponding to the several distinct offices of virtue (particular moral duties, such as not to lie). "To acknowledge several virtues, as we inevitably must, is merely to cogitate different moral objects towards which the will is guided and led by the one and single principle of virtue."

§ 87. He who endeavors to fulfil duty, approves his own conduct pro tanto; and this self-approbation is in itself no slight pleasure. Kant well says that no man can endure to hold himself unworthy of life; and the displacency following upon self-condemnation embitters any pleasure attained by unworthy means (violation of obligations). But he who persists in his worthy endeavor without ceasing, will probably surprise himself (and not infrequently) in the possession of an ethical complacency which is so far superior to selfapprobation that it is untranslatable into language; and in this way virtue is truly its own reward, bringing along with it (in terra) a peace (hominibus bonæ voluntatis) which passeth understanding. But this most desirable peace is to be attained by no other means than constant struggle; and he who halts for a moment in his onward march toward virtue, fondly fancying himself already sufficiently virtuous, shall have no peace. To say that virtue is a quality (possessed of degree) is no doubt correct; but to maintain that the essence of virtue consists just in the degree of the quality (in other words, that the possession of a certain quantum of virtue is the essence of moral perfection), is to eradicate the very

notion of morality. To him who should attain moral perfection, the law would be no longer applicable; and so the aim of the law could be no longer commanded and the end of the law no longer indicated. To sum up all in a paradox: virtue is never found but in the seeking, and he who hath her hath her not.*

§ 88. The great extent of the moral law (which must cover every particular act of reason, else it were no law of reason), preventing the possibility of its complete fulfilment by any one agent (though if all agents were honestly to fulfil each his duty, the law must necessarily be fulfilled, no further obedience being possible), in connection with the complexity of the concerns of individual life, occasions indeterminateness of moral obligation. For while it is easy to state certain acts which we must do or omit (as not to steal, to obey just statutes. etc.), there are other duties (as beneficence) no less obligatory, which cannot be extensively determined. For instance, whether we give to the poor so great part of our means that our own family must suffer, or withhold from our hungry neighbor that we may enjoy superfluity, we are equally wrong; but the exact medium cannot be known, and each person must judge each case for himself as justly as possible. It is not lawful to neglect any duty because its extent cannot be accurately known; for the obligation would thereby be violated. The judgment in indeterminate cases must depend upon the maxim which governs the act; and if that maxim is in harmony with the law, the act is right.

^{*} This is hard doctrine for those transcendent geniuses who if they may not issue upon some absolute end will begin no march; who find it "just as satisfactory to be resigned at the beginning as at the [what?] end" of an endless progress. But it involves no other presupposition than that the law precedes its subject. Leibnitz could not endure that form should precede the things themselves and determine their possibility: an objection, says Kant (remarks upon the equivocal nature of the conceptions of reflection), "perfectly correct, if we assume that we intuite things as they are, although with confused representation." But to think that form precedes things-in-themselves is irreconcilable merely with the thought of things uncreate and indeterminable, not repugnant to the understanding. For it is by no means the intuition which gives the permanence (not-beginning) of matter, but the understanding—the same understanding which confesses its own inability to deal in any way with this same permanent matter other than upon the presupposition of law. To annihilate the absolutely necessary presupposition, is to a limit the apotheosis of the absolutely limited understanding with which Fighter logically concludes.

- § 89. The interest of reason in the indeterminateness of moral obligation is inestimable. Although upon first view it would seem preferable that all acts should be morally determinate, yet manifestly if we are to know immediately that an act is right or wrong, we shall probably do or omit it and think no more about it, a procedure which does not so much tend to the exercise and consequent strengthening of virtue. But since we are obliged to use a continuous dialectic as to the morality of our actions, and are unable to conclude with certainty, and can approximately decide only by careful scrutiny of our own motives: it results that the faculty of moral judgment (conscience), developed by constant use, becomes more active and adept and easy of application: and the moral sense is rendered more acute, vastly increasing both the pain which deters from wrong and the pleasure which incites to right. And since virtue is inevitably its own reward, the most refined selfishness might forbid the neglect of any duty, however indeterminate.
- § 90. The facility with which the morality of actions may be evolved by consideration of their maxim is truly surprising. It is not easy to exemplify any rule, because instances are for the most part inadequate: but since we have nowhere attempted a categorical treatise, we have introduced examples without hesitation; and we here subjoin one which occurs: Yesterday we removed a large atlas from our desk. In passing through the office we were interrupted by an associate who inquired "Is the war over?" (the atlas no longer required?) He was answered that we wanted to use the atlas at our room. Conscience immediately condemned that answer; and the judgment was delivered as promptly and as apparently without consideration as the reply itself. But since reason never acts illogically, it is duty to recall by reflection the steps in the logical process which (were not originally omitted, but, being passed over with incalculable rapidity,) concluded in the first instance upon the reply and in the second upon the condemnation. Clearly it will not do to insist on the truth of the reply in the presence of the condemnation; so we must go to the motive again; this time we find that we do not desire to use the atlas at our room more than at the office, our real object being to secure more space

in the desk and to "satisfy the unities" by placing the book in our library. We next inquire into the motive of the lie: here it appears that there were present several gentlemen who might have inferred a wish to put the map out of their reach, a wish which if expressed would have been pronounced "mean." Hence the desire not to be accounted ungenerous prompted an inconsiderate and needless falsehood; and the maxim (to lie rather than seem ungenerous) needs no proof of its unfitness for law universal. No analysis of the lie itself can exhibit its falsity; but the recognition of the maxim instantly justifies the voice of conscience. miliation of such an examination is always salutary; for it strengthens the conviction that conscience, however warped, is apt to speak the truth to the attentive ear, and thereby assists to constitute a habit of attention which makes less difficult the performance of duty.

- § 91. But we cannot too emphatically insist that this sort of exploration does in no way increase the obligation of obedience to the law (§ 77). It is only because we cannot escape from the judgment of conscience, that we undertake the selfexamination necessary to exhibit the deduction of the judgment. If the judgment were theoretic merely and esteemed invalid, no man would devote an instant to the development of its accordance with the systematic unity of all science (§ 49). Moreover, if the scientific deduction were essential to the validity of the deliverance of conscience, that validity could extend only to those agents who are competent to make the deduction; and he who is by force of hard circumstance prevented from high cultivation of his own rational faculty, might well plead ignorance of the law in avoidance of judgment. And when presently we come to consider the supreme occasion of the law (\$\\$ 14, 96), we shall not be able sufficiently to admire that supreme adaptation of means to ends which admits no defeat and tolerates no avoidance, and which here as elsewhere distinguishes the architectonic character of the natura naturans.
- § 92. The intelligent knows himself merely as presenting a phenomenon to which he gives a law. Finding himself compelled to obey his law, he proceeds in accordance with his phenomenal method of ends to assign his intelligent self

as the end of his supersensible law. But of himself as an end he knows nothing more than the fact of existence. He yields obedience to the force of the pure law, and not to any figurative or abstract end. Himself as end is a pure abstraction, adding nothing to the law, which is an obstinate reality. For himself as end he may have no regard (§ 71): yet will he be unable to break the force of the law (§ 78). But as a doctrine, by the representation of himself as end the selfish man may be able to coact the pure representation of the law, setting over against the solicitations of the carnal man an ethical analogue (as it were) of the material ends of his phenomenal designs.

§ 93. This figurative sequent to the application (by an agent subject to sensuous solicitation) of the pure insensitive law, Kant represents as "an end which is at the same time a duty"; and the co-action which is effected by the adoption of this quasi end into human design, he seems to us to confound with the original spontaneous action of the law "That there must be such an end," says he, "and a categorical imperative corresponding to it, is apparent from this: that were there are free actions there must also be ends whitherwards they tend as their object; and among these ends there must be some whereof it is of the very essence to be duties. For were none such given, then (because no action can be aimless) would every end be only valid in the eye of reason as a means instrumental and conducive toward some further end, and a categorical imperative would be impossible, a position which would overthrow all ethics," which would be very sad, certainly.

§ 94. Now the truth is that the purely insensitive law (§ 54) cannot possibly supply the matter of obligation (an end which is at the same time a duty), and can at furthest only give form to sensible design and direct to the adoption of such ends alone as (and of any ends of will that) are thereto conformable. Kant's ethical end is merely the necessary schema (§ 59) in and through which the otherwise inconceivable synthesis (of the heterogeneous elements, intelligible holiness and the deflected and sensuously subjected will of the man of flesh and hot blood) becomes possible (and constitutes virtue). To this end (as to any schema) no con-

ceivable matter can be adequate; and while it must be conceded that beneath softer skies it may perhaps (how, when, or where we know not) be possibly an objective end, it cannot by any means be admitted into the essential constitution of the obligation of the supreme law of reason, who tolerates no co-sovereign (§ 46) and resolutely refuses to rest upon any determination of sense, whether body or pure schema, her absolute ideal rule: sic volo! sic jubeo! sit pro ratione voluntas!

§ 95. It is true that no action can be aimless. But reason commands to act only because to act is essential to the world of nature, whereof the rational agent is constituent (§ 47): in other words, the merely human reason is a regulative, not a constitutive idea, and her law commands not so much to act, as (since man Must act) now to act (§ 74). If there were no schema, she could not even regulate; and a categorical imperative commanding an end would be impossible, a position which would overthrow all applied ethics.

§ 96. But we understand that the categorical imperative (§ 5) depends upon no commandment of any end (§§ 57, 84) as its warrant and sure ground, but solely upon its position as the inexorable apodict of reason, by which supreme faculty it is moreover unremittingly thrust forward and enforced upon the world. We see also (Chap. IV.) how in and through the rational schema, man, the law is synthetically formulated and directed upon material ends, constituting and subsuming under itself particular offices of virtue: which offices are never adequate to the obligation of the law, and which ends can never enter into that obligation as the ethical end and aim of the law. Our deduction is therefore at an end and complete in so far as it subserves a practical behoof (§ 23); and it remains only to inquire, in order that the demand of reason for absolute completeness (theoretical as well as practical) may be satisfied: What is the true end and aim of the law? What is the true content of the design which reason apprehends in the conception of her absolute law, which design cannot be abstracted from without destroying the very notion itself of law? And we shall be assisted in this highest speculation of supremest reason by the reflection (upon sure apriori ground) that such an end cannot only be no object in the world and hence no possible end and aim of human

design, but no object at all, and therefore no end and aim of any finite intelligence. Else were it not only inadequate to the law which directs upon it, but insufficient to check the daring progress of reason, which would unhesitatingly pass beyond it in search of that Absolute Unconditioned upon which alone any determinate finds ultimate rest. What therefore we shall discover is no end and aim of our finite action, which it must be our duty as rational agents to adopt and approach; but such an end and aim as that MERELY TO BEHOLD IT is and ever shall be the complete and absolute occasion for the existence and exhibition of the law.

§ 97. The wondrous fact of morality in all ages and under all circumstances instructs man, who would fain set himself up as the author of a law from which he would fain escape, that so soon and so long as he attempts so to escape must he himself (man the inexorable judge) pronounce upon himself (man the willing culprit) never ending self-condemnation (§ 24), a judgment which neither contains nor threatens any penalty beyond the mere fact itself of its declaration, but under which to remain is itself the supreme penalty of supreme law. No doubt particular violations of material duties are followed by sensible pains and punishments; but these, however difficult to be borne, are utterly inadequate to the bare fact of the judgment, and would by the commonest reason gladly be a thousandfold endured, were it thereby possible to be rid of the terrors of the law itself. It is not to be denied that the material end and practical aim consequent upon the law is the conservation and continual advancement of phenomenal man. But the ethical end and aim of the law, (to which moreover three thousand recorded years of experience and observation have uniformly and irresistibly pointed), ever unconditionally demanded by reason in view of the unconditioned law itself, is the Uncondi-TIONED AUTHOR HIMSELF, SEMPER DEUS.*

^{*} It is 3266 years since in Asia the great Pharaoh, RAMESES MEI-AMOUN, in the fifth year of his reign, on the ninth day of the month Epiphi, marching against the insurgent tribes commanded by the prince of Kheta, found his troops driven back in terror before the city Atesh, on the left bank of the river Aranta, and himself for the first time in the face of defeat. To rally and inspire his broken cohorts, he himself in the presence of his army ordered his single chariot into the confederate ranks. "He was alone," relates a historian of his court, "no

§ 98. Schwegler aptly characterizes the Neo-Platonic philosophy as a monism, and thus the most perfect develop-

other near him. And the king had with him neither his princes nor his generals, nor the captains of the archers or of the chariots. And this is what his majesty of the sound and strong life said:

... What then is the intent of my Father Ammon? Is it a Father who would deny his son? Or have I trusted to my own thoughts? Have I not walked according to Thy word? Has not Thy mouth guided my goings forth, and Thy counsels have they not directed me? Have I not dedicated to Thee magnificent festivals in great number, and have I not filled thy house with my booty? There is building to Thee a dwelling for myriads of years. The whole world is gathering together to dedicate its offerings to Thee. I have enriched thy domain; I have sacrifieed to Thee thirty thousand oxen, with all the scent-bearing herbs and choicest perfumes. I have built for Thee upon the sand temples of blocks of stone; and bringing obelisks from Elephantina, I have reared eternal shafts in Thine honor. For Thee the great ships toss upon the deep; they bear to Thee the tribute of the nations. Who will say that like things have been done at any other time? Ignominy to him who resists Thy designs: felicity to him who understands Thee, O Ammon. I invoke Thee, O my Father! I am in the midst of a throng of unknown tribes, and I am alone before Thee; no one is with me. My archers and my horsemen deserted me when I called aloud to them; not one among them hearkened to me when A cried to them for help. But Iprefer Λ mmon to thousands of archers, to millions of horsemen, and to myriads of young men arrayed in phalanx. The wiles of men are as nought; Ammon will prevail over them. O Sun, have I not obeyed the order of Thy lips, and Thy counsels have they not guided me? Have I not given glory to Thee, to the ends of the earth?"

The incident is (said by the French savants to be) commemorated at Luxor, at Ipsamboul, at Beit-el-Wally, in the Rameseum, and at Karnak, upon one of whose walls it is related in extenso. Whether the ALEXANDER of his age actually delivered the invocation in the midst of battle, is not material for the purpose of this illustration; since even the uncritical predetermination to compress Egyptian chronology within the limits of the Mosaic genesis will not find it easy to assign to the record a date within the past three thousand years.*

At the Indian council at Fort Laramie, October 5, 1870, Red Cloud, hero of eighty-seven battles, with uplifted hands, "in presence of the commissioners and the assembled Indians," who all rose to their feet, "prayed:

"O GREAT SPIRIT, I pray You to look at us: we are Your children, and You placed us first in this land. We pray You to look down on us, so nothing but the truth will be spoken in this council. We don't ask for anything but what is right and just. When You made Your red children, O GREAT SPIRIT, You made them to have mercy upon them. Now we are before You to-day, praying You to look down on us and take pity on Your poor red children. We pray You to have nothing but the truth spoken here. You are the Protector of the people born with bows and arrows as well as the people born with hats and garments;

^{*} The poem of Pen-ta-ur upon the wall at Karnak is greatly disfigured by time; but it is partly preserved in the papyrus of Sallier in the British Museum, and partly restored by the labors of Champollion and other eminent Egyptologists. The reader may consult the Vicomte de Rouge's memoir on "the campaigns of Sesostris," Revue Contemporaire for August, 1856; or F. de Lanave's "Rameses the Great,"

ment of ancient philosophy "in so far as this has striven to carry back the sum of all being to one ultimate ground." (§ 16.)

PLOTINUS. Says Schwegler. "has thoroughly striven to think of this first principle [unity] not as first principle, i.e. not in its relation to that of which it is the ground, but only IN-ITSELF, wholly without reference either to us or to anything else. This pure abstraction, however," adds Schwegler, "he could not carry out."

Now this is just such a comment as one would expect from a disciple of Hegel, to whom even absolute nothing is something to be carried out. It is difficult to avoid the belief that there must be some radically weak point in such great minds, that when they have accompanied reason to her ultimate deliverance (consciousness) and have discovered her ultimate ground (unity*) they must so persistently forget that the consciousness of the ground is no knowledge of the ground, and in itself gives nothing more than bare existence, and must so daringly venture the transcendent saltus which re-

and I hope we don't pray You in vain. We are poor and ignorant; our fore-fathers told us we would not be in misery if we would ask for Your assistance. O Great Spirit, look down on Your red children and take pity on them."

Fayel, a correspondent who never lies, has particularly described to us the scene upon this occasion. We have carefully collated our copy with the original transcription made by John Richards, to whom and to Leon Pallarday (both of whom also heard the original delivery) Red Cloud for this purpose expressly repeated the invocation. The result of our investigation is the conviction that the prayer is genuine and the transcription correct in general, though not quite literal. The personal character of the chief (one of the noblest of his people) does not concern the present illustration.

God always; but when His children are in trouble, they call Him "Father."

* This unity is immanent in knowledge and in nature (of which may be knowledge), but it is transcendent in idea; and of it (as transcendent) consciousness declares only that it exists.

In this connection it may be noted that the word "preposited" (§ 16) is not used inadvertently: we do not mean "presupposed," as has been "supposed." The presupposition stands in relation to the supposition, like its hypothesis, and with it would fall. But the unity which is preposited by consciousness is clearly abstract, completely independent, and (unlike consciousness) cannot be annihilated even in thought. And of all the apodictic deliverances of consciousness, this is the most apodictic.

We are not unaware that the words suppose and presuppose are by some used to indicate the proposition and the preposition: but they are so demoralized by the popular use that we would as soon undertake to expound "the idea of

moves them instantly beyond all stay and support (§ 21)—as though having climbed to the very apex of the highest tower in the earth, one may safely leap thence toward heaven.

Neither PLOTINUS nor HEGEL nor any finite intelligent can carry out such pure abstraction. It is enough that the philosopher is permitted to attain to it and to gaze upon its glory. If his soul does not expand in that gaze, expand into utter humility (not humiliation), let him remember that pearls are no fit diet for swine, and get him back to whatever his experience enables him most easily "to carry out."

§ 99. But who, demands Plotinus, "could understand the full power [δύναμις] of Absolute Unity?" (αὐτοῦ ὁμοῦ, the one in itself). For if otherwise, he adds, "how could one [τις, he, any determinate] differ from the one in itself?"*

Since therefore to know the Infinite is not possible for the finite (§ 75), the grand old dialectician proceeds to illustrate that ecstatic instant in which as it were by a "flash of rapturous light" the soul becomes conscious of the absolute unknowableness of Absolute Unity, as a separation from individual consciousness and an absorption into Infinite Intelligence. This is that unparalleled magnificence of conception which the disciple of Comte is unable to look upon without a sneer at "the vicious circle in which all such reasonings are condemned to move."†

\$ 100. PLOTINUS, SPINOZA, KANT—greatest among great names—the last not least—how large a portion of Infinite Love must have blessed these three living, whose neglected

Now comes one who asks "How does the Infinite become finite;" and unblushingly explains that "the singleness of the determination sublates the otherness." The spirit of the reply is no doubt very honorable, and far from the superficies of self-styled positivism; but even a logodædalist might reflect that occultation adds nothing to the conception of substance, which last cannot

red" to a Texan bull as to restore their radical significance. Furthermore, they are convenient as degenerate.

^{*} Τις αν ούν τήν δίναισε σέτοι έλοι όμοι πάσαν; εί γάρ όμοι πάσαν, τί αν τις αὐτοῦ διαωτροι. — Enneas V. lib. 5, cap. 10.

[†] Lewes sarcastically sums up the case thus:

[&]quot; Axiom: The finite cannot comprehend the Infinite.

[&]quot;Problem: How can the finite comprehend the Infinite?"

[&]quot;Solution: The finite must become the Infinite."

Of a truth, ye are the people, and with you wisdom will die!

pages the spirit of Infinite Love so gloriously illumines! The purpose of this brief review and recension of the philosophy of Immanuel Kant in reference to its central thought and motive will be fulfilled if it shall induce the reader to take no more Kantian doctrine upon trust, from whatever source, but to study for himself the works of the great thinker who met rationalism upon its own ground and in the interest of religion completely conquered it. Semple exclaims that "the philosophic system of Kant is not a unity, which must be either wholly accepted or entirely rejected: it has a negative and a positive side, really opposed to each other." It is not true. The Kantian system is a connected whole and unity, and repays a thousandfold the patient months which bring at the last suddenly along the lines a blaze of light that irradiates and exhibits in new grandeur the whole universe. Happy IMMANUEL! how utterly hast thou entered into that very knowledge (falsely called "mysticism") which consists simply in Perceiving that knowledge is firmly rooted in the Unknowable, that reason declares her hidden source and spring with absolute certainty, that her earliest voice and her latest end and deliverance, speaking alike in the same unknown tongue, manifest to His creatures irrespective of intellectual condition the absolute existence of the ABSOLUTE ONE, the Siniatic I AM WHO AM.*

"I think," says Kant, "that the time will come when the Kantian system may laugh in turn, and with the greater justice, when it beholds the fair but airy castles of its opponents crumble to pieces at its touch, and their defenders taking fright amidst the ruins—a destiny which inevitably awaits them." No less does the same inexorable fate remain for the noble master's false disciples,† whose untruthful exegesis has for more than half a century degraded his title to a

be annihilated by an ideal and outrageously transcendent synthesis of the determinate and Absolute.

^{*} Not " I am that I am," which is puerile, but " I am Very Existence." See the Vulgate.

[†] It must not be supposed that we question the sincerity of those who claim to be rationalists of the Kantian school. But however true to themselves, they are utterly false to their master.

term of reproach among men and made the rational method an unendurable stink in the nostrils of virtue. When that time comes (perhaps not in our day, but surely), he who shall be so favored as to stand upon the solid Kantian ground at the outer verge of just human inquiry, shall behold dangling betwixt heaven and earth the baseless feet of them who make haste to lay profane hands upon the very altars of the MOST HIGH GOD.

There is none like Thee among the gods, O Lord, And no works like Thine.
All nations, which Thou hast made.
Shall come and bow down before Thee, O Lord, And shall give glory to Thy Name.
For Thou art great, and doest wonders;
Thou art God alone.

THE PERSONAL RELATION OF CHRIST TO THE HUMAN RACE.

By GEORGE N. ABBOTT.

Within the scope of this comprehensive topic the present article will be devoted to the discussion of the following proposition, namely,

Christ's sonship to humanity is a normal and integral relation.

The truth of this proposition supposes on the side of humanity, that, considered in its normal state, it contains some latent principle or incipient germ constituting the rational ground or capacity on its part for a divine progeny. For if the relation in question be an integral one, then is not Christ's divinity in the least excluded from the human sonship; and if the sonship be a normal one, then must there be an original susceptibility for this relation in the proper nature of each party involved.

Again, if Christ's sonship to humanity be a strictly normal relation, then did he not go out of his proper species when he "became flesh"; while, on the other hand, if the relation in question were abnormal, his becoming flesh could be no otherwise regarded than as a transmigration into a lower

species of being. The former alternative, namely, that his human sonship be considered normal and in every sense rational, while at the same time it is admitted that he is divine, brings us then at once to the assumption that there is no absolute difference of species between the divine and the human.

Thus much explanatory may serve sufficiently to set forth the general intent of our proposition. The scientific proof of such a proposition ought, in order to suit all the relations of the subject, to be both metaphysical and physical, or ontological and physiological.

In order to pursue our argument after the most feasible method it may be necessary to expand it into the most general form, and to assume as the basis of reasoning the universal relationship necessarily subsisting between normal persons of whatever grade. This universal relationship will embrace within itself all specific normal relations, at least in the germ. The general formula of personal relationship will then constitute the principal lemma for the argument in hand. This formula may be given generally thus:

Every normal personality virtually contains the radical principle of every other such personality (whether actual or only normally possible).

In order to render the import of this statement as intelligible as possible, we may vary its form so as to give place to variety in the exponential terms. Using the mathematician's vocabulary, we may give the substance of our formula as follows:

All the individual pure functions of the grand personal unit or idea are implicitly mutual functions of such other.

Again, the language of the formula being, so far as practicable, conformed to that of the naturalist, the same general import may be thus expressed:

Every organically individualized rationality possesses as an essential constitutive element an incipient Germ of every other such rationality whose existence is possible in the normal organic development of the rational.

The truth of these statements is that which lies at the foundation of the ideal harmony of the moral universe.

GENERAL DEMONSTRATION.

It is of course here postulated that there is a certain ultimate or radical constituent in each proper person which forms the ground of distinct and permanently self-identical personality. Now this ultimate distinguishing principle can be no other than that principle or idea of reason which would have to be grasped in making out a rationale (rational solution) of that particular person's being; which principle or idea we may designate by the term Radix Persona. But the ground principle of the rationale of a particular personality must be suggestive of, and in some mode or degree identical with, a universal personal idea comprehensive of a universal personal rationale: otherwise the particular rationale in question would be without rule or method; or, in other words, the existence of each individual person would form an entirely independent problem, and the rational conception of each person would be rendered absolutely and unconditionally sui generis; which is absurd. Consequently the universal personal idea, or the ultimate reason and seminal principle of the existence of all possible rational individuals, must be in some mode or degree identified with or involved in each radix persona.

Remark.—The special application of what is here proved to the particular case in question will be made in connection with the less rigid yet more specific demonstrations which follow.

ANALOGIC* DEMONSTRATION FROM NUMERICAL UNITY.

To the general demonstration now given may be added an analogic one having especial reference to the second or mathematically stated formula above. It is therein postulated, as is plain to be seen, more distinctly than in the first given formula, that there is a grand unit or personality. In this

^{*} This is called an *analogic* demonstration because there may be, as in the case of vegetable structures, actual numbers involved in the personal relations, which may be different from the ones suggested below. Since the writing of this essay the following passage from Fichte has been pointed out to the writer:

[&]quot;Jedes Individuum ist ein rationales Quadrat einer irrationalem Wurzel, die in der gesammten Geisterwelt ist wiederum rationales Quadrat der für sie und ihr universelles Bewusstsein, welches jeder hat und haben kann-irrationalen Wurzel = dem immanenten Lichte oder Gott."—Fichte to Schelling, Letter xxvii.

regard, that is taken for granted which it was just now one part of our object to prove.

Beginning, then, with the assumption of a universal personal unity, we may attempt to unfold some of the necessary implications of such a unity. Now it must be admitted that every idea which can properly be called a unity involves in some important sense the mathematical unity with its essential properties: otherwise the term unity in such a case loses entirely its primitive force. It appears likewise evident that the development of certain functions of the numerical unit ought to bear some specific analogy to the ideal development of any subject to which unity can be ascribed as an essential attribute. Proceeding, then, upon this presumptive analogy, let us seek to discover those simple pure functions of unity which may perhaps illustrate our subject.

In order to obtain the pure functions of any ideal subject, we proceed by the methods of analysis and synthesis, these being the two poles of all thought. But, in relation to number. involution and evolution form specific modes of synthesis and analysis.*

Now, making use of involution and evolution, we shall have three general pure functions of unity, including the underived unit as the prime function—namely, unity—the $n^{\rm th}$ power of unity and the $n^{\rm th}$ root of unity, or

$$1, 1^{n}, 1^{\frac{1}{n}}$$

Only the last of these three functions admits variety of value, that having in any case one value equal to that of either of the other functions and $^{n-1}$ other values all deducible by a general solution of the equation $x^n = 1$. In order to make a single hypothetical solution, so far as possible, a complete rationale or $\lambda \delta \gamma \sigma \zeta$ of the unit, let us suppose n (the degree of the given equation) equal to infinity, and at the same time a prime number, or, more strictly, *indivisible* by any assignable number except unity.

^{*} Possibly there may be other modes better adapted to illustrate the subject, but the course here taken is *one* way to show that unity involves the many.

[†] The more philosophical arrangement would be 1^n , 1, 1^n , or fully expressed, $\begin{cases} 1^n, & 1^n, & 1^n, & 1^n, \\ \text{Positive, Neutral. Negative.} \end{cases}$

The proposed hypothetical solution will then give us out of the general pure function 1^{∞} or 1^{∞} an infinite number of particular functions [roots], every one of which has its total significance absorbed in that of the unit, and at the same time, reciprocally, absorbs by implication the total significance of the unit.

Besides, one of these coördinately developed ultimate functions will be the *original unit* apparently unchanged, the remaining functions [roots] being essentially infinitesimal powers of of unity.*

The former together with the general functions 1 and 1^{∞} will then give three equal pure functions of unity.

In all, then, we shall have three equal functions and an indefinite number of functions coördinate or cognate with one of these three as regards development, but subordinate as regards value,—all these functions in the fullest sense implying each other.

Now, restoring our numerical unit to its place in the personal idea, we have—so far as the analogy will apply—a suggestion of three primary coëqual persons and an indefinite number of secondary persons essentially cognate with one of the primary; all mutually implying and as it were necessitating each other.

Still further, a radix personæ of the primary order involves, according to our analogy, one of the secondary order in an infinite degree; while a radix personæ of the secon-

1.
$$\frac{1}{4} \left[\sqrt{5} - 1 + \sqrt{-10 - 2\sqrt{5}} \right]$$

$$\frac{1}{4} \left[\sqrt{5} - 1 - \sqrt{-10 - 2\sqrt{5}} \right]$$

$$-\frac{1}{4} \left[\sqrt{5} + 1 - \sqrt{-10 + 2\sqrt{5}} \right]$$

$$-\frac{1}{4} \left[\sqrt{5} + 1 - \sqrt{-10 + 2\sqrt{5}} \right]$$

These may serve to illustrate the form and mutual relation of cognate roots of unity of any degree whose index has the nature of a prime number.

The existence of such roots adds significance to the function 1^{∞} , which of course infolds into itself the ultimate involution of all the possible roots of unity.

The imaginary character of the roots (except the first) is also significant, their real value lying not in themselves but in the parent unit.

The five fifth roots of unity are

dary involves one of the primary order in an infinitesimal degree.*

By a simple substitution of terms which requires no special explanation, our argument from number, so far as applies directly to the subject in hand, may be summed up thus:

While divinity involves humanity in its highest potence, humanity involves [implies] divinity in a minimum degree [germinally].

PHYSIOLOGICAL DEMONSTRATION.

We may here make a transition to the organic law of personal procreation, the substratum of which law we have attempted to give in the last of the three formulæ which were to constitute one and the same lemma to our first enunciated proposition. We may commence the proof of that formula by showing that the essential procreative power in each individual of a given organic species is in idea a summary of the procreative power of the whole species; in other words, that there is a tendency in each individual to produce the species entire, with all its normally arranged and correlated individuals.† Now a species is by definition limited to those individuals which either have or might have descended from a single individual or pair (the pair being organically but a polarized unit).‡

^{*} The $radix\ persone$ analogous to the unit value of our symbol 1^{∞} ought, if the analogy be good, to be regarded as in respect to $real\ value\ standing\ with$ the primary order, but in idea (i.e. as the ideal result of an infinite evolution or development) standing with the secondary order. In this view it becomes a true medium [mediator] between the two orders.

[†] Glimpses of a law of universal harmony between the proper individuals of an organic species are discoverable in the structure of a plant which of itself constitutes as it were a species in miniature; the single branches being distinct individuals, the single leaves too having strictly speaking a claim to organic individuality, and finally the millions of constituent cells having and in the last resort [e.g. at the beginning of germ-formation in the incipient seed] exercising the same claim. The branches, when all developed, are found to be arranged according to a geometrico-numerical law, the same law indeed by which the leaves are arranged upon the branches; so that the leaves of a tree, for instance, of a given species, and of a given age or degree of development, are in theory, it may almost be said, as the Scripture says of the hairs of our head, "all numbered."

[‡] This statement does not preclude the *ideal wholeness* of each component of the pair, as will be seen farther on.

There is, therefore, but one life in the species: and as this life may be wholly in one individual, so it may be wholly in every individual of which the one is the prototype. In other words, the species is brought simply by its definition within the range of application of that general axiom in relation to the dissemination of the organic or vital power in the individual: the whole is in every part.

Our formula, indeed, affirms this community of organific potence of the whole order of organized rational being, within which sphere of being must be included the divine Father of spirits (his very *paternity* being exponential of his organic, that is, *living* personality) and all within the circle of his true sonship, divine, angelic, and human.

And as all the individuals regularly descended from the same parent stock are universally reckoned to be of the same species, so is the divine Father with his first-born Son, the express image of his person, identified in species with numerous secondary progeny of angels and men; these latter [angels and men] differing only, if differing at all except in degree of development, as varieties or races, mere modifications of the same universal type, and this type the image of God.

If, therefore, the essentially self-procreative life of the species, original in the first All-Father, be, as we have endeavored to show, universally diffused throughout the species in some measure or mode of its [the life's] entireness, then must there be in like manner diffused the correlative All-Sonship in potentia. Or, if in this connection we may be allowed the use of a metaphor, the All-Intelligent's first allexpressive Word can, as we may reasonably imagine, be echoed or repeated at least faintly by all who share in the universal reason. Again, to put the same conception under an aspect familiar to the naturalist, there cannot be denied to the human race, as a race of the grand rational species, that inherent characteristic of all natural races, a tendency to return by procreation to the primitive type: for though in most cases of animal and vegetable races such return may be a long step downward, this does not prove that in the case of rational beings there may not be normally an equally strong, if not a stronger, tendency to reproduce the primal type of the rational, though the attainment of such a result

should be by an infinite step *upward*, since the contrast of inclinations thus presented is but the natural contrast between the rational and the irrational.*

If it cannot be assumed that the tendency in question will independently eventuate in an actual reversion to the divine Image proper in any single case of human birth, the denial of a right to such assumption is not equivalent to the denial of the fact of such a tendency. A tendency exists in every female to produce young; yet there is required a specific stimulative agency in order to overcome a certain inertia in the germinal organism.

That incipient organism in the female which, if properly fructified, will result in a birth, is called an *ovum*; the male *coefficient* of the *ovum*† is, without doubt, its exact equal in value‡: so we may assume the primitive ovum as the general symbol of the unisexual individual's reproductive capacity, whatever be the order of being.

Now our *lemma*, being regarded as proved, furnishes this important link of argument for our specific proposition with regard to Christ's Human Sonship, namely:

There belongs in the normal constitution of every human being the equivalent of an Ovum Divinum.§

In order to see clearly the full force of this statement, it will be needful to consider a little more particularly the relation of the sexual co-factors in procreation. Among some of the single-celled aquatic vegetables the method of propagation is by the *conjugation* or growing together of two cells not distinguishably different from each other, the adjacent walls being so removed as to allow the fluid contents of the two cells freely to commingle. In these mingled contents originate the reproductive spore-cells. Here we have doubtless a minimum sexual development, but at the same time an index

^{*} Nature when elevated by extraneous cultivation seems inclined to fall back to its original plane, as the water of the cloud returns to the ocean; but it may be, nevertheless, that in a more comprehensive view it will be found that all nature "groaneth and travaileth" in expectation of results above itself.

[†] The ovum in the case of persons might then be called the physiological radix persons.

[‡] This equality will, directly, be illustrated from a fact in natural history.

[¿] Comp. Gen. 3: 15. Gen. 22: 18, Gal. 3: 16.

to one of the most important laws in this department, namely, that the primitive sexual co-factors are essentially equal.

Again, in the higher forms of vegetation, where the sexual relation of reproductive organs is distinct, the masculine or pollen cell communicates its contents to the prime embryonic cell or vesicle only through two or more membranesthe actual communication being probably thus rendered, as it were, infinitesimal. The same holds good with respect to the higher animals. "In birds," says one writer on natural history, "the ova exist ready formed in the mother before fecundation; and it is not a rare occurrence to see eggs laid without impregnation similar in every respect to those which produce young." But such ready-formed or primitive ova are by no means peculiar to birds: they belong almost to the whole animal kingdom. They belong, too, to the human The difference between the embryo life of birds and that of viviparous animals lies chiefly in the place of incubation—this being in the one case without the mother, in the other case within. But this difference is of so little consequence that of two closely allied species of the batrachian order, one is viviparous and the other oviparous,* the eggs of the latter being fructified after their separation from the mother.

The summing up of the evidence under this particular head appears to be that the feminine factor of generation is substantially a complete germ; the special office of fecundation being to promote the development of this germ: at the same time there being in this germ, pure and simple, a disposition towards self-development almost, and even in particular cases quite, transcending absolute latency; so that in certain ova the process initiatory to embryo-formation has been observed, it is said, actually to commence independently of fecundation.†

The apparent insignificance to which this single view reduces the male factor of generation must be conceived as only apparent, and not as contradicting the law of equality of the sexual co-factors just now enunciated.

The organic first principle that the whole is substantially in each essential part here again applies.

^{*} Vogt, Thierleben. § 215.

Now, applying these principles within the sphere of ordinary humanity, we should say that a child is both *equally* and *integrally* the offspring of each parent.

Again, if we suppose the human ovum divinum in any case to be fecundated according to the Scripture history of Christ's earthly generation, what are we to look for in the result but a divine Son of man and a human Son of God, not merely one and inseparable, but one and identical.

Such an offspring would of course sustain to humanity a normal and integral sonship.

Again, this same hypothetical offspring of Deity and humanity would evidently be exponential of a maximum relationship between the human and the divine—that relationship, namely, in which the divine and human would be radically and completely identified in the same person.

But the personality of Christ must be exponential of a like maximum relationship, he being the "one Mediator between God and men, the man Christ Jesus"; and also "Immanuel, God with us," "God manifest in the flesh"—Godhead and manhood in him coming to a perfect oneness; and consequently the difference between divinity and humanity being in him reduced to nothing.

Hence our à priori developed conception of a divine-human person is homogeneous with Christ's actual personality. Therefore we may conclude that Christ is normally and integrally "THE SON OF MAN"; or, in other words, that as man he is radically the offspring of an implication of Deity* inherent in humanity as such, so that even as the Son of man he is divine.

The converse of the last statement, namely, that as the Son of God he is human, must also hold good according to the whole tenor of the foregoing argument.

It follows that the *historical* life of Christ as a divinehuman person was, philosophically speaking, simply a *true* exponent of his essential and eternal nature; and that there is nothing rationally inconceivable in his frequent appearance in a human similitude before his historical incarnation.

^{*} The rational pole of this implication may be viewed as a kind of oven (dicinam) rationale or latent idea, which, being divinely fructified, will result in "Christ's being formed in us."

ON PROFESSOR TYNDALL'S RECENT ADDRESS.

By Thomas Davidson.

The recent address of the President of the British Association delivered at Belfast is intended to be a general account of the history and principles of Materialism, whereof Professor Tyndall is one of the most distinguished and certainly one of the most eloquent expounders. In making a few criticisms upon it, I shall not follow those persons who have discussed its bearing upon religion and existing institutions, or its tendency generally, but shall confine myself to questions of historic fact and undeniable philosophic truth.

There was a time in the history of Materialism when its adherents eagerly inquired "Qui nous délivrera des Grecs et des Romains?" Now-a-days, on a changé tout ça, and Materialism is looking for antiquities, to give it prestige, among the fragments of the early philosophers of Greece and Rome, and dragging from their obscurity such names as Empedokles and Demokritos to set off against those of Plato and Aristotle. Like Dr. Büchner, Professor Tyndall opens his address with a sketch of the history of Materialism,* beginning with Demokritos, and therein takes occasion to speak depreciatingly of those thinkers who have maintained other doctrines, and especially of Aristotle, whom he charges with "what we should consider some of the worst attributes of a modern physical investigator—indistinctness of ideas, confusion of mind, and a confident use of language"-adding that his "errors of detail were grave and numerous."

Taking up first this portion of the Professor's address, let us see whether he, with over two thousand years more of "organically remembered" experiences than Aristotle, be entirely free from those same faults. And first as regards matters of historic detail.

(1.) In speaking of the doctrines of Demokritos, Professor Tyndall says: "The varieties of all things depend upon the varieties of their atoms in number, size, and aggregation." Now, all that we know about this matter, we know, either

^{*} Borrowed, often verbatim, from Lange and Draper.

directly or indirectly, through Aristotle; and he is at pains to tell us that, according to Demokritos, the varieties of all things depend upon the varieties of their atoms in figure, aggregation, and position— $\dot{\rho}\nu\sigma\mu\dot{\rho}\zeta$, $\partial\iota\alpha\partial\varsigma\gamma\dot{\gamma}$, $\tau\rho\sigma\pi\dot{\gamma}$ —which Aristotle renders into his own terminology by $\sigma\chi\tilde{\gamma}\mu\alpha$, $\tau d\tilde{z}\varsigma\zeta$, $\partial\dot{z}$ - $\sigma\iota\zeta$ (Metaph. A. 5).

(2.) A little farther on, we are told: "Empedokles," a man of more fiery and poetic nature [than Demokritos], introduced the notion of love and hate among his atoms, to account for their combination and separation. Noticing this gap in the doctrine of Demokritos, he struck it with the penetrating thought, linked however with some wild speculation, that it lay in the very nature of those combinations which were suited to their ends (in other words, in harmony with their environment) to maintain themselves, while unfit combinations, having no proper habitat, must rapidly disappear. Thus more than two thousand years ago the doctrine of the 'survival of the fittest,' which in our day, not on the basis of vague conjecture, but of positive knowledge, has been raised to such extraordinary significance, had received at all events partial enunciation." Reading this passage, one would certainly conclude that Empedokles wrote after Demokritos and with a knowledge of the doctrines of the latter. Now, there is not a shadow of proof for either of these assumptions. Empedokles belonged to Agrigentum in Sicily, and was, according to the best authorities, born about B.C. 492, while Demokritos belonged to Abdera in Thrace, and was born about 460. As Empedokles died at the age of sixty, Demokritos could hardly have been more than twenty-eight years old at the time of that event. As he is known to have made long journeys previous to writing his works, it is hardly credible that any of these could have reached Empedokles in Agrigentum. And, indeed, the writings of Empedokles show no traces of the influence of Demokritos: they belong to an older period of thought. There is no trustworthy proof that he propounded a doctrine of atoms at all. His extant fragments lead to the very opposite conclusion. He believed in the existence of four elements, combining and separating

^{* 1} have taken the liberty of using, for uniformity's sake, the Greek orthography of Greek proper names.

through the influence of love and hate, which however were not inherent in the elements, but outside and independent of them. Nowhere does Empedokles hint that those combinations of atoms which are suited to their ends maintain themselves, while unfit combinations disappear. He held, that of organisms the plants sprang first from the earth, then the animals. Not, however, whole animals, but separate limbs, which afterwards came together by chance, according as guided by love or hate. In the former case, monsters were produced; in the latter, natural products. It must require a wonderfully "scientific use of the imagination" to find any resemblance between this theory and the modern one of the "survival of the fittest." Thus, in the above quotation, there is not a single correct statement.

Passing over the accounts of Epikouros and Lucretius, which are not above criticism, we come to the following:

(3.) "During the centuries between the first of these three philosophers [Demokritos] and the last, the human intellect was active in other fields than theirs. The Sophists had run through their career. * * * Pythagoras had made his experiments on the harmonic intervals." Who would read this and not suppose that Pythagoras lived between Demokritos and Lucretius? And yet Pythagoras was dead long before Demokritos (probably even before even Empedokles) was born. He is thought to have been born B.C. 582, which would make him ninety years old at the birth of Empedokles, if he was then alive.

This may suffice to show the accuracy of Prof. Tyndall's acquaintance with those pre-Aristotelian philosophers whose views he sympathizes with and considers the forerunners of his own. I doubt whether his errors of detail be not grave nd numerous, and whether he be not fairly chargeable with "indistinctness of ideas, confusion of mind, and a confident use of language." But these faults become even more prominent when he comes to speak of Aristotle, with whom he does not sympathize, but whom he treats very much as George Henry Lewes does.

(4.) Prof. Tyndall tells us that "Aristotle put words in the place of things,* subject in the place of object." It is

^{*} Cf. Whewell, Hist. of Inductive Sciences, vol. i. p. 67.

[†] Cf. Lewes, Aristotle, p. 238.

curious to compare the former of these assertions with one of Prof. Steinthal's (Gesch. der Sprachwissenschaft bei den Griechen und Römern, pp. 197 sqq.): "From what has been said, we see that it is not notions or words that, according to Aristotle, are spoken, but objects. The object animal is said of the whole object horse (i.e. of course, of every horse)." Both assertions are equally untrue. Aristotle distinguishes perfectly well, not only between words and things, but between words and thoughts. In the first chapter of the work On interpretation, we read: "The modifications of the voice are the symbols of modifications in the soul, and written characters are symbols of the modifications of the voice. And as all peoples have not the same written characters, so all have not the same articulate sounds, whereas the corresponding modifications of the soul and the external facts which these represent are the same for all." As to the second assertion, that Aristotle put subject in the place of object; if we persist in translating Aristotle's word for subject (δποχείμενον) by object, that is our fault, not his. The present use of the words subject and object came in with Kant and Fichte. Trendelenburg, Elementa Logica Aristotelea, p. 55, note, says: "Apud Germanos, Kantio potissimum et Fichtio auctoribus, horum verborum usus plane inversus est." To-day we follow the German usage.

(5) Prof. Tyndall proceeds: "He [Aristotle] preached induction without practising it." This statement is borrowed from Lewes' Aristotle, p. 113. It is untrue notwithstanding, as any one acquainted with Aristotle's Logic, which rests entirely upon induction, well knows. It is true that Aristotle makes hasty and incorrect inductions; but in this respect Bacon, the falsely reputed father of induction, was even inferior to him. Lewes, ut sup., says: "Bacon did not attack the Method which Aristotle taught; indeed he was very imperfectly acquainted with it." * * "It is to these causes that Bacon's failure must be ascribed; for, grandly as he traces the various streams of error to their sources, he is himself borne along by these very streams whenever he quits the position of a critic and attempts to investigate the order of nature for himself."*

^{*} Compare the articles on Bacon by Baron Liebig in Macmillan's Magazine.

- (6.) We are next told that Aristotle's "notions of matter * * * no real mechanical were entirely unphysical, conception regarding it lying at the bottom of his mind." I don't know precisely what is here meant by "mechanical conception," having always thought that the notion of motion lay at the basis of all mechanical conceptions, instead of vice versa; but Alexander von Humboldt says: "Natural Philosophy deals with the general properties of matter; it is an abstraction from the manifestations of force in matter; and even where the basis of it was first laid, in the eight books of Aristotle's Physical Discourses, all the phenomena of nature are represented as the moving vital activity of a universal force." And he adds in a note: "All the changes in the condition of the physical world (Körperwelt) are reduced to motion—Aristot. Phys. Ausc. I. 1, 4." It is, indeed, hard to see how the notion of motion could have been "unphysical." But Whewell - from whose History of the Inductive Sciences, coupled with Lewes' work on Aristotle, Tyndall borrows pretty nearly all he knows about the Stagirite — is partly to blame for this misrepresentation.
- (7.) We are next informed that Aristotle "affirmed that a vacuum could not exist, and proved that if it did exist motion in it would be impossible." And yet, a little farther on, Tyndall accuses Aristotle of saying that "there is an empty space, not at the front, but at the back of every man's head."; Now, if an empty space be not a vacuum (the Aristotelian term, χενόν, is the same in both cases), I do not know what it is. The fact is that Aristotle attempted to prove, and did prove, that an independent, self-existing vacuum (γωριστον χενόν) could not exist; i.e., that vacuum is merely a relative term opposed to full. But even had Aristotle tried to prove the other, I apprehend Professor Tyndall would have had some difficulty in refuting him. In his Light and Electricity (§ 218), speaking of Luminiferous ether, he says: "It fills space; it surrounds the atoms of bodies; it extends, without solution of continuity, through the humors of the eye." It would be interesting to know where Prof. Tyndall, with this belief, ever found a vacuum, or how he knows that, if it did exist, motion in it would be possible.

[†] Cf. Whewell, ut sup., p. 68.

- (8.) As one of Aristotle's grave and numerous errors in matters of detail, we are told that "he affirmed that only in man we had the beating of the heart." Now, Aristotle does not affirm anything of the kind. What he does say, in a very modest way, is this: "It has been incorrectly affirmed that the lungs contributed to the fluttering ($\delta \lambda \omega \zeta$) of the heart; this fluttering, generally speaking, takes place in man only, because he alone is affected by hope and expectation." (On the Parts of Animals, Book III. chap. vi.) In the 20th chapter of his work On Respiration, he is extremely careful to distinguish between beating $(\sigma \varphi \nu \gamma \mu \delta \zeta)$ and fluttering or leaping $(\delta \lambda \omega \zeta, \pi \dot{\gamma} \partial \gamma \omega \zeta)$.
- (9.) A little farther on, we are assured that Aristotle "refers the ascent of water in a pump to Nature's abhorrence of a vacuum." Now, not to mention the fact that suction-pumps were not invented till long after the time of Aristotle, we venture to say that no such assertion occurs, even impliedly, in any of the works of Aristotle. Prof. Tyndall is here borrowing, and borrowing incorrectly, from Whewell (Inductive Sciences, vol. i. pp. 346 sqq.), who says: "Yet the effects of these causes were so numerous and so obvious, that the Aristotelians had been obliged to invent a principle to account for them; namely, 'Nature's Horror of a Vacuum.'" This is, I believe, the correct statement.

Perhaps enough has been said to give an idea of Professor Tyndall's knowledge of the history of philosophy and the development of human thought, as well as of his scientific habit of verifying his conclusions. But, if he is a mere tyro in the external history of philosophy, he is something worse in philosophy itself. Knowing no hierarchy in thought, he proceeds to solve the Universe with what he calls Vorstellungen, and, of course, finds himself helpless. He finds in matter "the promise and potency of every form of life." But, then, the existence of matter is a pure assumption, a metaphysical hypothesis, utterly incapable of being verified by experiment. It is conceived to exist in the external world; but the external world is, as Mill says, "the great battleground of metaphysics." Worse than this, it is the lost battle-ground of physics, which cannot venture on it at all. Prof. Tyndall wisely refrains from telling us what he thinks

about its existence, and contents himself with imparting to to us Mr. Spencer's method of cutting the Gordian knot, leaving us to suppose that he adopts the same. He says:

"With him [Spencer], as with the uneducated man, there is no doubt or question as to the existence of an external world. But he differs from the uneducated, who think that the world really is what consciousness represents it to be. Our states of consciousness are mere symbols of an outside entity which produces them and determines the order of their succession, but the real nature of which we can never know. In fact, the whole process of evolution is the manifestation of a Power absolutely inscrutable to the human intellect. As little as in the days of Job [cf. Renan, Livre de Job, Introduc. pp. 87 sqq.] can man, by searching, find this Power out. Considered fundamentally, it is by the operation of an insoluble mystery that life is evolved, species differentiated, and mind unfolded, from their prepotent elements in the immeasurable past. There is, you will observe, no very rank materialism here."

Indeed there is not. Having rejected Aristotle and Metaphysics and gone back to Demokritos with his atoms, he, of course, arrives at chaos, and the only way he can escape from that is by leaping on the back of "an insoluble mystery." How does Mr. Spencer or Prof. Tyndall happen to be so well acquainted with this mystery as to know that it is insoluble? With what solvents has he ever experimented upon it? Aristotle, seeing plainly that with a material cause only, endow it how you may, a world could not be constructed, recognized a triunity of causes besides matter, viz. formal, efficient and final causes, and tried to develope the notions of them in the profoundest of his works. He steadily disbelieved in all insoluble mysteries, and bravely went to work to solve them. His three causes are no less capable of external verification than is matter, which he admits to be, by itself, unknowable.* This is admitted even by Lewes (Aristotle, p. 119). Now, on what ground do Spencer and Tyndall assume a material cause and reject all others, or relegate them to the region of mystery? That there are form, harmony and adaptation in the world as truly as there is matter, and that the former need explanation as much as does the latter, is sufficiently

^{*} This need not be quoted as showing that Aristotle believed in insoluble mysteries.

evident. It is admitted that the promising, potent matter explains nothing, and yet it is assumed and eked out with an insoluble mystery. One mystery assumed as knowable, all else rejected as unknowable!

For example, it is assumed by Mr. Spencer that "our states of consciousness are mere symbols of an outside entity which produces them and determines the order of their succession, but the real nature of which we can never know." That is, our states of consciousness are symbols, but symbols of such a kind that they give us no information regarding the nature of the entity symbolized. Of course, then, we can have no knowledge repecting it. Notwithstanding this, Mr. Spencer appears to know a good deal about it. First, he knows that it is outside of us; second, that it is endowed with active powers; for, third, he knows that it is capable of producing symbols in us, and, fourth, he knows that it is capable of regulating the succession of the same. It would be interesting to know where he obtained all this information, and what more he thinks it would be desirable to know. Perhaps he would like to be able to form a Vorstellung of it; that is, to form a sensuous concept of it, just as Mr. Tyndall thinks he can form a "mechanical conception" of motion. But what if this "outside entity" were of such a nature as to be utterly beyond the reach of sensuous or mechanical conception? should we then be condemned to remain forever in ignorance of it? This, undoubtedly, is the theory arbitrarily maintained and unceasingly reiterated by Spencer and those who blindly follow his lead. "Nihil est in intellectu quod non prius fuerit in sensu"; and if we add "nisi intellectus ipse," they tell us that mind, too, is evolved from the prepotent elements of matter by the same inscrutable Power. But as matter by itself explains nothing, and that which we imagine to be the cause of everything is inscrutable, we know nothing of the real nature of anything. All that we know is symbols, which, we suppose, symbolize an outside entity, but in such a way as to give us no information as to its real nature.

It is easy enough to see what lies at the bottom of all this confusion, self-stultification, and self-confessed helplessness. The men who hold these views are in culpable ignorance of the history of the development of thought as well as of the

distinctions and limits in thought itself. With no preparation other than the perusal of a few compends and superficial treatises, and with no better implements than the Vorstellungen of the most naïve and confident common sense, they undertake to deal with the most difficult and momentous of problems, and, of course, come out with the confidently expressed result that these problems are insoluble. assumption of matter and atoms is what the Vorstellungskraft, from its very nature, drives them to, and of that assumption they will never be able to rid themselves until they ascend to higher ground and are able thence to survey and explain their Vorstellungen. When they have done that, they will be driven to examine and define other causes in the Universe besides matter, and may then find their inscrutable mystery solved. The great fault of these men is their attitude of ignorant superciliousness toward the past, coupled with intellectual sluggishness and a confident use of undefined terms.

There are, however, not wanting signs to indicate that the days of supercilious ignorance and sluggishness are drawing to a close. It is almost amusing to hear George Henry Lewes, one of the most brilliant and superficial of the decriers of metaphysics, declare, in his last book, Problems of Life and Mind, that "the continuance of metaphysical inquiry is, for the present, inevitable." He was apparently brought to this sudden change of view by the example of J. S. Mill, who says: "England's thinkers are again beginning to see what they had only temporarily forgotten, that the difficulties of Metaphysics lie at the root of all science; that these difficulties can only be quieted by being resolved, and that until they are resolved, positively whenever possible, but at any rate negatively, we are never assured that any knowledge, even physical, stands on solid foundations." Such language is hopeful, and shows that the human mind can never be made to rest satisfied with the recognition of insoluble problems. Indeed the acceptance of insoluble mystery in regard to all things that have any real interest or value, leaves an open door for all the forms of superstition that debase and corrupt. It was the recognition of insoluble mystery introduced by Christianity, far more than the Chris-

tian system itself, that produced that stagnation and degeneration of the European mind which Prof. Tyndall so bitterly and so justly laments. And there are not wanting indications that to-day the same cause would produce the same result. Mr. Alfred R. Wallace, whose reputation as a naturalist is almost equal to that of Darwin, and who is almost as much entitled to be called the discoverer of the Darwinian theory as Darwin himself, has come to be a believer in Spiritualism on grounds entirely illogical. As Dr. Carpenter (Principles of Mental Physiology, p. 627) says: "Such men seem totally oblivious of the difference between external and internal evidence—the testimony of our senses (or those of other individuals) and that of our sense." And this, though the most remarkable, is not a solitary instance. While, therefore, I entirely sympathize with Prof. Tyndall in his manly and determined opposition to dogma and authority, and in his demand for the free and unprejudiced discussion of all questions, I cannot but be sorry that he has diminished the weight of his own authority, and thus injured a cause which is that of all earnest truth-seekers, by trying to draw conclusions in regions of thought where he is an entire stranger, and by being thus entrapped into making a display of carelessness in regard to matters of fact and of incapacity to grasp philosophic truth.

NOTES AND DISCUSSIONS.

Professor Tyndall's Address.*

The recent "Inaugural Address before the British Association" by Professor Tyndall, in which he has taken occasion to define his attitude toward the current theories of the source of all phenomena, has excited interest on all hands. His bold statement regarding the potency of matter to produce every form and quality of life is a challenge to all thinkers who hold to the supremacy of Personality as the first principle of the Universe, particularly that portion of the address in which the Professor follows closely the Spencerian version of the doctrine of the Unknowable. Before all things, the writer on these subjects should be acquainted with the history of human thinking. Such acquaintance presupposes in one's self, however, the ability to think, for no one can recognize thought in another unless he rethinks the thought himself. Those who cannot solve the antinomics of reflection are necessa-

^{*} Reprinted in Appleton's Popular Science Monthly for October, 1874.

rily unable to give a coherent account of the doctrines of a philosopher who writes on a plane which presupposes such solution. Sir Wm. Hamilton's celebrated Critique of Cousin sets up the systems which claim a doctrine of the Absolute in a manner that makes them ludicrous and absurd to those who do not know the doctrines at first hand. The one who has studied those systems, however, sees that the absurdity lies in the mind of Hamilton, which has failed to grasp essential outlines. In Mr. Davidson's article on Tyndall, published in this number, the reader will find evidence of the carelessness with which the history of philosophy is treated by Mr. Tyndall. In this respect Herbert Spencer is quite as open to criticism. First Principles rest on an uncritical adoption of Kantianism, apparently at second or third hand, through some disciple of Sir Wm. Hamilton. has learned a little of the doctrine of antinomies, and uses that doctrine to prove that we cannot know spiritual verities. Afterwards, in the same book, he ignores the same doctrine, and in the face of it undertakes to prove physical laws à priori by an uncritical use of the elements of the antinomies. For instance, he proves that Matter is indestructible because we cannot think its annihilation; that Force is persistent for the same reason. Unthinkableness is here a valid ground for deciding upon the existence of objective realities. But earlier in his book he uses the same thesis negatively, after the style of Kant (First Prin., p. 31): "Self-Existence necessarily means existence without a beginning; and to form a conception of self-existence is to form a conception of existence without a beginning. Now, by no mental effort can we do this; and to conceive existence through infinite past time implies the conception of infinite past time, which is an impossibility." To have been consistent, he should have used the same argument regarding correlation, indestructibility, &c., thus (Jour. Spec. Phil., vol. i. p. 16): "Indestructibility implies existence through infinite future time, but by no mental effort can infinite time be conceived. Hence the indestructibility of matter is 'an untenable hypothesis,' and is only 'verbally intelligible.' So, too, with the 'Persistence of Force,' which involves the same unthinkable elements." *

Freedom of thinking is essential to philosophizing. Thought must be free, untrammelled not only by dogma or tradition, but also by the limitations of sensuous perception or the categories of reflection. Its first freedom is from the dogma, and in this freedom Tyndall and the Spencerians rejoice. But this is only formal freedom; it is not real, substantial: only the cognition of truth can give real, substantial freedom. A balancing of the mind between two sides of an antinomy is a paralysis of skepticism. The freedom from sensuous perception is gradually being achieved by the Spencerians and Comtians through a growing insight into the universal processes or potencies that underlie the phenomenal world (in such doctrines as the correlation of forces, evolution from the abstract to the concrete, &c.) Now, however, there remains the third freedom—the freedom

^{*} In a recent number of the New York World (August), the editor has undertaken to refute this position. His argument rests on a distinction between existence and self-existence, a distinction which has no bearing in this argument for the reason that the latter turns on the thinkableness of annihilation, which is the same whether applied to existence, or self-existence, or force.

from the stand-point of fatalism, which results from the nature of our Reflection. The stand-point of absolute personality, as the highest principle, is the one to be attained. On this plane, freedom, immortality, and God, are the regulative principles of science as well as of life, and they are not only matters of faith but equally matters of indubitable scientific certainty.

The remarks of Rev. F. E. Abbott, editor of the (Boston) *Index*, are so pertinent and just regarding these positions of Tyndall, that we quote them here (*The Index*, Sept. 17, 1874).

BY F. E. ABBOTT.

"Following Herbert Spencer with a fidelity to which that philosopher is by no means entitled, although his merits in many respects are indubitably great, Professor Tyndall settles down into the recognition of an "insoluble mystery" as the last word of modern science. 'In fact, the whole process of evolution,' he says, in an exposition of Spencer's thought which he apparently gives as also his own, 'is the manifestation of a Power absolutely inscrutable to the intellect of man.' Are we, then, shut down to the submissive acknowledgment that evolution is the manifestation of a Power which does not manifest itself? If so, science is degraded to the rank of the theological cosmogonies which Professor Tyndall so energetically repudiates, and the human intellect is driven to the hara-kari of a new sacred contradiction, which it must accept by a new species of 'faith.' For one, we repudiate such science as we repudiate the theology of which it is the bastard offspring. Science that deserves the name will refuse to admit the existence of any 'insoluble mystery.' She must, by the very law of her being, assume that every mystery is soluble, and forthwith proceed to solve it. She recognizes the co-existence of the known and the unknown, and admits that the latter is probably vaster, nay, inconceivably vaster, than the former -an admission she justifies solely on the ground of her own past experience; but she cannot possibly recognize the existence of the 'unknowable,' since even to affirm it would be to affirm some knowledge of it. The 'Power' which manifests itself in 'the whole process of evolution' manifests itself, does it not? It cannot, then, be 'inscrutable to the intellect of man.' The business of science is to study the manifestation of it, and not to cut her own throat by the confession that the 'manifestation' of anything under heaven is 'inscrutable' to her. The unutterable shallowness of this Spencerian philosophy of the 'unknowable,' now so fashionable, is the intellectual disgrace of the century. It makes a quasi-God out of 'the unknowable' by printing its name with a big U as 'the Unknowable'; it sets aside 'theism, pantheism, and atheism,' as equally untenable, notwithstanding the fact that, by the law of contradiction, either theism or atheism must be true (pantheism being merely one form of theism); and so it contrives to cheat its deladed followers into believing that philosophy sits between yes and no on the little end of nothing whittled down to a point. It is enough to make every thinker blush with shame to see philosophy so villainously impaled. Most certainly the humiliating spectacle will be a brief one. Compared with this farce of a philosophy, straight-out atheism is infinitely respectable. The issue raised by modern scientific reflection is a serious

and honest one; does God exist or not? The answer must be as honest as the question; yes or no. Science herself must give the answer, for science herself propounds the question; and, as our readers already understand, we believe her answer will be yes. That is the true state of the case; and we are sorry to see Professor Tyndall helping to confuse the public mind still further by reiterating Herbert Spencer's meaningless jargon on the subject. There is no religion in ignorance; but there is religion in a knowledge that seeks to lessen its own ignorance. There is no religion in mystification, or in the apotheosis of 'insoluble mystery'; but there is religion in the modest recognition of a mystery which we are here to solve, and thereby to convert into known and nutritious truth. That we shall solve it all, least of all in our own day, is not to be expected; but to give up the attempt to solve it on the plea that it is insoluble, is to bury our talent in the earth because we know that we have a hard master.

"For one, we refuse to juggle, or be juggled with, by this empty gibberish of 'the unknowable' or 'the inscrutable.' The 'Power' which confessedly manifests itself in the process of evolution is not only to be studied but known in and through its manifestations or effects; that is, in and through the grand order of Nature, the adaptation of part to part in the organic and limitless whole, the eternal series of sequences according to law by which it has been developed. Admitting that but an 'infinitesimal span' of the wondrous 'cosmical life' is as yet known to us, science has already taught us to seek its explanation in one omnipresent cause. If we consider this one cause to be matter, even in Professor Tyndall's enlarged use of the word, we are defeated in the search for real unity, which is excluded by his illimitable multitude of self-subsistent molecules; we can find it only in such a philosophy of atoms as shall show them to be indeed 'manifestations' of a unitary energy or 'Power,' That is, the way out of Tyndall's imperfect materialism is clear through it into a philosophy which may be called materialistic or spiritualistic as you please, yet which shall recognize the infinite 'cosmical life' as embracing our little human life, not as an alien thing, but as part and parcel of itself. What we require is a more radical treatment of science itself, sure that such a treatment will leave abundant room for every sentiment that now ennobles man, without imposing on him the dire necessity of pouring contempt upon his own 'understanding,' or of narrowing religion down to a mere emotion or feeling, as Professor Tyndall docs."

The Immortality of the Historic Individual.

In the last number of this journal Professor Smith continues the discussion of the question of immortality. The difficulty to be decided relates to the idea of Universality.

What can one mean by "historic individual" except the individual I or he who remembers that he has a distinct past history, in which he has reacted against persons and circumstances, and created his own self and belongings by the act of his WILL, and is now conscious that he is product of his will as producer? His will produce by his own act the universality

which is attributed to man. By the act of negating his particular, special, individual peculiarities he makes himself not an abstract universal but a concrete universal, one which is individual as well as universal. For, does it not sustain its phase of universality by the act of its will in negating or abstracting, and is not this act always a special one, a purely individual act? Were this annulment of the special, by means of the activity which is individual, to cease, there would remain neither abstract universal nor individual, but zero. The mistake consists in seizing an abstract caput mortuum for the universal instead of a concrete process. What I mean by concrete process is a process of self-determination wherein the negative unity which acts is the subject of the act, and freely produces in itself all its multiplicity and dissolves any particular phase of the same at will. cannot dissolve the total sphere of particularity at once, it is true; for the act of such annulment is itself a particular one, and hence creates what it attempts to destroy. Otherwise the self-relation of the negative act could annul or destroy the subject and thus end its being in a vacuity, like the abstract unity which is the result of the "absorption theory." The ego is always subject-object and hence dual in its unity. Since both sides are the same—the self as subject and the same self as object—we have a concrete unity; and since its knowing is always an acting, we have the existence of the ego an eternal process.

The following communication, received from Mr. Kroeger, continues the same subject.

EDITOR.

Mr. Editor:—In the July number of the Jour. Spec. Philosophy, Mr. B. C. Smith, referring to an article of mine on the subject of immortality, and, summing up his objections to it, takes occasion to say: "Mr. Kroeger, it seems to me, instead of proving our immortality, has, if anything, proven our immortal immorality." This hits the nail on the head, and seems to me, indeed, too self-evident to need much proof. If any finite being is immortal, i.e. continues to lead a self-conscious life throughout all time, it necessarily remains always more or less immoral, because it remains finite. Were it to lose its finite character, it would become God or be submerged in the Godhead, &c.; all of which suppositions are absurd, for the immortality which inheres in all res singulares sub specie æternitatis conceptæ is not in any sense of the word what people mean when they want to know whether they are immortal. Tom does not care a fig whether he will ever be "conscious of being identical with the Absolute," but he is very anxious to know whether he will be forever conscious of being and having been Tom. It seems strange that those who still discuss the subject of immortality always lose sight of this fact.

It does seem somewhat plausible that the moral world would be no more disturbed by my departure from it than it was by my advent into it, as Mr. Smith suggests; but the reason of the difference is precisely because "the moral world is not the world of time," to use Mr. Smith's own words in the same sentence wherein he seems to charge me with presumption in holding that the moral world cannot get along without me. Really, I think it cannot get along without him either.

A. E. Kroeger.

Dr. Brinton on Life Force and Soul.

In the "Medical and Surgical Reporter" (Philadelphia) for September 6, 1873, is to be found an editorial on modern Psychology which reviews concisely the attitude of the physiological school toward the spiritual doctrine of the soul, and especially toward that of free-will. In the number for October 11, 1873, a book notice of Garretson's "Thinkers and Thinking" furnishes occasion for some acute strictures bearing upon the two opposed schools—the positivists and the abstract idealists.

In the same journal (Medical and Surgical Reporter) for Nov. 1, 1873, the editor, Dr. Brinton, offered some valuable suggestions on the definition of life, criticising the attempts of Bastian, Bichat, Whewell, Spencer, De Candolle, and Cuvier. That of the last named he prefers to those of the others—"Life is that condition of Being in which the form is more essential than the matter," and proceeds to remark upon this definition:

"This, we take it, contains in abstract language the gist of the distinction between organic and inorganic nature.

"The value of a definition in inductive science, we have said, is to point out the path for future investigation. And, in the one we have just given, that object is prominently held in view. The science of Biology concerns itself beyond all else, with functions, combined in a *unity of purpose*, acting under varying conditions. This unity of purpose is the maintenance of the individual, as bounded and circumscribed by definite confines, or by defined *form*.

"Again, the whole science of Morphology is based on the idea of metamorphosed and developed symmetry of form; the matter is continuously and rapidly changing, it is in a whirling eddy or vortex (tourbillon), but the type, the form, is always retained in one or another of its metamorphoses. Although composed chiefly of such unstable elements as oxygen, hydrogen, and nitrogen, so long as life lasts, fidelity to form is the guiding principle of organic beings.

"There is even a higher application of this definition, lying, it is true, out of the boundaries of exact science, but we may, perhaps, be pardoned for referring to it. As those most airy and intangible elements are attached to fixed forms of symmetry and individual existence by Life, so the still less material elements of Thought may be chained to even more inflexible forms of personal existence when visible life ceases, and thus the words of the poet prove true:

"'Eternal Form shall still divide

Eternal Soul from all beside,

And I shall know him when we meet.'

Tennyson, In Memoriam."

In the next number (Nov. 8, 1873) Dr. Brinton discusses "The Ultimate of Science," and criticises acutely the various theories regarding force. He speaks of James Croll's views against Bain:

"The Determination (i.e. the direction, regulation, or application) of motion is something very different from its Production. If Force guides itself, by virtue of what does it do so? Energy cannot direct energy. The

determination of molecular motion is something else than the laws of that motion. They are merely the results of observed sequences; they are not regulative; or if regulative, then they mean something very different from an empirical law. Form can never be the product of forces; it is not their result, but the result of the way in which they are applied, the effect not of the forces but of that guiding or directing power which rests behind them (London Philosophical Magazine, July, 1872, pp. 5-25). He (Croll) and those with him insist that the Law of Causation can never offer a completely satisfactory explanation to the human mind. No matter how far up it is carried, no matter how supreme and universal the generalization reached, the mind cannot help still inquiring for yet another proximate cause. This Professor Bain pronounces to be inept; 'the limits of Explanation are the limits of Induction' is his dictum, and, true as it is, it is not the whit more satisfactory for all that; and no matter how many logicians sustain it, the mind itself will not.

"And why not?

"Because there is a wider, a more comprehensive truth, which decrees that no explanation dependent on the physical laws of causality can satisfy the thinking faculties; that they require, that they incessantly and increasingly demand, the ultimate reference of every law of phenomena to a law of Intelligence. Derided and despised as this instinctive longing may be, it will remain still importunate and clamorous until it is recognized, listened to, respected, yes, honored, and at last assigned its just position as the truest and grandest instinct of man's nature."

Dr. Brinton continued his philosophic discussions in the numbers of his journal for Nov. 15, Nov. 22 and Nov. 29, 1873, treating of "Soul in Terms of Science," "Laws Common to Mind and Matter," &c. On the former question he remarks:

"No branch of scientific inquiry has been more devotedly studied in the last ten years than the physiology of the senses. In Germany, especially, it has been pursued with unflagging ardor, and the researches of Fechner, Helmholtz, Hering, Wundt, and a score of others, are known, at least by hearsay, to every student. The half-confessed motive which has prompted these extraordinary labors has been the hope of throwing some light on the nature of man's thinking faculties, his mind or his soul. What the result has been it is our purpose now to lay before our readers in as brief a form as possible.

"The theory of the correlation of forces, reduced to a definite form by Helmholtz, Mayer, and Grove (about 1847–1850), while very fruitful for a while, has proved itself insufficient in the higher walks of science, and may now be said to have been expanded into the theory of the metamorphosis or propagation of motion. There is no such thing as a force; motion passing from one form to another displays what we call a Force. Considered broadly, matter has neither properties nor forces; for no such entities can be conceded to exist, but only action, repulsive or attractive. Motion, once more, is ending; what was once called latent force, or matter at rest, has been defined as constitutive motion, as opposed to regulative motion, which

embraces all dynamical conditions. Strictly, as we mentioned last week, force is neither motion nor action, but the intensity of action, expressed in terms of motion, either dynamically by the space passed over, or statically by pressure exerted.—"Such are the principles to guide us in the study of soul. Is this essence a measure of motion (as other so-called forces), or is it something entirely different? That is the question.

"An apparently unconquerable dilemma meets us at the very start. All motion must be in space. Yet thought is distinctly not in space. Space is a form of perception, and no possible common measure of thought and space can even be imagined. Therefore thought cannot be motion. This is the first horn of the dilemma.

"But again, all mental and physical force expended being exactly equal to the force in the form of nutriment received, clearly the mind, if there is any such independent thing, contributes no force at all; it cannot and it does not act on ponderable matter, and never gives added power. This is demonstrable, and is the other horn of the dilemma."

On the latter question he remarks:

"In the last few numbers of this journal we have explained the modern doctrines of Life, of Force, and of Soul. It remains, in order to complete the survey of this recondite province of physiological science which we have been exploring, to examine somewhat more attentively that community of laws which we found at the conclusion of our last article to constitute the real bond of unity between Thought and Matter, or, to phrase it differently, between Mind and body.

"Two eminent English authors, Professor Bain and Dr. Maudsley, have each written, the last year, a work on this very topic, and each has advocated closely similar views. These, in the case of the former, defend, to use his own words, 'a guarded Materialism,' and in the case of the latter a Materialism that can hardly be called guarded. In spite of the high reputation of these teachers, and the solid worth of much of their writings, few who are versed in the literature of psychology will accept their theories as adequate. It is not our purpose to point out their shortcomings, but merely to warn our readers, that, while they are good authorities as far as they go, they fail to grasp, or perhaps they avoid, the subtlest points of the inquiry.

"Taking their works as fair expositions of the ascertained and the suspected physiological bases of Life and Thought, we shall briefly adduce some of the laws common to thought and extended substance, in order to indicate the path of investigation in this direction.

"First, what is the true mental correlate of the physical fact of Life? This is the first and broadest question. We have defined life to be a certain condition of material Being. What immaterial, unextended mental fact is its universal associate, its inseparable correlate?

"No one can hesitate a moment to acknowledge that this correlate is *Feeling*, the sentient faculty. This is exclusively confined to living beings, and is co-extensive with them, in the vegetable as well as in the animal world. But can we not define still more closely this correlate? There can

be no reasonable doubt but that we can and must. Not Feeling alone, but pleasurable feeling, as opposed to painful feeling, is the true mental correlate of Life.

"This is a most momentous and far-reaching conclusion. It is formulated by Professor Bain as the 'Law of Self-Conservation' in the following words, which however might be more pointedly arranged: 'States of Pleasure are connected with an increase, states of Pain with an abatement, of vital functions.' (The Theories of the Relation of Mind and Body, p. 59.)

"The condition of increasing vitality is therefore increasing pleasure, and vice versa; and that this is true mentally and morally as well as physically is the assumed foundation of what is known as the Utilitarian theories of Ethics and Political Economy. The objections to these theories are in constant process of reduction, and doubtless will ere many years be wholly overcome; but, of course, we cannot stop even to glance at this immense discussion. Suffice it to say that modern physical science here reaches exactly the same point which psychical analysis, in the masterly hands of Spinoza, attained two hundred years ago, as any one can see by comparing the third part of his Ethices with this last book of Prof. Bain.

"The second fundamental law common to Thought and Material is akin to this first law of Selt-Conservation. It is the law of Unity or Identity. Whatever is, exists as itself, and not as something else. In other words, it preserves its own identity. Plants and animals, whose constituent parts are undergoing ceaseless change, preserve the identity of Form, and, what is even more inexplicable, transmit this Form, so that each species 'brings forth after its kind.' So in Thought, one must think of anything as one thing, and not another. The nervous impression given by the color blue must always be recognized as the color blue, or all correct thought about it becomes impossible.

"The third great law is the law of Duality, otherwise called Relativity or Contrast. One thing can only exist as one by being different from some other thing. So it can only be a subject of thought when contrasted with some allied subject of thought. We recognize the blue because it differs from the red, etc."

Contemporary Philosophy.

In the "North American Review" for July, 1872, appeared a very noteworthy estimate of the Philosophical stand-point of "Henry Thomas Buckle, His Problem and his Metaphysics," from the pen of Dr. J. H. Stirling, well known to our readers. The article is in the same thorough style as that on "Professor Fraser's Berkeley," published in this journal January, 1873.

In Scribner's Monthly for Sept., 1872, appeared an interesting article on "Frederic Denison Maurice," from the pen of Dr. E. Mulford, the author of "The Nation," by far the ablest speculative work on the Philosophy of Rights in the English language. At the close of the article he draws a comparison between Maurice's Theological views and those of Hegel, and does Hegel's views the justice that they seldom get.

In the July number of the above-named Review for the same year is a very satisfactory article on "Arthur Schopenhauer and his Pessimistic Philosophy," by E. Gryzanovski.

In the October number, "Taine's Philosophy of Intelligence" received a thorough examination by James T. Bixby.

Professor Barzelotti of Florence, Italy, whose book on *The Moral in Positive Philosophy* we noticed April, 1872, is now engaged in the preparation of an extensive work upon the present condition of Philosophy.

BOOK NOTICES.

Memoir of Samuel Joseph May. Boston: Roberts Brothers, 1873.

If the chief value of biography is found to lie in the fact that it brings the reader into intimate society with great and good men, here is certainly a valuable biography. All who knew Mr. May will comprehend the sincerity of the words of President White of Cornell University: "Here lies before us all that was mortal of the best man, the most truly christian man, I have ever known; the purest, the sweetest; the fullest of faith, hope, and charity; the most like the Master."

The Logic of Accounts; a New Exposition of the Theory and Practice of Double Entry Book-keeping, based in value, as being of two primary classes, Commercial and Ideal; and reducing all their Exchanges to nine Equations and thirteen Results. By E. G. Folsom, A.M., Proprietor of the Bryant & Stratton College, Albany, N. Y. New York and Chicago; A. S. Barnes & Co., 1873.

Who can doubt that a philosophically trained mind, deeply versed in political economy, would teach the subject of book-keeping in such a way as to make it simple and clear, and exhaustive and comprehensive? If our merchants were all thoroughly trained in a school of political economy, and were initiated into the secrets of finance, there would not only be fewer failures among them, but there would be vast systems of commerce built up on a sound basis. Commerce is the centre and head of human industry; on it rests the division of labor and all possibility of prosperous manufacturing, agriculture, and mining.

Until reached by the arms of commerce a population is never more than half civilized and its labor not half utilized; its ideas move in narrow eircles, for it cannot through the daily newspaper receive a cosmopolitan culture. The substitution of matter of world-interest for village gossip is as important a step toward genuine civilization as one can name.

Success to any teacher of Book-keeping who lifts his theme up on the pillars of broad generalization!

What Determines Molecular Motion?—The Fundamental Problem of Nature. By James Croll, of the Geological Survey of Scotland. (Reported from the Philosophical Magazine for July, 1872.) London: Taylor & Francis, 1872.

An able investigation into the phenomena of matter, motion, and force, which occupy so much of the attention of thoughtful men in our time. Its author is preparing for the press a new and revised edition of his "Philoso-

phy of Theism: the Determination of Molecular Motion considered in relation to Theism; with an Examination of Modern Theories of Molecular Evolution"—pronounced by English authority to be "one of the clearest and subtilest works on the metaphysics of theism ever written."

Bibliotheca Diabolica; being a choice selection of the most valuable books relating to the Devil, his origin, greatness, and influence; comprising the most important works on the Devil, Satan, Demons, Hell, Hell-torments, Magic. Witchcraft, Sorcery, Divination, Superstitions, Angels, Ghosts, &c. &c. With some curious volumes on Dreams and Astrology. In Two Parts—pro and con, serious and humorous. Chronologically arranged with Notes, Quotations and Proverbs, and a copious Index. Illustrated with twelve curious Designs. On sale by Scribner, Welford & Armstrong, 654 Broadway, New York.

This catalogue has been ably compiled and edited by Mr. Henry Kernot, and is the most complete and valuable one ever published, containing the names of upwards of five hundred works, on the subject. What adds most importance to the catalogue is the fact that all the books named are for sale by Scribner, Welford & Armstrong.

On Deaf-Mutism and the Method of Educating the Deaf and Dumb. By Lawrence Turnbull, M.D. Pamphlet, pp. 1 to 7. Reprint from Trans. Med. Soc. of Pa.

Catalogue No. 3 of Publications, importations and selections of a liberal and reform character, advocating free thought in Religion, and Political, Social and Natural Science. By Asa K. Butts & Co., 36 Dey street, New York.

The Philosophy of Evolution, together with a Preliminary Essay on the Metaphysical Basis of Science. Two Papers read before the Wisconsin Academy of Science, Arts, &c., by Stephen II. Carpenter, LL.D., Professor of Legic in Wisconsin University, and President of the Department of Speculative Philosophy in the Wisconsin Academy of Science.

Die Selbstzersetzung des Christenthums und die Religion der Zukunft. Von Eduard von Hartmann. Berlin, 1874. Carl Duncker's Verlag.

Contents (translated): (1) Reconstruction or a New Structure? (2) The Historical Problem of Protestantism; (3) Christianity and Modern Culture; (4) Pauline and Johannean Christianity: (5) The Christianity of Christ:

(4) Pauline and Johannean Christianity; (5) The Christianity of Christ;

(6) The unchristian Attitude of Liberal Protestantism—(7) Its Irreligiousness; (8) The Necessity and Possibility of a new World-Religion; (9) The Historical Corner-stone of the Religion of the Future.

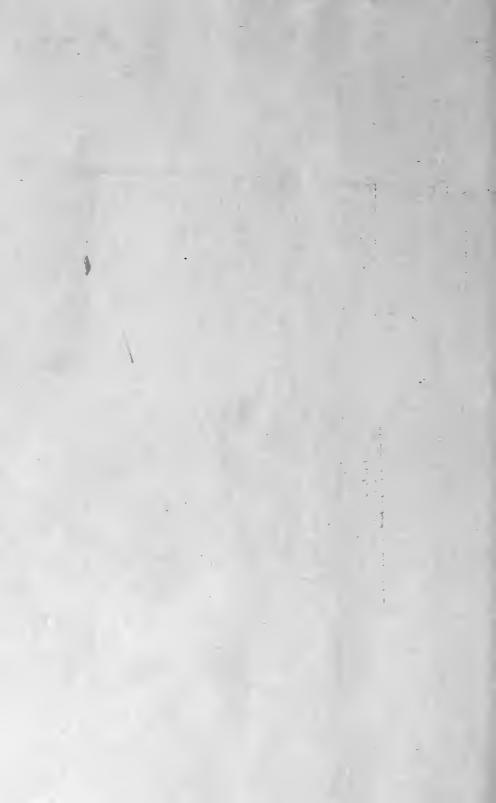
We have here the theological views of the author of the *Philosophy of the Unconscious*, whose work on that subject has run through six editions within five years. His closing paragraph is as follows:

"It therefore appears, from the present attitude of science, to be the most probable event, that the Religion of the Future will be a Pantheism, or, more definitely, a Pantheistie Monism (with an exclusion of every tendency to Polytheism)—or, in other words, an impersonal, immanent Monotheism, of whose deity the world is an objective manifestation—not without him, but within him. This, however, is not accomplished either by the Positive Christianity with its triune polytheism, or by the Liberal Protestantism with its abstract, personal theism; historically, the result sought for will be attained only through the synthesis of the East Indian and Jewish-Christian evolutions of religion into one structure which shall unite in itself the chief characteristics of both tendencies (with elimination of defects), and thereby find the means to complement both and become a World-Religion in the true sense of the word. Such a Panmonotheism would harmonize most perfectly with reason and at the same time arouse and satisfy completely the religious nature, and likewise furnish a metaphysics that would afford the strongest support to ethics, and therefore would come the nearest to being what people seek under the name of "truth" in Religion."

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