



3 1761 05388753 5

PRESENTED
TO
THE UNIVERSITY OF TORONTO
BY

Wm L Harris
Washington



Digitized by the Internet Archive
in 2008 with funding from
Microsoft Corporation

THE JOURNAL
OF
SPECULATIVE PHILOSOPHY.

VOLUME XII.

EDITED BY WM. T. HARRIS.

ST. LOUIS:
G. I. JONES AND COMPANY.
1878.

Entered according to Act of Congress, in the year 1878, by

WILLIAM T. HARRIS,

In the Office of the Librarian of Congress, at Washington.

13080

6

CONTENTS.

	PAGE
Boole's Logical Method,	George Bruce Halsted, 81
Brute and Human Intellect,	William James, 236
Christianity and the Clearing-up,	Francis A. Henry, 171, 337
Fichte's Criticism of Schelling (Tr.),	A. E. Krøger, 160, 316
Hegel on Symbolic Art (Tr.),	William M. Bryant, 18
Hegel on Classic Art (Tr.),	William M. Bryant, 145, 277
Hegel on Romantic Art (Tr.),	William M. Bryant, 403
Jacobi, and the Philosophy of Faith,	Robert H. Worthington, 393
Nation and the Commune, The,	Theron Gray, 44
Schelling on the Historical Construction of Chris- tianity (Tr.),	Ella S. Morgan, 205
Schiller's Ethical Studies,	Josiah Royce, 373
Science of Education, The (Paraph.),	Anna C. Brackett, 67, 297
Spencer's Definition of Mind,	William James, 1
Some Considerations on the Notion of Space,	J. E. Cabot, 225
Statement and Reduction of Syllogism,	George Bruce Halsted, 418
Von Hartmann on "The True and False in Dar- winism" (Tr.),	Henry I. D'Arcy, 138
World as Force, The,	John Watson, 113
Notes and Discussions,	92
(1) Sonnet to the Venus of Milo; (2) Emanuel Hvalgren's System;	
(3) Notes on Hegel and his Critics; (4) Sentences in Prose and Verse.	
Notes and Discussions: In Memoriam,	214
Notes and Discussions,	327
(1) Sentences in Prose and Verse; (2) Spiritual Epigrams; (3) A	
Fragment of the "Semitic" Philosophy; (4) Dr. Pfeleiderer's Philoso-	
phy of Religion; (5) On the Multiplicity of Conscious Beings; (6) Poly-	
crates sends Anacreon Five Talents.	
Notes and Discussions,	427
(1) The Moral Purpose of Tourguéneff; (2) Dr. Parson's Translation	
of Dante's Purgatorio.	
Book Notices,	108
(1) The Universe; (2) Heaven and its Wonders, and Hell; (3) Ueber	
die Aufgabe der Philosophie in der Gegenwart; (4) Municipal Law, and	
its Relations to the Constitution of Man; (5) Life and Mind—Their	
Unity and Materiality; (6) An Essay on Science and Theology; (7)	
The Relation of Philosophy to Science; (8) Neues Fundamental Or-	
ganon der Philosophie, etc.; (9) The Jurisdiction of Probate Courts;	
(10) The Natural Theology of the Doctrine of Forces; (11) Views of	

Nature and of the Elements; (12) Outlines of the Religion and Philosophy of Swedenborg; (13) Zwei Briefe Ueber Verursachung und Freiheit im Wollen; (14) Hartmann, Duchring, and Lange; (15) George Stjernhjelm; (16) Philosophische Monatshefte; (17) Verhandlungen der Philosophischen Gesellschaft.	
Book Notices,	217
(1) Zeitschrift fuer Philosophie und Philosophische Kritik; (2) Professor Watson on Science and Religion; (3) Principia or Basis of Social Science; (4) Soul Problems, with other Papers; (5) A Series of Essays on Legal Topics; (6) Percy Bysshe Shelley as a Philosopher and Reformer; (7) Elements de Philosophie Populaire; (8) Inaugural Address, by S. S. Laurie; (9) The Historical Jesus of Nazareth; (10) A Critical Account of the Philosophy of Kant; (11) Philosophische Monatshefte, Leipzig, 1877; (12) Die Phantasie als Grundprincip des Welt Processes; (13) Philosophie de la Religion de Hegel; (14) The Princeton Review.	
Book Notices,	436
(1) Krauth's Vocabulary of the Philosophical Sciences; (2) Stirling's Burns in Drama, together with Saved Leaves; (3) Pfeiderer's Religious Philosophie auf Geschichtlicher Grundlage; (4) Bascom's Comparative Psychology; (5) Eucken's Geschichte und Kritik der Grundbegriffe der Gegenwart; (6) Bascom's Philosophy of Religion; (7) American Journal of Mathematics.	

ERRATA.

Page 45, line 28,	for <i>such</i> , read <i>each</i> .
Page 51, line 23-4,	for <i>a plain man</i> , read <i>explain now</i> .
Page 54, line 5,	for <i>assuming</i> , read <i>assuring</i> .
Page 56, line 19,	for <i>Free</i> , read <i>True</i> .
Page 56, line 28-9,	for <i>diction</i> , read <i>dictation</i> .
Page 57, line 34,	for <i>interest</i> , read <i>increase</i> .
Page 60, line 12,	for <i>law-rule</i> , read <i>law—rule</i> .
Page 67, line 17,	for <i>the reappear</i> , read <i>there appear</i> .
Page 383, line 21,	for <i>sobriatur</i> , read <i>solvitur</i> .
Page 400, line 11,	for <i>on</i> , read <i>or</i> .
Page 401, line 8,	for <i>succeded</i> , read <i>superseded</i> .
Page 402, line 30,	for <i>an</i> , read <i>our</i> .
Page 402, line 33,	for <i>an</i> , read <i>our</i> ; for <i>even</i> , read <i>ever</i> .

THE JOURNAL OF SPECULATIVE PHILOSOPHY.

VOL. XII.]

JANUARY, 1878.

[No. 1.

REMARKS ON SPENCER'S DEFINITION OF MIND AS CORRESPONDENCE.

BY WM. JAMES.

As a rule it may be said that, at a time when readers are so overwhelmed with work as they are at the present day, all purely critical and destructive writing ought to be reprobated. The half-gods generally refuse to go, in spite of the ablest criticism, until the gods actually *have* arrived; but then, too, criticism is hardly needed. But there are cases in which every rule may be broken. "What!" exclaimed Voltaire, when accused of offering no substitute for the Christianity he attacked, "*jé vous délivre d'une bête féroce, et vous me demandez par quoi je la remplace!*" Without comparing Mr. Spencer's definition of Mind either to Christianity or to a "*bête féroce*," it may certainly be said to be very far-reaching in its consequences, and, according to certain standards, noxious; whilst probably a large proportion of those hard-headed readers who subscribe to the *Popular Science Monthly* and *Nature*, and whose sole philosopher Mr. Spencer is, are fascinated by it without being in the least aware what its consequences are.

The defects of the formula are so glaring that I am surprised it should not long ago have been critically overhauled.

The reader will readily recollect what it is. In part III of his *Principles of Psychology*, Mr. Spencer, starting from the supposition that the most essential truth concerning mental evolution will be that which allies it to the evolution nearest akin to it, namely, that of Life, finds that the formula "*adjustment of inner to outer relations*," which was the definition of life, comprehends also "the entire process of mental evolution." In a series of chapters of great apparent thoroughness and minuteness he shows how all the different grades of mental perfection are expressed by the degree of extension of this adjustment, or, as he here calls it, "correspondence," in space, time, speciality, generality, and integration. The polyp's tentacles contract only to immediately present stimuli, and to almost all alike. The mammal will store up food for a day, or even for a season; the bird will start on its migration for a goal hundreds of miles away; the savage will sharpen his arrows to hunt next year's game; while the astronomer will proceed, equipped with all his instruments, to a point thousands of miles distant, there to watch, at a fixed day, hour, and minute, a transit of Venus or an eclipse of the Sun.

The picture drawn is so vast and simple, it includes such a multitude of details in its monotonous frame-work, that it is no wonder that readers of a passive turn of mind are, usually, more impressed by it than by any portion of the book. But on the slightest scrutiny its solidity begins to disappear. In the first place, one asks, what right has one, in a formula embracing professedly the "entire process of mental evolution," to mention only phenomena of cognition, and to omit all sentiments, all æsthetic impulses, all religious emotions and personal affections? The ascertainment of outward fact constitutes only one species of mental activity. The genus contains, in addition to purely cognitive judgments, or judgments of the actual—judgments that things do, as a matter of fact, exist so or so—an immense number of emotional judgments: judgments of the ideal, judgments that things *should* exist thus and not so. How much of our mental life is occupied with this matter of a better or a worse? How much of it involves preferences or repugnances on our part? We cannot

laugh at a joke, we cannot go to one theater rather than another, take more trouble for the sake of our own child than our neighbor's; we cannot long for vacation, show our best manners to a foreigner, or pay our pew rent, without involving in the premises of our action some element which has nothing whatever to do with simply cognizing the actual, but which, out of alternative possible actuals, selects one and cognizes that as the ideal. In a word, "Mind," as we actually find it, contains all sorts of laws — those of logic, of fancy, of wit, of taste, decorum, beauty, morals, and so forth, as well as of perception of fact. Common sense estimates mental excellence by a combination of all these standards, and yet how few of them correspond to anything that actually *is* — they are laws of the Ideal, dictated by subjective *interests* pure and simple. Thus the greater part of Mind, quantitatively considered, refuses to have anything to do with Mr. Spencer's definition. It is quite true that these ideal judgments are treated by him with great ingenuity and felicity at the close of his work — indeed, his treatment of them there seems to me to be its most admirable portion. But they are there handled as separate items having no connection with that extension of the "correspondence" which is maintained elsewhere to be the all-sufficing law of mental growth.

Most readers would dislike to admit without coercion that a law was adequate which obliged them to erase from literature (if by literature were meant anything worthy of the title of "mental product") all works except treatises on natural science, history, and statistics. Let us examine the reason that Mr. Spencer appears to consider coercive.

It is this: That, since every process grows more and more complicated as it develops, more swarmed over by incidental and derivative conditions which disguise and adulterate its original simplicity, the only way to discover its true and essential form is to trace it back to its earliest beginning. There it will appear in its genuine character pure and undefiled. Religious, æsthetic, and ethical judgments, having grown up in the course of evolution, by means that we can very plausibly divine, of course may be stripped off from the main stem of

intelligence and leave that undisturbed. With a similar intent Mr. Tylor says: "Whatever throws light on the origin of a conception throws light on its validity." Thus, then, there is no resource but to appeal to the polyp, or whatever shows us the form of evolution just *before* intelligence, and what that, and only what that, contains will be the root and heart of the matter.

But no sooner is the reason for the law thus enunciated than many objections occur to the reader. In the first place, the general principle seems to lead to absurd conclusions. If the embryologic line of appeal can alone teach us the genuine essences of things, if the polyp is to dictate our law of mind to us because he came first, where are we to stop? He must himself be treated in the same way. Back of him lay the not-yet-polyp, and, back of all, the universal mother, fire-mist. To seek there for the reality, of course would reduce all thinking to nonentity, and, although Mr. Spencer would probably not regard this conclusion as a *reductio ad absurdum* of his principle, since it would only be another path to his theory of the Unknowable, less systematic thinkers may hesitate. But, waiving for the moment the question of principle, let us admit that relatively to *our* thought, at any rate, the polyp's thought is pure and undefiled. Does the study of the polyp lead us distinctly to Mr. Spencer's formula of correspondence? To begin with, if that formula be meant to include disinterested scientific curiosity, or "correspondence" in the sense of cognition, with no ulterior selfish end, the polyp gives it no countenance whatever. He is as innocent of scientific as of moral and æsthetic enthusiasm; he is the most narrowly teleological of organisms; reacting, so far as he reacts at all, only for self-preservation.

This leads us to ask what Mr. Spencer exactly means by the word correspondence. Without explanation, the word is wholly indeterminate. Everything corresponds in some way with everything else that co-exists in the same world with it. But, as the formula of correspondence was originally derived from biology, we shall possibly find in our author's treatise on that science an exact definition of what he means by it. On

seeking there, we find nowhere a definition, but numbers of synonyms. The inner relations are "adjusted," "conformed," "fitted," "related," to the outer. They must "meet" or "balance" them. There must be "concord" or "harmony" between them. Or, again, the organism must "counteract" the changes in the environment. But these words, too, are wholly indeterminate. The fox is most beautifully "adjusted" to the hounds and huntsmen who pursue him; the limestone "meets" molecule by molecule the acid which corrodes it; the man is exquisitely "conformed" to the *trichina* which invades him, or to the typhus poison which consumes him; and the forests "harmonize" incomparably with the fires that lay them low. Clearly, a further specification is required; and, although Mr. Spencer shrinks strangely from enunciating this specification, he everywhere works his formula so as to imply it in the clearest manner.

Influence on physical well-being or survival is his implied criterion of the rank of mental action. The moth which flies into the candle, instead of away from it, "fails," in Spencer's words (vol. I, p. 409), to "correspond" with its environment; but clearly, in this sense, pure cognitive inference of the existence of heat after a perception of light would not suffice to constitute correspondence; while a moth which, on feeling the light, should merely vaguely fear to approach it, but have no proper image of the heat, would "correspond." So that the Spencerian formula, to mean anything definite at all, must, at least, be re-written as follows: "Right or intelligent mental action consists in the establishment, corresponding to outward relations, of such inward relations and reactions as will favor the survival of the thinker, or, at least, his physical well-being."

Such a definition as this is precise, but at the same time it is frankly teleological. It explicitly postulates a distinction between mental action pure and simple, and *right* mental action; and, furthermore, it proposes, as criteria of this latter, certain ideal ends—those of physical prosperity or survival, which are pure *subjective interests* on the animal's part, brought with it upon the scene and corresponding to no

relation already there.¹ No mental action is right or intelligent which fails to fit this standard. No correspondence can pass muster till it shows its subservience to these ends. Corresponding itself to no actual outward thing; referring merely to a future which *may* be, but which these interests now say *shall* be; purely ideal, in a word, they judge, dominate, determine all correspondences between the inner and the outer. Which is as much as to say that *mere* correspondence with the outer world is a notion on which it is wholly impossible to base a definition of mental action. Mr. Spencer's occult reason for leaving unexpressed the most important part of the definition he works with probably lies in its apparent implication of subjective spontaneity. The mind, according to his philosophy, should be pure product, absolute derivative from the non-mental. To make it dictate conditions, bring independent interests into the game which may determine what we shall call correspondence, and what not, might, at first sight, appear contrary to the notion of evolution, which forbids the introduction at any point of an absolutely new factor. In what sense the existence of survival interest does postulate such a factor we shall hereafter see. I think myself that it is possible to express all its outward results in non-mental terms. But the unedifying look of the thing, its simulation of an independent mental teleology, seems to have frightened Mr. Spencer here, as elsewhere, away from a serious scrutiny of the facts. But

¹ These interests are the real *a priori* element in cognition. By saying that their pleasures and pains have nothing to do with correspondence, I mean simply this: To a large number of terms in the environment there may be inward correlatives of a neutral sort as regards feeling. The "correspondence" is already there. But, now, suppose some to be accented with pleasure, others with pain; that is a fact additional to the correspondence, a fact with no outward correlative. But it immediately orders the correspondences in this way: that the pleasant or interesting items are singled out, dwelt upon, developed into their farther connections, whilst the unpleasant or insipid ones are ignored or suppressed. The future of the Mind's development is thus mapped out in advance by the way in which the lines of pleasure and pain run. The interests precede the outer relations noticed. Take the utter absence of response of a dog or a savage to the greater mass of environing relations. How can you alter it unless you previously *awaken an interest* — i. e., produce a susceptibility to intellectual pleasure in certain modes of cognitive exercise? Interests, then, are an all-essential factor which no writer pretending to give an account of mental evolution has a right to neglect.

let us be indulgent to his timidity, and assume that survival was all the while a "mental reservation" with him, only excluded from his formula by reason of the comforting sound it might have to Philistine ears.

We should then have, as the embodiment of the highest ideal perfection of mental development, a creature of superb cognitive endowments, from whose piercing perceptions no fact was too minute or too remote to escape; whose all-embracing foresight no contingency could find unprepared; whose invincible flexibility of resource no array of outward onslaught could overpower; but in whom all these gifts were swayed by the single passion of love of life, of survival at any price. This determination filling his whole energetic being, consciously realized, intensified by meditation, becomes a fixed idea, would use all the other faculties as its means, and, if they ever flagged, would by its imperious intensity spur them and hound them on to ever fresh exertions and achievements. There can be no doubt that, if such an incarnation of earthly prudence existed, a race of beings in whom this monotonously narrow passion for self-preservation were aided by every cognitive gift, they would soon be kings of all the earth. All known human races would wither before their breath, and be as dust beneath their conquering feet.

But whether any Spencerian would hail with hearty joy their advent is another matter. Certainly Mr. Spencer would not; while the common sense of mankind would stand aghast at the thought of them. Why does common opinion abhor such a being? Why does it crave greater "richness" of nature in its mental ideal? Simply because, to common sense, survival is only one out of many interests—*primus inter pares*, perhaps, but still in the midst of peers. What are these interests? Most men would reply that they are all that makes survival worth securing. The social affections, all the various forms of play, the thrilling intimations of art, the delights of philosophic contemplation, the rest of religious emotion, the joy of moral self-approbation, the charm of fancy and of wit—some or all of these are absolutely required to make the notion of mere existence tolerable; and individuals who, by

their special powers, satisfy these desires are protected by their fellows and enabled to survive, though their mental constitution should in other respects be lamentably ill—"adjusted" to the outward world. The story-teller, the musician, the theologian, the actor, or even the mere charming fellow, have never lacked means of support, however helpless they might individually have been to conform with those outward relations which we know as the powers of nature. The reason is very plain. To the individual man, as a social being, the interests of his fellow are a part of his environment. If his powers correspond to the wants of this social environment, he may survive, even though he be ill-adapted to the natural or "outer" environment. But these wants are pure subjective ideals, with nothing outward to correspond to them. So that, as far as the individual is concerned, it becomes necessary to modify Spencer's survival formula still further, by introducing into the term environment a reference, not only to existent things non-existent, but also to ideal wants. It would have to run in some such way as this: "Excellence of the individual mind consists in the establishment of inner relations more and more extensively conformed to the outward facts of nature, and to the ideal wants of the individual's fellows, but all of such a character as will promote survival or physical prosperity."

But here, again, common sense will meet us with an objection. Mankind desiderate certain qualities in the individual which are incompatible with his chance of survival being a maximum. Why do we all so eulogize and love the heroic, recklessly generous, and disinterested type of character? These qualities certainly imperil the survival of their possessor. The reason is very plain. Even if headlong courage, pride, and martyr-spirit do ruin the individual, they benefit the community as a whole whenever they are displayed by one of its members against a competing tribe. "It is death to you, but fun for us." Our interest in having the hero as he is, plays indirectly into the hands of our survival, though not of his.

This explicit acknowledgment of the survival interests of the tribe, as accounting for many interests in the individual which

seem at first sight either unrelated to survival or at war with it, seems, after all, to bring back unity and simplicity into the Spencerian formula. Why, the Spencerian may ask, may not all the luxuriant foliage of ideal interests—æsthetic, philosophic, theologic, and the rest—which co-exist along with that of survival, be present in the tribe and so form part of the individual's environment; merely by virtue of the fact that they minister in an indirect way to the survival of the tribe as a whole? The disinterested scientific appetite of cognition, the sacred philosophic love of consistency, the craving for luxury and beauty, the passion for amusement, may all find their proper significance as processes of mind, strictly so-called, in the incidental utilitarian discoveries which flow from the energy they set in motion. Conscience, thoroughness, purity, love of truth, susceptibility to discipline, eager delight in fresh impressions, although none of them are traits of Intelligence *in se*, may thus be marks of a general mental energy, without which victory over nature and over other human competitors would be impossible. And, as victory means survival, and survival is the criterion of Intelligent "Correspondence," these qualities, though not expressed in the fundamental law of mind, may yet have been all the while understood by Mr. Spencer to form so many secondary consequences and corollaries of that law.

But here it is decidedly time to take our stand and refuse our aid in propping up Mr. Spencer's definition by any further good-natured translations and supplementary contributions of our own. It is palpable at a glance that a mind whose survival interest could only be adequately secured by such a wasteful array of energy squandered on side issues would be immeasurably inferior to one like that which we supposed a few pages back, in which the monomania of tribal preservation should be the one all-devouring passion.

Surely there is nothing in the essence of intelligence which should oblige it forever to delude itself as to its own ends, and to strive towards a goal successfully only at the cost of consciously appearing to have far other aspirations in view.

* A furnace which should produce along with its metal fifty

different varieties of ash and slag, a planing-mill whose daily yield in shavings far exceeded that in boards, would rightly be pronounced inferior to one of the usual sort, even though more energy should be displayed in its working, and at moments some of that energy be directly effective. If ministry to survival be the sole criterion of mental excellence, then luxury and amusement, Shakespeare, Beethoven, Plato, and Marcus Aurelius, stellar spectroscopy, diatom markings, and nebular hypotheses are by-products on too wasteful a scale. The slag-heap is too big—it abstracts more energy than it contributes to the ends of the machine; and every serious evolutionist ought resolutely to bend his attention henceforward to the reduction in number and amount of these outlying interests, and the diversion of the energy they absorb into purely prudential channels.

Here, then, is our dilemma: One man may say that the law of mental development is dominated solely by the principle of conservation; another, that richness is the criterion of mental evolution; a third, that pure cognition of the actual is the essence of worthy thinking—but who shall pretend to decide which is right? The umpire would have to bring a standard of his own upon the scene, which would be just as subjective and personal as the standards used by the contestants. And yet some standard there must be, if we are to attempt to define in any way the worth of different mental manifestations.

Is it not already clear to the reader's mind that the whole difficulty in making Mr. Spencer's law work lies in the fact that it is not really a constitutive, but a regulative, law of thought which he is erecting, and that he does not frankly say so? Every law of Mind must be either a law of the *cogitatum* or a law of the *cogitandum*. If it be a law in the sense of an analysis of what we *do* think, then it will include error, nonsense, the worthless as well as the worthy, metaphysics, and mythologies as well as scientific truths which mirror the actual environment. But such a law of the *cogitatum* is already well known. It is no other than the association of ideas according to their several modes; or, rather, it is this association definitively perfected by the inclusion of the teleological factor of

interest by Mr. Hodgson in the fifth chapter of his masterly "Time and Space."

That Mr. Spencer, in the part of his work which we are considering, has no such law as this in view is evident from the fact that he has striven to give an original formulation to such a law in another part of his book, in that chapter, namely, on the associability of relations, in the first volume, where the apperception of times and places, and the suppression of association by similarity, are made to explain the facts in a way whose operose ineptitude has puzzled many a simple reader.

Now, every living man would instantly define right thinking as thinking in correspondence with reality. But Spencer, in saying that right thought is that which conforms to existent outward relations, and this exclusively, undertakes to decide what the reality *is*. In other words, under cover of an apparently formal definition he really smuggles in a material definition of the most far-reaching import. For the Stoic, to whom *vivere convenienter naturæ* was also the law of mind, the reality was an archetypal Nature; for the Christian, whose mental law is to discover the will of God, and make one's actions correspond thereto, *that* is the reality. In fact, the philosophic problem which all the ages have been trying to solve in order to make thought in some way correspond with it, and which disbelievers in philosophy call insoluble, is just that: What is the reality? All the thinking, all the conflict of ideals, going on in the world at the present moment is in some way tributary to this quest. To attempt, therefore, with Mr. Spencer, to decide the matter merely incidentally, to forestall discussion by a definition—to carry the position by surprise, in a word—is a proceeding savoring more of piracy than philosophy. No, Spencer's definition of what we ought to think cannot be suffered to lurk in ambush; it must stand out explicitly with the rest, and expect to be challenged and give an account of itself like any other ideal norm of thought.

We have seen how he seems to vacillate in his determination of it. At one time, "scientific" thought, mere passive mirroring of outward nature, purely registrative cognition; at an-

other time, thought in the exclusive service of survival, would seem to be his ideal. Let us consider the latter ideal first, since it has the polyp's authority in its favor: "We must survive—that end must regulate all our thought." The poor man who said to Talleyrand, "*Il faut bien que je vive!*" expressed it very well. But criticise this ideal, or transcend it as Talleyrand did by his cool reply, "*Je n'en vois pas la nécessité,*" and it can say nothing more for itself. *A priori* it is a mere brute teleological affirmation on a par with all others. Vainly you should hope to prove it to a person bent on suicide, who has but the one longing—to escape, to cease. Vainly you would argue with a Buddhist or a German pessimist, for they feel the full imperious strength of the desire, but have an equally profound persuasion of its essential wrongness and mendacity. Vainly, too, would you talk to a Christian, or even to any believer in the simple creed that the deepest meaning of the world is moral. For they hold that mere conformity with the outward—worldly success and survival—is not the absolute and exclusive end. In the *failures* to "adjust"—in the rubbish-heap, according to Spencer—lies, for them, the real key to the truth—the sole mission of life being to teach that the outward actual is not the whole of being.

And, now—if, falling back on the scientific ideal, you say that to *know* is the one *τέλος* of intelligence—not only will the inimitable Turkish cadi in Layard's Ninevah praise God in your face that he seeks not that which he requires not, and ask, "Will much knowledge create thee a double belly?"—not only may I, if it please me, legitimately refuse to stir from my fool's paradise of theosophy and mysticism, in spite of all your calling (since, after all, your true knowledge and my pious feeling have alike nothing to back them save their seeming good to our respective personalities)—not only this, but to the average sense of mankind, whose ideal of mental nature is best expressed by the word "richness," your statistical and cognitive intelligence will seem insufferably narrow, dry, tedious, and unacceptable.

The truth appears to be that every individual man may, if

it please him, set up his private categorical imperative of what rightness or excellence in thought shall consist in, and these different ideals, instead of entering upon the scene armed with a warrant—whether derived from the polyp or from a transcendental source—appear only as so many brute affirmations left to fight it out upon the chess-board among themselves. They are, at best, postulates, each of which must depend on the general consensus of experience as a whole to bear out its validity. The formula which proves to have the most massive destiny will be the true one. But this is a point which can only be solved *ambulando*, and not by any *a priori* definition. The attempt to forestall the decision is free to all to make, but all make it at their risk. Our respective hypotheses and postulates help to shape the course of thought, but the only thing which we all agree in assuming is, that thought will be coerced away from them if they are wrong. If Spencer to-day says, “Bow to the actual,” whilst Swinburne spurns “compromise with the nature of things,” I exclaim, “*Fiat justitia, pereat mundus*,” and Mill says, “To hell I will go, rather than ‘adjust’ myself to an evil God,” what umpire can there be between us but the future? The idealists and the empiricists confront each other like Guelphs and Ghibellines, but each alike waits for adoption, as it were, by the course of events.

In other words, we are all fated to be, *a priori*, teleologists whether we will or no. Interests which we bring with us, and simply posit or take our stand upon, are the very flour out of which our mental dough is kneaded. The organism of thought, from the vague dawn of discomfort or ease in the polyp to the intellectual joy of Laplace among his formulas, is teleological through and-through. Not a cognition occurs but feeling is there to comment on it, to stamp it as of greater or less worth. Spencer and Plato are *ejusdem farinae*. To attempt to hoodwink teleology out of sight by saying nothing about it, is the vainest of procedures. Spencer merely takes sides with the *τελος* he happens to prefer, whether it be that of physical well-being or that of cognitive registration. He represents a particular teleology. Well might teleology (had she a voice) exclaim with Emerson's Brahma:

"If the red slayer think he slays,
 Or if the slain think he is slain,
 They know not well the subtle ways
 I keep, and pass and turn again.
 * * * * *
 "They reckon ill who leave me out;
 When me they fly, I am the wings;
 I am the doubter and the doubt," etc.

But now a scientific man, feeling something uncanny in this omnipresence of a teleological factor dictating *how* the mind shall correspond—an interest seemingly tributary to nothing non-mental—may ask us what we meant by saying sometime back that in one sense it is perfectly possible to express the existence of interests in non-mental terms. We meant simply this: That the reactions or outward consequences of the interests could be so expressed. The interest of survival which has hitherto been treated as an ideal *should-be*, presiding from the start and marking out the way in which an animal must react, is, from an outward and physical point of view, nothing more than an objective future implication of the reaction (if it occurs) as an actual fact. If the animal's brain acts fortuitously in the right way, he survives. His young do the same. The reference to survival in noway preceded or conditioned the intelligent act; but the fact of survival was merely bound up with it as an incidental consequence, and may, therefore, be called accidental, rather than instrumental, to the production of intelligence. It is the same with all other interests. They are pleasures and pains incidentally implied in the workings of the nervous mechanism, and, therefore, in their ultimate origin, non-mental; for the idiosyncrasies of our nervous centers are mere "spontaneous variations," like any of those which form the ultimate *data* for Darwin's theory. A brain which functions so as to insure survival may, therefore, be called intelligent in no other sense than a tooth, a limb, or a stomach, which should serve the same end—the sense, namely, of appropriate; as when we say "that is an intelligent device," meaning a device fitted to secure a certain end which we assume. If *nirvana* were the end, instead of survival, then it is true the means would be different, but in both cases alike

the end would not precede the means, or even be coeval with them, but depend utterly upon them, and follow them in point of time. The fox's cunning and the hare's speed are thus alike creations of the non-mental. The *τέλος* they entail is no more an agent in one case than another, since in both alike it is a resultant. Spencer, then, seems justified in not admitting it to appear as an irreducible ultimate factor of Mind, any more than of Body.

This position is perfectly unassailable so long as one describes the phenomena in this manner from without. The *τέλος* in that case can only be hypothetically, not imperatively, stated: *if* such and such be the end, then such brain functions are the most intelligent, just as such and such digestive functions are the most appropriate. But such and such cannot be declared *as* the end, except by the commenting mind of an outside spectator. The organs themselves, in their working at any instant, cannot but be supposed indifferent as to what product they are destined fatally to bring forth, cannot be imagined whilst fatally producing one result to have at the same time a notion of a different result which should be their truer end, but which they are unable to secure.

Nothing can more strikingly show, it seems to me, the essential difference between the point of view of consciousness and that of outward existence. We can describe the latter only in teleological terms, hypothetically, or else by the addition of a supposed contemplating mind which measures what it sees going on by its private teleological standard, and judges it intelligent. But consciousness itself is not merely intelligent in this sense. It is *intelligent intelligence*. It seems both to supply the means and the standard by which they are measured. It not only *serves* a final purpose, but *brings* a final purpose—posits, declares it. This purpose is not a mere hypothesis—"if survival is to occur, then brain must so perform," etc.—but an imperative decree: "Survival *shall* occur, and, therefore, brain *must* so perform!" It seems hopelessly impossible to formulate anything of this sort in non-mental terms, and this is why I must still contend that the phenomena of subjective "interest," as soon as the animal

consciously realizes the latter, appears upon the scene as an absolutely new factor, which we can only suppose to be latent thitherto in the physical environment by crediting the physical atoms, etc., each with a consciousness of its own, approving or condemning its motions.

This, then, must be our conclusion : That no law of the *cogitandum*, no norm-ative receipt for excellence in thinking, can be authoritatively promulgated. The only formal canon that we can apply to mind which is unassailable is the barren truism that it must think rightly. We can express this in terms of correspondence by saying that thought must correspond with truth ; but whether that truth be actual or ideal is left undecided.

We have seen that the invocation of the polyp to decide for us that it is actual (apart from the fact that he does not decide in that way) is based on a principle which refutes itself if consistently carried out. Spencer's formula has crumbled into utter worthlessness in our hands, and we have nothing to replace it by except our several individual hypotheses, convictions, and beliefs. Far from being vouched for by the past, these are verified only by the future. They are all of them, in some sense, laws of the ideal. They have to keep house together, and the weakest goes to the wall. The survivors constitute the right way of thinking. While the issue is still undecided, we can only call them our prepossessions. But, decided or not, "go in" we each must for one set of interests or another. The question for each of us in the battle of life is, "Can we *come out* with it?" Some of these interests admit to-day of little dispute. Survival, physical well-being, and undistorted cognition of what is, will hold their ground. But it is truly strange to see writers like Messrs. Huxley and Clifford, who show themselves able to call most things in question, unable, when it comes to the interest of cognition, to touch it with their solvent doubt. They assume some mysterious imperative laid upon the mind, declaring that the infinite ascertainment of facts is its supreme duty, which he who evades is a blasphemer and child of shame. And yet these authors can hardly have failed to

reflect, at some moment or other, that the disinterested love of information, and still more the love of consistency in thought (that true scientific *æstrus*), and the ideal fealty to Truth (with a capital T), are all so many particular forms of æsthetic interest, late in their evolution, arising in conjunction with a vast number of similar æsthetic interests, and bearing with them no *a priori* mark of being worthier than these. If we may doubt one, we may doubt all. How shall I say that knowing fact with Messrs. Huxley and Clifford is a better use to put my mind to than feeling good with Messrs. Moody and Sankey, unless by slowly and painfully finding out that in the long run it works best?

I, for my part, cannot escape the consideration, forced upon me at every turn, that the knower is not simply a mirror floating with no foot-hold anywhere, and passively reflecting an order that he comes upon and finds simply existing. The knower is an actor, and co-efficient of the truth on one side, whilst on the other he registers the truth which he helps to create. Mental interests, hypotheses, postulates, so far as they are bases for human action—action which to a great extent transforms the world—help to *make* the truth which they declare. In other words, there belongs to mind, from its birth upward, a spontaneity, a vote. It is in the game, and not a mere looker-on; and its judgments of the *should-be*, its ideals, cannot be peeled off from the body of the *cogitandum* as if they were excrescences, or meant, at most, survival. We know so little about the ultimate nature of things, or of ourselves, that it would be sheer folly dogmatically to say that an ideal rational order may not be real. The only objective criterion of reality is coerciveness, in the long run, over thought. Objective facts, Spencer's outward relations, are real only because they coerce sensation. Any interest which should be coercive on the same massive scale would be *eodem jure* real. By its very essence, the reality of a thought is proportionate to the way it grasps us. Its intensity, its seriousness—its interest, in a word—taking these qualities, not at any given instant, but as shown by the total upshot of experience. If judgments of the *should-be* are fated to grasp us in this way, they are what “corre-

spend.” The ancients placed the conception of Fate at the bottom of things—deeper than the gods themselves. “The fate of thought,” utterly barren and indeterminate as such a formula is, is the only unimpeachable regulative Law of Mind.

HEGEL ON SYMBOLIC ART.

[TRANSLATED FROM THE SECOND FRENCH EDITION OF CHARLES BÉNARD'S TRANSLATION OF THE SECOND PART OF HEGEL'S *ÆSTHETICS*.]

BY WM. M. BRYANT.

CHAPTER II.—THE SYMBOLIC OF THE SUBLIME.

I. The Pantheism of Art.

1. Indian Poetry.—2. Mahometan Poetry.—3. Christian Mysticism.

The non-enigmatical clearness of spirit, which unfolds itself in accordance with its own nature, is the end toward which Symbolic Art tends. This clearness can be attained only in so far as the meaning comes into consciousness separate and apart from the entire phenomenal world. This purification of spirit, and this express separation from the sensuous world, we must seek first in the *sublime*, which exalts the absolute above all visible existence.

The sublime, as Kant has described it, is the attempt to express the infinite in the finite, without finding any sensuous form capable of representing it. It is the infinite manifested under a form which, causing this opposition to become manifest, reveals the incommensurable grandeur of the infinite as surpassing all representation taken in the finite.

Now, here are two points of view to be distinguished: Either the infinite is the absolute Being conceived by thought as the *immanent substance of beings*, or it is the infinite Being as distinct from beings of the real world, but elevating itself above them by all the distance which separates the infinite from the finite; so that, compared with it, they are but mere

nothingness. God is thus purified from all contact with, and from all participation in, sensuous existence which vanishes and is canceled in His presence.

To the first point of view, Oriental pantheism corresponds. Pantheism belongs principally to the Orient, where dominates distinctly the thought of an absolute unity of the Divine, and of all things as contained in this unity.

Thus the divine principle is represented as immanent in the most diverse objects—in life and in death, in mountains, the sea, etc. This principle is, at the same time, the excellent, the superior, in all things. On the other hand, because the unity is all—because it is no more this than that, because it is found again in all existences—individualities and particularities are destroyed or canceled. The *One* is the collective totality of all the individuals which constitute this visible whole.

Such a conception can be expressed only by poetry, and not by the figurative arts, because these represent to the eyes, as present and permanent, the determinate and individual reality which, on the contrary, must disappear in face of the one only substance. Hence, where pantheism is pure, it admits no one of the figurative arts as its mode of representation.

1. As the chief example of such pantheistic poetry, we may still cite Indian poetry, which, apart from its fantastic character, offers us a brilliant illustration of this phase.

The Indians, indeed, as we have already seen, set out from universal being and the most abstract unity, which is then developed into the determinate gods, the *Trimurti*, *Indra*, etc. But particular existence cannot maintain itself; it allows itself to dissolve anew. The inferior gods are absorbed into the superior, and these again into Brahma. Here it is already manifest that this universal being constitutes the immutable and identical basis of all existence. Indeed, the Indians, in their poetry, show the double tendency—on the one side, to exaggerate the proportions of real form, in order that it may appear the better to correspond to the idea of the infinite; on the other, to allow all determinate existence to be canceled in presence of the abstract unity of the absolute. Nevertheless,

we also see the pure form of pantheistic representation appear with them from the point of view of the imagination, which consists in causing the immanence of the divine substance to go forth again in all particular beings.

We can, without doubt, discover in this conception a marked resemblance to the immediate unity of the real with the divine, which characterizes the religion of the Parsees; but with the Persians the *One*—the Supreme Good—is itself a physical existence, namely, the Light. With the Indians, on the contrary, the *One*—Brahma—is merely the being without forms, which, when it has assumed one, has assumed all. Manifested in a multiplicity of individual existences, it gives place to this pantheistic mode of representation. Thus, for example, it is said of Krishna (Bhagavad Gita, VIII, 4): “Earth, water, wind, air, fire, spirit, reason, and personality are the eight component elements of my natural power. Yet behold in me a higher essence which vivifies the earth and sustains the world. In it all beings have their origin. Thus, be assured, I am the origin of this universe, and also its destruction. Beyond myself there is nothing superior to myself. All existing things are attached to me as a row of pearls on a thread. I am the vapor in water, the light in the sun and in the moon, the mystic word in the holy scriptures, in man the virile force, the sweet perfumes in the earth, the brightness of the flame, life in all beings, contemplation in the solitary. In living beings I am the vital force; in the wise, wisdom; glory in illustrious men. All real existences, visible or invisible, proceed from me. I am not in them, but they are in me. The whole universe is dazzled by my attributes, and, know well, I am immutable. It is true the divine illusion, *Mayá*, deceives not me myself. It is difficult to surmount it; it may follow me, but I triumph over it.” In this passage the unity of the universal substance is expressed in the most striking manner, as truly immanent in all beings of nature and as elevating itself above them by its infinite character.

Similarly, Krishna says of himself that he is, in diverse existences, whatever is most excellent. “Among the stars I am the sun which darts his rays; among the planets, the

moon ; among the holy books, the book of Canticles ; among the senses, the interior sense ; Meru among mountains ; among animals, the lion ; among the letters of the alphabet, the vowel 'A ;' among seasons, the season of flowers, spring-time, etc."

This enumeration of what is best in all, this simple succession of forms which must, without ceasing, express the same thing, notwithstanding the wealth of imagination which, from the first, appears to be displayed in them, is none the less monotonous in the highest degree, and, on the whole, empty and fatiguing, just for the reason that the idea is always the same.

2. *Oriental Pantheism* was developed in a more elevated, more profound, and freer manner in Mahometanism, and in particular by the Mahometan Persians.

Here is presented, chiefly from the poetic side, a peculiar character.

Indeed, while the poet seeks to see, and really sees, the divine principle in all things, and while he abandons thus his own personality, only so much the more does he feel God present in the depths of his soul thus enlarged and rendered free. Thereby is born in him that interior serenity, that intoxication of happiness and of felicity, peculiar to the Oriental, who, in disengaging himself from the bonds of particular existence, is absorbed into the eternal and the absolute, and recognizes in all things its image or its presence. Such a disposition has an affinity with mysticism. In this respect we must especially designate *Dschelal Eddin Rumi*, who furnishes the finest examples. The love of God (with whom man identifies himself by an unlimited resignation, whom alone he contemplates in all parts of the universe, with whom he connects all, and to whom he traces back all) constitutes here, as it were, the center whence radiate all ideas, all sentiments, in the various regions through which the imagination of the poet runs.

In the sublime, properly speaking, the most elevated objects and the most perfect forms are employed only as ornaments of Deity ; they serve only to reveal His power and His majesty,

since they are placed before our eyes only to celebrate Him as Sovereign of all creatures. In pantheism, on the contrary, the immanence of God in objects elevates actual existence—the world, nature, and man—to a real and independent dignity. The life of the spirit, communicated to the phenomena of nature and to human relations, animates and spiritualizes all things; it constitutes a wholly peculiar relation between the sensibility and the soul of the poet and the objects of which he sings. His heart, penetrated and filled with the divine presence, in changeless calm and perfect harmony, feels itself dilated, aggrandized. He identifies himself with the soul of things, with the objects of nature which impress him by their magnificence, with all that appears to him worthy of commendation and love. He tastes, thus, an inward felicity, plunged as he is in ecstasy and rapture. The depth of the romantic sentiment in the Occident shows, it is true, the same character of sympathetic union with nature; but, in the poetry of the North, the soul is more unhappy and less free; it contains more desires and aspirations, or, rather, it remains concentrated within itself, occupied wholly with itself; it is of a tender sensibility, which everything wounds and irritates. Such a concentrated sentimentality is expressed especially in the popular songs of barbarous nations.

On the contrary, a free, joyous devotion is peculiar to the Orientals; chiefly to the *Mahometan Persians*. These abandon completely and cheerfully their personality in order to identify themselves with all that is beautiful and worthy of admiration, as with God himself; and yet, in the midst of this resignation, they know how to preserve their freedom and internal calm, face to face with the world which environs them. Thus, in the burning ardor of passion, we see appear the most expansive felicity and freedom of expression (*la parrhésie*) of sentiment revealed in an exhaustless wealth of brilliant and pompous images. Everywhere resound the accents of joy, of happiness, and of beauty. In the Orient, if man suffers and is unhappy, he accepts this as an irrevocable decree of destiny. He rests there, firm in himself, without appearing crushed or insensible, and without sadness or melancholy. In the poetry

of *Hafiz* we find many elegiac songs ; but he remains as careless in grief as in happiness. He says, for example, somewhere : “ Offer not thanks because the presence of thy friend illumines thee, but burn the taper as in woe, and be content.” The taper teaches how at once to smile and to weep. It smiles through the serene light of its flame, even while it dissolves in burning tears. This is, indeed, the character of all this poetry.

To give a few images of a more special order ; flowers and jewels, especially the rose and nightingale, play an important rôle in the poetry of the Persians. This animation of the rose and the love of the nightingale often recur in the verse of *Hafiz*. “ Though thou art the sultana of beauty,” says he, “ abstain from scorning the love of the nightingale.” He himself speaks of the nightingale of his own heart. We, on the contrary, when mention is made in our poetry of the rose, of the nightingale, of wine, etc., do so in a wholly different and more prosaic sense. The rose is presented only as an ornament — “ crowned with roses,” etc. ; or, if we hear the nightingale, his song only causes sentiments to awake within us. We drink wine, and we say it chases away care. But with the Persians the rose is not a simple ornament ; it is not merely an image, a symbol. It appears to the poet to be indeed an animated being ; it is a loved one, an affianced. He penetrates, in imagination, to the soul of the rose. The same character which reveals a brilliant pantheism manifests itself in the most modern Persian poems.

Goethe, also, in opposition to the melancholy character and intense sensibility by which the poems of his youth are distinguished, experienced, in his maturer years, this serenity full of resignation ; and even in his old age, as if penetrated by a sigh of the Orient, his soul filled with an immense felicity, he abandoned himself, in the heat of poetic inspiration, to this freedom of sentiment which preserves a charming carelessness even in polemic.

The various songs of which he constructed his *West-Eastern Divan* are neither mere plays of fancy nor yet insignificant poems for social pastime ; they are inspired by a free senti-

ment, full of grace and resignation. He himself calls them, in his song to Suleika, "Poetic pearls, which thy love, like waves of the sea, has cast upon the desert shore of my life. Gathered by dainty fingers, they have been set with jewels in an ornament of gold." "Take them," cries he to his beloved, "hang them upon thy neck, upon thy bosom, these dew-drops from Allah, matured in a modest shell-fish."

3. As to the genuine pantheistic unity, which consists in the joining of the soul with God, as present in the depth of consciousness, this subjective form is found in general in mysticism, as this is developed in the bosom of Christianity. We will content ourselves with citing, as example, *Angelus Silesius*, who has expressed the presence of God in all things—the union of the soul with God, that of God with the human soul—with an astonishing boldness of ideas, and with great depth of sentiment. He displays in his images a prodigious power of mystic representation. Oriental Pantheism, on the contrary, develops rather the conception of a universal substance in all visible phenomena, together with the resignation of man, who, in the measure that he renounces self, feels his soul aggrandized, delivered from the constraints of the finite, and who thus arrives at a supreme felicity in identifying himself with whatever is grand, beautiful, and divine in the universe.

II. *Art of the Sublime—Hebrew Poetry.*

1. God the Creator and Ruler of the Universe.—2. The Finite World stripped of all Divine Character.—3. Position of Man face to face with God.

But the genuine sublime is represented by *Hebrew Poetry*. Here, for the first time, God appears truly as spirit, as the *invisible Being*, in opposition to nature. On the other hand, the whole universe, notwithstanding the wealth and magnificence of its phenomena, when compared with the supremely great Being, is of itself nothing. A simple creation of God, submitted to His power, it exists only to manifest and glorify Him.

Such is the idea which forms the source of this poetry, of which the character is the sublime. In the *beautiful*, the idea

penetrates through the external reality of which it is the soul, and forms with it a harmonious unity. In the *sublime*, the visible reality, through which the Infinite manifests itself, is humbled in its presence. This superiority, this imperiousness of the Infinite, the immeasurable distance which separates it from the finite—this is what the art of the sublime should express. It is the religious art, the sacred art par excellence; its sole destination is to celebrate the glory of God. This office poetry alone can fulfill.

1. The dominant idea of *Hebrew Poetry* is God as Lord of the world; God in His independent existence and His pure essence, inaccessible to the senses and to all sensuous representation, which does not correspond to His greatness. God is the creator of the universe. All those gross ideas concerning the generation of beings give place to that of spiritual creation. “Let there be light and there was light.” This phrase indicates creation by speech, which is itself the expression of thought and will.

2. Creation assumes then a new aspect: Nature and man are no longer deified. To the Infinite is distinctly opposed the finite, which is no longer confounded with the divine principle, as in the symbolic conceptions of other peoples. Situations and events take shape with greater clearness. Characters take a more fixed, more precise, meaning. These are human figures which no longer present anything fantastic and foreign; they are perfectly intelligible, and approach us more nearly.

3. On the other hand, notwithstanding his impotence and his nothingness, man obtains here a freer and more independent place than in other religions. The immutable character of the divine will causes the idea of *law* to appear, and to this law man must render obedience. His conduct becomes enlightened, fixed, regular. The perfect distinction between the human and the divine, between the finite and the Infinite, brings to light that between good and evil, and permits an enlightened choice. *Merit* and *demerit* are the consequence. To live according to justice in fulfilling the law—this is the end of human existence, and it places man in direct relation with God. Here is the principle and explanation of his whole

life, of his happiness, and of his sorrows. The events of life are considered as benefits, as recompenses, or as trials and chastisements.

Here, also, the *miracle* appears. Elsewhere all is of the nature of prodigy, and, hence, nothing is miraculous. The miracle presupposes a regular succession, a constant order, and an interruption of this order. But creation itself is altogether a perpetual miracle, destined to serve for the praise and the glorification of God.

Such are the ideas which are expressed with so much brilliancy, elevation, and poetry in the *Psalms*—those classic examples of the sublime—in the *Prophets*, and in the sacred books generally. This recognition of the nothingness of things, of the greatness and omnipotence of God, of the unworthiness of man in His presence, the complaints, the lamentations, the cry of the soul toward God, constitute their pathos and sublimity.

CHAPTER III.—REFLECTIVE SYMBOLISM,

Or that Form of Art of which the Basis is Comparison.

I. Under the name of *Reflective Symbolism* we are to understand a form of art wherein the idea is not only comprised within itself, but also expressly posited as distinct from the sensuous form by which it is represented. In the sublime the idea also appears as independent of this form; but here the relation of these two elements is no longer, as in the preceding stage, a relation based upon the very nature of the idea; it is, more or less, the result of an accidental combination, which depends upon the will of the poet, upon the depth of his spirit, upon the fervor of his imagination, or upon his genius for invention. He is able to set out either from a sensuous phenomenon to which he lends a spiritual meaning by taking advantage of some analogy; or from a conception or an idea, which he proceeds to clothe with a sensuous form; or he simply places one image in relation to another, because of their resemblance.

This mode of combination is distinguished, then, from *naïve*

symbolism (which has no consciousness of itself) in this: that the artist comprehends perfectly the idea which he wishes to develop, as well as the image of which he makes use under the form of comparison; thus it is with reflection and by design that he combines the two terms according to the similarity he has found in them. This class differs from the sublime in two particulars: 1st. Not only the distinction of the two terms, but also the parallel between them, is more or less formally expressed; 2d. It is no longer the absolute, but some finite object which is the source of representation. Thus, in the same way, the contrast which gives birth to the sublime disappears and is replaced by a relation which, notwithstanding the separation of the two terms, approaches rather to that which the *naïve* and primitive symbol establishes after its own peculiar fashion.

Hence it is no longer the absolute, the infinite Being, which these forms express. The ideas represented are borrowed from the circle of the finite. In sacred poetry, on the contrary, the idea of God is the only one which has a meaning by and for itself; created beings are, in His presence, vanishing existences, pure nothingness.

The idea—in order to find its faithful image and proper term of comparison in what is essentially limited—finite, must itself be of a finite nature.

Besides, though the image may be foreign to the idea, and chosen arbitrarily by the poet, still similitude constitutes a law of their relative conformity. There remains, then, in this form of art, but a single characteristic of the sublime: It is that the image, instead of truly representing the object or the idea in itself and in its reality, must present only a resemblance or *comparison* of it.

Thus this form of art constitutes a class which is inferior, but complete in itself. It attempts no more than to find and to describe some sensuous object, or a prosaic conception, the idea of which must be expressly distinguished from the image. Further, in works of art which are constructed entirely upon one theme, and of which the form presents an undivided whole—as, for example, in the noteworthy productions of Classic

and of Romantic art—such work of comparison can serve only for ornament and as an accessory.

If, then, we consider this form of art in its collective totality as partaking at once of the sublime and of the symbol—of the first, because it presents the separation of idea from form; of the second, because the symbol presents the combination of the two terms united by virtue of their affinity—we are not to conclude that it is, therefore, a more elevated form of art; it is rather a mode of conception—clear, it is true, but superficial; which, limited in its object, more or less prosaic in its form, departs from the mysterious depth of the symbol, and from the elevation of the sublime, only to sink to the level of ordinary thought.

II. DIVISION.—The mode of division in this sphere is based invariably upon an *idea*, to which is related a *sensuous image*. But, though the idea may be the chief thing, still there is always a distinction here which must serve as our basis; and this is that sometimes the idea, sometimes the image, serves as point of departure. Whence we can establish two principal divisions:

1. In the first, the *sensuous image*—and this may be a natural phenomenon or a circumstance borrowed from human life—constitutes at once the point of departure and the essential phase of the representation. This image, it is true, is presented only because of the general idea; but comparison is not therein expressly announced as the end which the artist proposes to himself. It is not a simple decoration in a work which might do without such ornaments; its ambition is rather to constitute a totality complete in itself. In this species we may note the following varieties, viz.: The *Fable*, the *Parable*, the *Apologue*, the *Proverb*, and the *Metamorphosis*.

2. In the second division the *idea* is the first term which presents itself to the mind. The image is only accessory; it has no independence, and appears to us entirely subordinated to the idea. Thus the arbitrary will of the artist, who has fixed his choice upon this image, and not upon another, nevertheless appears. It is scarcely possible that this species of

representation should produce independent works of art; it must be content with incorporating its forms, as simple accessories, with other productions of art. As its principal varieties we can admit: the *Enigma*, the *Metaphor*, the *Image*, and the *Comparison*.

3. In the third place, finally, we may mention, by way of appendix, *Didactic Poetry* and *Descriptive Poetry*.

In the first of these classes of poetry, indeed, the idea is developed in itself, in its generality, such as consciousness seizes it in its rational clearness. In the second, the representation of objects under their sensuous form is, in itself, the end; whence are found to be completely separated the two elements, of which the perfect combination and fusion produce genuine works of art.

Now, the separation of the two elements which constitute a work of art entails this consequence: That the different forms which find their place in this circle belong almost wholly to that art whose mode of expression is *speech*. Poetry alone, indeed, can express this distinction and this independence of the idea from the form; while it is in the nature of the *figurative arts* to manifest the idea in its external form as such.

I. Comparisons which Commence with the Sensuous Image.

1. The Fable.—2. The Parable, the Proverb, and the Apologue.—3. Metamorphoses.

1. *The Fable* is a description of a scene from nature, taken as a symbol which expresses a general idea, and whence we draw a moral lesson, a precept of practical wisdom. It is not here, as in the mythological fable, the divine will which manifests itself to man by natural signs and their religious meanings; it is an ordinary succession of phenomena whence may be drawn, in a manner altogether human and rational, a moral principle, a warning, a lesson, a rule of prudence, and which, for this very reason, is proposed to us and placed before our eyes.

Such is the position which we can here assign to the class of fables to which Æsop in particular has given his name.

The Æsopic fable, in its original form, presents such a conception as the foregoing, of a natural relation or phenomenon between actual objects of nature generally — for the most part between animals, of which the instincts take root in the same necessities of life which move living men. This relation or phenomenon, therefore, considered only in its general characteristics, is of such kind that it can also be admitted into the circle of human life, and it is through this connection that it first obtains a real significance for man.

a. The first condition is, then, that the determinate fact which is to furnish the *moral* should not be imagined at pleasure, nor, above all, in a sense opposite to that in which such incidents actually occur in nature.

b. The story must relate the fact, not in its generality, but with its character of individuality as a real, historical event ; which does not prevent its being taken as a type of every event of the same class. This primitive form of the fable gives to it the greatest *naïveté*, because the didactic aim appears only at the close (*tardivement*), and not as if premeditated and sought after by design. Thus, among the fables attributed to Æsop, those which offer the greatest attractiveness are such as present these characteristics. But it is easy to see that the *Fabula docet* takes away from the life of the picture and renders it dull or obscure, so that often the very opposite doctrine, or a much more important one than that presented, might be inferred.

As to Æsop himself, it is said that he was a deformed slave. According to accounts given, he lived in Phrygia, in a country which forms the transition out of real symbolism — that is to say, from the state where man is held in the bonds of nature — to a more advanced civilization, where man begins to comprehend and appreciate freedom of spirit. Thus, far from resembling the Hindus and the Egyptians, who regard everything that belongs to the animal kingdom, and to nature in general, as something divine, the fabulist views all these things with prosaic eyes. He sees only phenomena of which the analogy with those of the moral world served solely to give light respecting the proper conduct of life. Still, his ideas are merely

ingenious fancies, without energy of spirit, or depth of insight, or substantial intuition—without poetry or philosophy. His reflections and his teachings are full of meaning and of wisdom ; but they are, after all, only serious meditations on minor matters. These are not the free creations of a spirit which displays itself without constraint, but of one which is restricted to seizing, in the facts which nature herself furnishes him—in the instincts and propensities of animals in minor daily incidents—some phase immediately applicable to human life, because such spirit dares not openly expose the lesson in itself. It is content with veiling it, with leaving it to be understood ; it is like an enigma which must always be accompanied by a solution. Prose commences in the mouth of a slave. Similarly the class itself is altogether prosaic.

Nevertheless, these ancient productions of the human spirit have extended to almost all ages and all peoples. Whatever may be the number of fabulists of whom any nation possessing the fable in its literature may boast, these effusions are, for the most part, only reproductions of primitive fables merely translated into the taste of each epoch. Whatever the fabulists have added to the hereditary stock, or whatever can be considered as their invention, must, in the main, be esteemed as far inferior to primitive conceptions.

2. *The Parable, the Proverb, and the Apologue.*—*a. The Parable* resembles the fable in so far as, like that, it borrows its examples from common life. It is distinguished from it in that it seeks such incidents, not in nature and in the animal kingdom, but in the acts and circumstances of human life, as these commonly present themselves to all eyes. It enlarges the compass of the fact chosen, which seems in itself of little importance, extends its meaning to a more general interest, and allows a more elevated purpose to appear.

We might consider the means employed by Cyrus to bring about a revolt of the Persians as a parable composed with a view to an entirely practical end (Herod I. C. cxxvi). He wrote them that they should assemble, provided with sickles, at a place designated by himself. The first day he made them clear a field covered with thorns ; the day following,

after having caused them to rest and bathe, he conducted them into a meadow where he entertained them sumptuously. The feast terminated, he asked them which day had been the more agreeable to them. All cried out in favor of the present day, which had brought them nothing but delight. "Very well," said Cyrus, "if you will follow me, such days will multiply without number; if not, be assured that you will suffer innumerable hardships like those of yesterday."

There is some analogy between such parables and those which we find in the Gospel, though the latter are much more profound, and of a higher generality. The parable of the *Sower*, for example, is a story of which the subject is in itself insignificant, and which derives importance only from its comparison to the kingdom of heaven. The meaning of this parable is a wholly religious idea, to which an incident of human life presents some resemblance; as, in the *Æsopic* fable, human life finds its emblem in the animal kingdom.

The story of Boccacio, of which Lessing has made use, in *Nathan the Wise*, for his parable of the *Three Rings*, presents a meaning of like extent. The story, considered in itself, is still altogether ordinary; but it makes allusion to the most important ideas, to the difference and the relative purity of the three religions, Jewish, Mahometan, and Christian. It is the same—to recall the most recent productions of this class—with the parables of Goethe.

b. *The Proverb* forms an intermediate class in this circle. Indeed, when developed, proverbs change either into parables or into apologues. They present some circumstance borrowed from whatever is most familiar in human life, but which is then to be taken in a universal sense. For example: *One hand washes the other. Let everybody sweep before his own door. He who digs a pit for another, falls into it himself.* Here also belong maxims, of which Goethe has also, in these latter times, composed a great number which are of an infinite grace, and often full of profound meaning.

These are not comparisons. The general idea and the concrete form are not separated and again brought together. The idea is immediately expressed in the image.

c. *The Apologue* might be considered as a parable which serves as an example, not in the manner of a comparison, in order to make manifest some general truth, but to introduce under such wrappage a maxim which is found to be therein expressed. This is really included in the particular fact which, nevertheless, is related simply as such. In this sense *The God and the Bajadere* of Goethe might be styled an apologue. We find here the Christian story of the sinful Magdalene clothed in the forms of Indian imagination. The bajadere shows the same humility, the same power of love and of faith. The god subjects her to a proof which she sustains perfectly ; she is freed from her faults and returns again to favor through atonement. In the apologue the recital is so conducted that the issue itself gives the lesson, without any comparison being necessary ; as, for example, in the *Treasure-Seeker*, " Give day to labor, evening to pleasure ; toil through the week, but on holiday be merry ; henceforth be this thy motto."

3. *Metamorphoses* constitute the third class, forming a contrast with the fable. They present, it is true, the symbolic and mythological character ; but, aside from this, they place the spirit in opposition to nature, because they represent an object of nature — a rock, an animal, a flower, etc. — as an existence of the spiritual order degraded by punishment. *Philomela*, *the Pierides*, *Narcissus*, *Arethusa*, are moral persons who, by a fault, a passion, a crime, or the like, have merited infinite suffering, or have fallen into great sorrow. Bereft of liberty, of life, and of spirit, they have entered into the class of natural beings.

Thus the objects of nature are not considered here prosaically, as physical beings. These are no longer simply a mountain, a fountain, a tree ; they represent an act, a circumstance of human life. The rock is not merely a stone ; it is *Niobe* weeping for her children. On the other hand, this act is a fault, and the transformation must be looked upon as a degradation from spiritual existence.

We must, then, carefully distinguish these metamorphoses of men and of gods into natural objects from the unconscious or irreflective symbolic properly speaking. In Egypt, for

example, the divine principle is contemplated immediately in the mysterious depth of animal life. Moreover, the true symbol is a sensuous object, which represents an idea by its analogy with it, yet without expressing it completely, and in such manner that this is inseparable from its emblem; for here spirit cannot disengage itself from the natural form. Metamorphoses, on the contrary, constitute the express distinction between natural and spiritual existence, and in this respect mark the transition from symbolic mythology to mythology properly speaking. Mythology, as we understand it, sets out, it is true, from real objects of nature—as the sun and the sea, rivers, trees, the fertility of the earth, etc.; but it lifts them out of their mere physical character by individualizing them as spiritual powers, so as to make of them gods having a human soul and the human form. It is thus, for example, that Homer and Hesiod first gave to Greece its true mythology; that is to say, not merely the fables concerning the gods, or conceptions, moral, physical, theological and metaphysical, under the veil of allegory, but the beginning of a religion of spirit, with the anthropomorphic character.

II. Comparison which Commences with the Idea.

1. The Enigma. 2. The Allegory. 3. The Metaphor, the Image, and the Comparison.

1. *The Enigma* is distinguished from the symbol properly speaking, first, in this: that it is clearly understood by the inventor; secondly, because the form which envelops the idea, and of which the meaning is to be divined, is chosen designedly. Real problems are, first and last, *unsolved* problems. The enigma, on the contrary, is, by its very nature, already solved before being proposed; which caused *Sancho Panza* to say, with much reason, that he would greatly prefer to be given the word, before the enigma.

The point whence one takes his departure in the invention of an enigma is, then, the meaning which it contains, and of which he has perfect consciousness.

Nevertheless, individual characteristics and specific prop-

erties are borrowed designedly from the external world, and are brought together in a manner unequal, and, therefore, striking; just as in nature, and externality generally, they are found strewn about in mutual exclusion. Whence there is lacking in these elements the close connection which is remarked in a whole of which the parts are strongly bound together of themselves; thus their artificial combination has no meaning by itself. Still, from another point of view, they express a certain unity, because characteristics in appearance the most heterogeneous are brought into connection by means of an idea, and thus offer some significance.

This idea, constituting the subject to which those scattered attributes belong, is *the word of the enigma*, the solution of the problem which must be sought out by guessing at it through this obscure and perplexed envelop. In this respect the enigma is, in the ordinary sense of the term, the spiritual side of the reflective symbol; it puts to the proof the spirit of sagacity and of combination. At the same time, as a form of symbolic representation, it destroys itself, since it requires to be resolved.

The enigma belongs mainly to that art of which the mode of expression is *speech*. Still a place can be found for it in the figurative arts, in architecture, in the art of gardening, and in painting. It makes its first appearance in poetry in the Orient, at that period of transition which separates the old Oriental symbolism from reflective knowledge and reason. All peoples and all epochs have found their amusement in such problems. In the middle ages, among the Arabs and the Scandinavians, in German poetry—for example, in the poetic contests which took place at Marburg—the enigma played an important part. In our modern times it has fallen from its elevated rank. It is no longer anything more than a frivolous element of conversation, a freak of wit, a social pleasantry.

2. *The Allegory*.—The opposite of the enigma, in the circle wherein we set forth from the idea in its universality, is the allegory. True, it seeks faithfully to render the characteristics of a general conception manifest by properties analogous

with those of sensuous objects ; but, instead of half concealing the idea by proposing an enigmatical question, its aim is precisely the most perfect clearness. So that, with respect to the idea which appears in it, the exterior object made use of must be of the most perfect transparency.

a. Its chief purpose, then, is to represent and to personify, under the form of a real object, universal, abstract conditions or qualities, as well from the human as from the animal world ; such as justice, glory, war, religion, love, peace, the seasons of the year, death, renown, etc. And to personify, we must remember, is to comprehend that which is personified as a *subject*—as a *conscious being*. Nevertheless, neither through the content nor through the outer form is there in personification any real, living individuality ; it is always an abstract conception, which preserves merely the empty form of personality. Hence it can be regarded only as a nominal existence. It is in vain that the human form has been given to an allegorical being ; it will never arrive at the concrete and living individuality of a Greek divinity, nor of a saint, nor of any other real personage, because, in order to render it suitable to the representation of an abstract conception, it is necessary to take away just that which constitutes its personality and its individuality. It is, then, with justice that the allegory has been pronounced cold and pallid. We may add that, in respect of invention, because of the abstract character which allegory expresses, it is rather an affair of the reason than of the imagination ; it presupposes no lively and profound sentiment of the reality. Poets like Virgil are often compelled to resort to allegorical beings because they do not know how to create gods who rejoice in a genuine personality, like those of Homer.

b. The idea which the allegory represents, notwithstanding its abstract character, is, nevertheless, *definite*. Otherwise, it would be unintelligible. And yet the connection between this idea and the attributes which explain it is not sufficiently close to secure its identification with them. This separation of the general idea from the particular ideas which

determine it, resembles that of subject and attribute in the grammatical proposition ; and this is the second cause (*motif*) which renders the allegory cold.

c. To represent the special characteristics of the general idea it has been customary to employ emblems, borrowed either from external facts or from circumstances attaching to manifestation in the real world ; or, again, to introduce the instruments, the means used for the realization of the idea. War is, for example, designated by arms, lances, cannons, drums ; spring, summer, autumn, by flowers, fruits, etc. ; justice, by balances ; death, by an hour-glass and a scythe. But as the external forms which serve to represent the abstract idea are entirely subordinated to it, and play the part of mere attributes, the allegory is thus doubly cold. 1. As personification of an abstract idea, it lacks life and individuality. 2. Its external, determinate form presents only signs, which, taken in themselves, have no longer any meaning. The idea which should be the bond and center of all these attributes is not a living unity which develops itself freely and manifests itself through these special forms. Hence, in the allegory, the real existence of personified beings is never taken seriously ; and this forbids the giving an allegorical form to an absolute being. The Diké of the Ancients, for example, should not be regarded as an allegory. It is the necessity which weighs upon all beings ; it is eternal justice, universal power, the absolute principle of the laws, which govern nature and human life ; while at the same time it is the absolute itself, to which are subjected all individual beings, men and gods included.

3. *The Metaphor, Image, and Comparison.* — The third mode of representation, after the enigma and the allegory, is the Figure in general. The enigma, as yet, conceals the meaning which, on its own account, is known, while the form in which it is clothed is of a heterogeneous and far-fetched character ; and nevertheless, in its affinity with the idea, it appears to be the principal thing. Allegory, on the contrary, makes clearness of meaning the essential end, so that personification and allegorical attributes appear reduced to the level of mere signs. The figure combines this clear-

ness of the allegory with the pleasure which the enigma produces in presenting to the spirit an idea under the veil of an exterior appearance which has some analogy with it ; and that in such manner that, instead of an emblem to decipher, it is an image in which the meaning is revealed with great clearness, and manifested in its true character.

a. The Metaphor.—In itself the metaphor is a comparison, in so far as it clearly expresses an idea by means of a similar object. But in comparison, properly speaking, the meaning and the image are expressly separated, while in the metaphor this separation, although it offers itself to the mind, is not directly indicated. Thus Aristotle already distinguishes these two figures in saying that in the first comparison we add “*as*” — a term which is wanting in the second. That is to say, the metaphorical expression mentions only one side, viz., the image ; but, in the connection in which the image is used, the precise meaning which is intended is so manifest that it is, so to speak, given immediately and without express separation from the image. If I hear uttered, “the spring-time of his days,” or “a river of tears,” I know that I must take these words, not in their immediate, but in their figurative, sense, which is made apparent by the connection in which the expressions are used.

In the symbol and the allegory the relation between the idea and the external form is neither so immediate nor necessary. In the nine steps of an Egyptian stairway, and in a thousand other examples, only the initiated, the wise, and the learned seek to discover a symbolic meaning. In a word, the metaphor can be defined as an *abridged comparison*.

The metaphor cannot pretend to the value of an independent representation, but only to that of an accessory one. Even in its highest degree it can appear only as a simple ornament for a work of art, and its application is found only in spoken language.

b. The Image.—Between the metaphor and the comparison is placed the image, which is only a developed metaphor. Notwithstanding its resemblance to the comparison, it differs from it in this: that the idea is not here disengaged and

expressly developed aside from the sensuous object. It can represent a whole series of states, of acts, of modes of existence, and can render such series sensuous by a like succession of phenomena borrowed from a sphere which is independent, but which presents some analogy with the first; and this without the idea being formally expressed in the development of the image itself. The poem of Goethe, entitled *The Song of Mahomet*, will serve as an example: "A mountain-spring with the freshness of youth leaps over rocks into the abyss; anon it reappears in bubbling fountains and in rivulets, then flows out upon the plain, greets its brother streamlets, gives its name to many lands, sees cities born beneath its feet, until, at length, it bears in tumultuous joy its treasures, its brothers, and its children into the bosom of the creator who awaits it." The title alone tells us that this magnificent image of a torrent, and of its course, represents to us the flight of Mahomet, the rapid propagation of his doctrine, and the combination of all peoples blended together in the same faith.

The Orientals especially show great boldness in the employment of this class of figures. They love to thus construct a group of ideas, of wholly different orders, and make them agree. A great number of examples of this are furnished by the poetry of *Hafiz*.

c. *Comparison*.—The difference between the image and the comparison consists in this: that what the image represents under a figurative form appears in the comparison as abstract thought. Here the idea and the image proceed side by side.

The two terms are entirely separated, each being represented on its own account, after which they are, for the first time, exhibited in presence of one another because of their resemblance.

Comparison, like the image and the metaphor, expresses the boldness of the imagination, which, having an object in view, shows in pausing before it the power it possesses of completely combining by external relations ideas the most widely separated, and which, at the same time, knows how to cause the principal idea to reduce to its sway a whole world of varied phenomena. This power of the imagination, which is revealed

by the faculty of discovering resemblances, of combining heterogeneous objects wholly by means of relations full of interest and of meaning, is, in general, what constitutes the essence of comparison.

In this connection we must remark a difference between the poetry of the East and that of the West. In the Orient, man, absorbed by external nature, entertains few thoughts concerning himself, and knows neither languor nor melancholy. His desires are restricted to experiencing an altogether outward joy which he finds in the objects of his comparisons and in the pleasure of contemplation. He looks about with a free heart, seeking, in what environs him — in what he knows and loves — an image of that which captivates his senses, and fills his spirit. The imagination, disengaged from all internal concentration, free from every malady of the soul, finds its satisfaction in a comparative representation of the object which interests it, especially if this, because it is compared with what is most brilliant and most beautiful in nature, acquires greater value, and strikes the eye more vividly. In the Occident, on the contrary, man is more occupied with himself, more disposed to break forth in complaints and lamentations respecting his own sufferings, to allow himself to give way to languor and vain desires.

III. Disappearance of the Symbolic Form of Art.

1. *Didactic Poetry.*—When a general idea, of which the development presents a systematic whole, is conceived in its abstract character by the mind, and when, at the same time, it is exhibited under a form and with ornaments borrowed from art, then is produced the *didactic poem*. To speak rigorously, didactic poetry ought not to be counted among the forms appropriate to art. Indeed, matter and form are here completely distinct.

At first the ideas are comprehended in themselves, in their abstract and prosaic nature. On the other hand, the artistic form can be joined with the subject-matter only by an altogether external relation, because the idea is already expressed in the

mind, with its abstract character. Instruction is addressed, first of all, to reason and reflection. Thus, its aim being to make known a general truth, its essential condition is clearness.

Art, then, can be employed in the didactic poem only upon what concerns the external part; the measure, the nobility of language, the introduction of episodes, the employment of images and comparisons, the expression of sentiments, a swifter progress, more rapid transitions. All the wrappage of poetic forms—which does not touch upon the matter, but is placed outside of it—figures only as something accessory. More or less vivacious and striking, these images enliven a subject otherwise serious, and temper the dryness of the lesson. What is in itself essentially prosaic cannot be poetically developed. It can only be clothed in poetic form. It is thus that the art of gardening, for example, is only the external arrangement of the grounds, of which the general configuration is already given by nature, and which can have in itself nothing beautiful or picturesque. It is thus, again, that architecture, by ornaments and external decorations, gives an agreeable aspect to the simple regularity of an edifice constructed merely with a view to utility, and of which the destination is wholly prosaic.

It is in this way that Greek philosophy, at its beginning, was produced under the form of the didactic poem. Hesiod might be taken as an example. Still, conceptions truly prosaic are properly developed only when reason renders herself mistress of her object in imposing upon it her reflections, her reasonings, and her classifications; when, in other words, she proposes to teach directly, and, in order to reach her aim, calls to her aid elegance, the charms of style, and the harmonies of poetry. Lucretius, who reproduced in verse the system of Epicurus; Virgil, with his instructions in agriculture, furnish us models which, notwithstanding all the ability of the poet and the perfection of his style, fail to constitute a pure and free form of art. In Germany the didactic form has already lost favor. At the close of the last century Delille gave to the French, besides the *Poem of the Gardens*, or the *Art of*

Embellishing Landscapes, and *The Man of the Fields*, etc., a didactic poem, in which he presents a sort of compendium of the principles discovered in physics upon magnetism, electricity, etc.

2. *Descriptive Poetry* is, in one respect, the opposite of didactic poetry. The point of departure, indeed, is not the idea already presented to the mind; it is the external reality with its sensuous forms, objects of nature or works of art, the seasons, the different parts of the day, etc. In the didactic poem the idea which constitutes its basis remains, from its very nature, in its abstract generality. Here, on the contrary, they are the sensuous forms of the real world in their particularity, which are represented to us, depicted or described, as they usually present themselves to our view. Such a subject of representation belongs, absolutely speaking, only to one side of art. Now, this side, which is that of external reality, has a right to appear in art only as manifestation of spirit, or as a theater for its development. Here it does not exist on its own account, but is destined merely to receive the characters, while for itself it is but a simple external reality separated from the spiritual element.

Descriptive poetry affords greater interest when it causes its pictures to be accompanied by the expression of sentiments which can be excited by nature—the succession of the hours of the day and of the seasons of the year, a wood-covered hill, a murmuring brook, a cemetery, a pleasantly-situated village, a quiet, thatched cottage. It admits, also, like the didactic poem, episodes which give it a more animated form, especially when it depicts the sentiments and emotions of the soul, a sweet melancholy, or minor incidents borrowed from human life as exhibited in the humble degrees of society. But this combination of the sentiments of the soul with the description of the external forms of nature may still remain wholly superficial; for the scenes of nature preserve their special and independent existence. Man, in presence of this spectacle, experiences, it is true, such or such sentiment; but, though between these objects and his sensibility there may be sympathy, there is yet no union, no deep penetration. Thus,

when I enjoy a bright moon, when I contemplate the woods, the valleys, or the fields, I do not, for all that, imitate the enthusiastic interpreter of nature ; I only feel a vague harmony between the interior state into which this spectacle casts me and the group of objects which I have before my eyes.

3. *The Ancient Epigram.*—The primitive character of the epigram is immediately expressed by the word itself ; it is an *inscription*. Without doubt, between the object itself and its description there is a difference ; but in the more ancient epigrams, of which Herodotus has preserved us a few, we have not the description of an object formed with a view to accompanying some sentiment of the soul. The thing itself is represented in a twofold manner : First, its external existence is indicated ; then its meaning, its explanation, is given. These two elements are closely combined ; they enter deeply into the epigram, which expresses the most characteristic and most appropriate features of the object. Later, the epigram loses, even with the Greeks, its primitive character, and degenerates so far (on occasion of special events, of works of art, or of personages whom it is desired to designate) as to inscribe fugitive thoughts, dashes of wit, touching reflections, which belong rather to the exclusively personal disposition of the author himself in his relation to the object than to the object itself.

The defects of the symbolic form are manifest in what precedes, and out of these defects arises the following demand, viz. : That the external phenomenon and its meaning, outer reality and its spiritual explanation, must not be developed in complete separation ; while, on the contrary, the unity of these two elements must not continue to be of that type which has been offered us in the *symbol*, in the *sublime*, and, finally, in the reflective or *figurative form of art*. Genuine artistic representation must be sought only where perfect harmony is established between the two terms ; that is to say, where the sensuous form manifests in itself the spirit which it contains and by which it is penetrated ; while, on its side, the spiritual principle finds in sensuous reality its most appropriate and

most perfect manifestation. But, in order to arrive at the perfect solution of this problem, we must take leave of the Symbolic Form of Art.

THE NATION AND THE COMMUNE.

BY THERON GRAY.

It is proposed in this paper to make a somewhat earnest appeal to the ruling powers of the Nation in behalf of true national culture and accordant organization. Because, notwithstanding the increasing libertinism and disorder in all directions, there is no doubt that means are available by which to order anew and conduct the Nation on and upward to its promised destiny as a people's government. It is desired, in behalf of those means, to gain the attention and enlist the effort of those who, by commanding intelligence, genius, and wealth, will inevitably rule public affairs, and, ruling rightly, will gradually supplant disorder and strife with order and peace.

The promise of such an effort is most vital to all, but especially important to these builders themselves; for, if they build with unfit fragments, without due connections and supports, their work will surely fall, and crush them in the ruins.

So, it is not as mere sentiment that bewails the lot of the ignorant and oppressed, and strives to make that lot more tolerable, that best appeal is made, but as political economy, fortified with *data* firmly rooted as a science of civil conduct, more promising to the rich and cultivated, if possible, than to the various grades below. Thus promising, because the present practical antagonism of wealth and want tends rapidly to make want desperate, and to place wealth in peril before it—as the recent communal outbreaks sufficiently show.

The thought that does not meet the whole case and minister alike to the behests of wealth, with all its monitions of culture and refinement, and to the needs of the weak, ignorant, gross,

and base of every kind, is not the true thought of this era of commotion and strife between opposing forces.

As the skillful physician, in searching for the nature and remedy of a malignant disease developed in the system of his patient, tries to comprehend the normal and habitual states of that system, so, in order to understand the cause and remedy of communal outbreaks, and other lesser ruptures in our national experience, we must come to a good understanding of the normal order of the national system itself, and its habitual operations.

While in principle and theory our Nation is distinctly social or fraternal in fullest scope, in practice it is found quite the reverse. In theory it is thoroughly a people's government, without a taint of that inhuman exclusivism developed normally in all less mature forms of civil government. This theory carries the principle of perfect unity, alliance, and coöperation of the whole people. "Each in all and all in each" is the necessary logic of all human activities, and all investing methods or institutions under it. This robe of fraternity is so vital and broad that it enfolds and duly covers every person in the whole system, making each perfectly free in the bonds of law, and such a bondman or servant in the freedom of organized fraternity.

Alas, for the practice that has come to offset this theory! It exhibits a sort of freedom, but it is the freedom of a cut-throat competition—liberty to combat and undermine the neighbor, to circumvent the plans of the fellow-citizen in unbridled self-service, providing, only, such endeavor is kept literally accordant with statutory law.

Selfish competition and strife, that breed every form of crafty evasion and criminal aggression, take the place of normally developed genius and organized power, according to the national theory; and remorseless greed, corruption, and baseness of every kind are coming more and more to the front, in bold defiance of the threatening and protesting voices of penal and moral codes. Hence, while freedom is limited and distracting, order is equally partial and delusive, being the order of arbitrary authority, and not that of truly organized equality inherent in the national system.

This contrast of national theory and practice is suggested with no feeling of peevishness or acrimony, but as a reminder of dangerous perversion; under a firm conviction that such a course of national deflection tends, without remedy, to sure national ruin; and, also, that the remedy is simple, and easily made available, when the real powers that command are reached and duly impressed concerning that remedy. And, in order to thus reach and impress, it is designed to give an assurance, as we proceed, beyond any merely opinionial conception—an assurance derived solely in manifest science.

Civil government cannot be less subject to the rule of stern law, interpreted as science, than are the numerous special domains of physics. In other realms of thought and experience, human genius has unfolded and applied the harness of science with such fidelity and exactness that mishap and failure are no longer possible. Civil government still struggles amid painful commotions and destructive shocks only because, in this grandest sphere of human endeavor, actual social science is still unknown, and only puerile empiricism bears sway.

We should understand that there is no force in creation that is not subject to orderly play, as a ministry to human needs, by being brought under the regimen of underlying law developed as science. This underlying, unwritten law is immutable, and co-existent with God Himself. In order to stand in actual service, written law—all rules and authorities affirmed by man—must truly represent the unwritten—eternal.

That form of force known as human power is, when regarded in its full scope, the crowning verity in creation. Crude, undisciplined, and unbridled, it is sure to ravage and destroy. Disciplined and moulded through the discovery and institutional appliance of the unwritten laws of its being, this power will become constantly ordered as the crowning glory of creation, because it will thus be presented divinely in-formed and motivated continually. So, while otherwise it were a power full of furious passion and desolating rage, through the composing methods of ultimate forms of science it will be found as genial, beneficent, and productive as before it were malignant and destructive.

But here we step above the realm of physics in our quest of

science. The human form is a spiritual force—a form of creative genius endowed with majesty and power. As such it must be known in its essential nature and conditions before we can proceed to comprehend and apply investing methods or conduits thereto. Hence metaphysics, or the science of mind, is sternly fundamental to civic science in institutional methods. Exact knowledge of the substance is requisite before we may proceed to ally it with its true investiture. And, although an elaborate presentation of this science of metaphysics does not seem necessary for the purposes of this treatise, its methods will be suggested, over and over, by the formulas and discussions proposed.

Here another predicate comes in order. It is this: Man (mind) is supremely objective or magisterial in the creative scheme, and institutional forms (government) are subjective or ministerial.

This is a truth so fundamental and constant that any human system that fails to see in the lowest and basest of human kind the foetal or infantile heir to a lordly inheritance in a divinely-destined patrimony, and neglects to rear and train its ward accordingly, violates its obligations as an authority, and does not rule by “divine right.”

Authority, even of an arbitrary nature, is necessary during all stages of human development; but authority that violates this fundamental social law of the essential majesty of man, and constant servility of all institutions to that august presence, is not an authority poised in *divine right*, and will surely come to naught, whether it appears under the rule of despotic or democratic institutions.

But, to get our foundation well laid, we must lay it piece by piece; so we proceed:

THIS HUMAN FORM IS THREEFOLD.

Basic is the *Sensory Economy* (animal-human), whose controlling authority is unreasoning force, represented by penal law.

Mediate is the *Rational Economy* (human-human), whose

authority is educated reason under conscience, represented by moral law.

Supreme is the *Sophial Economy* (divine-human), whose authority is spontaneous life, represented by social law, under whose diction, as science, all extremes and diversities become reconciled and ordered, freedom constant in immutable law, and authority relieved of all pressure through right adjustment.

The lowest degree, being immersed in mere sense-conditions, cannot, of itself, rise above them.

The mediate degree carries sense-power up into distinctive human realms of conscience and rational ideas, but cannot, unhelped, rise above that unsatisfactory state.

The supreme degree carries sense and reason up into the realm of regal greatness, in infinite love, wisdom, and power; there disciplines, qualifies, and empowers for the order of scientific fruition to which the whole form is destined.

It is essential to impress our thought somewhat with this order of degrees as universally prevalent in the human form, because by that alone do we come to comprehend the verities of human experience and human destiny, and derive a sure clew to processes of human culture competent to carry the whole body steadily up to its best estate.

Here is the proper aim of all true thought and endeavor to-day: We are not to convert, *immediately*, the principle of social law into methods of final organization and ripest uses in best social conditions. The material for those conditions is mostly wanting, at present. That material is found only in maturest human character, genius, and power in all personal forms. Hence the work of true social science shall consist, for the present, in projecting primary institutions, of every kind, adapted to the physical, moral, and social nature and conditions of the whole people. The principle of the universal unity of mankind — amplest fraternity — must steadily vitalize and illumine those processes, else they will descend to the partial, exclusive, and selfish methods of present ruling, rather than remain constantly true to the divinely-human behests of social law.

No building can be built and adapted to its purposes in use till its material shall have been fully wrought out and fitted for the structure, according to plan and specifications given. Nor can that sublime structure, human society, be reared and converted to orderly use till the human material is fully wrought into qualified conditions. So, while social law, in a conception of human society, is indispensable to shape, and rule constantly all preliminary, qualifying methods, the master-builder will never for a moment countenance any rude attempts to leap into full occupancy and use of best social conditions, while only qualifying or structural processes are in order. This must be constantly urged.

The partial, trifling schemes of social organization that have sprung up and failed because of this oversight of primary conditions — because of this attempt to “take the kingdom of heaven by violence,” rather than by general qualification for its exalted conditions — are apt illustrations of the folly of trying to realize the harvest before entering into the toils of cultivation. No man, nor set of men, has a right to withdraw and stand aloof from the toils and burdens of the great race of human kind. To rush with headlong zeal for Heaven, and leave the degraded brotherhood writhing in the pangs of Hades, were selfish greed so diabolic that Hadean flames were sure to overleap their accustomed bounds and torture such selfishness with becoming discipline.

Now, in order to make the rule of the thought I am trying to advance more intelligible, as also the thought itself, let me try to represent to the senses the whole system involved—that, if there fail to be fullness and consistency in verbal expression, wholeness of representation may remedy the short-coming and carry full conviction.

The representative formula here presented is derived in unitary principles of creative law, that embrace, not only the processes of the productive or generative series, but also genetic root as base of development, and generated result as crowning fruition thereto.

The ordering principle thus presented, let us be careful to observe, is simply the law of triplicity, embracing :

First. Monoplicity ; as subjective power, *involved*, in indefinite form, or chaos.

Second. Duplicity ; as subjective power in transit, through *evolutionary processes*, by toils, struggles, conflicts, and unrest, specifically elaborating all particular forms and forces involved.

Third. Triplicity ; as subjective power become objective in *evolved state*, and at rest in the inspiring delights of spontaneity, through perfection of powers and conditions.

Although the human form is thus defined in successive order, the three elements of human personality are involved, and simultaneously active, from the beginning, but are not seen and understood in best respects till revealed in the life and light of the ultimate degree come to be an actual experience. Although the ultimate form — perfect manhood — cannot be known or comprehended excepting as the human affections and intellect are ripened into vital unity with that great destiny wherein the race puts on its royal robes, yet it is the only living power in all history, without which the race could never rise above the most stolid communal chaos, but by virtue of which its destined glory, in the realms of our common experience, is surely fixed.

Let us not be misled by any unreal *appearance* in the diagram. It actually presents only three degrees, or moments, as a rule of thought. The multiplied divisions of the second degree (II) do not add to these three terms, as may at first seem. Any seeming of that kind comes from repeated solutions of that degree — extended analyses of the generative factor of the scale — made by carrying the same alkahestic trine into minor quests in this special realm.

All *developing* movement is derived in static base, as initial form, and tends to crowning result in end achieved.

End of development, or productive energy, does not imply a rest in stagnation or death, as sometimes erroneously conceived. It only implies objective attainment in perfect conditions of life and uses. This end, in human development, is a

DIAGRAM OF CREATIVE LAW, REPRESENTING THE SERIAL ORDER
OF THE HUMAN FORM, AND RELATED ORDER
OF INSTITUTIONAL INVESTITURE.

I.		II.							III.	
ENVELOPED FORM.		DEVELOPING FORM.							DEVELOPED FORM.	
INVOLVED TRINE.		MONAL DEVELOPMENT.		DUAL DEVELOPMENT.			TRINE DEVELOPMENT.		MONAL, DUAL, AND TRINE UNITED.	
0.		1.	3.	4.	5.	6.	7.	8.	9.	10.
This space represents the potential or involved form of <i>Mind</i> and <i>Institutions</i> , whence are derived three discrete degrees in development, and a fruition of perfect order in scientific organization.		<div> <div>These spaces denote the orderly unfolding of the Human Form in all intrinsic character and genius.</div> <div>These spaces denote the orderly declension of all institutional authority as arbitrary pressure.</div> </div>								
		Monarchy, or Simple government.		Duarchy, or Complex government.			Triarchy, or Composite government.		Triarchy fully organized; or, complete Hierarchical Order.	

NOTE.—Monal Development covers, in the Human Series, the conditions of infantile *growth*; Dual Development relates to youthful *growth*; and Trine Development relates to the ripening process of human character—*growth* in manhood. The unit of human character and power, indicated under III, embraces all human excellence, with accordant institutional forms, and thus stands for full, perfect manhood and scientific order.

promise to man of the attainment of unimaginable genius and power; not in some far-off heaven, but in heaven on earth—infinite beauty, harmony, and order in all our common experience—to be consummated, finally, through the steady conduct of public affairs in the spirit and *lumen* of social law.

The design at present in view does not so much demand a thorough explication of the full trine terms of the diagram (I, II, III), as a symbol of creative law, as it does an exposition of the rule of development under the mediate term (II) of that series. And our main interest here will center upon the third term (trine development); for our own national order is therein represented, and the Nation will yet verify the rule of development there indicated, providing its commanding wisdom comes to find and employ the clew to actual scientific national development—to do which it has not hitherto been able.

The three squares of this degree of the diagram (II) are designed to represent the three discrete degrees of the human form in their unfolding processes (either in the race, the nation, or the individual), and also the three related degrees of institutional authority (government).

The smaller divisions of those three squares indicate a further analysis, under the same principles, not necessary to a plain man. The running of the Arabic numerals through the full series, thus exhaustively analyzed, gives a hint of the rule of the principle in the scale of numeric power, and helps more forcibly to illustrate the scope and power of the conception as a method of unitary law.

The transverse line, descending from left to right across the three squares, is intended to define between mental power (spaces above) and institutional power (spaces below).

The three terms of *these* degrees should really be *mon-dual*, *duo-dual*, and *tri-dual development*, because they all partake of the duplex or diverse and unsettled factor of the full series, being all varied forms of that degree. Familiarity with the principle, and its application as a strict solvent, will make this clear.

The first degree (mon-dual development; 1, 2, 3), starting

from anarchical root ("0"), as communal indifference of mind and its conditions, represents human power beginning at zero, with related authority at zenith, or supreme; the first (human power) gradually augmenting, and the latter (authority) gradually declining, till, at the point of departure to the next degree, mind—human personality—becomes a manifest power, and authority becomes measurably deferential, on human account, and slightly yielding.

This new step in development (the duo-dual, 4, 5, 6) initiates and carries on a marked struggle; on one hand (mind), for greater freedom and power; on the other (authority), to perpetuate its sway and hold in check the rising tide of human personality.

This is emphatically the specializing or individualizing degree of the series. While, therefore, it tends to educate and establish personal power, with its normal sense of freedom, it is not favorable to united action, alliance, combination of such special powers. So the conditions are not here favorable to revolution by the masses in their own behalf. This is accordant with a wise providence, which does not incline to facilitate the assertion of great freedom and power by the masses until they are fitted to give the initial to organic order, whereby freedom may find its proper mould or body in fitting institutions.

It is as surely the destined lot of the race to grow as it is the lot of the individual. Hence this mediate degree of development ends in a transit to the next (tri-dual, 7, 8, 9) degree—after having projected multiform institutional methods, more or less yielding to human needs—under an explicit *theory* of man as master, and institutions as servants to his needs, without exception.

Here we find the organic initial to our own national system as a government "of the people, by the people, for the people." This order commences in a manhood so majestic and true, the clearest intuitions of the ripest human conditions possible to experience were native to it. That manhood startled the observant nations with proclamations of the greatness, power, and inherent rights of man universally;

planted the new germ of liberty amid bravest toils and sacrifices, and poured copious streams of its most precious blood around it to fit it for future growth and fruitage.

Growth and fruitage! But true national growth was uncomprehended and overlooked, and the promised fruitage became only a vague phantom of "glittering generalities." The men who came after mistook the situation, and plunged the nation into a career adverse to the national theory, adverse to its promise as a true republic or people's government, and nothing but renewed wisdom, and a new departure in the true national spirit and purpose, can avert fatal results.

Reference to the diagram will show that this third, ripening form is still a form of development in human worth and power, with corresponding declension in arbitrary authority, till the first attains a supremacy, and the latter a servility, of function exactly accordant with the national conception and promise as announced by the founders. For the nation practically reveals its form and verifies its promise only when the whole people shall have become free, orderly, and powerful, in a manhood and womanhood of supremest moment, with institutional methods adjusted in constancy to every dictate of perfect society, and never the slightest pressure at any point. So it is seen that this conception of the declension of institutions to a point of nihility, as human worth and power fulfill in character, does not contemplate the lawless parade of the latter and the extinction of the former, but simply the realization of both terms grandly consummated—man being lord and master, and institutions wholly servile to his needs; just as, in any special science, mastery of ruling laws, and conformity thereto in practical uses, enfranchises and empowers to the utmost extent, without the slightest sense of pressure.

There is no verity in creation—either as thought or thing—that is not subject to a developing or unfolding process just proportioned to the magnitude or importance of that verity. Who will suppose, therefore, that a national system fraught with the promise of ours could be given in experience and immediately operated as if it were substantially a matured

structure? Such is the aspect practically presented. How else may we account for the lavish distribution of power and privilege before there had been any qualification therefor in educated virtue and intelligence, and institutional conduits assuming the proper flow of such power and privilege? A system that presupposes exalted human worth as a factor of government should surely first develop that worth, and truly condition its methods of expression, in order to make any practical exhibition of itself in its own mature form. How perilous the mistake, therefore, that made a broad distribution of freedom and authority to the people, according to the *involved* nature of the system, instead of proceeding to construct and operate methods that would first duly qualify freedom and power in the citizen.

True, there seems an inconsistency in founding a representative government wherein the whole people are to be represented, and then withholding the ballot and other forms of power from a large portion of citizens. But do we not know that the child in the family is more truly represented by parental intelligence and power that comprehend its needs and apply the wherewith to fulfill those needs than it could be by having the responsibility thrown upon its own uneducated intelligence and power? Under the social dogma of its initial instruments, what is our nation but a larger family—all of whose children, during their minority, should be faithfully represented by a presiding wisdom comprehensive of their needs and carefully provident of all their interests?

With a large portion of the people practically children—variously weak, ignorant, gross, or vicious, as they were sure to be previous to national fruition according to the national ideal—a numeric minority of intelligence and wealth were sure to be the governing power, whatever the semblance through a universal ballot that is practically little more than a fraud. If the ballot really functioned as a representative means—as it purports to do—what would it represent, in so far as a large section of the most needy and helpless are concerned? Simply weakness, ignorance, vice, and crime of every

kind. What can avail for *freemen* fastened in these degrading toils but the governing wisdom of the power above them? Nothing.

But here we face a difficulty. Under the prevalent competitive strife for distinction in wealth, and other like aggrandizements, intelligence and wealth, as ruling powers, are so largely carried in this inhuman self-service that, comparatively, little thought or means are given to public service—to a service of all, in all, for all.

But there remains a remedy, even if selfishness still inclines to be absorbed in its greedy pursuit. For that mighty undertow of neglected human power—hitherto mostly surging in subterranean depths—begins to show on the surface in fearful breakers. And, if these controlling powers remain fixed in narrow devotion to selfish aims, instead of giving heed to social law and ruling to fraternal ends—ends that comprehend all interests and provide for all—then will they come to be played upon and ravished by those under-currents of lust and passion that were suffered to drift recklessly onward and augment in characteristic force, when they should have been taken in hand and truly directed. Communal desolation is the remedy—but a painful remedy. Far wiser were it to listen to the monitions of social science, and thereby rightly dispose the elements otherwise sure to flay us. Remedies by inversion and empirical endeavor are always painful and tedious, and only successful at last by compelling resort to methods of science in commanding law. The distress of our late communal throes will prove thus remedial when it prompts the ruling powers to instigate a radical search, in the light of civic science, and thence to institute remedies accordingly. And it cannot be too forcibly and constantly urged that this demands a public conduct strictly consonant with the terms of social law; a conduct, consequently, that shall proceed from a wisdom comprehensive of the needs of the whole people, and a power sufficient to execute the demands of that wisdom.

We cannot, in our appeals, get direct access to the ears of the various communal grades; nor would it effect any desirable

result if we could. They can ravage and destroy ; or, by forbearance, can *adjourn* the evils of competition between capital and labor, but they can do nothing directly to inaugurate right methods, nor even to avert, finally, the fearful violence of uncultured and exasperated human power pressed and stung beyond endurance. Our only hope is in an appeal — through manifest science — to the ears of those few who do and will, at present, rule the nation — either for the good of all or the ruin of all.

If the competitive system is perpetuated, strength and superior craft will continue to despoil the weak and less crafty. This will continue to breed reckless and desperate feeling and habits. Human nature *will* react against whatever presses and galls it. In such reaction it will resort to means proportioned to its conditions. It will be unreasonable, vindictive, and cruel in proportion as it is uncultured and gross. Hence the governing powers have an interest to provide methods of culture for all who are uncultured, and to compel a use of these methods. Free culture will provide for all the powers of man — physical, as well as the intellectual, and higher still. Especially does it demand the institution of industrial methods of every kind ; not only to train in industrial power, but to produce proper supplies for all. To this end all must be protected and assured in a just share of the goods they create. At no point may the weaker and more dependent be despoiled with impunity, else they will come to prey upon, and despoil in return, with a ferocity that knows no bounds.

So completely has Providence put this nation under the dictation of social law, which regards unity of power and the fruits of power in a positive commonwealth, that no violation of that law can rule continuously without disaster or ruin.

United and happy peoples in a united and happy race is the ultimate purpose of Divine Wisdom. Hence all petty schemes that violate the laws of universal brotherhood must be fraught with evil, especially to the votaries of such schemes. Do we need more tuition under this head than that which has come to us in communal outbreaks and destruction ? If so, we will get it by extending the reign of strife and competition in behalf

of self-aggrandizement. On the contrary, if we will organize the principle of fraternal good-will, inherent in the national system, peace will at once begin to exert her benign sway.

There are those who say that this competition is essential to business enterprise—that business would flag, and general stagnation take the place of present business energy, if the motive to outshine and excel others in these superior shows of wealth and power, that practically cripple and destroy the brother, were displaced. But it is a shocking reflection upon the creative wisdom to suppose it limited to an economy that bases energy and enterprise in a system that is fatal to the existence of that orderly society which itself has appointed as the acme of human greatness. It is impossible. The thought is as absurd as it is dishonorable to the divine name. The emulative spirit is a beneficent and mighty power; its true expression is accordant with, and productive of, fraternal order and peace, rather than of discord and warfare, amongst men. Excellence and superiority in all social power and worth; in productive genius, and every kindly ministry to all human needs; in mastery of every obstacle to the welfare of all—these, and their like in social significance and tendency, will be found ample ministries to the emulative spirit in man. They are honorable to both creator and creature, and will inspire human energy and enterprise immensely beyond the base, cut-throat methods of our present competitive strife.

In the processes of social regeneration all forms of industry and art will become duly honored; dullness will be encouraged, prompted, and educated into becoming energy; shirking, dishonored and disciplined; idleness, treated as a species of disgraceful stealth, and its votary trained accordingly; till, finally, all come into the spirit and power of true social order.

True, with a large development and application of mechanical powers to production, and the more general interest and application of human power, productive results would be vastly augmented, but there would be no danger of a surfeit or glut; for consumption would keep pace with production. Being relieved from the stress of monopoly and exclusive

hoarding by being assured in a just share of the proceeds of best conditions of production, the masses would become generous consumers, as well as producers; becoming relieved from the pinching conditions that now drive them to madness and the rudeness of communal outrage. So, perpetual enterprise and thrift would take the place of revulsions and painful stagnation.

At present we have almost no means of stimulating human powers and directing their orderly play. We throw around each individual the pressure of legal and moral restraints, and expect conformity and order in the life of each, while yet we have given them scarcely a particle of social culture and support. How absurd to suppose the pressure of the lower degrees can apply to regulate the conditions of the higher, and produce the coveted order!

When men scorn and deride these barriers and levers — as they are sure to do under the quenchless cravings of their social instincts — we apply the vindictive screws of justice, as we call it, till they are broken into order or crushed out. So we have increasing rebellion and disorder, and multiplied thumb-screws of *justice*. And, strange to say, few seem to distrust prevailing ideas of social economy, or question the wisdom of a public conduct bearing fruits of pillage and distress on every hand. Rebellious human nature — all unhelped and unwashed as it is — seems alone at fault, while we, the *righteous* commanders, feel ourselves justified, and even obligated, to lash, scourge, and destroy. If, instead, we would come to a due sense of social obligations, and concentrate the commanding intelligence and power upon means of general helpfulness, organizing ways and means for the development and proper play of all human power, there would be an immediate lull to the raging currents of lust and passion, and, in good time, perfect equilibrium and peace.

He whose rule is supreme and cannot be supplanted admonishes us in a thousand stinging providences that this is an era of social forces and laws, and that social conduits must be provided for the accumulating fluids if we would not be rent and torn by their furious rage. He is daily showing us the impo-

tence of designed restraints that imprison, chain, strangle, and shoot down the unkempt brotherhood, by rearing up bristling hordes to fill the ranks thus decimated. And He will continue thus to do until we heed His calls to social law and duty, and proceed to construct systems of social sewerage and general reform—to provide that filthiness shall be washed away; the hungry fed; the wayward and vile recovered to usefulness and decency; the weak made strong; the infirm, of every kind, firm and upright. Not by alms-giving and alms-doing, that tend to weaken and debauch, but by scientific recuperative methods that develop and rightly employ the native forces before going to waste.

Under the diction of mere sense—with its rule of arbitrary force—one may attend mainly to one's own; and under the diction of human reason, even—with its moral barriers and stimulants—one comes to little of the sublime breadth and liberation of true human poise; but, under the diction of wisdom—with the social barriers and stimulants of universal brotherhood—one comes to see clearly that we dwell, constantly, “each in all and all in each;” that, consequently, there can be no full rest and peace for a single soul, short of rest and peace for all. So, the genius and power of previous culture, that were before absorbed in every lust and scheme of self-service, as opposed to common service, come here into the broad and genial light of the universal, and devote themselves accordingly mostly to public service. Not, indeed, sacrificing and depleting self by so doing, for this social law is so broad and economic that what serves the public best likewise best serves the individual, and *vice versa*.

Minus the rule of this principle here, in this nation of its own nominal home, and the reign, instead, of every species of self-service, the most voracious and inhuman strife were inevitable. As a consequence, social aggressions, repulsions, and explosions are rife on every hand. Volumes would not suffice to enumerate the various convulsions thereupon experienced. Little can be done here more than to cite in general terms, and point out the relation of, commanding laws; that thereby specific explications and remedial applications may be prompted.

Under a science of archial order, dictated by social law—man being constantly magisterial and objective, with institutions ministerial and subjective—the progress of the race, under whatever prevailing mould or governmental form, would be made with a steady, peaceful flow, ever true to the growth of man in human worth and power. Institutions would truly conform to such gradual human exaltation; orderly declension of arbitrary methods, and the substitution of social springs and levers, would occur, and thus the unfolding volume of spontaneous life find its due ministries.

If rulers everywhere were to become duly informed, and thence rule according to these dictates of social law—rule socially and humanly, rather than selfishly and inhumanly, every form of authority would become at once glorified with divine radiance; for, all authority being based in social knowledge, and proceeding with social aims, beholding in every person an heir of glory, destined *lord of lords and king of kings*, would regard with tenderest deference the unwashed babes and sucklings of our present mendicant conditions. Every appliance of genius and method of wisdom would be brought into use to cleanse, cultivate, liberate, and exalt human kind universally. The present scarred and deformed samples of humanity, ranking, socially, from embryonic to more advanced stature, would be carefully cherished, nursed, trained, and in every way fitted to join the great march and keep orderly step of themselves.

So we constantly see; social science will not, for the present, apply itself to the organization and operation of ripest human character and conditions. It must first be employed to effect true social culture, in the light of such final order. At present it has to deal with very crude and base raw material. But the point of supremest moment is to keep the light of man's social destiny steadily in view as the only *lumen* by which to handle and fashion this unwrought and badly-wrought material. Then, formation and re-formation may go on together in perfect order.

The dullness of those invested with the responsibilities of authority has suffered the accumulation of a fearful amount

of most perverse human power, which *must* be taken in hand and brought into lines of discipline and tutelage that lead upward towards the desired end. Multitudes have been so born, reared in, and saturated with, all forms of diabolism, that well-disposed people look doubtfully, if not with dismay, upon the work of reform; especially upon propositions for actual cure. Nor is such distrust surprising; for the accumulating composite forces of this social era are so poorly understood, and even so little known to exist, in their true nature and activity, the conditions presented cannot be otherwise than disheartening. But those duly conversant with the laws of movements, and consequently with the forces at play, and the means at hand adapted to the rule of those forces, see nothing but the power and glory of the coming of the Son of Man on the surrounding clouds — so deep and somber to most observers.

In view of the late communal *émeutes*, one of the startled millionaires of the country, it is said, called for a dictatorship to rule the nation, and pronounced for General Grant as dictator. That wily intellect is doubtless good for the work it has in hand. By bulling the stock markets, and variously operating financial checks and springs, it may continue to hoard and monopolize any amount of the wealth produced by others; but, when it thus looks to a scheme of converting this government into an instrument to bull the masses into supple allegiance to the few great monopolists of the land, it exhibits a stupidity concerning government problems that would send the puniest school-boy in political science to the foot of his class.

Monarchy is possible here, but it cannot be pre-arranged and doctored after the manner of the financial operations of the monopolists. The nation must first go down in communal anarchy; thence governmental authority would surely arise, and that resurrection would exhibit monarchy as a new start in archial growth. Let the monopolists understand the part they are playing in this *rôle*, for the anarchy of senile communism—the communism of this era—is as different from that of primitive anarchy as the terrible rage of the ocean in the

most violent storm is different from its undisturbed surface. Under the rule of social law they are surely so disordering the elements as to produce storm conditions in our social experience.

Only a few decades ago the old United States Bank, operating under a capital of \$20,000,000, was found to be a dangerous money power, because, by methodic inflation and contraction, made to reach the circulating medium of the whole country, it could unsettle the industrial and commercial operations of the nation, in behalf of some special scheme, and thus spread distress and ruin amongst the whole people. As a financial center, that bank was the merest pigmy compared with numerous aggregations of capital to-day. There are many millionaires in the country whose possessions reach or come near that sum, and a few whose wealth largely exceeds it. It is said that some of our Westerners, owners of bank and mining stocks, command an annual income of about \$20,000,000. The Rothschilds, with a capital of some \$200,000,000, and an income of about \$10,000,000, must soon fall behind some of our own money kings, in power, and yet it is thought they can control most of the crowned heads of Europe. Besides these immense gatherings of wealth and power in the hands of individual capitalists, the vast sums centralized in large railroad and other corporations exhibit fearful powers, which, under the present competition of labor and capital, tend steadily to debase labor and aggrandize capital. And there is a constant tendency to organize and consolidate the powers of wealth, while labor combinations are easily played off by capital, and workmen become forced to sue for humiliating terms. So, between two stones operated by capital—one grinding down labor and the other, by making "corners," grinding up prices—the laborer has a poor outlook for relief without the introduction of a radical change in the system.

Wealth cannot thus centralize and operate in the hands of a small numeric minority without directly distressing and impoverishing a large numeric majority. But it can, and does, make this minority of numbers a mighty majority of power in the shaping of public conduct; so that it is well known to be

almost impossible to carry important legislation in the direct interest of the masses against the direct greed of the monopolists. For these financial bullies have got the clew to bulling legislation, and the lobby has thus come to be the commanding power over the people's tribunals in this country—in this government of, by, and for the people!

It is often argued that the masses are served by the business and enterprise of the country, operated by this wealth, and ought to take their wages, economize their means, and keep quiet; and even be thankful. Served, indeed, as the dogs are served with the crumbs that fall inadvertently from the master's table! They can take the scant pickings and gleanings which wealth is compelled to scatter in its gathering operations, and only these.

In the great aggregate—the game of monopoly as a whole—every one knows that wealth settles more and more in few hands, and want more and more presses the many. This is a truth that cannot be gainsaid, and one of immense significance.

But how is it all to be remedied? Capital commands the situation; legislation in behalf of the masses, that will curb aggressive monopoly and organize those masses in industries, and assure them in the just proceeds of their toils, cannot be effected, for the monopolists command legislation in behalf of their own aims. All appeals in behalf of justice and right are of no avail, because moral law has ceased to be a force against the aggressive greed of the monopolists no less than against the criminal arts of the human under-currents that surge to despoil them. So, what can be the remedial resort? We must heed the voice of social law, and *institute* the methods of *common justice*—healthy activities and providence for all, neglect and spoliation to none. We must impress the monopolists in behalf of these social aims; not by appeals on moral grounds—for now is the reign of the social era in human affairs—but by appeals on economic grounds; grounds of general production, conservation, and distribution of wealth on principles of exact justice, more important to the upper strata than to the contemned under-currents fast gather-

ing to carry them down unless the gathering be rightly averted.

Aggressive wealth is fast educating aggressive want. The commune is a normal outgrowth of the galling operations of centralized and centralizing wealth. Seizing and exclusive hoarding by the arts of avarice, speculation, and traffic stimulate seizing and appropriating by the arts of theft and every species of free-booting and piracy.

Nothing can save us from the distressing dead-level of communal dissipation but the speedy initiation of societary methods inherent to the national logic. The inhuman greed of monopoly that more and more seeks to aggrandize the few at the expense of the many *must* give place to the gracious calls of society in behalf of our common human nature.

If the monopolists will duly consider the pressing needs, and take a strong hand in organizing ways and means for all, then peace and order will at once begin their benign course. If they continue to violate their social opportunities, and still grasp and appropriate as heretofore, then let them look for grasping and appropriating by the pinched and starving legions in return. Seizing by the few, by virtue of superior craftiness or intelligence, is deemed *civil* practice, and thought to be essential to healthy business enterprise and worthy attainments. Seizing by the many, by virtue of mere physical force, is criminal aggression and *uncivil* communism, to remedy which bullets and bayonets are mistakenly deemed our best appliances.

But, although we have barely laid out the grounds for the new social structure that, amid all the shakings, can never more be moved; have touched lightly the rickety old, and faintly indicated the structural processes of the sublime new, we must draw to a close our present treatise.

Let us now partly retrace our steps, and, with an added thought or two, conclude our essay.

The conception of our national system embraces the principle of perfect society—fraternity. The nation can only exemplify that principle by first ordering and steadily unfolding all the forces of individual character and institutional

investiture, with a clear design to realize such society. The *nature* of the system was perfect from the beginning. All the materials were *potentially* right. Yet those materials—both as to quality of citizenship and institutional forms—were far too crude, gross, and immature to be convertible to such designs through immediate organization and use. So, while for a long time it were impossible to operate the nation in such complete conformity to the conception as to actualize perfect society—brotherhood—it was at once obligated to devise and operate systems of public education and training perfectly true to the conception; thus assuring, in the end, the actual national embodiment of that conception in perfect society.

Such systems of national culture would be so compulsory as to carry every personal factor into line of development and use, whatever were the state and personal tendencies of such factor. Government, being really an expression of the commanding intelligence, was obligated to be so wise and authoritative—so truly government—that no citizen could proceed, self-directed, contrary to a public direction, towards full social harmony and order.

There being all forms and states of culture in citizenship, from lowest up towards the highest (none being, for the time, actually in highest conditions), all forms and conditions of institutional investiture were indispensable accordingly. But, man being constantly the magisterial or regal force involved, and institutions the ministerial or servile force, all authority must be true to this principle, and, therefore, never in the slightest degree tend to despoil the individual. *There is no other ground of law nor rule for freedom under our system.* Unless the nation can devise methods and direct conduct accordantly therewith, it cannot truly build the system it has taken in hand, nor hope to realize the sublime end, finally, that awaits legitimate national fruitage.

It is clear, according to the thought advanced, that little of true national development has really transpired in the nation's experience. And this thought is held to be irrefutable. Distinctive national development consists in the unfolding of

manly worth and power in all citizens, and corresponding projection of institutions, both gradually tending upward towards the inspiring standard contemplated. Institutions, being the instruments or moulds of this advance in human power, must fully keep pace therewith. So, it were the true mission of conservatism, as a force in our system, not to conserve or hold mere forms or instruments perpetually, but to surely conserve the commanding principle that ever underlies all forms, and thus rightly fashion and hold forms in their true order of use; introducing new when required, dismissing old when no longer useful.

It were also the true mission of radicalism not to war upon forms because they seemed inadequate to ultimate ends, but to keep true to root principles, see that consistent institutions were gradually unfolded and applied as ministries to progress, so that immediate, partial ends would be sure to serve ultimate, perfect ends.

Thus true science practically reconciles these hitherto conflicting forces, and unites them in vital human endeavors; conservatism being the guard and defense, and radicalism being the stimulating and provident ministry, of the nation's life. But both radical and conservative mostly failed to comprehend the situation. Both practically mistook national development to consist in the increase of population, with all material powers and resources, such as are common to all nations, and do not distinguish one from another. But the political genius of a nation makes its true form; and the nation is developed and fixed in that form when the logic of its political system has been fully embodied in institutions and converted in use, and not till then. So, national development, in our American system, consists in processes of human culture and institutional forms that will carry the nation steadily through that degree of growth represented in the diagram as the last—Tri-dual—term of Development, and fix it in those logical issues of glory and power represented in the diagram as the ultimate form of the whole Archial Series—III.

Men of apparent intelligence—capable, at least, of expressing their ideas with tolerable force—have lately advanced the

notion that our national system is a failure, and must give place to monarchical rule. A most stupid thought! The national system was never tried, in a way to determine its value, by this or any other nation. It was never more than a mere inchoation of the true nation. It may, perhaps, be regarded as having had birth, though it were a question whether mere foetal insemination were not the truer symbol of its life. Hence it may yet fail to get practical development and organic activity in its own order—its own normal fullness and power. In that case it would exhibit an incapacity on the part of its doctors, wet-nurses, and later tutors and wardens, but surely no fault as to the system itself. How can it be maintained that a distinct system of nationality has proved a failure when it was never matured, nor even approximately developed in its own proper form? As well look for true manhood in malformed infancy, and denounce all manliness as failure because it did not reappear. Yet such is the shallow habit of criticism we daily meet.

Our national system has not proved a failure, nor do we believe it will do so. It never can prove itself a failure until it has been put on trial in its own true form. It can never thus be put upon trial until it shall have been thoroughly developed and organized upon that supreme principle of social law fundamental to its theory as a government of the people, by the people, for the people, without exception. The Lord grant that it may thus come to trial.

THE SCIENCE OF EDUCATION.

A PARAPHRASE OF DR. KARL ROSENKRANZ'S "PEDAGOGICS AS A SYSTEM."

BY ANNA C. BRACKETT.

[The translation of "Pedagogics as a System" was prepared and published five years ago. The wide demand for it that has made itself known since that time, especially in normal schools, has proved the value of such works in the domain of education. At the same time, the difficulty the students have always found in its use—a difficulty inseparable from any translation of a German metaphysical

treatise—has led us to the conviction that a paraphrase into a more easily understood form is a necessity, if the thought of Rosenkranz is to be appropriated by the very class who are most in need of it. As was remarked in the preface to the translation, we have in English no other work of similar size which contains so much that is valuable to those engaged in the work of education. It is no compendium of rules or formulas, but rather a systematic, logical treatment of the subject, in which the attention is, as it were, concentrated upon the whole problem of education, while that problem is allowed to work itself out before us. To paraphrase the text—or, rather, to translate it from the metaphysical language in which it at present appears into a language more easy of comprehension—without losing the real significance of the statements, is the task which is here undertaken. Free illustrations and suggestions have been interwoven to give point and application to the thoughts and principles stated. This translation, or paraphrase, follows the paragraphs of the original and of the first translation. The analysis of the whole work, as it appeared in the original translation, is appended at the end of the “Introduction,” as a guide to the student.—Tr.]

INTRODUCTION.

§ 1. The science of Pedagogics may be called a secondary science, inasmuch as it derives its principles from others. In this respect it differs from Mathematics, which is independent. As it concerns the development of the human intelligence, it must wait upon Psychology for an understanding of that upon which it is to operate, and, as its means are to be sciences and arts, it must wait upon them for a knowledge of its materials. The science of Medicine, in like manner, is dependent on the sciences of Biology, Chemistry, Physics, etc. Moreover, as Medicine may have to deal with a healthy or unhealthy body, and may have it for its province to preserve or restore health, to assist a natural process (as in the case of a broken bone), or to destroy an unnatural one (as in the case of the removal of a tumor), the same variety of work is imposed upon Education.¹

§ 2. Since the rules of Pedagogics must be extremely flexible, so that they may be adapted to the great variety of minds, and since an infinite variety of circumstances may arise in their application, we find, as we should expect, in all educational literature room for widely differing opinions and the wildest theories; these numerous theories, each of which

¹ The parallelism between these two sciences, Medicine and Education, is an obvious point, which every student will do well to consider.

may have a strong influence for a season, only to be overthrown and replaced by others.² It must be acknowledged that educational literature, as such, is not of a high order. It has its cant like religious literature. Many of its faults, however, are the result of honest effort, on the part of teachers, to remedy existing defects, and the authors are, therefore, not harshly to be blamed. It is also to be remembered that the habit of giving reproof and advice is one fastened in them by the daily necessity of their professional work.³

§ 3. As the position of the teacher has ceased to be undervalued, there has been an additional impetus given to self-glorification on his part, and this also—in connection with the fact that schools are no longer isolated as of old, but subject to constant comparison and competition—leads to much careless theorizing among its teachers, especially in the literary field.

§ 4. Pedagogics, because it deals with the human spirit, belongs, in a general classification of the sciences, to the philosophy of spirit, and in the philosophy of spirit it must be classified under the practical, and not the merely theoretical, division. For its problem is not merely to comprehend the nature of that with which it has to deal, the human spirit—its problem is not merely to influence one mind (that of the pupil) by another (that of the teacher)—but to influence it in such a way as to produce the mental freedom of the pupil. The problem is, therefore, not so much to obtain performed works as to excite mental activity. A creative process is required. The pupil is to be forced to go in certain beaten tracks, and yet he is to be so forced to go in these that he shall go of his own free will. All teaching which does not leave the mind of the pupil free is unworthy of the name. It is true that the teacher must understand the nature of mind, as

² This will again remind the student of the theories of treatment in medicine in diseases which, in the seventeenth century, were treated only by bleeding and emetics, are now treated by nourishing food, and no medicines, etc.

³ The teacher will do well to consider the probable result of the constant association with mental inferiors entailed by his work, and also to consider what counter-irritant is to be applied to balance, in his character, this unavoidable tendency.

he is to deal with mind, but when he has done this he has still his main principle of action unsolved; for the question is, knowing the nature of the mind, How shall he incite it to action, already predetermined in his own mind, without depriving the mind of the pupil of its own free action? How shall he restrain and guide, and yet not enslave?

If, in classifying all sciences, as suggested at the beginning of this section, we should subdivide the practical division of the Philosophy of Spirit, which might be called Ethics, one could find a place for Pedagogics under some one of the grades of Ethics. The education which the child receives through the influence of family life lies at the basis of all other teaching, and what the child learns of life, its duties, and possibilities, in its own home, forms the foundation for all after-work. On the life of the family, then, as a presupposition, all systems of Education must be built. In other words, the school must not attempt to initiate the child into the knowledge of the world—it must not assume the care of its first training; that it must leave to the family.⁴ But the science of Pedagogics does not, as a science, properly concern itself with the family education, or with that point of the child's life which is dominated by the family influence. That is education, in a certain sense, without doubt, but it does not properly belong to a science of Pedagogics. But, on the other hand, it must be remembered that this science, as here expounded, presupposes a previous family life in the human being with whom it has to deal.

§ 5. Education as a science will present the necessary and universal principles on which it is based; Education as an art will consist in the practical realization of these in the teacher's work in special places, under special circumstances, and with special pupils. In the skillful application of the principles of the science to the actual demands of the art lies the opportunity for the educator to prove himself a creative artist; and it is in the difficulty involved in this practical

⁴ The age at which the child should be subject to the training of school life, or Education, properly so-called, must vary with different races, nations, and different children.

work that the interest and charm of the educator's work consists.

The teacher must thus adapt himself to the pupil. But, in doing so, he must have a care that he do not carry this adaptation to such a degree as to imply that the pupil is not to change; and he must see to it, also, that the pupil shall always be worked upon by the matter which he is considering, and not too much by the personal influence of the teacher through whom he receives it.⁵

§ 6. The utmost care is necessary lest experiments which have proved successful in certain cases should be generalized into rules, and a formal, dead creed, so to speak, should be adopted. All professional experiences are valuable as material on which to base new conclusions and to make new plans, but only for that use. Unless the day's work is, every day, a new creation, a fatal error has been made.

§ 7. Pedagogics as a science must consider Education—

- (1) In its general idea;
- (2) In its different phases;
- (3) In the special systems arising from this general idea, acting under special circumstances at special times.⁶

§ 8. With regard to the First Part, we remark that by Education, in its general idea, we do not mean any mere history of Pedagogics, nor can any history of Pedagogics be substituted for a systematic exposition of the underlying idea.

§ 9. The second division considers Education under three heads—as physical, intellectual, and moral—and forms, generally, the principal part of all pedagogical treatises.

In this part lies the greatest difficulty as to exact limitation. The ideas on these divisions are often undefined and apt to be confounded, and the detail of which they are capable is almost unlimited, for we might, under this head, speak

⁵ The best educator is he who makes his pupils independent of himself. This implies on the teacher's part an ability to lose himself in his work, and a desire for the real growth of the pupil, independent of any personal fame of his own—a disinterestedness which places education on a level with the noblest occupations of man.

⁶ See analysis.

of all kinds of special schools, such as those for war, art, mining, etc.

§ 10. In the Third Part we consider the different realizations of the one general idea of Pedagogics as it has developed itself under different circumstances and in different ages of the world.

The general idea is forced into different phases by the varying physical, intellectual, and moral conditions of men. The result is the different systems, as shown in the analysis. The general idea is one. The view of the end to be obtained determines in each case the actualization of this idea. Hence the different systems of Education are each determined by the stand-point from which the general ideal is viewed. Proceeding in this manner, it might be possible to construct a history of Pedagogics, *a priori*, without reference to actual history, since all the possible systems might be inferred from the possible definite number of points of view.

Each lower stand-point will lead to a higher, but it will not be lost in it. Thus, where Education, for the sake of the nation,⁷ merges into the Education based on Christianity, the form is not thereby destroyed, but, rather, in the transition first attains its full realization. The systems of Education which were based on the idea of the nation had, in the fullness of time, outgrown their own limits, and needed a new form in order to contain their own true idea. The idea of the nation, as the highest principle, gives way for that of Christianity. A new life came to the old idea in what at first seemed to be its destruction. The idea of the nation was born again, and not destroyed, in Christianity.

§ 11. The final system, so far, is that of the present time, which thus is itself the fruit of all the past systems, as well as the seed of all systems that are to be. The science of Pedagogics, in the consideration of the system of the present, thus again finds embodied the general idea of education, and thus returns upon itself to the point from whence it set out. In the First and Second Parts there is already given the idea which dominates the system found thus necessarily existing in the present.

⁷ Asiatic systems of Education have this basis (see § 178 of the original).

Education.	{	FIRST PART. In its General Idea.	{ Its Nature. Its Form. Its Limits.			
		SECOND PART. In its Special Elements.	{ Physical. Intellectual. Moral.			
			{	National.	Passive.	{ Family . . China. Caste. . . India. Monkish . Thibet.
					Active.	{ Military. . Persia. Priestly. . Egypt. Industrial. Phœnicia.
					Individual.	{ Esthetic . Greece. Practical . Rome. Abstract { Northern Individual. { Barbarians
		THIRD PART. In its Particular Systems.	{		Theocratic.	. . . . . Jews.
			{			Monkish.
			{			Chivalric.
			{	Humanitarian.		{ For Special Callings. { Jesuitic. Pietistic.
					For Civil Life.	{ To achieve an Ideal of Culture. { The Humanities. The Philanthropic Movement.
						{ For Free Citizenship.

FIRST PART.

The General Idea of Education.

§ 12. A full treatment of Pedagogics must distinguish—

- (1) The nature of Education ;
- (2) The form of Education ;
- (3) The limits of Education.

I.—The Nature of Education.

§ 13. The nature of Education is determined by the nature of mind, the distinguishing mark of which is that it can be developed only from within, and by its own activity. Mind is essentially free—*i. e.*, it has the capacity for freedom—but it cannot be said to possess freedom till it has obtained it by its

own voluntary effort. Till then it cannot be truly said to be free. Education consists in enabling a human being to take possession of, and to develop himself by, his own efforts, and the work of the educator cannot be said to be done in any sense where this is not accomplished. In general, we may say that the work of education consists in leading to a full development of all the inherent powers of the mind, and that its work is done when, in this way, the mind has attained perfect freedom, or the state in which alone it can be said to be truly itself.⁷

The isolated human being can never become truly man. If such human beings (like the wild girl of the forest of Ardenes) have been found, they have only proved to us that reciprocal action with our fellow beings is necessary for the development of our powers. Caspar Hauser, in his subterranean prison, will serve as an example of what man would be without men. One might say that this fact is typified by the first cry of the newly-born child. It is as if the first expression of its seemingly independent life were a cry for help from others. On the side of nature the human being is at first quite helpless.

§ 14. Man is, therefore, the only proper object of education. It is true that we speak of the education of plants and of animals, but we instinctively apply other terms when we do so, for we say "raising" plants, and "training" animals. When we "train" or "break" an animal, it is true that we do, by pain or pleasure, lead him into an exercise of a new activity. But the difference between this and Education consists in the fact that, though he possessed capacity, yet by no amount of association with his kind would he ever have acquired this new development. It is as if we impress upon his plastic nature the imprint of our loftier nature, which imprint he takes mechanically, and does not himself recognize it as his own internal nature. We train him for our recognition, not for his own. But, on the contrary, when we educate a human being, we only excite him to create for himself, and out of himself,

⁷ The definition of freedom here implied is this: Mind is free when it knows itself and wills its own laws.

that for which he would most earnestly strive had he any appreciation of it beforehand, and in proportion as he does appreciate it he recognizes it joyfully as a part of himself, as his own inheritance, which he appropriates with a knowledge that it is his, or, rather, is a part of his own nature. He who speaks of "raising" human beings uses language which belongs only to the slave-dealer, to whom human beings are only cattle for labor, and whose property increases in value with the number.

Are there no school-rooms where Education has ceased to have any meaning, and where physical pain is made to produce its only possible result—a mechanical, external repetition? The school-rooms where the creative word—the only thing which can influence the mind—has ceased to be used as the means are only plantations, where human beings are degraded to the position of lower animals.

§ 15. When we speak of the Education of the human race, we mean the gradual growth of the nations of the earth, as a whole, towards the realization of self-conscious freedom. Divine Providence is the teacher here. The means by which the development is effected are the various circumstances and actions of the different races of men, and the pupils are the nations. The unfolding of this great Education is generally treated of under the head of Philosophy of History.

§ 16. Education, however, in a more restricted sense, has to do with the shaping of the individual. Each one of us is to be educated by the laws of physical nature—by the relations into which we come with the national life, in its laws, customs, etc., and by the circumstances which daily surround us. By the force of these we find our arbitrary will hemmed in, modified, and forced to take new channels and forms. We are too often unmindful of the power with which these forces are daily and hourly educating us—*i. e.*, calling out our possibilities into real existence. If we set up our will in opposition to either of these; if we act in opposition to the laws of nature; if we seriously offend the laws, or even the customs, of the people among whom we live; or if we despise our individual lot, we do so only to find ourselves crushed in

the encounter. We only learn the impotence of the individual against these mighty powers; and that discovery is, of itself, a part of our education. It is sometimes only by such severe means that God is revealed to the man who persistently misunderstands and defies His creation. All suffering brought on ourselves by our own violation of laws, whether natural, ethical, or divine, must be, however, thus recognized as the richest blessing. We do not mean to say that it is never allowable for a man, in obedience to the highest laws of his spiritual being, to break away from the fetters of nature—to offend the ethical sense of his own people, or to struggle against the might of destiny. Reformers and martyrs would be examples of such, and our remarks above do not apply to them, but to the perverse, the frivolous, and the conceited; to those who are seeking in their action, not the undoubted will of God, but their own individual will or caprice.

§ 17. But we generally use the word Education in a still narrower sense than either of these, for we mean by it the working of one individual mind upon or within another in some definite and premeditated way, so as to fit the pupil for life generally, or for some special pursuit. For this end the educator must be relatively finished in his own education, and the pupil must possess confidence in him, or docility. He must be teachable. That the work be successful, demands the very highest degree of talent, knowledge, skill, and prudence; and any development is impossible if a well-founded authority be wanting in the educator, or docility on the part of the pupil.

Education, in this narrowest and technical sense, is an outgrowth of city or urban life. As long as men do not congregate in large cities, the three forces spoken of in § 16—*i. e.*, the forces of nature, national customs, and circumstances—will be left to perform most of the work of Education; but, in modern city life, the great complication of events, the uncertainty in the results—though careful forethought has been used—the immense development of individuality, and the pressing need of various information, break the power of custom, and render a different method necessary.

The larger the city is, the more free is the individual in it from the restraints of customs, the less subjected to curious criticism, and the more able is he to give play to his own idiosyncrasies. This, however, is a freedom which needs the counterpoise of a more exact training in conventionalities, if we would not have it dangerous. Hence the rapid multiplication of educational institutions and systems in modern times (one chief characteristic of which is the development of urban life). The ideal Telemachus of Fenelon differs very much from the real Telemachus of history. Fenelon proposed an education which trained a youth to reflect, and to guide himself by reason. The Telemachus of the heroic age followed the customs ("use and wont") of his times with *naïve* obedience. The systems of Education once sufficient do not serve the needs of modern life, any more than the defenses once sufficient against hostile armies are sufficient against the new weapons adopted by modern warfare.

§ 18. The problem with which modern Education has to deal may be said, in general terms, to be the development in the individual soul of the indwelling Reason, both practical (as will) and theoretical (as intellect). To make a child good is only a part of Education; we have also to develop his intelligence. The sciences of Ethics and Education are not the same. Again, we must not forget that no pupil is simply a human being, like every other human being; he is also an individual, and thus differs from every other one of the race. This is a point which must never be lost sight of by the educator. Human beings may be—nay, must be—educated in company, but they cannot be educated simply in the mass.

§ 19. Education is to lead the pupil by a graded series of exercises, previously arranged and prescribed by the educator, to a definite end. But these exercises must take on a peculiar form for each particular pupil under the special circumstances present. Hasty and inconsiderate work *may*, by chance, accomplish much; but no work which is not *systematic* can advance and fashion him in conformity with his nature, and such alone is to be called Education; for Educa-

tion implies both a comprehension of the end to be attained and of the means necessary to compass that end.

§ 20. Culture, however, means more and more every year; and, as the sum total of knowledge increases for mankind, it becomes necessary, in order to be a master in any one line, to devote one's self almost exclusively to that. Hence arises, for the teacher, the difficulty of preserving the unity and wholeness which are essential to a complete man. The principle of division of labor comes in. He who is a teacher by profession becomes one-sided in his views; and, as teaching divides and subdivides into specialities, this abnormal one-sidedness tends more and more to appear. Here we find a parallelism in the profession of Medicine, with a corresponding danger of narrowness; for that, too, is in a process of constant specialization, and the physician who treats nervous diseases is likely to be of the opinion that all trouble arises from that part of the organism, or, at least, that all remedies should be applied there. This tendency to one-sidedness is inseparable from the progress of civilization and that of science and arts. It contains, nevertheless, a danger of which no teacher should be unwarned. An illustration is furnished by the microscope or telescope; a higher power of the instrument implies a narrower field of view. To concentrate our observation upon one point implies the shutting out of others. This difficulty with the teacher creates one for the pupil.

In this view one might be inclined to judge that the life of the savage as compared with that of civilized man, or that of a member of a rural community as compared with that of an inhabitant of a city, were the more to be desired. The savage has his hut, his family, his cocoa-palm, his weapons, his passions; he fishes, hunts, amuses himself, adorns himself, and enjoys the consciousness that he is the center of a little world; while the denizen of a city must often acknowledge that he is, so to speak, only one wheel of a gigantic machine. Is the life of the savage, therefore, more favorable to human development? The characteristic idea of modern civilization is: The development of the individual as the end for which the State exists. The great empires of Persia, Egypt, and India,

wherein the individual was of value only as he ministered to the strength of the State, have given way to the modern nations, where individual freedom is pushed so far that the State seems only an instrument for the good of the individual. From being the supreme end of the individual, the State has become the means for his advancement into freedom; and with this very exaltation of the value of the mere individual over the State, as such, there is inseparably connected the seeming destruction of the wholeness of the individual man. But the union of State and individual, which was in ancient times merely mechanical, has now become a living process, in which constant interaction gives rise to all the intellectual life of modern civilization.

§ 21. The work of Education being thus necessarily split up, we have the distinction between general and special schools. The work of the former is to give general development—what is considered essential for all men; that of the latter, to prepare for special callings. The former should furnish a basis for the latter—*i. e.*, the College should precede the Medical School, etc., and the High School the Normal. In the United States, owing to many causes, this is unfortunately not the case.

The difference between city and country life is important here. The teacher in a country school, and, still more, the private tutor or governess, must be able to teach many more things than the teacher in a graded school in the city, or the professor in a college or university. The danger on the one side is of superficiality, on the other of narrowness.

§ 22. The Education of any individual can be only relatively finished. His possibilities are infinite. His actual realization of those possibilities must always remain far behind. The latter can only approximate to the former. It can never reach them. The term “finishing an education” needs, therefore, some definition; for, as a technical term, it has undoubtedly a meaning. An immortal soul can never complete its development; for, in so doing, it would give the lie to its own nature. We cannot speak properly, however, of educating an idiot. Such an unfortunate has no power of generali-

zation, and no conscious personality. We can train him mechanically, but we cannot educate him. This will help to illustrate the difference, spoken of in § 14, between Education and Mechanical training.

We obtain astonishing results, it is true, in our schools for idiots, and yet we cannot fail to perceive that, after all, we have only an external result. We produce a mechanical performance of duties, and yet there seems to be no actual mental growth. It is an exogenous, and not an endogenous, growth, to use the language of Botany.⁹ Continual repetition, under the most gentle patience, renders the movements easy, but, after all, they are only automatic, or what the physicians call reflex.

We have the same result produced in a less degree when we attempt to teach an intelligent child something which is beyond his active comprehension. A child may be taught to do or say almost anything by patient training, but, if what he is to say is beyond the power of his mental comprehension, and hence of his active assimilation, we are only training him as we train an animal (§ 14), and not educating him. We call such recitations parrot recitations, and, by our use of the word, express exactly in what position the pupils are placed. An idiot is only a case of permanently arrested development. What in the intelligent child is a passing phase is for the idiot a fixed state. We have idiots of all grades, as we have children of all ages.

The above observations must not be taken to mean that children should never be taught to perform operations in arithmetic which they do not, in cant phrase, "perfectly understand," or to learn poetry whose whole meaning they cannot fathom. Into this error many teachers have fallen.

There can be no more profitable study for a teacher than to visit one of these numerous idiot schools. He finds the alphabet of his professional work there. As the philologist learns of the formation and growth of language by examining, not

⁹ Perhaps, however slow the growth, there is real progress in liberating the imprisoned soul (?)

the perfectly formed languages, but the dialects of savage tribes, so with the teacher. In like manner more insight into the philosophy of teaching and of the nature of the mind can be acquired by teaching a class of children to read than in any other grade of work.

BOOLE'S LOGICAL METHOD.

BY GEORGE BRUCE HALSTEAD.

Perhaps the possession of absolute originality cannot be better demonstrated than by breaking through the barriers inside which men have hitherto worked, pushing boldly into what was supposed to be outer void and darkness, and, without hint, without help, opening broad roads and showing fertile fields for wholly new, unsuspected sciences. This did George Boole in more than one direction.

The vast Invariantive Algebra, which is now the foundation rock of modern advance in mathematics, was started by him. Says Salmon (3d ed., p. 103): "What I have called Modern Algebra may be said to have taken its origin from a paper in the *Cambridge Mathematical Journal* for November, 1841, where Dr. Boole established the principles just stated, and made some important applications of them."

Of the same epoch-making character were his extensive contributions to the Calculus of Operations. Again, in 1862, Russell said before the British Association, in regard to the Calculus of Symbols: "It received a fresh impulse from the very remarkable memoir of Prof. Boole (on a 'General Method in Analysis.' *Phil. Trans.*, 1844), in which an algebra of non-commutative symbols was invented and applied." He found many willing and able to follow on these roads, and to settle in the new lands thus laid open; but when, in 1847, he struck the key-note of a generalization of logic, which exhibits it as almost a new science, he seems to have advanced too far beyond his time, and so was left to carry it on alone, which he

did in his great work, "The Laws of Thought," published in 1854. That this, at the present moment, instead of being a thing of the past, is just beginning to attract that attention so well deserved by its extraordinary originality and suggestiveness, carries a plain inference in regard to the character of the mind capable of producing it, unaided, a quarter of a century ago.

What, then, was his generalization, and what the method he proposed for the solution of the general problem?¹

The problem may be very compactly stated, but we cannot guarantee that the reader will be able at once to appreciate its full significance. It is: "Given any assertions, to determine precisely what they affirm, precisely what they deny, and precisely what they leave in doubt, separately and jointly." Or, as Boole himself puts the "statement of the final problem of practical logic. Given a set of premises expressing relations among certain elements, whether things or propositions; required explicitly the whole relation consequent among *any* of those elements, under any proposed conditions and in any proposed form."

That this is vastly more general than anything ever attempted by the old logic, needs no pointing out. Its startling breadth makes it seem, at first, absolutely insoluble. To illustrate this, suppose Boole had, as many cursory readers have supposed, made logic depend on the solution of ordinary algebraic equations. With the world of mathematicians to aid him, he could never have solved his problem; for from its very essence it can make no restrictions as to the number or degrees of equations, and mathematicians have never been able to find a general solution for even the equation of the fifth degree, while some of their greatest have given demonstrations of the impossibility of such solution.

¹The *Revue Philosophique* for September 1877, contains an article thirty-three pages long on "La Logique Algébrique de Boole," by Louis Liard. It is, for the most part, simply a translation of so much of the original, blunders included, into French. Number IV of *Mind*, October, 1876, contained an article of twelve pages on "Boole's Logical System," by J. Venn. This we enthusiastically recommend to our readers. We only wish it had been three times as long, and that the author had entered somewhat more into detail.

In going on to state how Boole actually did accomplish his purpose, we are met at the outset by a difficulty in the shape of a familiar word, which, as used by him, has been by prominent logicians disastrously misconceived. His critics have always used the term "mathematics" as dealing essentially with quantitative specification, and have drawn their arguments from the supposition that Boole was using the term in that sense. Even his friends have made their fight on this assumed line; which accounts for R. Harley's saying "Logic is never identified or confounded with mathematics," and for Mr. Venn's saying "The prevalent notion about Boole probably is that he regarded logic as a branch of mathematics. This is a very natural mistake."

Boole himself says, p. 11: "Whence is it that the ultimate laws of logic are mathematical in their form;" and, p. 12, says again of logic: "But it is equally certain that its ultimate forms and processes are mathematical." The key to the difficulty is contained in one short sentence, which should have been printed in capitals: "It is not of the essence of mathematics to be conversant with the ideas of number and quantity."

This simply means that Boole felt strongly the need of some word broad enough to cover the range of sciences expressible by algebras, and thought the facts justified his taking the old word "mathematics" for such a signification.

He says, in regard to it: "The predominant idea has been that of magnitude, or, more strictly, of numerical ratio." * * * "This conclusion is by no means necessary. We might justly assign it as the definitive character of a true calculus; that it is a method resting upon the employment of symbols, whose laws of combination are known and general, and whose results admit of a consistent interpretation." In this sense he chooses to use the word "mathematical," and in this sense his symbolic logic is as much a branch of mathematics as the ordinary algebra of number.

His broadened use of the word has been accepted by some as meeting a real want, among whom we may mention Profes-

son Benjamin Pierce, who adds: "Qualitative relations can be considered by themselves, without regard to quantity. The algebra of such enquiries may be called logical algebra, of which a fine example is given by Boole." By bearing in mind this point we may avoid this pit, which seems to have rendered dangerous all approach to the work under consideration, and into which Stanley Jevons was one of the first to fall.

In any algebra the laws of combination of symbols are all-important. Upon these depend its particular character and the validity of its processes. So here, in seeking to discover the most natural algebra for logic, though we may convene to represent by letters, x, y, a, b , etc., all ordinary logical classes, we must determine how they combine formally, by careful consideration of the intellectual operations implied in the best use of language as an instrument of reasoning. All thought postulates: I. The law of Identity: $x=x$. II. The law of Contradiction: It is impossible for any being to possess a quality and at the same time not to possess it. III. The law of Excluded Middle: Everything is either x or not x . Reasoning on classes postulates also the axiom: IV. Whatever is predicated of a class may be predicated of the members of that class. Had Boole only referred to these openly, instead of making use of them unconsciously, he would have saved himself a vast amount of trouble and some positive error.

Convening, then, to represent any class by a letter—as, men by a and good things by b —we see that, when these are combined in thought or language, one acts as a selective adjective, and that, whichever this be, the result is the same; so that ba , or "good men," gives us the same collection of individuals as ab , or "human good beings." Using the sign $=$ as meaning, in the most general way, identity, co-existence, or equality, we say $ab=ba$. "We are permitted, therefore, to employ the symbols x, y, a, b , etc., in the place of substantives, adjectives, and descriptive phrases, subject to the rule of interpretation that any expression in which several of these symbols are written together shall represent all the objects

or individuals to which their several meanings are together applicable, and to the law that the order in which the symbols succeed each other is indifferent."

Again, to form the aggregate conception of a group of objects consisting of partial groups, we use the conjunctions "and," "or." Convening that the classes so joined are quite distinct, so that no individual is added to himself, we see that these conjunctions hold precisely the same position *formally* as the sign $+$ in the ordinary algebra of number, and, therefore, are represented by that sign. As the order of addition is indifferent, we have $x+y=y+x$; and, from IV, $z(x+y)=zx+zy$. Again, to separate a part from a whole, we express in common language by the sign "except" ($-$), as, "All men except Asiatics." This is our minus. As it is indifferent whether we express excepted cases first or last, we have $x-y=-y+x$, and, from IV, $z(x-y)=zx-zy$.

So we may at once affirm for our logical algebra the validity of the three general axioms:

1. Equals added to equals give equals.
2. Equals multiplied by equals give equals.
3. Equals taken from equals give equals.

Though each of these may be demonstrated for the algebra of logic entirely independently of even the existence of any such thing as the algebra of number, yet we see it actually turns out that, so far, the two algebras are *formally* identical. This may lead the reader to wish that this formal identity had held throughout, so that he might have interpreted his quantitative mathematics directly as so much logic, just as the *same process* may, under one scheme of interpretation, represent the solution of a question on the properties of numbers, under another, that of a geometrical problem, and under a third, that of a problem in dynamics or optics. But let me repeat that, if no different operative law had manifested itself, the algebra of logic, like that of number, would have been stopped short at the equation of the fifth degree, and so its general problem could never have been solved.

Just as the algebra of quaternions differs in one fundamental law from the algebra of number, namely, in its multi-

plication being non-commutative, so that ab does not equal ba , so our algebra of logic differs in a law equally fundamental, and from this difference comes the power that, in it, every equation can be solved and every solution interpreted.

The real nature and unavoidable character of this law in our new algebra depend upon the general postulates of thought which we have given; but, unfortunately, Boole, groping in the darkness of a dawning subject, introduced the matter upside down, and so was led into a curious error. He commences thus, p. 31: "As the combination of two literal symbols in the form xy expresses the whole of that class of objects to which the names or qualities represented by x and y are together applicable, it follows that, if the two symbols have exactly the same signification, their combination expresses no more than either of the symbols taken alone would do. That is, $xx=x^2=x$. The law which this expresses is practically exemplified in language. To say 'good good,' in relation to any subject, though a cumbrous and useless pleonasm, is the same as to say 'good.' Thus, 'good good' men is equivalent to 'good' men." Only two symbols of number obey this formal law. They are 0 and 1. Their natural interpretation in the system of logic is *Nothing* and *Universe*, which are the two limits of class extension. If from the conception of the universe, as consisting of "men" and "not-men," we exclude or subtract the conception of "men," the resulting conception is that of the contrary class, "not-men." Hence, if x represent men, the class "not-men" will be represented by $1-x$. And, in general, whatever class of objects is represented by the symbol x , the contrary class will be expressed by $1-x$, which we may write \bar{x} . Boole now goes on to make the blunder referred to, in gravely stating: "Prop. IV. That axiom of metaphysicians which is termed the principle of contradiction, and which affirms that it is impossible for any being to possess a quality and at the same time not to possess it, is a consequence of the fundamental law of thought, whose expression is $x^2=x$." As Mr. Venn has remarked, this "surely argues a strange inversion of order." Indeed, the inversion is so palpable that we are astonished to find Liard

repeating the error on page 292 of his article, where he says, "*Maintenant il est aisé de voir que l'axiome appelé par les logiciens principe de contradiction, et considéré par eux comme une loi primitive et irréductible de la pensée, est une conséquence de cette loi antérieure dont l'expression est: $x^2=x$.*"

But while the law $x^2=x$ should have been introduced as rather the effect than the cause of the principle of contradiction, yet I believe I am announcing an important discovery when I say that it is this law alone which has, so far, rendered division impossible in the algebra of logic, which in turn forced Boole to introduce the machinery and all the features which have been objected to in his calculus. I may add, in passing, that, having traced the difficulty to its source, I believe myself able to overcome it, and hope to publish my solution at no distant day.

To return to our author, he says, p. 36: "Suppose it true that those members of a class, x , which possess a certain property, z , are identical with those members of a class, y , which possess the same property, z : it does not follow that the members of the class x universally are identical with the members of the class y . Hence it cannot be inferred from the equation $zx=zy$ that the equation $x=y$ is also true. In other words, the axiom of algebraists, that both sides of an equation may be divided by the same quantity, has no formal equivalent here." He attempts no explanation of this anomaly, but makes it analogous to the case where, in the algebra of number, if, in the equation $zx=zy$, z can be 0, we cannot deduce $x=y$. Now, this is an eminently false analogy, only representing the case where z is the limiting class "nought," which, combined with any class, gives nought. Here the two algebras are completely analogous, but this is not at all the point we are considering. The special limitation in logical algebra is not caused by any one special class, like 0, but applies to every class and to all equations, and has nothing in the slightest degree analogous to it in the algebra of number. When he reverts to this matter again, p. 88, we see more conclusively that he has been able to think of no logical cause for it, and can only fall back on this false quantitative analogy. He says:

"If the fraction $\frac{e}{e}$ has common factors in its numerator and denominator, we are not permitted to reject them, unless they are mere numerical constants. For the symbols x, y , etc., regarded as quantitative, may admit of such values, 0 and 1, as to cause the common factors to become equal to 0, in which case the algebraic rule of reduction fails. This is the case contemplated in our remarks on the failure of the algebraic axiom of division," p. 36. Now, if there was no cause for the failure of the division axiom except the reduction of some factor to nought, there would be no cause for calling attention to the matter, and we might proceed to use division precisely as we do when treating of number, since a zero has precisely the same effect in both algebras.

But, in point of fact, Boole cannot use real division at all. If he chooses to write $ayz=xz$ in the form $a=\frac{xz}{yz}$, he has not divided out any factor, and dare not. Even when he is certain z is not nought he cannot divide it out, which demonstrates instantly the falsity of his analogy. The real cause is the existence of the law, $xx=x^2=x$, in the logical algebra, which has no counterpart in that of number. That this is the true explanation appears very simply, as follows: If we have an equation in which a common factor appears in both members, as, *e. g.*, $zy=zv$, this law renders it impossible for us to know how far the class z coincides with x , since it may run from absolute difference up to complete identity: so that, in dividing out z , we may always be leaving some or all of it behind in the remaining factor. For example, if all rational white men = all white rational animals, and we divide out "rational," we have, all white men = all white animals. Now, the fact that this is not true, that a white man is not a white horse, though both are white animals, does not depend upon anything becoming zero, but upon the fact that on one side some of the meaning of rational has been unavoidably left behind in the term "men," while the division succeeded in taking it all out of the other member of the equation. If we start with the simple truth, "All men are all the rational animals," that is, $m=ra$, we may multiply both sides by r and it

remains just as true ; becoming $rm=r^2a=ra \therefore rm=ra$. But, if now we attempt to divide out this r we just put in, it draws with it the original r from one member, while leaving it latent in the other member, and we have $m=a$, all men are all the animals.

This shows us why in Boole's system we cannot divide ; and when, remembering this restriction, we use the fractional form, we get expressions which often bear on their face no meaning or interpretation. These Boole transforms, by what he calls development, into forms always strictly interpretable. The fact of his conducting his reasoning thus, through mediate uninterpretable steps, has been the most serious objection to his system, yet he saw no other way to attain a perfectly general solution.

This development theorem, given on p. 73, Prop. II, "To expand or develop a function involving any number of logical symbols," contains, and has been made, the basis of Stanley Jevons' whole logical system. Utterly misconceiving his master's attempt to give a genuine algebra of logic, which should make it a progressive science like quantitative mathematics, Mr. Jevons has been entirely content with the general method of indirect inference by trials, which is given immediately by this one theorem of development. We cannot enter here into a discussion of the principles involved in this process of generalized dichotomy. Merely as a hint at its application, we treat the simple proposition we have been using, $m=ra$. To get at what this can tell us about animals we express a as a function of m and r : $a=\frac{m}{r}$. Developing, we have $a=\frac{m}{r}=f(m,r)=f(1,1) m.r+f(1,0) m.\bar{r}+f(0,1) \bar{m}r+f(0,0) \bar{m}\bar{r}$. From this, without trials, Boole proves that all animals consist of all men and some irrational things not men. But, if he would have consented to use trials in referring to the premises in every particular instance, he would not have needed the co-efficients of his expansion. Thus, since all men are rational, the second term, $m.\bar{r}$, strikes out ; and, since men are all the rational animals, the third term, $\bar{m}r$, strikes out, and we are left for animals only mr and $\bar{m}\bar{r}$, as before. This

satisfies Jevons. This he has adopted, and, as one instantly sees, it may be carried on without saying anything about expansion, and without putting the development in the form of an equation. For convenience, we may always use the same letters, taking as many as we need in regular alphabetical order, and denoting positive terms by capitals, and their negatives by small letters. In our example, let A = animal, B = man, C = rational, and, instead of developing only with reference to two terms, expand with reference to the three, and our constituents are eight in number, as follows :

1,	.	.	.	.	.	.	.	.	.	ABC .
2,	.	.	.	.	.	.	.	.	.	ABc .
3,	.	.	.	.	.	.	.	.	.	AbC .
4,	.	.	.	.	.	.	.	.	.	Abc .
5,	.	.	.	.	.	.	.	.	.	aBC .
6,	.	.	.	.	.	.	.	.	.	aBc .
7,	.	.	.	.	.	.	.	.	.	abC .
8,	.	.	.	.	.	.	.	.	.	abc .

Making our trial references to our premise, "all men are all the rational animals," 2, 3, 5, 6 strike out, and, selecting the terms left containing A , we have for animals only animals, men rational, and animals, not-men, not-rational, the same as before. If using, with Boole, the principle of quantification of the predicate, we express our premises in these same letters, the making of trial-references becomes purely mechanical, and thus Boole's theorem gave rise to Jevons' interesting logical machine. This, as a result, by the way, is certainly very charming, but the end and aim, a genuine satisfactory algebra of logic, should be kept steadily in view. It is overlooking this that makes even such an acute critic as Mr. Venn blame Boole for giving to the last process we shall mention, the process of getting rid of any terms we choose from our equations, the name "Elimination." Says Mr. Venn: "In each case no doubt a term disappears from the result, but the meaning and consequences of its disappearance are altogether distinct." Of course they are, but this is matter of *interpretation*, and to name the formal processes of a symbolic algebra according to interpretation would be in the highest degree unwise.

Here again our law of duality or simplicity, $x^2=x$, comes to our aid and makes the problem of elimination resolvable under all circumstances alike. In common algebra there exists a definite connection between the number of independent equations given and the number of symbols of quantity which it is possible to eliminate from them ; but, in the algebra of logic, from even a single equation an indefinite number of terms may be eliminated.

Here we will pause. We are now in position to see how it is that Boole's Logical Method can give an absolutely general solution to the final problem of practical logic. Its mode of application to every possible case is evident from the analogy of common algebra, and we may refer to the book itself for examples, instead of taking any here of sufficient intricacy to give any adequate idea of its astonishing grasp and power.

We have made no attempt at a complete presentation of the system. Our desire has been to call attention to the principles which rendered it possible, to show where its imperfection lies, to throw light on those points where his readers have been most apt to go astray, and to heighten the interest beginning to be widely shown in a truly wonderful work.

NOTES AND DISCUSSIONS.

SONNET TO THE VENUS OF MILO.

O peerless marble! bold had been the thought.
 When thou in nature's formless grasp didst lie,
 That thou couldst thus breathe forth divinity.
 Olympian glory, grace, and majesty.
 A subtle spirit, he whose touch hath wrought
 Thee into being; one to whom the sky
 With blue abysses, ocean's symphony,
 Flood, forest, vale, declared harmoniously
 The gladsome reverence which nature felt
 For the great thoughts which pulsed within his soul.
 He was the monarch: she submissive knelt,
 And knew her glory was her lord's control.
 So must we kneel with reverence in thy sight;
 In thee the finite touched the Infinite!

B. E. S.

AMHERST, MASS.

EMANUEL HVALGREN'S SYSTEM.

[We have received, from the philosopher above named, a syllabus of his lecture on the "Being and Existence of God and the World." In Vol. VIII, p. 285, we have noticed his "Theocosmic System."—Ed.]

A. THE IDEA SPIRIT: THE GODHEAD (ABSOLUTE FREEDOM).

Arguments for the Existence and Essence of God.

1. If God is not, He must have Freedom not to be. God is not; therefore He must have Freedom not to be.
2. If God is, He must have Freedom to be. God is; therefore He must have Freedom to be.
3. From this it follows that Freedom is the ground and condition for the non-being, as well as the existence, of God; and, consequently, higher than the common notion of God, whether as merely an unconscious *abstractum* or as self-consciousness (personality).

4. But, as not any notion can be higher than God, and Freedom is demonstrated to be the highest notion or principle, Freedom itself is God.

5. These arguments will, therefore, remain valid as long as the logical and mathematical laws of thought and nature are valid. And, if these should be suspended by a higher law, this, again, must have Freedom for its presupposition, and, consequently, be Freedom itself.

B. SPIRIT: THE WORLD (RELATIVE FREEDOM).

Arguments for the Existence and Essence of the World.

These resemble the foregoing, and, consequently, the World is in absolute Unity and Identity with Freedom.

EMANUEL HVALGREN.

WARBERG, SWEDEN, August 15, 1877.

NOTES ON HEGEL AND HIS CRITICS.

We cannot help believing in the reality of pure thought, Hegel argues, in the Encyclopædia, no matter how thoroughly we may have schooled ourselves in the Cartesian scepticism. The *will* to think purely is all that is required of the beginner at the outset of the logic. Though it prove itself identical with being, pure thought is always the logical *prius*. Because it is first, and because, as any logical beginning must be, it is immediate, it is best represented as objective—as something given, to be observed or *speculated*, rather than controlled or comprehended. Here, as being and as essence, it is the most real of all realities; in short, it is substance itself, in its most self-subsistent nature.

In the logic of notion pure thought becomes its own equipollent subject, constituting the world in which consciousness lives and moves, and hence is the most ideal of all ideas—now not merely metaphysical, but transcendent. It is pure thought which is latent and determining abstract, in Hegel's sense, through all the stages of the Phenomenology, and which becomes articulated and explicit in the Logic. Thus, as the Neo-Platonists said of the relation between the Old and New Testaments, so we may say of the Phenomenology and the Logic: In the first the last lies concealed; in the last the first stands revealed.

There is no *jenseits* to the logician who has reached the perfect *entelecheia* of *für sich*. The picture is the curtain which seemed to hide it. Pure thought, then, which seemed so easy because it is so spontaneous and inevitable, proves in the end infinitely hard, because, as Michelet explains, not only are all the phenomenal stages of consciousness presupposed, but because the universal whole of thought is involved by the severest logical necessity in its simplest act. Pure thought, then, is not so much a dominant category in Hegel's system as the warp, which does not in itself contribute to form or color, although *through* it all the categories are woven with harmonious and determinate sequence into ideal patterns of things.

Does Hegel's system require us to conceive of thought as pure in an improbable sense? This has been a central question in all Hegelian discussions. It seems evident that "a presuppositionless beginning does not require us to forego the use of concrete predicates," or "metaphors of sense and understanding," in characterizing it, nor forbid us to recognize any of the previous determinations of thought as we proceed. Indeed, it is perhaps more necessary for the dialectic than for the deductive method that it pause and verify at every step. Even Rosenkranz insists that the logic needs modifications because this was not sufficiently done by Hegel. Indeed, this is necessary not merely for the didactic success of any system, but it is perhaps the highest philosophic motive, for no speculation was ever truly satisfying to the philosophical impulse, or even very convincing as a mere act of first intellection, before it was brought into manifold and harmonious relations to common thought and things. But, on the other hand, if what claims to be a pure geometry of thought is found to be merely description of particular objects of thought—if *idola fori*, or the *Zeitgeist*, or empirical science are found to have furnished centers about which thought has accreted, instead of crystallizing into its own free forms, then it is impure, in a sense fatal to many cherished results of Hegelism.

Space, in Hegel's system, is derived only in the philosophy of nature as the first result of the creative resolve of the absolute idea in its pure freedom to become objective to itself. It is thus the other-being of spirit, the external as such, and in itself, without farther determination. While later, space and time, by their own imminent dialectic, become, as sublated, matter. Before this, quantity and measure, and even attraction, repulsion, and mechanism, are all characterized in the logic as non-spacial. It is evident, without discussion, that Hegel is no mathematician, and that this description of the origin of space is inadequate to the most important of all logical transi-

tions, viz., from the subjective-intensive to the objective-extensive. This will at least be admitted by those who realize the complexities in which this, the central question of all recent psychology, is involved.

Pure vacuous space—is it something or nothing? We may even say that this is at the same time a real and a logical question. Substituting the word “space,” first, for “being,” then, again, for “nothing,” in the large logic, we have, without a single change in the phraseology or illustration, a discussion of the above question. Like being, space is undetermined; like only to itself, cannot be known by means of any determination or content which can be distinguished in it, or out of it. It is, in short, nothing which sense or understanding can apprehend. It is perfect emptiness, or self-determination, and thus neither more nor less than nothing; though we cannot add of space, as Hegel does of being=nothing, that it is empty perception or thought itself. This, especially if we were to accept Werder’s interpretation that nothing is, as it were, the memory of the vanished being, and, therefore, something additional to it, simply shows how sublimated and impossible is the thought here postulated. Will it be said that space is merely an illustration of pure being? If so, as the above are all *the* attributes of being and nothing, and as they belong to space, have we not a perfect identity? Where are the *differentia*?

The grounds upon which space is identified with being are far more logical than those by which thought and being are identified. Hegel’s reasoning may be put as follows: Pure being is indeterminate, simple, immediate. Pure thought is indeterminate, simple, immediate. Therefore, thought is being. This violates two principles of logic. Two negative premises are made to yield a conclusion; and, secondly, that conclusion is positive when it should be negative, because the syllogism is in the second figure. In other words, Hegel starts with two *tabulae rase*, and, because they are alike in being *rase*, he infers that the two *tabulae* are identical. While we insist that there is but one conceivable *tabula* which is absolutely *rasa* in the universe, and that that is simply space, which thought tries to apprehend—now positively, as a condition and *prius* of all things; now negatively, as the absence of all content or determination.

When we remember how the Eleatics denied the existence of not-being, or, as we should say, failing to see the dialectic nature of the notion of space, made it more real than its content; or how the Vedic consciousness, abstracting all sensuous content, hypostatized emotional factors as its content of unlimited potentiality, the great merit of Hegel’s characterization must be admitted. We prefer to stand,

however with C. H. Weise. who, in his metaphysics, breaks with Hegelism by arguing that everything that is real and necessary must submit to the categories of space.

If Hegel's being were the mere infinitive of the copula *is*, as Erdmann thought, not only would whatever copulative force it might retain still presuppose two terms to be connected, but it is impossible to empty the word of all notion of existence. Of course, the phrase *nothing is* must be purely negative here. The *is* has no shadow of substantive quality about it. It has manifestly even less meaning than in such a phrase as *abracadabra*, which has no sort of existence, *is*. The predicate of the phrase *being is*, on the other hand, has, in spite of us, a positive substantive meaning. In characterizing or thinking *being*, we cannot escape the subtle connotations of the predicative verb; while, in thinking *nothing*, all reference to even its copulative function is, by hypothesis, excluded. We cannot escape the conviction that, though no doubt Hegel understood this distinction well enough, he has unconsciously *punned* upon two words which really have nothing in common except form and grammatical function.

Again, we may substitute for being and nothing, in the Hegelian equation, space with any homogeneous content, and it "solves and proves" quite as well; for instance, ether—Lucretian atoms uniformly and infinitely diffused, undifferentiated nebula—anything which will serve as a background for the cogitable universe, even if it be so only in terms of sight and touch, it does quite as well. Are, then, intension and extension convertible terms instead of dialectic opposites, or have we here only an artificial abstraction from sensation? Hegel is fond of showing us that no more could be seen in pure unbroken light than in darkness, but how shall we explain his denunciation of Newton as a barbarian, who might as well have said water was made of seven kinds of dirt, as light of seven colors? Surely it was not because Newton had marred a mere metaphor of the Hegelian logic.

Leibnitz was the first to say that all science that could be *proven* must be referred to spacial intuitions. Schopenhauer has shown that many qualitative relations of thought may be best expressed diagrammatically. J. H. Fichte argues that space depends on a peculiar feeling of extension "inseparable from self-consciousness and grounded in the objective nature of the soul." The mechanical logic of Boole, and even that of Ueberweg, are founded upon the idea that as inference becomes certain it is best formulated by quantitative symbols. F. A. Lange, however, has attempted to show at some

length that, after excluding modality, a spacial formularization in thought is always necessary when we would assign a general validity to any particular logical form. Thus, all the true may be best distinguished from all the fallacious forms of the possible syllogism by means of the spacial inclusion or exclusion of circles. Although syntactical forms furnish the most striking and suggestive illustrations of the innateness of these spacial determinations, was it not upon such geometrical references, far more than upon grammatical relations, that even Aristotle was led to infer the apodictic nature of syllogistic reasoning?

One interpretation of pure being makes it the same as the simplest psychic process. This is precisely what Hegel attempts to describe at the beginning of the *Phenomenology*. "Mere being," we are there told, "is an immediate delivery of sensuous certainty, but as the first object of consciousness it is identical with the abstract *now* and *here*." This is precisely the view of recent psychology, and accords with the verdict of perhaps most post-Hegelian speculation. "Thought," says Ueberweg, "must be free from the compulsions of experience, but not void of experience." "Thought without presupposition," argues Ulrici, "reverses the possibility of things." "Pure abstraction," says Schelling, "must always presuppose that from which abstraction is made." "Reason," says Schopenhauer, "is of feminine nature. She can give only what she has received. Her conceptions are never immaculate." "No concept-form" (*Begriff*), Hodgson urges, "can ever grasp the infinite, but can only reach the conviction that there is something beyond its power to grasp, and this something we call ontological, because, and so far as, we feel that thought does *not* correspond to things." In other words, intension, as divorced from extension, is inconceivable. Schleiermacher's argument is that dialectic reason must always rest upon the double basis of inner and of outer perception, and Kuno Fischer, in his Hegelian period, understood Hegel to mean that the shadows of earlier perceptions might enter and determine the dialectic process.

Our conclusion, then, is, not that pure thought is demonstrably unknowable or unreal, but only that it was as unknown to Hegel as it is to the rest of us thus far; that what he has characterized is neither single, immediate, nor extraneously undetermined. The fact that the Idomedian eye—which Reid supposed to exist by itself, and to perceive the world as it would look if sight were absolutely uninstructed by experience or by the sense of touch—was unreal, does not forever disprove the possibility of something that we may poetize about as pure vision. If we close the eye, we have a dim sense of spacial

extension, over which the retinal darkness is spread—something, as Hegel assumes, the mind, emptied of all the products of sensation, has a consciousness of being and nothing; but the one feeling as well as the other is a mere residuum of experience, and not the undifferentiated substance out of which experience is made. If color had no objective ground, but were, as Schopenhauer argues, only a physiological phenomenon, dependent for hue on greater or less quantitative activity of the retina, and for intensity on the amount of its undivided residual energy, then we should have something in the world at least analogous to Hegel's pure logic of quality. But even this is far more demonstrable.

Pure thought, then, in the sense required by Hegelism, we regard as a postulate, or rather an hypothesis, of logic, and not as an established verity, and still less as demonstrably identical with being.

But even this is not the greatest difficulty with the first triad. Thus far all is static, motionless. Pure being is as seductive to the rest-seeking reason as *Nirvana* to a world-sick soul. But where comes the vital, moving, evolving principle? Such random categories as matter, space, substance, being, are members of a very different order from such as cause, force, becoming, and the like. Whether because these last are based upon time, as the first upon space, we will not here pause to ask. However this may be, it is certain that *esse* and *feri*, *stasis* and *dynamis*, are, as it were, the two poles of all thinking. Whence, then, comes the last? Logic, at length, has come to adequately recognize Leibnitz's dynamic negative as a universal determinant. But we have still to urge that an absolute *nihil privitivum* is not the presence, but the denial, of all possible determination or predication. If universal being *is* in pure thought, or otherwise, then non-being is not, else being is relative and finite. However, whatever or so far as being is, non-being is not. This is purely logical negation, or the mere denial of what the first or affirmative notion arrested, without in any way implying anything else in its place. Opposition is here equivalent to diametrical contradiction, and the application of the method of the excluded middle is undoubted. Hegel cannot, then, have meant that being and nothing are logically opposed, or else becoming, as their synthesis, would be forever impossible. But if we define *real* opposition, with Trendelenburg, as the denial of an affirmative notion, by another affirmative notion, so far as they must be mutually related, what have we, then, but the obverse side of Mill's "associative impulse," or a new and somewhat quaint illustration of the doctrine of relativity. Nothing, like being, is positive only; it is in a new relation, and the dialectic process, instead

of being in any sense genetic, is as capricious and arbitrary as the psychological factors of attention. In fact there is no contradiction whatever, save in the Herbartian sense of mere difference.

Trendelenburg's question is still more searching. How does thought get from its first affirmative term to its second denying affirmation? It can only be by reflection from sense or understanding. "The nothing is attained by comparing the pure being of thought with the full being of sense-perception."

But we must not forget that being and nothing are not affirmed to be absolutely identical. We are not required to say both yes and no to the same question understood in precisely the same sense, else there were no possibility of becoming. If A equals A, it cannot become A in any real sense. Everything flows, said Heraclitus, because it is and is not at the same time. Only movement is and is not at the same point and moment, said Trendelenburg, and so movement, understood in the most generic sense, as common to thoughts and things, and not becoming, is what is motivated here. But motion is an original factor, of a new species. It is, even Trendelenburg admitted, the existing contradiction which formal reasoning easily proves impossible. Thus, contradictions *are* overcome, though all static logic is powerless to tell how.

If the problem of creation were absolutely indeterminate, if the atoms of the Lucretian rain had been infinitely diffused, or had not swerved from the straight equidistant lines of their course, "there could have been no law, even of gravity, for its existence depends on the distribution and collocation of matter." These would have eternally remained an infinite equation of possibilities, every element perfectly poised and balanced, an infinite here, an eternal now. In language less mathematical and more familiar, the homogeneous is unstable, and must differentiate itself. But why, if purely homogeneous, can it be unstable, and whence comes the *must*? Formal logic, which deals with ready-made ideas, can always prove development impossible, for every sort of creation must be regarded as the irruption of an extraneous power into the realm of its Saturnian repose.

Thus it is that the necessity of an empirical principle is demonstrated, which must be at the same time simple and universal. Now, psychological analysis and physiological investigation concur in designating motion as such a principle. Vierordt, and Exner, and others have shown some reason for believing that the perception of motion is the only immediate sensation, and, unlike other rudimentary psychic processes, not founded on unconscious inferences of any sort. The sense of motion, it is claimed, is the quickest, the most minute,

most primitive sensation of animal life; out of it all the higher faculties of the soul are developed, and in many common delusions of muscular and other feeling we may still detect its original forms, uninterpreted—indeed, almost forgotten—by adult consciousness. The facts upon which these inferences rest are, it need hardly be said, far too few to warrant any positive conclusion of this sort.

But shall we then urge, with Trendelenburg, that movement, in a broader sense, is the only aspect common to both thought and being—is the *prins* and the medium of all experience? Because, he argues, the original activity of mind is best described as the counterpart of material motion, knowledge of the external world is possible and valid, though it is imperfect so far as this analogy fails.

Because of this common term ideal, *a priori* categories are possible and valid in experience. Time is the internal result, space the external condition, of movement. If we are asked to explain light, heat, electricity, chemical change, the laws of physics or astronomy, the mode in which mind acts on matter, or the essence of either, or even the way in which the idea of a line, a surface, or a sphere, or a logical conception, arises in the mind, we can only reply in terms of movement in time. Molar is explained by molecular, known by hypothetical motion. Yet movement, which explains all things, is itself unexplained and undefined. By it all things are known. It must be self-known. If we try to *derive* movement, or construe it into non-motive terms, we are like a blind optician, who does not realize that sight can be understood only by seeing.

Here we shall at once be met by the objection that movement in thought and physical motion have nothing in common but the name. We grant at once that succession in consciousness and objective sequence are two very different, and perhaps quite incommensurate, series, but as soon as one psychic term follows another in the same *order*, as the corresponding objective term follows its antecedent, we have, if not as Chauncy Wright argued, the very beginning of consciousness—at any rate, *pro hac vice*, the truest form of knowledge; for what is causation but the postulation of something in the bond that joins two things, that is common with the bond that joins two thoughts, or *vice versa*?

We quite agree with Hegel that we may be said to know a thing, even the mind itself, most truly when our thought has followed all its changes in time, or has traced all its processes above, but we insist that the dialectic method is in no real sense genetic.

It is easy to conceive the external world as real, or as ideal, but impossible to conceive the *order* of the terms which common con-

consciousness ascribes to it as real, as the reverse of that ascribed to it as ideal. Philosophy may still find pleasant pastime in resolving the universe into all-object or all-subject, but has she not a higher destiny than to amuse herself with this see-saw of reality and ideality, in despair of ever getting out of the labyrinth in which the theory of knowledge has entombed her, remote from the common life of men and dead to the issues and impulses of science? May not pure idealism read a wholesome warning in the fate of the obsolescent materialisms of the past, infinitely superior as it is in every way to them? Are mind and matter mutually exclusive or contradictory? Must the world be all one or all the other, or is there much that is common to, yet more than, both, as yet known? These are the questions which psychology has made pertinent, though it is as yet by no means certain that it can ever answer them. Its suggestions thus far may be briefly epitomized.

The simplest elements of sensation that common consciousness recognizes, and which seem immediate and instantaneous, are yet resolvable into a series of yet more ultimate states. The simplest act of vision, for example, is a whole cosmos of such psychic elements. Each of these changes has at some point of the nervous system, as a counterpart or background, some demonstrable form of molecular or electrical change. Now, if pure sensations may be described as an immediate knowledge of physical states; if æsthetic feelings, or pleasure and pain, are conditioned at all by the nutritive state of nerve fibres; if the muscular sense is an *a priori* knowledge of relative position or motion of parts of the body; if organic sensation, or the feeling of general depression or elation; and, above all, if Wundt's hypothesis of the direct consciousness of innervation registering accurately every increase or expenditure of nerve force be allowed, then, surely, those elements are not *unconscious*, but are the most innate forms of self-consciousness—the mother-tongues of sensation—from which all the functions of sense-perception are developed, along with the form of sentient organism, by intricate processes of extradition and *intradition*, if the word be allowable. A primitive immediacy, or absolute identity of subject and object at some point back of all of individual experience, perhaps, is thus postulated. That mind and matter may even be proven identical to the understanding, will, of course, seem a forlorn hope. It is so; but is not the alternative for philosophy still more forlorn? Of course, to all who do not thoroughly prefer the pursuit to the possession of truth, the assurance of Hegel that the problem of things is essentially solved, or even the confessed nescience of Spencer or the new Kan-

tean school will seem far more philosophical than such a mere programme of long investigations yet to be made—a programme that must itself, no doubt, be re-cast again and again with every new discovery. But does not psychology, as well as the history of philosophy, teach us that the outstanding questions of thought have always seemed settled in proportion as men's minds were shut, or as they confounded the limits of their own individual development or culture with the limits of possible knowledge? If the truth-loving reason is not to be satisfied with ever deeper insights, in a ratio corresponding to its own increasing power—if, as Tyndall intimates, its essential principles of science are all found out—nothing remains but to pigeon-hole all the details of knowledge.

The world in which thought lives and moves is but little better than a dead moon, and pessimism, the true devil-worship of philosophy, is inevitable. The apparent achievements of individuals were never less, but the real work done in philosophy was never greater or more promising, than now. It is for her to ask questions, and rarely, indeed, is it permitted her to answer them, save by other questions, broader, more earnest and searching. Philosophy is no longer a guild, or even a profession, so much as a spirit of research inspiring many specialties. It is because physiological psychology, with true Socratic irony, dares to take the attitude of ignorance toward both a positive philosophy and a yet more positive science, while it puts the same old question of philosophy in such new, tangible terms, and with such a divine soul of curiosity, that we love its spirit, and hope much from its methods. Nothing, since the phenomenology, which seems to us to contain the immortal soul of Hegelism, is so fully inspired with the true philosophic motive.

In creating and using a technical language, Hegel is unsurpassed throughout the logic. He is a master of illustration and of clearness in detail. If the maxim, *bonus grammaticus, bonus theologus*, were true of the philosopher, there would be little left to desire. But the trouble lies far deeper than style. Numerous as his school has been, no two Hegelians understand their master alike. Gabler says Trendelenburg's misunderstanding of him is inconceivable; while Michelet says Trendelenburg understands him better than most of his followers, but that Zeller's misconceptions are "monstrous." Stirling describes Haym's ignorance of Hegel's meaning as strange and inconceivable. Michelet considers that the greatest error of Krause, Herbart, and Schopenhauer is in fancying that they are not true Hegelians, while in a recent pamphlet he says—in emulation, perhaps, of Hegel's assertion that only animals are not metaphysicians

—that all who think must be Hegelians. Gans thinks the dialectic method is an instance of pure deduction. Gabler says the idea created being out of itself; while the young, or left, Hegelians assert that the idea is God immanent, not so much in the world-process, or the race-consciousness, as in the individual soul.

But it is not concerning the logic so much as the philosophy of rights, æsthetics, and especially of religion and nature, that Hegelians disagree. Yet the impulse he gave to thought in these fields was unprecedented. The philosophy of nature, for instance, of which Trendelenburg, more wittily than truly, said that it might claim to be a product of pure abstract thinking more justly than the logic, and which, when the first editions of his works were sold, was most in demand, gave an impulse to natural sciences none the less philosophical, because, in the ferment which followed, Hegel's views were soon outgrown, and his method forgotten. As a mental discipline, then, as a wholesome stimulant of every motive of philosophical culture, and as the best embodiment of the legitimate aspiration of the philosophical sentiment, we have gradually come to regard Hegel's system as unrivaled and unapproached; yet, at the same time, as fatal as a finality, almost valueless as a method.

G. STANLEY HALL.

CAMBRIDGE, MASS., January, 1878.

SENTENCES IN PROSE AND VERSE.

FROM THE SANSKRIT.

Until he finds a wife, a man is only a half; the house not occupied by children is like a cemetery.

The housewife is declared to be the house. A house destitute of a housewife is regarded as a desert.

These women are by nature instructed, while the learning of men is taught them by books.

How can the conceit in one's mind be eradicated? The tittibha (a bird) sleeps with its feet thrown upwards, fearing that the sky may fall.

The place where the self-subduing man dwells is a hermitage.

Even when being cut down, the sandal-tree imparts fragrance to the edge of the ax.

Constantly, rising up, a man should reflect: "What real thing have

I done to-day? The setting sun will carry away with it a portion of my life.”

The kinsmen of the poor die away, even when the poor themselves continue to live. A stranger turns himself into a relation of the rich.

He whose time has arrived, if touched only with the point of a straw, cannot escape.

Hari was regarded by cowherds as a cowherd, and by gods as the lord of the universe.

A jar is gradually filled by the falling of water-drops.

The soul itself is its own witness; the soul itself is its own refuge.

Poor King Rantideva bestowed water with a pure mind, and went to heaven; King Uriga gave away thousands of cows, but, because he gave away one of another's, he went to hell.

Say, say, who are the deafest? They who will not listen to good advice.

Who is dumb? He who does not know how to say kind things at the proper time.

I know not if the essence of this world be ambrosia or poison.

O lord of the Yadus, and husband of Lakshmi, I ever spend my time in doing homage to thy lotus-feet.

That jewel, knowledge, which is not plundered by relatives, nor carried off by friends, which does not decrease by giving, is great store of riches.

There are many books—Vedas and the like; there are myriad obstacles in the way of success. Let a man strive to discover the essence, as the swan finds milk in water.

A son born of one's body, if faithless, is like an eating disease, and to be wrongfully deserted by one's children is the torment of hell on earth.

Men wish the *fruits* of virtue, not virtue. They desire not the fruits of sin, but practice sin laboriously.

As a lump of salt is without exterior or interior, but is all a mass of flavor, so this soul.

The seeker of knowledge can find no ease.

Not self-directing, a man yields to some current of evil impulse, as a tree which has fallen from a river-bank and has reached the middle of the stream.

FROM THE ARABIC.

It is easy to mount a little donkey.

If you can add anything to what you possess, it is of value—even a rusty nail.

The passage of a single rat is nothing, but it soon becomes a thoroughfare.

The candle shines not upon what is beneath it.

If you will cook the steak with words, I promise you kegs of butter.

Do good, and then drown yourself; God may do you justice, if the fish cannot.

One asked of the crow why he stole soap. Says he, "It comes naturally."

We invited him, and he brought a jackass to dinner.

If you like to have things look pretty, look at them in the dark.

If you buy meat cheap, you will smell what you have saved, when it boils.

The hen drinks, and stares at heaven.

I said to the ass, "God be with you." He answered: "If my master be with me, I am well enough with the rest."

The cock was called up to crow. Said he: "The sun respects my time, though it breaks him."

A tall man gets angry about nothing; a short one plays tricks.

Everything but Death can be cheapened; with him you need not expect to drive a bargain.

A man tumbled into a gutter. "Take this rose," said his friend, "and see how sweet it smells."

You will earn nothing by telling a blind man oil is dear.

If we are both drivers, which shall hitch the horse?

A right beginning is the right ending.

Moonlight and news need not be paid for; they travel *gratis*.

We were in love when parted; together, we hate.

Eyes not seen are soon forgot.

Profit and loss are business partners.

His friends would praise him, I believed 'em;

His foes would blame him, and I scorned 'em.

His friends, as angels I received 'em,

His foes—the devil had suborned 'em.

—Tennyson.

Le peu que nous croyons, tient au peu, que nous sommes.—*Victor Hugo*.

With some people everything means everything, and they put their whole heart's interest into each mouse-trap along the road.—*English novel*.

The stealthy, steady attraction of the earth is ever telling upon the

living body; we call the force that resists the earth vital. There is no proof that at birth the animal is endowed with a reserved force over and above what it obtains from food and air.—*B. W. Richardson.*

The fierce hyena, frightened from the walls,
Bristled his rising back, his teeth unsheathed,
Drew the long growl, and, with slow foot, retired.

—*Landor.*

The goddess Calamity is delicate, and her feet are tender. Her feet are soft, for she treads not upon the ground, but makes her path upon the heads of men.

Over men's heads walking aloft,
With tender feet, treading so soft.

—*Plato.*

God, if He be good, is not the author of all things. But He is the cause of a few things only.—*Plato.*

Evils, Theodorus, can never perish. There must always remain somewhat antagonist to good.—*Plato.*

It is well to come out of the city to admire the beauty of the world. But to be continually here, to be present at the baking of the johnny-cake, is not as interesting.—*Anon.*

I am Autolyceus, a peddler; I go up and down the country with my wares [lecturing].

Foreign travel is the deadliest *cholera Americana*.

I had been in the country, as I thought, and a lady began to talk about the Tyrolese Alps—a justice's wife, in a little village. After we are too old to travel, you observe, we spend our time railing at traveling.

You can tell me nothing of Pepys; I know him by heart.

He has great talent, but no root that runs down to the water. There is no flight.—*R. B.*

Sleep is wit.

'Tis a little gilding; they put a little butter in the spoon [golden-rods].

The English have astonishing productive force—more fullness, and are more complete. We are thin.

I have already lost her; I cannot follow.

Good taste does not consist in magnifying the little, but in the selection of good things that can be properly magnified.—*George Sand's Life.*

Shakespeare is the chief fact in modern history. Having this

Saxon, we need not eat grass. There are no names in Europe equal to those of a few Englishmen. Shakespeare on one side, and Newton on the other, for ballast. I care not what the character may be called—King John or Henry VIII. It is the sentences which transcend, in their expression, all we know, and that can never be read out. Age after age shall descend this golden legacy to the race, imperishably inscribed.

We have a set of boxes which we may unlock at pleasure in our minds. There are those who have not their feelings properly locked up in one close box, and their thoughts in another, and so they seem to me—a *mush*.

I had a visitor yesterday who left this cane behind, but I do not think I had a good bargain.

S—— did not love to die. He thought this earth a fine place. The clergy do not like to treat with ideals.

I love reading as well now as I ever did in my youth. Give me my book and candle and I am grateful to the universe.

Dr. Kendall became a handsome man in his old age; he was the beloved pastor of Plymouth. There is a certain saccharine quality that comes out in some aged people, as the sun sets in gold.

I know of nobody who says he is afraid of death, now-a-days. This fear was very important to our grandfathers.

The people are of little use to us. There is our friend ——, he seems full of pins. Why cannot he be sweet and pleasing, when it is easy? What is so cheap as politeness?

I think well of Goethe's saying: "If nature has given me such faculties, and I have employed them faithfully to the end, she is bound yet further to explain the questions which they put."

Yes, I know he needs cherishing and care! Yet who can care and cherish; we are so driven with our errands?

It were well if we could prick this monstrous puff-ball, with which life begins and is surrounded [egotism].

Herrick makes me nervous with the accounts of his lozenges, and the sores in his ears. But how excellent he is. He writes so well, and he knows it as well.

Each man has some one thing to do, which comes to perfection in him. It is organic from nature, and can only be done by him.

WM. ELLERY CHANNING.

CONCORD, MASS., October, 1877.

BOOK NOTICES.

THE UNIVERSE. By John Paterson, A. M.

This little pamphlet of twelve pages attempts a deduction of time, space, motion, heat, light, etc., on a purely mathematical basis. Its author exhibits subtle ingenuity, as well as grasp of ideas.

A. E. K.

HEAVEN AND ITS WONDERS, AND HELL. FROM THINGS HEARD AND SEEN. By Emanuel Swedenborg. Philadelphia: J. B. Lippincott & Co. 1877.

We can conscientiously recommend this new edition of the great Swedish seer's famous work as an excellent translation into English from the Latin original, neatly printed and bound, and rendered of more value than other editions by its carefully prepared indexes and foot-notes.

A. E. K.

UEBER DIE AUFGABE DER PHILOSOPHIE IN DER GEGENWART. By W. Wundt. Leipzig: Wilhelm Engelmann.

This is an inaugural dissertation, delivered by Dr. Wundt, at Zuerich, in 1874, on the task of philosophy at the present time, which he formulates as the aspiration after a unitarian, connected comprehension of the universe, which shall satisfy all the needs of the special sciences, as developed up to the present day.

A. E. K.

MUNICIPAL LAW, AND ITS RELATIONS TO THE CONSTITUTION OF MAN. By R. S. Guernsey, of the New York Bar. New York: McDivitt, Campbell & Co.

This lecture is altogether too short for the subject of which it purposes to treat. But the manner in which the author handles his subject makes us look forward with hopes of a more satisfactory treatment to a future work, of which he holds out promise.

A. E. K.

LIFE AND MIND; THEIR UNITY AND MATERIALITY. By Robert Lewins, M. D. Lewes: Geo. P. Bacon. 1873.

When a writer begins by telling his readers that "the non-existence of a vital or spiritual principle as an entity apart from the inherent energy of the material organism" is "one single, well-established physiological canon," it surely is useless for the reader to look for further proof of this well-established canon. We, therefore, gently close the *brochure*, and put it modestly aside.

A. E. K.

AN ESSAY ON SCIENCE AND THEOLOGY. By J. M. Kerr. Dayton, Ohio: United Brethren Publishing House.

One of the many attempts to establish a reconciliation between the Bible and physical science, which satisfy neither the believer in the direct inspiration of the Book of Books nor the student of physics. The task is as unprofitable as it is useless. It would afford quite as much instruction to prove that the Bible did not conflict with the modern theory of national finances, or with the science of European cookery.

A. E. K.

THE RELATION OF PHILOSOPHY TO SCIENCE. An inaugural Lecture delivered in the Convention Hall of Queen's University, Kingston, Canada, by John Watson, M. A., Professor of Logic, Metaphysics, and Ethics.

In this lecture Professor Watson shows that the relation of the science of Philosophy to the other special sciences is not one of opposition; as, indeed, it cannot be, since the special sciences, unless improperly treated, never enter the domain of philosophy. The lecture gives signal evidence of scholarship, as well as of original thought.

A. E. K.

NEUES FUNDAMENTAL ORGANON DER PHILOSOPHIE UND DIE THATSÄCHLICHE EINHEIT VON FREIHEIT UND NOTHWENDIGKEIT. Von Dr. W. Braubart. Neuwied und Leipzig: J. H. Heuser.

This is a rather ambitious title, and we question whether the work has effected so revolutionary a change in philosophical thought as its author seems to have anticipated. The pamphlet opens with a "psychological ground scheme," which fits the division of contents of the five styles of literature—*e. g.*, 1. The Sensory—description and narration; 2. The Understanding—didactic (style); 3. The Reason—incitement and direction.

SOUTHERN LAW REVIEW FOR JUNE-JULY, 1877. Published Bi-Monthly, by G. I. Jones & Co. St. Louis, Mo.

We would call particular attention to Judge J. G. Woerner's article in this number on the Jurisdiction of Probate Courts. Mr. Woerner, one of the best judges that has ever been elected to the Probate Court of St. Louis, is, moreover, a philosophical student of great industry, and is admirably fitted to speak of what he justly says is about to become generally recognized in this country as "an independent branch of the law, destined to achieve for itself a sphere of jurisdiction entirely *sui generis*, and based upon, and determined by, its own inherent principles."

A. E. K.

THE NATURAL THEOLOGY OF THE DOCTRINE OF FORCES. By Professor Benj. N. Martin, D. D., L. H. D. University of the City of New York.

There is one central truth in this lecture, delivered before the University Convocation, held at Albany, N. Y., August 1st, 2d, and 3d, 1871, to which the professor gives condensed expression, at the conclusion of his address, in these words: "All true science, therefore, involves both the knowledge of nature and the knowledge of man; it includes the study of mind as well as of matter." In other words, every student of a physical science must necessarily, to become a master of his special science, become also a student of the science of speculative philosophy.

A. E. K.

VIEWS OF NATURE AND OF THE ELEMENTS. FORCES AND PHENOMENA OF NATURE AND OF MIND. By Ezra C. Seaman. New York: Scribner & Co.

The aim of this *brochure* is thus stated by the author: "I have endeavored to combat as unsound the solar emission theory, as well as the vibratory ether theory of heat and light, the chemical theory of combustion, the chemico-mechanical theory of life and organization, and the material, or chemico-mechanical, theory of mind, and have presented, as worthy of consideration, the old material theory of caloric, the attraction theory of light, and of the action of caloric, the terrestrial theory of the sources of caloric, the calorific theory of ignition and combustion, the vital theory of life and organization, and the spiritual (*i. e.*, Christian) theory of mind."

A. E. K.

OUTLINES OF THE RELIGION AND PHILOSOPHY OF SWEDENBORG. By Theophilus Parsons. Boston: Roberts Brothers. 1876.

In this work Mr. Parsons attempts to give the outlines of the New Church, or Swedenborgian religion and philosophy, in the clearest and simplest manner of which the subject admits. To the admirers of Swedenborg, Mr. Parsons has for many years been favorably known as the author of "The Infinite and the Finite," "Deus Homo," and other works, all of which are written with admirable directness of purpose and clearness of style.

In the present work the author goes over the *whole* sphere of the New Church doctrines, which gives it special value to persons who wish to make themselves acquainted with all of Swedenborg's religious teachings, and yet lack patience to study them in the original writings. (The book is handsomely printed, of handy size, and cheap. Price, \$1.25.)

A. E. K.

ZWEI BRIEFE UEBER VERURSACHUNG UND FREIHEIT IM WOLLEN. GERICHTET AN JOHN STUART MILL. MIT EINEM ANHANGE UEBER DIE EXISTENZ DES STOFFES UND UNSERE BEGRIFFE DES UNENDLICHEN RAUMES. Von Rowland G. Hazard. New York: B. Westerman & Co. Leipzig: Bernhard Hermann.

Mr. Hazard's letters to John Stuart Mill, on the freedom of the will, of which this work is a translation, are too well known to our readers to need further recommendation from us. We can say, however, of the translation, that it is excellently done, and bespeak for it the attention of such of our German friends as prefer to read a work of this character in their own language. The translator is quite justified in giving his reason for rendering Mr. Hazard's work into the German language, as follows: "The admiration which Mr. Hazard has won by his works, even outside of the circle of his adherents, and which was shared by John Stuart Mill in a high degree, suffices to entitle him to a place in the foremost ranks of the metaphysical writers of the present day."

A. E. K.

HARTMANN, DUEHRING, UND LANGE. ZUR GESCHICHTE DER DEUTSCHEN PHILOSOPHIE IM XIX JAHRHUNDERT. Von Hans Vaihinger. Iserlohn: Verlag von J. Baedeker. 1876.

Mr. Vaihinger is, perhaps, known to our readers as an industrious contributor to the *Philosophische Monatshefte*. The present work is, like his article on the present condition of cosmology and that on the three phases of Czolbe's naturalism, the result of a series of lectures delivered by him before the Philosophical Society of Leipzig. It is a critical essay, in the main intended to elaborate the philosophical systems of the three men after whom the work is named, but giving ample chance for the representation of the author's own views. Hartmann is the representative of the Idealistic Pessimism of these days, Duehring figures as the exponent of Realistic Materialism, and Lange as the mediator of Scientific Criticism. The latter comes in for the larger share of Mr. Vaihinger's exposition. The work is well written, and shows both study and care, though it displays strong, and perhaps at times injudicious, partisanship.

A. E. K.

GEORGE STJERNHJELM. THE FATHER OF SWEDISH POETRY. By Prof. Bernard Moses. Extracted from the *Methodist Quarterly Review* for October, 1875.

We doubt whether this pamphlet of Professor Moses (now of the University of California) will meet appreciation amongst the American students of Swedish poetry. There may, however, be another claim to the interest of students, in Stjernhjelm's scientific attainments, to which Atterborn ("Siare och Skalder") gives expression as follows: "He saw in our world, in all its shifting forms, an

unbroken symbolical revelation of the Divine; and *even in mathematics a hieroglyphic in which the initiated finds the key to the glory of that higher knowledge, that jewel of wisdom—the necklace of Minerva.*”

It is well known to all who have studied Swedenborg's works in their entirety that his great glory rests in his scientific works, which his religious followers seem persistently to ignore. And it is strange, though characteristic enough of human perversity—as Edgar A. Poe would call it—that Stjernhjelm's claims on the recognition of his fellow-men should be based by his admirers, not on the services he rendered to physical science, but on his achievements as the Father of Swedish Poetry.

A. E. K.

PHILOSOPHISCHE MONATSHEFTE. Leipzig: 1876. Dr. E. Bratuscheck, Editor.

With this twelfth volume of the *Monatshefte*, Dr. Bratuscheck, who has been the editor for the past four years, and conducted it, under very adverse circumstances, with remarkable success, retires from his post, his successor being Professor Schaarschmidt, of Bonn.

The present volume is full of interesting matter. Among the more important articles we may mention: The Significance of Philosophy, by J. H. v. Kirchmann; Mechanism and Teleology, by A. G. Todtenhaupt; Concerning the First Principles, by A. Spir; Spinoza as Monist, Determinist, and Realist, by Opitz; Plotinus' Doctrine of Beauty, by Dr. H. Mueller; and Plotinus and Schiller on the Beautiful, by Dr. H. F. Mueller. Amongst the reviews, we note specially Dr. Wiegand's review of Krohn's "The Platonic State," and, above all, a very lengthy review, by Dr. Bratuscheck himself, of V. Stein's "Seven Books in Relation to the History of Platonism." This comprehensive—and, at the same time, remarkably concise and clear—essay on one of the most difficult subjects in the history of philosophy, leads us all the more to regret the retirement of Dr. Bratuscheck from a position which he was so eminently qualified to fill.

A. E. K.

VERHANDLUNGEN DER PHILOSOPHISCHEN GESELLSCHAFT. Zu Berlin. Leipzig: Erich Koschny. 1875. Hefte I–V.

This is a record of the more important papers read at the monthly gatherings of the Philosophical Society of Berlin.

The first number has, Prof. Lasson: Causality and Teleology; Dr. Fredricks: Die Principien des kritischen Idealismus. The second number has, Prof. Michelet: Ueber Ideal Realismus; Dr. A. Vogel: Ueber das Problem der Materie. The third number has, Prof. Lasson: Ueber Zwecke im Universum. The fifth number has, Dr. Otto Vogel: Haeckel und die Monitistische Philosophie.

In noticing these several numbers we shall confine our remarks to the writings of Professor Lasson, since these have excited unusual attention in the European philosophical world, and both of which deal with the often enough discussed, and yet singularly misapprehended, question of Teleology. Perhaps the absurd terminology of *final cause*, instead of purpose—Zweck—has been chiefly instrumental in effecting this misapprehension. Stripping the problem of all verbal masquerade, it turns on this question: Is the existence of the world comprehensible as simply a series of occurrences, having need of no other explanation than their existence, or must it be regarded as having an end to fulfill?

Mr. Lasson, let us say at the beginning, does not pretend to establish the theory of Teleology so much as to confine the doctrine of causality to its proper limits.

In this latter effort he has, we are glad to say, been eminently successful. He starts from the very just supposition that the problem underlying the dispute between the categories of causality and teleology is to be found, not in the phenomena themselves, and the impressions which they make upon us, but in the so-called "laws of our thinking." He, therefore, gives full validity to the causality doctrine, as the only proper criterion to be applied to the phenomena of nature as they appear to us.

In this Mr. Lasson is in full conformity with the "Science of Knowledge" of J. G. Fichte. In that work it is shown that the causality doctrine is one of the primary categories of the human mind, and that without it we can arrive at no knowledge whatever.

The great trouble with the teleologists at all times has been that they denied to the natural-science men the right and propriety to apply the doctrine of causality exclusively to the phenomena of nature. Now, Dr. Lasson fully recognizes that right and propriety. He repeats, again and again, that the man of natural science is bound to regard all phenomena of nature under the category of cause and effect, or of mechanism, and hails the firm position on this ground of the present school of investigators of nature as a great advance on their former vacillating claims.

But, at the same time, Dr. Lasson tells those men plainly that they have no right to exclude the teleological view from the universe, and insists that the phenomena of nature, especially man, cannot be comprehended except under a teleological view. He demands, therefore, equal recognition of both views from the science of philosophy; the man of natural science to keep on using, for his specialty, the category of causality alone; and all men in general, when not investigating matters of special science, to regard the phenomena of nature as having an end—namely, the realization of spirit in the world of matter. In this he is in full accord with Kant and Leibnitz, the latter of whom, particularly, has given the most admirable expression to the teleological view in his renowned system of the Preëstablished Harmony.

There is, however, one danger which threatens Dr. Lasson, and of which, even from this distance, we would warn him. This danger is that of turning the teleological doctrine, which he upholds from his present transcendental, to a dogmatic, point of view—that is, of maintaining that the universe has been *created at some point in time for a specific purpose*. This is dogmatic theology of the worst kind, and which Kant did his best to root out from men's minds. Dr. Lasson, to our surprise, says that he is not yet prepared to take a position on this part of the question. But he ought not, even for a moment, to entertain a doubt on the subject. The rational position of teleology is not that this world was created by some outside power, with a view, for instance, to attain utmost perfection, or to ripen it to utter damnation; but it is this: that man—or spirit, or thought, or mind—cannot help viewing all the phenomena of the world as *adaptable* to the designs of man, spirit, or thought; and, since the mind cannot help cherishing this view, this view is real and actual, as much so as the phenomena of the world themselves are real and actual; and that, hence, it is quite proper to say that a purpose or design—namely, the subjection of the world's phenomena to man—underlies the existence of the universe.

A. E. K.

THE JOURNAL OF SPECULATIVE PHILOSOPHY.

VOL. XII.]

APRIL, 1878.

[No. 2.

THE WORLD AS FORCE.

[WITH ESPECIAL REFERENCE TO THE PHILOSOPHY OF MR. HERBERT SPENCER.]

BY JOHN WATSON.

No intelligible theory of the universe can possibly be framed or put into words which does not avowedly, or by implication, rest upon the intelligibility of the universe itself. The denial that Nature is the embodiment of Reason carries with it the assumption that the world is beyond the comprehension of intelligence, and, therefore, in the strictest sense, unknowable. And, as knowledge is necessarily a reduction of particulars to a more or less exhaustive universality, or an expression of universality through the particular, the assertion that the world is known in immediate feeling—the assertion, in other words, that the particular alone reveals what is real—destroys at once the possibility of knowledge and the intelligible reality of things. Of this necessary interdependence of intelligence and reality, the advocates of the correlation of Forces seem to have very little comprehension; and, as a consequence, we find them making intelligence one of a series of equivalent and convertible forces, unaware, apparently, that this involves the absurdity of accounting for intelligence by that which is non-intelligent, and of explaining the reality of the universe apart from that which makes it real. “Various classes of facts,”

writes Mr. Spencer, "unite to prove that the law of metamorphosis, which holds among the physical forces, holds equally between them and the mental forces. * * * That no idea or feeling arises, save as a result of some physical force expended in producing it, is fast becoming a commonplace of science; and whoever duly weighs the evidence will see that nothing but an overwhelming bias in favor of a preconceived theory can explain its non-acceptance."¹ The theory here indicated is that, as mechanical force is expressible in terms of chemical affinity or vital energy, so either of these is convertible with consciousness. Such a view seems hardly intelligible to those who, believing they can show that consciousness is the condition of all reality, claim that it is absurd to place consciousness upon the same level as the objects it renders possible. Anything like a successful attempt to account for the existence and prevalence of some such theory as that of Mr. Spencer, especially among those whose lives have been devoted mainly to physical science, ought, therefore, to be of some profit.

Those who have been led to regard the method of empirical psychology as the only method which preserves the reality of things, by preventing the thinker from overriding and destroying the facts of life, minister to their own self-satisfaction by taunting the speculative thinker with going along the "high *priori* road" he has constructed for himself above and beyond the real world. The charge can only provoke a smile in those who know how wide of the mark it really is. Speculative philosophy makes no pretensions to the "construction" of reality in the ordinary sense of the word, but only to such an explanation of reality as shall account for the facts in their completeness. Its problem is: Given the world as it exists to common consciousness and to physical science, to point out the relation of the different elements of it to each other, when these are viewed *sub specie aternitatis*—i. e., in their connection with intelligence. The futile problem at which the empirical psychologist works is to explain the universe independ-

¹ First Principles, p. 217, sec. 71.

ently of intelligence, to construct an intelligible world out of unintelligible elements. The method which this mode of conception necessitates can get a foundation for its operations only just in so far as it is untrue to itself; it has to assume the rationality of the world by putting into irrational feeling what should in consistency be excluded; and to posit as known that which it virtually denies to be knowable. The speculative method endeavors, by an analysis of the known world as a whole, to get the elements of reality apart, but it seeks to comprehend those elements so accurately as not to leave out of account that side of them which forms their point of connection with each other, convinced that any failure of insight which leads to the isolation of one element of reality from the rest destroys the possibility of the systematic interconnection of the elements as a whole. The only presupposition that speculative philosophy makes is that the world is an intelligible system, in which, as in the living organism, each part exists only in combination with every other part.

It is not unusual for philosophers to appeal to the common consciousness of men in support of their own special theory, or of that part of it which is apparently furthest removed from popular preconceptions. When the Sensationalist wishes to convict the Idealist of a supposed disposition to spin the universe out of his own individual consciousness, he appeals to the common sense of men to support him in his declaration that mere "ideas" can never bring the mind in contact with a real universe, and that it is through the senses the knowledge of that real universe can alone be obtained. The common sense of men eagerly assents. When the modern Materialist desires to obviate the unpalatable character of his theory, he talks cunningly of the world as a system of law, and of the absoluteness of the quantity of matter and of force, and appeals to the popular judgment in support of his assertion that we have no capacity within ourselves to make or unmake a single particle of matter, or to increase or diminish the amount of force stored up in the universe. The unphilosophical man sees at once that the Materialist is right. The Idealist, in turn, may appeal to the higher nature of

man, in support of his view that, without intelligence, no orderly universe whatever could be shown to exist, and that all things must come from the hand of an Infinite Intelligence, whose work they are. Again the "practical" man is convinced. Common sense is the authority to which all may confidently appeal, provided, only, that a popular turn be given to the expression of the theory, so as to prevent the awakening of a distrustful reflection. Now, surely, the lesson taught by this peculiar fact is, not that all philosophical theories are equally indorsed by the common consciousness, but rather that the appeal to such an authority is essentially absurd. The common sense of men is not to be despised, but the attempt to prop up a philosophical theory by an authority that is compatible with any system whatever, simply because it dwells in a region into which the divisive energy of philosophical reflection has not as yet made its way, is even more absurd than for a physicist to appeal to the same authority against some view of his brother physicist. We may either say that common sense holds in solution all philosophical theories, or we may, with equal propriety, say that it lies outside of them all; but, from either point of view, it is valueless as a criterion of philosophical truth.

This view of common sense, as of no authority in the decision of philosophical questions, will probably be accepted without much hesitation. More difficulty will be felt in admitting that physical science, including physiology, is equally helpless to determine any of the controverted questions in regard to the nature of the world as a whole, or in regard to the nature of knowledge. No assumption is more persistently and triumphantly paraded before the public than this: that the determination of such questions must be sought in the discoveries, and by the method, of the special sciences. Such a claim rests upon a confusion between the *data* for a comprehensive philosophy, which must be sought from all the sources of human knowledge, and the metaphysical theories of those who seek, by formulating the unsifted categories of science, to construct a philosophical theory of the universe. The fact that, to a certain extent, physical science and philosophy deal with

the same *data*, easily leads to the unjustifiable supposition that the latter is merely a branch of the former. But the method and object of each differ completely. Science deals with space, for example, *in concreto*—i. e., with points, lines, figures, etc.—but not with the question of the relation of space to intelligence; it makes use of conceptions of matter, motion, and force, but with these only as they are taken up ready-made by external reflection. The problem as to the conditions of reality—or, what is the same thing, as to the relation of intelligence and existence—cannot possibly be affected by science, as such, simply because science never touches the problem at all.

If this view of the impartiality as regards philosophical questions, maintained by common sense and by physical science, be correct, much of current speculation upon the nature of real existence, and of real knowledge, must be pronounced completely beside the mark. When a writer proceeds upon the supposition that existence is full-formed independently of intelligence, and that the problem of philosophy is to explain how individual men, or successive generations of men, conceived of as a number of individuals, have gradually apprehended it, he simply betrays that he has not asked the initial question, without which no true philosophy can come into existence; for it admits of the most perfect demonstration that any account of knowledge that starts from the assumption that reality is independent of intelligence must end, if only it be carried forward to its results, in denying reality and destroying the possibility of knowledge. It is this false assumption that has led Mr. Spencer to speak of consciousness as a force convertible, like other forces, into molecular processes, and to put forth a theory of knowledge that is really a theory of absolute and irremediable ignorance. In attempting to justify this charge in detail I shall, in the present article, confine myself mainly to the third chapter of the second part of Mr. Spencer's "First Principles," preparatory to a consideration, at some future time, of his developed view of the "persistence of force."

It does not require very much reflection upon the statements

in the chapter in question to make it apparent that, all through, Mr. Spencer assumes that there is a real universe existing in its completeness in absolute independence of all relation to intelligence. Now, there is no reason to deny that, taking one aspect of common sense and of natural science, there seems to be the strongest support for this supposition. The ordinary attitude of the plain man is that of a spectator who observes directly before him certain real things and persons that he seems to apprehend as they exist full-formed and complete in themselves. His doubts as to reality, if he have any, do not concern the possible illusiveness of existing things, but only the possibility of misapprehension on his own part. In like manner it is a presupposition of the observations and experiments of the scientific man that the world exists complete in itself, and lies there ready for apprehension. He knows that effort on his own part is the condition of the knowledge of things, but he never supposes that the presence or absence of such knowledge has anything to do with the reality of existence. A philosopher, therefore, who appeals to common sense and to science in support of his assumption that the world is independent of conscious intelligence has the apparent support of both. But the support is only apparent. Ask the man of common sense, or the scientific man who is innocent of philosophical theory, whether the world he regards as real is not, after all, a world of mere appearances—a world as it seems, but is not—and he can only be made to understand the question by a series of explanations that take him beyond his ordinary point of view, and awaken him, as by a shock, to an elementary conception of the problem of Philosophy. Prior to this, he had taken for granted that knowledge and reality are one, and, hence, it is just as easy to show, by an appeal to common sense and science, that reality is bound up with intelligence, as to show that it is independent of intelligence. The separation of thought and nature—knowledge and reality—does not present itself to ordinary consciousness at all; and, hence, the empiricist and the idealist may with equal confidence appeal to it, secure of an apparent support. But this simply shows the absurdity of the appeal. Philosophy begins by discerning

the possibility of a breach between knowledge and reality, and its task is to show either that they coincide or that they do not. It is, therefore, utterly unpardonable in a philosopher to begin with the assumption of the non-dependence of reality on intelligence, for such an assumption just means that so far he has not got to the philosophical point of view. Nor is this all, for such a supposition is not only unjustifiable, but leads to a perverted view of the relation between knowledge and reality, as will appear from an examination of Mr. Spencer's procedure.

Between the first view of the world as a congeries of individual objects connected together by the superficial unity of space and time, and the scientific view of that world as a system of forces, there lies a wide interval during which intelligence has been becoming more and more active—on the one hand observing the infinite complexity of the determination of things, and on the other hand finding them united by higher and closer bonds of unity. But, as the process by which intelligence develops itself is looked upon by the scientific man, not less than by the man of common sense, simply as a process by which the properties and the relations of objects in a world independent of consciousness are discovered by the individual observer, the correlative evolution of intelligence is neglected. Science finds it necessary to systematize its knowledge by means of the conceptions of matter, motion, and force, but these conceptions are looked upon as purely objective, or independent of thought. In this assumption, science, as such, is perfectly justified, since its task is to point out what are the properties and the relations of things to each other—not to inquire into the relation of knowledge and reality. But he who constructs a philosophical theory may not take up from the special sciences, without criticism, the conceptions they are compelled to use, and proceed to explain knowledge on the assumption of the complete determination of objects independently of intelligence. This, however, is what Mr. Spencer, in the present instance, does. The order his exposition ostensibly follows is to treat first of Space and Time, then to go on to Matter and Motion, and to end with Force, “the ultimate of

ultimates," as he calls it. The real order of his thought, however, is to start from the conception of Force, next to go on to Motion and Matter as presupposed in Force, and finally to come to Time and Space as implied in Motion and Matter. Now, this just means that he assumes the independent reality of the world as it exists for science, and then proceeds by analysis to get back to the simplest and most abstract elements of that world. The true order is exactly the reverse. The world, as absolutely unthinkable apart from intelligence, presupposes the putting together of more and more concrete elements, so that, while Space, as the mere abstraction of external individuality, is in the order of thought and of the evolution of intelligence, the abstractest and simplest element of all, Force, as comprehending in a more concrete unity Time, Matter, and Motion, is the last and highest conception of all. The process of abstraction or analysis by which Mr. Spencer gets his results is merely a process by which the intelligible character of the universe is denied, just because it is tacitly assumed.

The next step of Mr. Spencer is to explain how a world already assumed to be known gets into the individual consciousness. The method of explanation is exceedingly simple. It consists in plausibly explaining how a world already known communicates itself to the individual through his senses. The senses are said immediately to reveal objects as resisting, and the feeling of resistance is identified with Force. As the conception of force already presupposes the whole process by which it has been arrived at, we thus get, by an act seemingly of the simplest kind, the materials from which Motion, Matter, etc., may be apparently obtained by analysis, without any synthetic activity of thought whatever. The derivation of all of the elements assumed to constitute reality is thus secured beforehand, and we have only to take, at each fresh stage of our progress, as much from the intelligible world as we find convenient, to give a plausible derivation of reality from immediate feeling. Thus the dependence of real existence upon intelligence is got rid of by the convenient method of assuming beforehand what we pretend to derive by a process of immediate apprehension. Nothing could be simpler, and nothing

more useless and delusive, than a method such as this, which simply sets forth, as the process by which the knowledge of reality is obtained, that which has been tacitly assumed at the outset. Before turning directly to Mr. Spencer's account of Space and Time, with which he begins his exposition, a few words upon what we conceive to be the true nature of those conceptions may not be out of place.

When we proceed to examine the world of experience with a view to a reflective comprehension of the elements it contains, it becomes apparent that the simplest element with which we can possibly start involves a synthesis of universality and particularity in their most attenuated forms. The world of experience is a world that is known, and no knowledge is thinkable that does not imply the comprehension of differences by thought. Intelligence and Nature reciprocally imply each other, so that either is a fiction of abstraction apart from the other. Now, the simplest form in which the external or material universe can be thought of is as a pure self-externality, which is yet a unity. This simplest and most attenuated form of the unity of universal and particular is what must be understood by the world as pure space. Space is absolute or perfect externality, because every part of space is external to every other, and between the different parts there is no distinction except that they are out of each other. But, as the parts are all absolutely alike, the distinction of parts is no distinction; space is only external to itself. The particularity, therefore, is just as much universality. And the universality is no less particularity. From the point of view of reality, space may be said to be one space uniting an infinity of spaces; from the point of view of intelligence, it is the simplest phase of thought, in which universality and particularity are so attenuated as to be inseparable and indistinguishable. In other words, the concrete objects known in experience are here reduced to their vanishing point, and it is found that the barest reality involves the reflection of the particular into the universal.

This view of the matter has important consequences. If the poorest and most abstract form in which the external world can

be thought at all involves the synthesis of universal and particular—or, what is the same thing, from the side of intelligence, the reflection of immediate feeling into thought—it is vain, at any subsequent stage of intelligence, to attempt the explanation of reality as the purely individual, or of the knowledge of reality as built upon simple, unmediated consciousness. Any attempt to account for extension as revealed by pure feeling, whether it takes the form of Locke's confusion between touch as a mere feeling and body as that which is distinct from, and yet related to, feeling; or Hume's shuffle between "colored points disposed in a certain manner" and individual sensations of sight and touch; or Mr. Bain's confusion between muscular sensations and extended bodies; or Mr. Spencer's identification of feelings of resistance with objects that resist—all such attempts involve the inconsistency of explaining that which is intelligible by that which is unintelligible. From the mere particularity of feeling the universal can by no possibility be extracted; and, hence, even if it be granted that particular feelings might possibly reveal a succession of *Heres* or particular spaces, it would not be possible to explain the combination of spaces in one space, without having recourse to the universalizing power of thought. The difficulty is infinitely increased when it is considered that a succession of feelings can never give rise to co-existent spaces. Thus, at the very outset, a regard for facts > compels us to say that space, as the unity comprehending particular spaces, can only be known by an intelligence that brings the particular within the grasp of its own universality. On the other hand, the opposite fault of the abstracting intellect—the isolation of the universal from the particular—is equally guarded against by the analysis of space just made. > Kant's conception of space as a pure form of our sensibility commits the mistake of fixing upon the unity of space to the exclusion of its particularity; for, while particular spaces that are completely isolated from each other could never give rise to the conception of one world of things in space, pure space, as the exclusion of particular spaces, is no less an unthinkable abstraction. The concrete unity resulting from the reflection

of particular spaces into one universal space is just the barest and simplest form in which the material world can be thought of at all, and the isolation of either element must result, in the long run, in the overthrow of real knowledge. Hence it is that, while the Sensationalist's account of space as an immediate revelation of feeling issues in the denial of all externality to objects, the Kantean position that space is a bare form at length revenges itself in the denial of any knowledge of things in themselves. Particular feelings, supposing them to exist in consciousness at all, can never take the individual beyond his own subjective states, and the conception of space as a mere form does not allow of the apprehension of the world and the mind as they really are.²

The above analysis also guards against the supposition that Space can, in any proper sense, be a limitation of intelligence. The supposed limitation derives its plausibility from the assumption that the world, as spacial, is independent of intelligence. But, as space *per se* is pure externality, it can only exist in relation to a comprehending intelligence, that manifests itself in its simplest form as a self-externality, that is just as much self-internality. Space cannot limit thought, because, without thought, space itself could not be real. Nor, again, are spacial relations applicable to intelligence or reality in all its modes; the simplest manifestation of intelligence cannot be carried along so as to prevent the elevation of intelligence into higher forms. On the contrary, the universalizing power of thought must manifest itself by increasing its own complexity, and, at the same time, the complexity of the world. That unity in diversity which meets us in space, rather as a prophecy than an accomplished fact, must manifest itself in the richer and concreter manifestations of the real world; and to this growing complexity there can be no limit until every element of difference has been reduced to a perfect unity. This

² For an exhaustive criticism of Kant's view of Space and Time I am happy to be able to refer to Professor Caird's "Critical Account of the Philosophy of Kant" (see, especially, pages 267, 603), a remarkable work, that ought to effect a revolution in English methods of philosophizing.

process is exhibited in germ in the conception of things, as in Time.

As Space is the abstraction of mere externality or individuality, so Time is the abstraction of pure internality. In the one case, things are conceived as absolutely out of each other, so that the world is regarded solely in its statical aspect; the latter views things as issuing from each other, and, hence, it looks upon the world of things in their dynamical aspect. Objects that are thought of simply as in space are regarded as utterly indifferent to each other, and, hence, change, in any form, is excluded; at the same time, all objects are a totality, and this totality is, in its abstract form, space as one space. In the conception of Space as a unity of spaces there is, therefore, involved implicitly the connection of things with each other, and, therefore, the change of one into the other; and this notion of change, in its crudest form, is Time. The same factors of universality and particularity are here involved; pure Time is unthinkable, and, therefore, unreal; and mere times are equally unintelligible. Time is the abstract unity of permanence and change. The *Now* exists only relatively to other *Nows*, and the unity of all *Nows* is Time as relatively concrete. Nature, as changing, is the synthesis of permanence and succession. Intelligence, manifesting itself as Nature, is the synthesis of the abiding universal and the changing particular. A merely feeling consciousness, a consciousness having no universality in it, could not be conscious of Time, because the particular is not of itself a possible object of thought. Hence the absurdity of attempting to account for Time from the changing phases of individual consciousness. Only the universal or permanent can comprehend the particular, and a purely feeling consciousness, which *ex hypothesi* changes as the moments of Time change, could never grasp together the different *Nows* of Time, and, hence, could never become conscious of *Time* at all. On the other hand, as was remarked of Space, Time is not a mere form or abstract universal, for in that case all distinctions in Time — and, therefore, Time itself — would be unknowable. Kant's concep-

tion of *Time*, as pure, unmediated universality, is as faulty as the sensationalist's assumption that *Time* is pure particularity. Time is neither the one nor the other, but both; as an expression of the nature of intelligence, it is a universal that is mediated and defined through the particular. It need hardly be added that Time, as one of the simplest manifestations of thought, is no limitation of thought; that which is a manifestation of intelligence cannot frustrate the necessary development of intelligence. Thought must go on from the conception of abstract self-evolution to the conception of the world as a concrete process of becoming. Having so far negated the mere externality of things as to conceive of them as passing into each other, and yet abiding by themselves, it must, in order to explain the universe as it really is, show that Space in itself and Time in itself are but the simplest elements in a world that is one, and yet infinitely diverse.

If the above is anything like a true account of what is implied in the conception of Nature as spacial and temporal, the derivation given by Mr. Spencer of space and time, preparatory to his reduction of all phenomena to Force, at least in so far as it is self-consistent, is so radically false as completely to reverse the relation of Intelligence and Nature. That explanation is, briefly, as follows: "Of those relations which are the form of all thought there are two orders, relations of sequence and relations of co-existence, the former being original and the latter derivative. The relation of sequence is given in every change of consciousness. The relation of co-existence, which cannot be originally given in a consciousness of which the states are serial, becomes distinguished only when it is found that certain relations of sequence have their terms presented in consciousness in either order with equal facility; while the others are presented only in one order. Relations of which the terms are not reversible become recognized as sequences proper, while relations of which the terms occur indifferently in both directions become recognized as co-existences. By endless experiences an abstract conception of each is generated. The abstract of all sequences is Time. The abstract of all co-existences is Space.

Our conceptions of Time and Space, then, are generated, as other abstracts are generated from other concretes; the only difference being that the organization of experiences has, in these cases, been going on throughout the entire evolution of intelligence. The experiences out of which the abstract of co-existence has been generated are experiences of individual positions as ascertained by touch, and each of such experiences involves the resistance of an object touched, and the muscular tension which measures this resistance. By countless unlike muscular adjustments different positions are disclosed; but since, under other circumstances, the same muscular adjustments do not produce contact with resisting positions, there result the same states of consciousness, minus the resistance, and from a building up of these results Space. Similarly in regard to Time, the abstract of all sequences.”³

This passage contains an admirable illustration of that mixture of common-sense Realism and individualistic Sensationalism which runs through the whole of Mr. Spencer’s philosophy, and, indeed, through all empirical psychology. It is really an attempt to combine two discordant views that are not capable of union, and which, therefore, are simply applied to each other without being united, as the surfaces of two chiseled stones may be brought into close contact without being joined together. In our unreflective experience of the world we are as far as possible from supposing that the objects we know are resolvable into our own passing feelings; on the contrary, we tacitly assume that the world *we* know is the world as it really is — the world as known by everybody else. It is, no doubt, true that we look upon ourselves and others as independent individuals, and that this assumption, when made explicit, leads to the view of Sensationalism that the only way in which things are known is through our subjective feelings. We may, therefore, say that common consciousness assumes, indifferently, that the known world is objective and intelligible, and that it is subjective and sensuous; unreflective consciousness, in short, is, implicitly, at once idealistic and

³ First Principles, pp. 163-165, sec. 47.

sensationalistic, although, explicitly, it is neither the one nor the other. Mr. Spencer's procedure is to accept both the Realism — *i. e.*, the tacit Idealism of common sense — and its contradictory Sensationalism. Accordingly, he does not scruple to speak of relations of sequence and relations of co-existence as if they were given in complete independence of intelligence; and, hence, the only question, as he puts it, is how the individual comes gradually to appropriate objects through his own particular and perpetually-changing feelings. From this way of stating the question the absurdity of trying to build up a stable universe out of evanescent sensations is concealed both from Mr. Spencer himself and from the unwary reader; because, having an intelligible universe always before their consciousness, it is overlooked that individual feelings, as unrelated, are in the most absolute sense unintelligible. It is not seen to be a contradiction to identify successive feelings of touch and of muscular sensation with "relations of sequence," and even with "relations of co-existence," although it seems plain enough, the moment it is stated, that feelings, as such, cannot be "relations" of any kind whatever. Proof of this charge of self-contradiction is so important in itself, and has so decisive a bearing upon the doctrine of Force as conceived by empirical psychologists, that a detailed examination of Mr. Spencer's derivation of the conceptions of Space and Time may be excused. The "relation of sequence" is primary, because "given in every change of consciousness;" the "relation of co-existence" is secondary, because it "cannot be originally given in a consciousness of which the states are serial." How, then, does the consciousness of co-existence arise? From the fact that "certain relations of sequence have their terms presented in consciousness, in either order, with equal facility, while the others are presented only in one order." Here it is quite evident that Mr. Spencer is trying to explain how we come to experience a world of co-existent and successive objects, conceived in the first place as independent of consciousness. Now, a world in which events are "presented only in one order" is, in other words, a world in which the events are connected in an irreversible or uniform order, *i. e.*,

in which they are connected together as cause and effect. Such a world, therefore, is already constituted by universal forms of thought, involving, not only intelligence, but intelligence that has developed itself by very complex relations. And a necessary and uniform sequence of events is very different from a supposed sequence of feelings, as they occur in "a consciousness of which the states are serial." No doubt there is a point of view from which it can be shown that the serial states of consciousness imply a uniform sequence in the way of causality, but such a view can only be justified by a theory which undertakes to set forth, in systematic order, the different elements that conspire to produce a rational universe — a universe that, apart from Reason, is nothing; not by a theory that proposes to account for a ready-made universe which is independent of Reason. That Mr. Spencer is committed to the latter stand-point is evident even from his attempt to account for relations of co-existence by relations of sequence; and it is still more apparent from the fact that co-existence is afterwards explained as a compound of feelings of touch and, muscular sensation. His method, then, is to identify "relations of sequence" with the mere sequence of feelings, in a "consciousness of which the states can only be serial;" and, having thus assumed uniform relations of sequence, the only thing requiring explanation seems to be, how these give rise to relations of co-existence. But a sequence of feelings conceived to occur in a purely individual consciousness is as far as possible from being identical with the objective sequence of real events in an intelligible world. The former is, *ex hypothesi*, not irreversible, but arbitrary; not objective, but subjective. The latter is necessary, uniform, and unchanging, and involves the actual relation of objects as identical in the midst of change, and as necessarily connected with each other. The one excludes all relation, the other involves a complexity of relations. It is, therefore, utterly impossible to extract from the sequence of states, in a purely individual consciousness, any objective order of events; and there is no reason whatever for deriving co-existence from sequence, except the unwarrantable confusion between the causal sequence

of events and the arbitrary sequence of individual feelings. And this brings us to remark, secondly, that "relations of co-existence" are not separable from "relations of sequence" in the way assumed by Mr. Spencer. We may distinguish the causal connection of events from the reciprocal influence of co-existing substances upon each other, but the intelligent experience of reality involves both. It is not possible to be conscious of events as uniformly sequent, without being conscious of substances as reciprocally dependent upon and influencing each other; or, to take experience at an earlier stage, it is not possible to think of events as following upon each other in time, apart from the thought of things as co-existing in space. The experience of the one implies the experience of the other; and, hence, any attempt to get the one without the other is an attempt to apprehend one element of the real world apart from another element that is necessary to make it real. We may, certainly, ideally distinguish the elements, but in our analysis we must be careful to leave room for such a synthesis as shall exclude all actual separation. That this is not Mr. Spencer's view would be evident even from the fact that he makes relations of sequence primary, and relations of co-existence secondary—exactly the reverse of the true order of connection, as our analysis of Space and Time has shown.

Having plausibly derived relations of co-existence from relations of sequence, Mr. Spencer tries to show that Space and Time are "generated as other abstracts are generated." The same paralogism of individual feelings and relations of thought again presents itself. We start from the world as given in ordinary consciousness—the world as implicitly rational—and ask how, supposing we have a knowledge of co-existent and successive objects, abstract Space and Time are produced? There can be no difficulty in giving an apparently satisfactory explanation, because in our *datum* we already have implicitly that which is to be established. Things as co-existent and successive are spacial and temporal, and by simply analyzing what is contained in our ordinary knowledge, and abstracting from all the differences of objects, we easily get

Space and Time as residue. Mr. Spencer, in other words, when he speaks here of Space, has before his mind Space as the object of the mathematical sciences. Now, mathematics does not find it necessary to inquire into the relation of Space to intelligence; as a special science it is sufficient for it to assume its object as ready-made, and to examine the various ideal limitations of it from the phenomenal point of view. Mr. Spencer, therefore, has, in his conception of space as the "abstract of all co-existences"—an abstract that is supposed to be obtained by mere analysis of a preëxistent material—a ready means of emptying intelligence of its universal relations. Just as, when he has to account for co-existent objects, he first identifies the mere sequence of feelings with the necessary or objective sequence of events, and thus apparently gets into feeling the conception of permanent substances; so here he assumes that objects as offering resistance are given in feelings of touch, and, hence, easily derives empty space from muscular tensions unassociated with feelings of resistance. It is hardly necessary to repeat that individual feelings, however numerous, cannot possibly account for the knowledge of extended things or of extension, since such feelings are assumed to be destitute of that universality which is the condition of any knowledge whatever. Mr. Spencer seems to suppose that, by throwing the supposed experience back into the haze of the past, and imagining a vast period of time to have elapsed, during which the race has been accumulating knowledge, the intellectual elements of experience may be resolved into felt elements. But this is an utterly untenable position. The very beginning of intelligent experience, whether in the individual or in the race, must contain the elements necessary to such experience, and these elements cannot be reduced to lower terms than a synthesis of subject and object, of the universal and the particular. A purely feeling consciousness, assumed to exist for an infinite period of time, would still be a feeling consciousness, and, until it emerged from this unintelligent state, and by a primary act of abstraction separated and united the object and the subject, it could have no experience of the world at all, and, therefore, no experience of a world as

spacial. Mr. Spencer really confuses the unreflective consciousness, which does not sharply separate subject and object, or things and space, with a merely feeling consciousness which, as such, is the negation of that separation. But in the former the two terms are really present, and, although their contrast is seldom explicitly perceived, it is still there, ready to be brought out by reflective analysis; in fact, were it not implicitly there, no amount of reflection could extract it. It is, therefore, a manifest *hysteron proteron* to account for Space as due to mere feelings of muscular tension. In intelligent experience Space and Time are not posterior, but prior, to co-existing and successive objects, as undifferentiated Space is prior to positions—*i. e.*, limitations of Space. Mr. Spencer first identifies feelings of muscular tension with co-existing positions—which, as involving relations to each other, are more than feelings—and next assumes that a synthesis of these positions generates Space. But position already involves the relation of the parts of Space to each other, and, hence, cannot account for Space. In short, just as existing objects presuppose the relation of objects to each other in Space, and, therefore, different positions, so position presupposes a universal Space, which is ideally limited. Space is not a collection of particular spaces, but a universal Space differentiating itself in the particular.

Having found that Mr. Spencer ostensibly derives Space and Time from mere feelings of resistance, which he unwarrantably identifies with the conception of Force, we may be sure that in his account of Matter and Motion the same fallacious method will be resorted to. The account of Matter is, briefly, as follows: “Our conception of Matter, reduced to its simplest shape, is that of co-existent positions that offer resistance. We think of Body as bounded by surfaces that resist, and as made up throughout of parts that resist. * * *

And, since the group of co-existing positions constituting a portion of matter is uniformly capable of giving us impressions of resistance in combination with various muscular adjustments, according as we touch its near, its remote, its right or left side, it results that, as different muscular adjustments habitually indicate different co-existences, we are obliged

to conceive every portion of matter as containing more than one resistant position. * * * The resistance-attribute of Matter must be regarded as primordial, and the space-attribute as derivative. * * * It thus becomes manifest that our experience of *force* is that out of which the idea of Matter is built.”⁴

Here again we have an illustration of that method of accounting for the intelligible world by ignoring intelligence which Mr. Spencer carries on with great self-complacency, and apparently without the least perception of the real nature of his procedure. “Our conception of Matter, reduced to its simplest shape,” simply means the real world after we have eliminated by abstraction those prominent elements in it which presuppose an elaborate process of construction by thought. The world as it exists for the scientific man, the world as composed of objects bound together by the law of gravitation, and manifesting physical, chemical, and vital forces, is stripped of all its differentiating relations, and reduced to a congeries of extended and solid atoms, preparatory to the reverse process by which the relations abstracted from shall be surreptitiously brought back and attributed to independent feelings. But, even when thus attenuated to a ghost of its former self, the attempted derivation from feeling is easily seen to be inadmissible. The passage from individual feelings to “co-existent positions that offer resistance,” however apparently easy, cannot really be made. We are told of “impressions of resistance,” and of “muscular adjustments.” Now, an impression of resistance is not a mere feeling, but the conception of an object as resisting, and such a conception involves a construction of reality by relations of thought. Similarly, “muscular adjustments” presupposes a knowledge of the muscular system, or, at least, of the body as it exists for common consciousness, and, hence, relations of thought are inconsistently attributed to mere feeling. If we exclude all that is involved in the relation of a resisting object to the organism as the medium of muscular sensibility, we are reduced to mere

⁴ First Principles, pp. 166, 167, sec. 48.

feelings that by no possibility can give a knowledge of anything real and external to themselves. Hence the absurdity of assuming that mere feeling gives a theory of matter as a manifestation of force; hence, also, the absurdity of regarding force as the simplest, instead of the most complex, element of the real world as it exists for the scientific man.

From what has been said it is easy to say why Mr. Spencer regards the "resistance-attribute of matter as primordial, the space-attribute as derivative." It must, at first sight, seem strange that "co-existing positions that offer resistance" should be held to be prior to "co-existing positions" themselves. In the apprehension of resisting positions there is, surely, already implied Space. Mr. Spencer, however, identifies his own theory, that resistant positions are revealed by muscular sensations, with the common-sense apprehension of objects, which, like all knowledge, really involves the implicit reduction of particulars to the unity of thought. Hence Space, although it is involved in the ordinary apprehension of objects in the same sense in which resistance is involved in it, is assumed by Mr. Spencer not to exist for consciousness at all, because it has not yet been made an object of the abstract understanding. Accordingly, the resistance is abstracted from, and there is left, pure Space, as it exists for the mathematician. Here the purely analytical procedure of the empirical psychologist is apparent. The world of objects in Space is supposed to be given apart from thought, or rather by means of mere "impressions of resistance," and, by a further extension of this purely sensible process, the knowledge of Space is supposed to be given by feeling, when in reality it is got by a process of abstraction that presupposes the manifold relations of intelligence by which the world has been put together. Mr. Spencer has not asked himself the proper question of philosophy, How is the real world related to intelligence? but, instead, has put a question that presupposes a false abstraction of reality from intelligence, viz., How does the individual man apprehend by his sensations the real world? The true answer to his question is that, by mere sensation, no reality whatever can be apprehended, and the illusion of such apprehension simply

arises from confounding sensation as the first unreflected form of knowledge with sensation as a mere abstraction of one element of knowledge. If it be replied that Mr. Spencer does not base knowledge upon mere feelings, but upon "relations," the answer is that the "relations" do not on his view constitute reality, but are only the modes by which the individual consciousness gradually fills itself up with the preëxistent elements of a supposed real world; and, hence, that, notwithstanding the use of terms implying more than feeling, mere feelings are, after all, assumed to account for reality.

Mr. Spencer's account of Motion is similar in nature to the account of Space, of Time, and of Matter. "The conception of Motion, as presented, or represented, in the developed consciousness, involves the conceptions of Space, of Time, and of Matter. A something that moves; a series of positions united in thought with the successive ones—these are the constituents of the idea. * * * Movements of different parts of the organism in relation to each other are first presented in consciousness. These, produced by the action of the muscles, necessitate reactions upon consciousness in the shape of muscular tension. Consequently, each stretching-out or drawing-in of a limb is originally known as a series of muscular tensions, varying in intensity as the position of the limb changes. * * * Motion, as we know it, is thus traceable to experiences of force."⁵

In treating of Matter, Mr. Spencer betook himself to the conception of the world as it exists for the scientific man, and, neglecting the manifold relations which form the real wealth of the sciences, he fixed his attention exclusively upon Body, conceived as extended and resistant. Now, he refers again to his scientific conception of the world, and, fetching therefrom the conception of Motion, adds it to the elements he has thus far sought to explain. In this way he gets the credit of explaining the origin of Motion without any synthetic activity of thought, while in reality he is simply giving a distorted view of the supposed origination of that conception

⁵ First Principles, pp. 167, 168, sec. 49.

from feelings — a view that recommends itself to the uncritical reader merely because he fails to see the assumptions it involves.

Motion is to be explained by feeling, and, for the purpose in hand, muscular tensions are most easily manipulated. “Movements of different parts of the organism,” we are told, “are first presented in consciousness.” This is an exceedingly facile way of accounting for our knowledge of Motion. The “organism” is assumed, and that means that we are already, at the beginning of knowledge, supposed to have such a knowledge of it as is possessed by the scientific physiologist. Hence the manifold relations of real objects to each other, and the differentiation of the human organism from other organisms, and from inorganic bodies, is taken for granted at the very start. That being so, there can be no great difficulty in accounting for the movements of the organism, seeing that these are already implied in our knowledge of the organism itself. These movements, we are next informed, “necessitate reactions upon consciousness.” No doubt they do; but the question is whether such “reactions” can possibly be known by consciousness as reactions, supposing consciousness to be identical with feeling. The assumption that this is really the case derives its apparent force from confusing the mere feeling of muscular tension, which is incapable of giving the knowledge of any reality whatever, with the conception of muscular tension as related to a real, intelligible world. Hence it seems as if feelings of muscular tension, “known as a series,” account for motion in the form of “movements of different parts of the organism.” But “muscular tensions,” as feelings, can only be supposed to give a knowledge of the movements of the organism, because the conception of such movements, and of motion in general, is taken up without criticism from the special sciences. When we make a real effort to explain Motion, we find that it is utterly unintelligible, apart from the other elements dependent upon an intellectual synthesis, to which it is related.

After what has already been said, it cannot be necessary to show at length that “experiences of Force” do not, as Mr.

Spencer would have us believe, precede experiences of Motion, but, on the contrary, presuppose those experiences. It is only by unwarrantably confusing mere feelings of muscular tension with the muscular tensions themselves, as they exist in a real world, which is, at the same time, an intelligible world, that any one could fall into the mistake of setting down as primary and simple that which involves a long and very complex process of differentiation. Force is, no doubt, presupposed in Motion, as Motion is presupposed in Matter, and Matter in Time, and Time in Space; but the implications of the first and simplest form of knowledge are not at first discerned, and, hence, Force is the last element in the scientific conception of the world which emerges into explicitness.

And this brings us to Mr. Spencer's concluding remarks upon the relation of Force to the other elements he has endeavored to account for. Space, Time, Matter, and Motion "are either built up of, or abstracted from, experiences of Force," and these "supply at once the materials whence the forms of relations are generalized, and the related objects built up. * * * Thus all other modes of consciousness are derivable from experiences of Force; but experiences of Force are not derivable from anything else." ⁶

It would be tedious to repeat what has been already said as to the unwarrantable identification of the conception of Force with supposed sensations of Force. In place of this, two remarks of a more general character may be made. In the first place, there is a sense in which it may be said that everything is reducible to "experiences of Force," while these are not themselves reducible to anything else. Taking the conception of Nature as it exists for the scientific man, and asking what are the elements it presupposes in their connection with each other, we shall be led to say that the conception of Force comprehends under it manifold relations, which it reduces to a higher unity. The conception of Nature, as a system of forces, is more perfect than the conception of it as a congeries of material things endowed with the capacity of

⁶ First Principles, p. 169, sec. 50.

motion, or than the conception of it as simply a world in Space and Time. In this sense it may be said that in Force we reach a conception that cannot legitimately be brought under any other conception. But it must be observed that, in this way of looking at the matter, Force, so far from being incomprehensible, is the most comprehensible of all. Intelligence is more at home when it grasps external nature as a world in which Force manifests itself in an infinite variety of ways than when it conceives of Nature as arrested in exclusive material things, only externally related to each other by the superficial bonds of Space and Time, or by the more definite bond of Motion. The only way in which Force can seem to be more alien to intelligence than nature in its lower forms is when we try to conceive of it as a mysterious something existing apart from its manifestations, for then it is stripped of all the determinations which give it meaning. The true definition of Force is to be found in the infinite relations between material things which constitute the world as real.

And this leads us to remark, secondly, that, however perfect the conception of Force or its manifestations may be, as a definition of external nature, it is yet but a stage in the complete comprehension of the universe as a whole. The only category which is adequate to reality in its completeness is self-conscious intelligence. Until intelligence has advanced to the comprehension of itself, as the first presupposition of all reality, and the last definition of it, it must be afflicted and goaded on by unrest to seek its own realization. The notion of the world as Force still leaves a distinct trace of the independence of Nature and Intelligence, and, until this tacit dualism is completely transcended, intelligence cannot be satisfied that its knowledge is undeniably real. Hence the necessity of advancing to a higher stage of thought than that which results even from a systematic comprehension of the elements of reality involved in the scientific conception of Nature. The further development of this thought must, however, be left to a future occasion, when we propose to examine Mr. Spencer's account of the indestructibility of matter and the persistence of force.

THE TRUE AND THE FALSE IN DARWINISM.

A CRITICAL REPRESENTATION OF THE THEORY OF ORGANIC DEVELOPMENT. BY
EDWARD VON HARTMAN. BERLIN, 1875.

TRANSLATED FROM THE GERMAN BY HENRY I. D'ARCY.

III. The Theory of Heterogeneous Generation, and the Theory of Transmutation.

Although we shall not consider any further the other instances of ideal relationship in the natural system, but shall devote ourselves simply to a consideration of the theory of descent, yet we deem it proper to repeat that the theory of descent is broader than Darwinism. The latter is a particular theory of transmutation—that is, it assumes that the derivation of every species from another is effected through a gradual change of type, by means of repeated infinitesimal variations. The theory of descent, as such, does not, indeed, exclude this principle, but it does not depend upon it, for it also allows quite different views as to the manner in which one type springs from another. The theory of transmutation is not even the most natural one, since direct experience furnishes no instance of an actual transmutation of one well-defined species into another, but rather points to the old doctrine of the constancy of species, a doctrine which can only be disproved by a critical examination of the transitional character of the difference (*flüssigen Unterschieds*) between undeveloped, developed, and overdeveloped (*überreifen*) species. The most natural supposition is, rather, that the first ovum of the species about to be created is produced in the ovary of a closely-related species, by a change, at the earliest moment, in the tendencies of the embryo. This process by which parents of one species produce young of a new species has been styled by Kölliker¹ “heterogeneous generation.” Here,

¹ Compare Kölliker “Ueber die Darwinsche Schöpfungstheorie,” Leipzig, 1864; and “Morphologie und Entwicklungsgeschichte des Pennatulidenstammes nebst allgemeinen Betrachtungen zur Descendenzlehre,” Frankfurt, 1872.

also, there is a transmutation or change, but the process is instant, and not one consisting of numerous short stages; and, of course, this sudden change is never visible, but is a germ-metamorphosis which leads to the creation of a new species. In this form, as "a change of types through germ metamorphosis," the theory of descent was maintained in Germany by Heinrich Baumgärtner² before Darwin or Kōlliker.

This view of course renders hopeless any attempt to explain the processes which occur in the embryo and introduce a new species merely by the mechanical influence of accidental external causes, and points steadily to the assumption of an internal development according to law, though of but occasional occurrence. It was, perhaps, this which repelled the natural philosophers, who were most wedded to a mechanical conception of nature, from this form of the theory of descent, and led them to a belief in the exclusive efficacy of the transmutation theory, in the sense above indicated, in which the law of internal development is sought to be, apparently, eliminated by a subdivision of the process of change into numerous minute stages. On the other hand, those who ascribe considerable importance to this inner law allow themselves, on account of the erroneous belief of the Darwinians that they have eliminated such law by means of the transmutation theory, to be misled into a certain groundless opposition to this theory, which, nevertheless, can be easily maintained within certain limits—that is, so far as the gradual transmutation is regarded as the external medium of the ideal change of type, and, therefore, the means used by the principle of development for the attainment of its ends. As the type of every species includes within it a greater or lesser number of varieties, some particular varieties of the two most closely related species must be more closely related to each other

² The works of Baumgärtner are: "Ueber die Nerven und das Blut," 1830; "Lehrbuch der Physiologie," 1853; "Blicke in das All," 1857; "Natur und Gott," 1870. The chapters of this work, from the third to the sixth, are particularly instructive, but the remainder of it is of a disconnected and *dilettante*-like character.

than any other two, and even the strongest advocates of the constancy of species are obliged to admit (Wigand, page 18) that there are species whose extremities nearly or quite run into each other; at any rate, the most closely related varieties of two species form the best bridge for germ-metamorphosis, and, in the case of contact of two species, heterogeneous generation itself is only a link in the chain of gradual transmutation which connects the centers of both species.³

It is obvious that heterogeneous generation and gradual transmutation are by no means conflicting theories; the difference between them is rather one of degree. For we may conceive transmutation to be as gradual as we please, yet the shortest steps are not, in a mathematical sense, infinitely short; every deviation, be it ever so small, is consequently, in the strict sense of the term, a leap of nature, and the question is only whether the leap is longer or shorter. If it passes a certain limit, it is called heterogeneous generation; but what this limit is, no one dares to determine. Should we seek it at the point where there occurs a change of the type of a species, we would forget that in those species whose extremities run into each other the deviation may be much less than we often see before our own eyes when a new variety suddenly appears. On the other hand, we should take care when there is a direct descent of one species from another, and a considerable difference between their forms, not to infer the existence of intermediate varieties, now lost, in order to serve as connecting links; because we have no means of

³ The fact must be by no means overlooked that, in germ-metamorphosis, not only the visible type, but also the latent tendencies, must experience a modification; especially must the transition be effected from the tendency in a border-variety (*Grenzvarietät*) to repeat itself to the tendency to vary itself. The advocates of the constancy of species may contend that heterogeneous generation is, in this, specifically different from transmutation; but it should not be forgotten that the latent process by which the tendency to repeat is changed into the tendency to vary can as easily be divided into a series of minute germ-metamorphoses, and distributed through several generations, as the process of external change can. It is only where an entire organ suddenly appears, or where the numerical relation of morphological features suffers a change, that, as we shall soon see, a germ-metamorphosis must be recognized which represents a leap (*Sprung*) in the newly thrown-off germ-cell of such organ or feature which, from its nature, cannot be divided into minute steps.

knowing what leaps nature may make in the process of heterogeneous generation; and it would be entirely premature to undertake, without any real *data* for such a calculation, to prescribe limits to *nature's utmost stretch in germ-metamorphosis*. Heterogeneous generation and gradual transmutation have each a place in the process of organic development, and it is as one-sided to exclude, with Darwin, the former in favor of the latter as it is to exclude, with Wiggand, the latter in favor of the former. These are hypotheses in a domain where all empirical certainty fails, and where we should be rejoiced to secure even what promises to be an instrument for the removal of the many existing difficulties.

As we were forced to complain, in a former chapter, because Darwinism regards every proof of an ideal relationship of species as a proof of their genealogical relationship, so we must now, in like manner, characterize as a second error the claim that every possibility of an actual genealogical connection is an additional support to the theory of transmutation. For the same reason as that which led us before to consider the facts that favored an ideal, to the exclusion of a genealogical relationship, we now deem it prudent, in correction of the second error of Darwinism, just mentioned, to consider the facts which, in many cases, seem to weaken the theory of gradual transmutation, and to support that of heterogeneous generation.

The phenomena of alternate generation (*Generationswechsel*), and of dimorphism, are generally relied upon to establish the fact that the production of a type entirely different from that of the parents is by no means uncommon in nature. But both comparisons are deficient in this, that the offspring is different from the parents only in its external attributes, while it retains the power inherited from them of reproducing the ancestral type. Each of these two phenomena appears, from this stand-point, as a process analogous to that of the metamorphosis of insects and amphibious creatures, with the exception that in metamorphosis the phases of development which the type of the species undergoes are included in the life of one individual, whereas, in dimorphism they are

separated in space, and in alternate generation they are separated in time, and distributed among different individuals. These processes would only lead to the origin of new species if an inner change of tendency were added to the outer change of form—that is, if the butterfly should deposit eggs out of which would come, not caterpillars, but butterflies; or if, from the two dimorphous types of one species, one or both should cease to reproduce both types jointly, and should only reproduce offspring of one type; or, finally, if the two or more occurring in alternate generation should cease to alternate, and should reproduce each its second type (*Sondertypus*.)

It is by no means impossible that such processes may have led to the origin of new species; indeed, perhaps it was chiefly by these, or processes similar to them, that the advance was effected from lower to higher orders in the animal kingdom, viz., from worms to insects, or from fishes to amphibious animals; and Darwinism itself, depending upon such occurrences as the exceptional change of the axolotl into an animal like a salamander, or the issuance of perfectly formed frogs from spawn, in those islands where there is no fresh water, inclines to such conjectures, though, of course, admitting that they are entirely without proof. But, if these conjectures were well founded, these phenomena would be strong evidence against gradual transmutation, and in favor of heterogeneous generation. We should find in all these cases a peculiar division of the process of heterogeneous generation into two germ-metamorphoses, separated from each other by, perhaps, very long intervals of time, one of which produced the change of type relatively to the outer form, and the other the change in the procreative tendency. The latter must, naturally, be a sudden and abrupt change, and must, therefore, utterly exclude all gradual transmutation. The former may, under some circumstances (for instance, in the case of dimorphism), be produced by gradual transmutation; but, generally (in metamorphosis, and in alternate generation probably always, and in dimorphism probably as a rule), it must be regarded as a sudden spring of the new type out of the old, which still, in some way, retains its characteristics. This certainly must be

regarded as alone probable in all those cases where both types are distinguished from each other, not only by different colors and by the different shape of their respective morphological structures (as generally happens in dimorphism), but where the morphological type which appears is of a higher order, and passes *per saltum* from a lower to a higher grade of organization.

The new science of comparative embryology, which, indeed, frequently fails to answer our most pressing questions, but must yet, when it speaks, be regarded as the safest guide through the labyrinth of descent, and the best criterion of the alternative, "ideal or genealogical relationship," leaves us, from the nature of the case, completely in the dark with regard to the other alternative, "transmutation, or heterogeneous generation." For, whatever may have been the advances in the direct ancestral line of a particular embryo, the abbreviation of the phylogenetic development which is presented in the ontogenetic is too great to warrant inference as to the mode of transition from one plane to the next. It is only in relation to the morphological changes of types that embryology gives valuable aid in showing that all the more important organs are developed by throwing out cells at a very early period of the individual's life; and the fact is well utilized by Baumgärtner ("Natur und Gott," 4 Abschnitt) against the theory of Transmutation, and in favor of Germ-Metamorphosis. For, no matter how far back in the line of progenitors we may go, a morphologically distinct organ always points to an origin in the germ-cells of the embryo, and never to actual acquisition by a particular animal during its life. Only the latter, however, would enable the transmutation theory to account for morphological changes, while the former represents the first appearance of the germ-cell of a new organ, in the embryo of a species which did not before possess such organ, as a new occurrence taking place suddenly at a particular period of the phylogenetic development, by which occurrence is at once effected the morphological change of the type in its perfect state. So embryology affords no support to the transmutation theory, while it decidedly favors

heterogeneous generation, in accordance with internal laws of development.

The same is true of palæontology, although it is just here that the Transmutation theory, on account of the rapid discovery of intermediate forms, claims its greatest triumphs. But it is quite clear that only such intermediate forms can strengthen the Transmutation theory as, in the first place, are only separated from the forms which they connect by exceedingly small intervals; and, in the second place, demonstrably constitute, not merely systematic, but genealogical, links between such forms; both conditions must co-exist, or the evidence fails.

Darwinism, however, is very far from requiring these conditions in the materials gathered by it in the support of the Transmutation theory; it treats all intermediate forms, at once, as going to establish that theory. On close inspection, however, it is manifest that where the first condition probably exists the second is wanting, and where the second exists the first is wanting. As to the filling-up of the large gaps in the natural system where discovered forms represent, not only species, but lost orders and families, we can often conclude, with reasonable probability, that we have found a type which genealogically connects types of a higher and of a lower order very widely separated; but just in such cases the materials for the filling-up of these gaps are relatively so few that we must presume that phylogenetic development, with the help of heterogeneous generation, has made considerable leaps between species, which, perhaps, are still to be inserted in the intervals left by the types already discovered. For, if we should suppose that such great gaps have been filled up by gradual transmutation, such long periods of time and such an enormous number of individuals would, according to Darwin's own views, be required for the purpose that the extraordinary scarcity of palæontological materials from these numberless generations, in comparison with the rich funds secured from other domains of Flora and Fauna, seems scarcely explicable. Should we, however, regard the periods of change as short, relatively to the periods of unchanged ex-

istence (Ph. d. Unbru., 8ter Ausg., cap. 10, Schluss), the scarcity of paleontological forms is, indeed, explained, and the hope of further discovery still left open, but the prospect of ever filling up such gaps with continuous series of transitional forms is gone forever.

When, on the other hand, the continuity of the form-line is preserved, the necessary evidence that such line is really a genealogical, and not merely a systematic, one (see the distinction between these in the preceding chapter) is entirely wanting. The existence of a genealogical series would be only probable, though by no means certain, if geology showed that the horizontal *strata* contained types of a very different kind, and that these types formed a continuous scale in a vertical direction, and developed themselves perpendicularly, or by means of bifurcations, and did not, as it were, in cyclic fashion return to themselves.

But, as a matter of fact, this state of things is not found, and, when closely examined, the facts which are most triumphantly advanced in favor of the transmutation theory oppose it, and support heterogeneous generation, as regards the transition from a variety of one species to that of another.

HEGEL ON CLASSIC ART.

[TRANSLATED FROM THE SECOND FRENCH EDITION OF CHARLES BÉNARD'S TRANSLATION OF THE SECOND PART OF HEGEL'S *ÆSTHETICS*.]

BY WM. M. BRYANT.

PART II.

CHAPTER V.—OF THE CLASSIC FORM OF ART.

1. Unity of Idea and Form as the Fundamental Characteristic of the Classic.—2. Of Greek Art as Realization of the Classic.—3. Position of the Artist in this new Form of Art.

The intimate union of matter or content with form—the mutual adaptation of these elements together with their

perfect harmony — constitutes the central point of art. This realization of the idea of the beautiful, to which symbolic art vainly strives to attain, is accomplished for the first time in Classic Art.

We have already seen what is here to be understood by the Classic. Its characteristics are summed up in the ideal. This perfect mode of representation fulfills the condition which is the very end of art.

But, in order that this condition might be accomplished, there was need of all the particular moments or elements which appear in symbolic art. For the basis of classic beauty is not a vague and obscure conception; it is the *free idea*, which is its own significance, and which, therefore, manifests itself on its own account — in a word, it is *spirit*, which seizes itself as its own object. In thus presenting itself to itself as an object of contemplation, it assumes an external form; and this, identical with the matter which it manifests, becomes its faithful, adequate expression. The consciousness which it possesses of itself permits it to reveal itself clearly.

This is what Symbolic Art, with that species of unity which constitutes the symbol, has been able to present us. Now it is nature with its blind forces which forms the source of its representations; again, it is the spiritual Being which it conceives in a vague manner, and which it personifies in gross divinities. Between idea and form there is revealed a simple affinity, an external correspondence. The attempt to conciliate them, under their opposition, is still more striking; or art, as in Egypt, in wishing to give expression to spirit, creates only obscure enigmas. Above all, there is betrayed the absence of true personality and freedom; for these can unfold only with the evolution of complete self-consciousness on the part of the spirit.

We have, it is true, encountered this idea of the nature of spirit as opposed to the sensuous world, clearly expressed in the religion and the poetry of the Hebrew people. But that which is born of this opposition is not beauty; it is the sublime. A lively sentiment of personality manifests itself also with the Arab race. But with them this is only a superficial

side, stripped of depth and of generality ; it is not true personality fixed upon a solid basis, upon the knowledge of spirit and of the moral nature.

All these elements, therefore, whether separated or combined, cannot present us the ideal. They are antecedents, conditions, and materials. Their collective totality presents nothing which corresponds to the idea of real beauty. This ideal beauty we have found realized for the first time in Classic Art, which endeavors to give it a more precise characterization.

I. In classic art, spirit does not appear under its infinite form. It is not the thought which thinks itself, the absolute which reveals itself to itself as the universal. It manifests itself still in an immediate, natural, and sensuous existence. But at least the idea, in so far as it is free, chooses for itself in art its appropriate form, and possesses within itself the principle of its external manifestation. It must then return to nature, but only to become its master. Those forms which it borrows from nature, instead of being simply material, lose their independent value in order to become exclusively the expression of spirit. Such is the identification, conformable to spirit itself, of the two elements, spiritual and sensuous. In place of being neutralized the one by the other, the two elements rise to a higher harmony which consists in each being preserved in the other ; in idealizing and spiritualizing nature. This unity is the basis of Classic Art.

By virtue of this identification of significance with sensuous form, no separation can take place, and thus there is no interruption of their perfect union. Thus, too, the inner principle cannot retire into itself as pure spirit and abandon corporeal existence. Besides, as the objective and outer element in which spirit manifests itself is entirely definite and particular, the free spirit, such as art exhibits it, can only be the equally definite and independent spiritual individuality in its natural form. Hence man constitutes the true center of classic beauty.

It is clear, also, that this intimate union of the spiritual with the sensuous element can be no other than the human form. For, though this participates especially in the animal type, it is none the less the sole manifestation of spirit. There is in

it the inanimate, the ugly; but the task of art is to cause to disappear from it this opposition between matter and spirit, to embellish the body, to render this form more perfect, to animate it, to spiritualize it.

As classic art represents free spirituality under the human, individual, and corporeal form, it has often been reproached with anthropomorphism. With the Greeks, Xenophanes had already attacked the popular religion in saying that, if lions had had sculptors among them, they would have given to their gods the form of lions. The French have in this sense a witty saying, that "God created man in His image, and men have shown their appreciation by providing themselves with gods in human form." But it is to be remarked that, if classic beauty is, in one respect, imperfect when compared with the romantic ideal, the imperfection does not reside in anthropomorphism as such. Far from this, we must admit that, if Classic Art is sufficiently anthropomorphic for art, it is too little so relatively to a more advanced religion. Christianity has pushed anthropomorphism much further; for, in the Christian doctrine, God is not merely a divine personification under the human form; He is at once very God and very Man. He passed through every phase of human existence. He was born, He suffered, and died. In Classic Art, sensuous nature does not die, but neither is it resuscitated. Thus this religion does not wholly satisfy the human soul. The Greek ideal has for its basis an unchangeable harmony between spirit and sensuous form—the unalterable serenity of the immortal gods; but this calm has about it something cold and inanimate. Classic Art has not comprehended the true essence of the divine nature, nor penetrated to the depths of the soul. It has not known how to develop its inmost powers in their opposition, and again to reestablish their harmony. All this phase of existence, the evil, the sinful, the unhappy, moral suffering, the revolt of the will, remorse, and the agonies of the soul, are unknown to it. Classic art does not pass beyond the proper domain of the veritable ideal.

II. As to its realization in history, it is scarcely necessary to say that we must seek it among the Greeks. Classic beauty,

with the infinite wealth of ideas and forms which compose its domain, has been allotted to the Greek people, and we ought to render homage to them for having raised art to its highest vitality. The Greeks, to consider their history only from the external side, lived in the happy medium of self-conscious, subjective freedom and moral substantiality. They were not enchained in the immobile unity of the Orient, of which the result is political and religious despotism, where the personality of the individual is absorbed and annulled in the universal substance, and has thence neither rights nor moral character. On the other hand, they proceed no further than to that stage where man concentrates himself within himself; separates himself from society, and from the world which environs him, in order to live retired within himself. Hence they connect their conduct with real interests only in turning toward a purely spiritual world. In the moral life of the Greek people the individual was, it is true, independent and free, yet without being able to isolate himself from the general interests of the State, or to separate his freedom from that of the city of which he formed a part. In Greek life the sentiment of general order as basis of morality remains in changeless harmony with that of personal freedom.

At the epoch when this principle reigned in all its purity, the opposition between political and moral law which is revealed by the moral consciousness was not yet manifest. The citizens were still penetrated by the spirit which constitutes the basis of public customs. They sought their own freedom only in the triumph of the general interest.

The sentiment of this happy harmony penetrates through all the productions in which Greek freedom has become conscious of itself. So that this epoch is the medium in which beauty begins its true life, and enters into full possession of its serene domain. It is the medium of free vitality — which is not here merely a product of nature, but a creation of spirit — and by this right it receives its manifestation in art; it is a mingling of spontaneity and reflection, where the individual is not isolated, but where also he cannot connect his faith, his sufferings, and his destiny with a more elevated principle, and

knows not how to reëstablish harmony within himself. This moment, like human life in general, was only a transition ; but in this instant, so brief, art attains to the culminating point of beauty under the form of plastic individuality. Its development was so rich and so full of genius that all the colors, all the tones, are there combined. At the same time, it is true, all that has appeared in the past finds its place here no longer as something absolute and independent, but as elements which are subordinate and accessory. Whence, also, the Greek people has revealed to itself its own spirit, in a sensuous and visible manner, in its gods. It has given them in art a form perfectly in accord with the ideas which they represent. Thanks to this perfect accord, which reigns as well in Greek art as in Greek mythology, this was, in Greece, the highest expression of the absolute ; and the Greek religion is the very religion of art ; while, at a later epoch, Romantic Art, though it may be as truly art, still gives intimation of a higher form of consciousness than Art is capable of representing.

III. Art here appears, not as a production of nature, but as a creation of the individual spirit. It is the work of a free spirit which has consciousness of itself, which possesses itself, which has nothing vague or obscure in thought, and finds itself arrested by no technical difficulty.

This new position of the Greek artist is manifested at once in respect of matter, of form, and of technical ability.

1. In that which concerns the matter or the ideas which are to be represented — in opposition to Symbolic Art, where the spirit gropes about, seeks, without being able to arrive at, a clear notion — the artist here finds those ideas already provided in dogma, in popular faith ; and of these he renders a clear account to himself. Nevertheless, he is not subservient to it ; he accepts it, but reproduces it freely. Greek artists received their subjects from the popular religion ; this was an idea originally transmitted by the Orient, but which was already transformed in the consciousness of the people. They transformed it, in their turn, in the sense of the beautiful ; they reproduced and created at the same time.

2. But it is, above all, in the form, that their free activity is

concentrated and exercised. While Symbolic Art exhausts itself in search of a thousand extraordinary forms in order to transmit its ideas, having neither measure nor fixed rule, the Greek artist confined himself within his subject and respected its limits. Thus he also established a perfect accord between matter and form. In thus working out the form, he perfected the matter, or content, also. He disengaged them both from useless accessories, so as to adapt the one to the other. Whence he did not pause with an immobile and traditional type; he perfected the whole, for matter and form are inseparable; he developed both the one and the other in all the serenity of inspiration.

3. As to the technical element, to the classic artist belong, in the highest degree, ability combined with inspiration. Nothing either arrested or constrained him. Here were no impediments, as in a stationary religion where forms are consecrated by usage—as, for example, in Egypt. And this ability continued always increasing. Progress in the methods of art is necessary to the realization of pure beauty, and to the perfect execution of works of genius.

DIVISION.—This must be sought only in the degrees of development which spring from the conception of the classic ideal.

1. The fundamental point which here constitutes all progress is the advent of genuine personality, which, in order to express itself, can no longer make use of forms borrowed from inorganic or animal nature, nor of gross personifications where the human form is mingled with preceding forms. This successive transformation by which classic beauty is engendered of itself is, then, the first point to examine.

2. After having spanned this interval, we have attained to the true ideal of Classic Art. What constitutes here the central point is the Greek Olympus, the new world of the gods of Greece, the beautiful creations of art. These we must characterize.

3. But in the idea of Classic Art is contained the principle of its destruction, which must conduct us into a mightier world—the Romantic world. This will constitute the subject of a third chapter.

CHAPTER I. — DEVELOPMENT OF CLASSIC ART.

I. Degradation of the Animal Kingdom.

1. Sacrifices of Animals. — 2. Hunts of Wild Beasts. — 3. Metamorphoses.

The first improvement consists in a reaction against the Symbolic Form, which the new spirit busies itself in destroying. The Greek gods came from the Orient; the Greeks borrowed their divinities from foreign religions. We might say, on the contrary, that they invented them; for invention does not exclude borrowing. They transformed ideas contained in ancient traditions. Now, upon what was this transformation based? This is the history of polytheism, and of antique art which pursues a parallel course and is inseparable from it.

The Greek divinities are, first of all, moral persons clothed with the human form. The first development, then, consists in rejecting those gross symbols which, in Oriental naturalism, constitute the objects of worship, and which disfigure the representations of art. This progress is marked by the degradation of the animal kingdom. It is clearly indicated in a great number of the ceremonies and fables of polytheism: 1. By Animal Sacrifices. 2. By Sacred Hunts; by many of the exploits attributed to heroes — in particular, the Labors of Hercules. Some of the fables of *Æsop* have the same meaning. 3d. The metamorphoses described by *Ovid* are also disfigured myths, or fables become burlesque, but of which the basis, remaining intact and easy to be recognized, contains the same idea.

This is the opposite of the manner in which the Egyptians considered animals. Nature here, instead of being venerated and adored, is reduced and degraded. To assume an animal form is no longer a deification — it is the chastisement of a monstrous crime. This form is made a disgrace to the gods themselves, and they assume it only to satisfy the passions of a sensual nature. Such is the meaning of many of the fables of *Jupiter*, as those of *Danae*, of *Europa*, of *Leda*, of *Gany-*

mede. The representation of the generative principle in nature, which constitutes the source of ancient mythologies, is here changed into a series of tales, wherein the father of gods and men plays a role little edifying and often ridiculous. Finally, all this part of religion which relates to the sensual desires of the animal nature is crowded into the background and represented by subordinate divinities: Circe, who changes men into swine, Pan, Silenus, the Satyrs, and the Fauns. Still the human form predominates, the animal form being indicated by the ears, small horns, etc.

Among these mixed forms it is necessary also to class the Centaurs, in which the sensual, passionate side of nature dominates, and where the spiritual side permits itself to be suppressed. Chiron alone, an able physician and the preceptor of Achilles, has a noble character, but his subaltern functions of pedagogue, which do not rise above human ability and wisdom, prevent his admission to the circle of the gods. In this fashion the character which the animal form presents in Classic Art is found to be changed in all respects; it is employed to designate the evil—that which is in itself bad or reprehensible: the forms of nature inferior to spirit; while elsewhere it is the expression of the Good and of the Absolute.

II. Conflict Between the Old and the New Gods.

1. Oracles.—2. Distinction between the Ancient and the New Divinities.—
3. Overthrow of the Ancient Gods.

After this degradation of the animal kingdom a progress of a higher order causes itself to be felt. It consists in this: that the real gods of Classic Art, of whom the essential characteristics are freedom and personality, manifest themselves with the attributes of consciousness and will as spiritual powers. And here it is under the human form that they appear. As the animal kingdom has been degraded and abased, so the powers of nature are also abased and degraded. In opposition to these, spirit occupies a more elevated rank.

Then, instead of simple personification, it is true *personality* which constitutes the chief element. Still, the gods of Classic Art do not cease to be forces of nature, because God could not here be represented as the free and absolute Spirit — such as he appears in Judaism and in Christianity. God is neither the creator nor the lord of nature; nor is He any more the absolute being whose essence is spirituality. This contrast between the Divinity and created things deprived of the divine character gives place to a harmonious accord, wherein results beauty. The universal and the individual — nature and spirit — combine without losing their respective rights, and without altering their purity in the representations of Greek art.

Classic Art does not, then, immediately attain to its ideal. Thus the manner in which these gross, deformed, *bizarre* elements borrowed from nature are modified and perfected ought especially to excite interest in Greek mythology. Without entering into the detail of traditions and myths (which is not our subject), we would call attention to the chief points in this progress, as follows: 1. The Oracles. 2. The distinction between the Old and the New Gods. 3. The overthrow of the Ancient Divinities.

1. In the oracles the phenomena of nature are no longer objects of adoration and of worship, as they are with the Persians or the Egyptians. Here the gods themselves reveal their wisdom to man; the very names lose their sacred character. The Oracle of Dodona makes response in this sense. The signs by which the gods manifest their will are very simple: the rustling and whispering of sacred oaks, the murmur of fountains, the clang of brazen vessels which the wind causes to resound. So, also, at Delos rustled the laurel; and at Delphi the wind upon the brazen tripod was a distinct, definitive element. But, beyond such immediate natural sounds, man himself was an enunciator of the oracle in so far as, out of the waking thoughtfulness of the understanding, he was dazed and frenzied into a naturalism of inspiration or ecstacy. Thus the Pythias renders oracles. Another characteristic is that the oracle is obscure and ambiguous. God, it is true, is

considered as possessing a knowledge of the future ; but the form under which He reveals it remains vague, indefinite ; the idea needs to be *interpreted*, so that man who receives the response is obliged to explain it, to mingle his reason with it ; and, if he thus takes part in the delivery of the oracle, he also assumes a part of the responsibility. In dramatic art, for example, man does not yet act entirely on his own account ; he consults the gods, and obeys their will ; but his will is fused with theirs. A part is performed by his freedom.

2. The distinction between the old and the new divinities marks still more clearly this progress of moral freedom.

Among the first, which personify the powers of nature, there is already established a gradation : First, the savage and subterranean powers, Chaos, Tartarus, Erebus ; then, Uranus, Gæa, the Giants and Titans ; in a still higher degree, Prometheus, the friend of the new gods, the benefactor of man, afterward punished for this apparent benefit — an inconsequence which is explained by the fact that, if Prometheus taught men industry, he created a cause of discord and dissension in not joining a higher instruction, namely, that of morality, the science of government, guarantees of property. Such is the profound meaning of this myth which Plato explains thus in his Protagoras.

Another class of divinities, equally ancient but already moral, though they still recall the fatality of physical laws, are the Eumenides, Dicé, the Erinyes. Here we see appear the ideas of *right* and of *justice* ; but of right that is exclusive, absolute, narrow, unintelligent, under the form of an implacable vengeance ; or, like the ancient Nemesis, of a power that brings down all that is elevated ; establishes equality by leveling — a procedure quite opposed to true justice.

3. Finally, this development of the Classic Ideal is revealed most clearly in the theogony and the genealogy of the gods ; in their birth and their succession ; by the abasement of the divinities of earlier races ; again, in the hostility which breaks out between them, in the revolution which has deprived them of sovereignty in order to place it in the hands of

new divinities. The distinction is pronounced at the point where the conflict arises, and this conflict becomes the chief element of mythology.

This is, indeed, the conflict between *Nature* and *Spirit*, and it is the law of the world. Under the historical form it is the perfecting of human nature, the successive conquest of the rights of property, the amelioration of laws, of the political constitution. In religious representations it is the triumph of moral divinities over the powers of nature.

This conflict announces itself as the greatest catastrophe in the history of the world; so that it is not the theme of a particular myth; it is the principal, decisive fact which forms the center of all this mythology.

The conclusion relative to the history of art, and to the development of the ideal, is that art, like mythology, must reject, as unworthy of it, all that is confused, fantastic, obscure; all gross mingling of the natural with the spiritual. All these creations of an ill-regulated imagination no longer find their place here; they must vanish before the light of spirit. Art purifies itself from all that may be styled caprice, fantasy, symbolic accessory—from every vague and confused idea.

At the same time the new gods form an organized and established world. This unity is affirmed and perfected still further in the ulterior developments of plastic art and poetry.

III. Conservation of the Ancient Elements in the New Mythological Representations.

1. The Mysteries.—2. Conservation of the Ancient Divinities.—3. Physical Elements of the Ancient Gods.

Notwithstanding the victory of the new gods, the ancient divinities preserve their place in Classic Art. They are venerated in part under their primitive form, in part changed and modified.

1. The first form under which we find the ancient myths preserved among the Greeks is that of the *Mysteries*.

The Greek mysteries possessed no secret, if by this word we understand that the Greeks did not know what was the basis of them. The greater part of the Athenians, together with a multitude of foreigners, were initiated into the Eleusinian mysteries ; only they would not reveal what the initiation had taught them. Now, it does not appear that any very lofty secret was concealed in the mysteries, nor that their content was much more elevated than that of the public religion. They preserved the ancient traditions. The form was symbolic, as was appropriate to the ancient telluric, astronomic, and Titanic elements. In the symbol, indeed, the meaning remains obscure ; it contains something else than what is revealed under the external form. The mysteries of Ceres and Bacchus have, it is true, a rational explanation, and hence a profound meaning ; but, the form under which this matter was presented remaining foreign to it, nothing clear could arise from it. Thus the mysteries exercised little influence upon the development of art. For example, it is related of Æschylus that he had revealed designedly the mysteries of Ceres. The impiety was restricted to having said that Artemis was the daughter of Ceres ; and this does not seem a very profound idea.

2. The worship and the conservation of the ancient gods appear more clearly in the artistic representations themselves. Thus Prometheus is first punished and chastised as a Titan ; but, again, we see him delivered ; permanent honors are rendered him. He was venerated in the Academy, with Minerva, as Vulcan himself. According to Lysimachides, Vulcan and Prometheus were distinct ; the latter was represented as prior and the more ancient. The two had a common altar upon the same pedestal. According to the myth, Prometheus was not long compelled to suffer his punishment, and was delivered from his chains by Hercules. We have another example in the *Eumenides* of Æschylus. The discussion between Apollo and the Eumenides is judged by the Areopagus, presided over by Minerva—that is to say, by the living spirit of the Athenian people. The voices are equally divided ; the white stone of Minerva terminates the dispute. The angry Eumenides raise

an outcry; but Pallas appeases them by according to them divine honors in the sacred wood of Colonus.

3. The ancient gods do not merely preserve their place beside the new; what imports most, even in the new gods, is the preserved ancient element which belongs to nature. As it is very easily conciliated with the spiritual individuality of the Classic Ideal, it is reflected in them, and its worship is thus found to be perpetuated.

The Greek gods, notwithstanding this human form, are not, then, as has often been said, simple allegories of the elements of nature. They say truly that Apollo is the god of the sun; Diana, the goddess of the moon; Neptune, the god of the sea; but the separation of the two terms (the physical element and its personification), as in the divine government of the world in the sense of the Bible, cannot apply to Greek Mythology. Moreover, the Greeks did not deify the objects of nature; they thought, on the contrary, that nature is not divine. To deify the existences of nature is the characteristic of the earlier myths. Thus, in the Egyptian religion, Isis and Osiris represent the sun and moon. But Plutarch thinks it would be unworthy to wish to explain them in this way. But all that in the sun, in the earth, etc., is ill-regulated or in disorder is, with the Greeks, attributed to physical forces. The Good—order and regularity—these are the work of the gods. The essence of the gods is the spiritual side—reason—the *λόγος*, the principle of law or of order. With this mode of viewing the spiritual nature of the gods, the particular elements of nature are distinguished from the new gods. We have the habit of associating the sun with Apollo; the moon with Diana. But with Homer these divinities are independent of the stars which they represent.

Still there remains in the new gods an echo of the powers of nature. We have already seen the principle of this combination of the *spiritual* with the *natural* in the Classic Ideal; to illustrate which a few examples will here suffice: Neptune represents the sea, the ocean, of which the waves embrace the earth; but his power and his activity extend still further. It

was he who built the walls of Ilium ; he was a tutelary divinity of Athens. Apollo, the new god, is the light of science, the god who renders oracles ; he preserves, nevertheless, an analogy with the sun and with physical light. It is disputed whether Apollo ought or ought not to signify the sun. He is at once both the sun and not the sun, for he is not limited to this merely material significance, but has come to have a meaning which is truly spiritual. There is a real and profound analogy between intellectual light and the light which renders bodies visible. Thus, in Apollo as god of intelligence, we find also an allusion to the light of the sun. Similarly his deadly arrows have a symbolic relation to the rays of that luminary. Hence, in external representation, there must be a clear indication of the outer attributes which show in which sense the divinity is to be taken.

In the history of the birth of the new gods we recognize the natural element which the gods of the Classic Ideal preserve. Thus, in Jupiter, there are characteristics which indicate the sun ; the twelve Labors of Hercules have a relation to the sun and to the months of the year. By her numerous breasts the Diana of Ephesus expresses fecundity. On the contrary, in Artemis the huntress, who slays ferocious beasts, with her beautiful human form — that of a young girl — the physical side is concealed ; though the crescent, together with the arrows, still recalls the moon. It is the same with Venus Aphrodite ; the further we ascend toward her origin in Asia, the more she is a power of nature. When she arrives in Greece, properly speaking, there appears the side more spiritual and more individual, of the beauty of the body, of grace, of love, which is added to the physical and sensuous side. The muses originally represented the murmur of fountains. Jupiter himself is first adored as thunder, though in Homer the lightning flash is already a sign of his will ; it is an *omen*, a connection with intelligence. Juno also presents a reflex of nature ; she recalls the celestial vault, and the atmosphere in which the gods move.

Similarly with the forms of the animal kingdom. Heretofore degraded, they resume a positive place. But the sym-

bolie sense is lost ; the animal form has no right to mingle with the human form — a monstrous mixture which art rejects. It presents itself then as a simple attribute or indicative sign : the Eagle near Jupiter, the Peacock by the side of Juno ; Doves accompany Venus ; the dog Anubis becomes the guardian of the lower world. If, then, there is still something symbolic contained in the ideal of the Greek gods, the primitive sense is no longer apparent ; the physical side, heretofore the essential, no longer remains, except as a vestige or external peculiarity. Further, the essence of these divinities being human nature, the purely external side appears no longer, except as a thing accidental — a human passion or foible. Such are the amours of Jupiter, which primarily related to the generative force of nature, and which, having lost their symbolic meaning, assume the character of licentious stories, which the poets have invented at will.

This realization of the gods as moral persons conducts us to the Ideal of Classic Art, properly speaking.

FICHTE'S CRITICISM OF SCHELLING.

[TRANSLATED FROM THE GERMAN OF J. G. FICHTE.]

BY A. E. KROEGER.

[NOTE.—The following was written by Fichte in 1806, though not published till after his death, as an exhaustive exposition of the distinction between the Science of Knowledge and Schelling's so-called Nature-Philosophy, just then all the rage in Germany. The polemical part of this article has been retained for the sake of completeness.—TR.]

I. Concerning the Significance of the Science of Knowledge.

If to man's cognition of truth this obstacle should be found to oppose itself—that, in the natural and unartificial state of man's mind, his cognition forms itself according to inner and perennially concealed laws, and communicates this, its own form, to the truth which is to be cognized without man's

becoming aware of the communication, thus ever remaining its own obstacle, entering between itself and pure truth — then truth could never be arrived at ; and, if this self-modification of cognition should turn out to be changeable, and in its various formations dependent upon blind chance, then a lasting unity and certainty in cognition or knowledge could never be attained. This defect, and the necessary consequences thereof, could be remedied in no other manner than by a full deduction of those inner self-modifications from the own laws of knowledge, and by abstracting their products from the cognized truth, after which abstraction pure truth would constitute the remainder. Such is, indeed, the case ; and this is the reason why all thinkers and workers on the field of science, until the days of Kant, have been dragged hither and thither by the concealed current of this inner modification of knowledge, and have been placed in opposition to themselves and others. Kant was the first who happily discovered this source of all errors and contradictions, and formed the resolution to stop it up by the only possible scientific process — namely, by a systematic deduction of all those modifications, or by, as he called it, a survey of the whole field of Reason. The execution of his plan, however, did not come up to the conception of it, since in it knowledge was not represented in its absolute unity, but as in itself divided into several branches ; for instance, theoretical, practical, and judging Reason. Moreover, the laws of these several branches were rather empirically gathered up, and proved by induction as laws of Reason, than by a true deduction from their original source in their essence. Under these circumstances the Science of Knowledge took hold of the problem propounded by Kant's discovery, and showed what Science is in its unity ; perfectly certain that from this unity the several branches would separate of themselves and characterize themselves.

We are not inclined to deny that some persons have, to a certain degree, understood this Science of Knowledge, and historically apprehended its object ; particularly as several have confessed that the Science of Knowledge has shown up the absolute nothingness of all productions of the fundamental law

of knowledge — reflection. But, unfortunately, from this discovery of the result of that philosophy the conclusion was drawn that the result proved the falseness of the Science of Knowledge; for a reality, it was argued, surely *did* exist; and this reality, it was argued, could not be taken hold of otherwise (because the individual who argued thus could not get hold of it otherwise) than within the sphere of the law of reflection. This erroneous presupposition, moreover, necessarily led them to represent the Science of Knowledge in a wrong light; for, never doubting that an objective Being *must* be posited, and that the Science of Knowledge also would be subject to this universal fate of mortality, they began to entertain the opinion that the error of its philosophy consisted in presupposing a subjective and an objective Being — a real and concretely existing *Ego*, as thing in itself — *which error they now believed they could get rid of, as far as they were concerned, by PRESUPPOSING INSTEAD OF IT AN OBJECTIVE-SUBJECTIVE BEING, WHICH THEY HONORED WITH THE NAME OF THE ABSOLUTE.*

True, the Science of Knowledge has not hesitated, in the face of the presupposition ascribed to it, to protest in the most various ways against it; but they insist — as, indeed, they cannot well do otherwise — that they know, better than the author of the Science of Knowledge, what he really intended to teach. In regard to their own improvement on the system, it is sun-clear, and, if ever a little sense should come to be the order of the day, every child must see that this their Absolute is not only objective, which objectivity is the first product of the standing form of reflection, but is, also, as Absolute determined by its opposite of a Non-Absolute, which entire *fivefoldness*, together with the Infiniteness contained in the Non-Absolute, lies in that operation of theirs, grown together with the Absolute and their phantasy; and thus their Absolute is, therefore, not a possible thought at all, but a mere dark production of their unbridled imagination, invented for the purpose of explaining that empirical reality, in the belief whereof they have grown up and are rooted forever.

Against these charges they believe that they can defend

themselves in the following manner : The Science of Knowledge has proposed to them — of course, only as a temporary expedient and a useful medicine for those to whom a state of calm considerateness has not yet become natural, and in whom this state alternates with a state of inconsiderateness — that, in producing any of these products of the standing form of reflection, they should always well consider that they *think* the thought.

Now, they, well knowing that by so doing their beloved deception would vanish, and that which they would so gladly regard as the true Reality manifest and show itself up to be a mere thought, insist that at this point we ought never to call upon them to reflect, and assert that, by carrying out such an absurd maxim, the Science of Knowledge resolves itself into a mere empty reflection-system, and the whole form of reflection into a mere nothing (which is, indeed, the case) ; and they assure us that it is the great art, of which the Science of Knowledge has remained ignorant, at the right place to close the eyes and open the hands in order to grasp reality. It escapes them utterly that the act of thinking — utterly independent of their reflecting or not reflecting upon it — remains in itself what it is, and as it necessarily shapes itself by the form of the limitation, with which they produce that act ; and that it is a very poor remedy against blindness to close the eyes to the existence of blindness. Thus, in the present case, their Absolute, of which they cannot think otherwise than that it is, remains always an Objective, projected from out of the Seeing (thinking), and opposed to it in itself by virtue of its essence and through its essence, no matter whether they expressly posit this its opposite, Seeing, or not ; and, if they have not realized more than this objectivating, they have thought only Being generally, but not, as they claim, the Absolute. Or, if they insist on having thought the Absolute, they have within Being generally, through a second antithesis to a not-absolute Being, realized a further Determination ; and then their Absolute is a particular Being within the general Being, and their thinking is in a determined manner analytical-synthetical, because only through such a thinking can that conception which they pretend to have been produced, whether they recognize it or not.

All this has been repeated to them again and again during the last thirteen years and in the most varied forms, and they have heard it well enough. But they do not want to hear it any longer, and hope, because we have been silent for a few years, that they are rid of it forever, and are now in undisturbed possession of that wisdom which pleases them so well.

But this their unwillingness to hear is not altogether a free one; it is, on the contrary, necessarily produced by the state of their spiritual nature. They have not the power to do what we ask of them, nor to be as we wish them to be. Hence, unless they are willing to give up all Being and sink into complete annihilation, they must plant themselves upon the only Being at which it is possible for them to get, and endeavor to uphold it with all their power.

The above-instanced analytical-synthetical thinking is a function of the imagination, and mixes reality with the schemes (pictures) created by it; but we ask them to realize the pure and simple thinking or contemplation, by which alone they can attain reality in its unity and purity. They are utterly incapable of this, and are, therefore, most certainly forced—unless they want to give up thinking altogether—to abandon themselves entirely to the rule of their dark and confused imagination. However they may move hither and thither with their spirit, they will be driven only towards other forms of imagination, but will never get beyond imagination. The form of imagination is always tearing asunder the one; they never approach the matter but with a mind torn asunder, and thus the one can never get at them, because they themselves never are the one.

Hence, also, all preaching loses its effect upon them; for, in order to get to them, it must first pass through their organism, and, in this passing through, it loses its own form and assumes the form of their organism. If one speaks to them, for instance, of the *Ego* as the ground-form of all knowledge, they find it impossible to get this *Ego* into their mind otherwise than as an objective *Ego*, determined by another objective Being opposed to it; because this latter form is the ground-form of imagination. Hence it is very natural and necessary that they

should understand the Science of Knowledge in the manner in which the German public has understood it ; and, hence, also, it is very clear that the Science of Knowledge cannot get at them at all. In its stead they get hold only of a very wrong system, which they seek to correct again by the opposite error.

Simple thinking is the inner Seeing ; imagining, on the contrary, is a blind groping, the ground of which always remains concealed to the groper. The Science of Knowledge was a painting calculated for light and eyes, and was submitted to the public on the presupposition that such things as light and eyes did exist. Several years were spent in groping all over the painting, and a few were found polite enough to aver that they did feel the figures (assumed to be painted) with their fingers. Others, who had more courage, confessed that they did not feel anything, which tended to do away with the timidity and false shame of the former, who, therefore, retracted their previous statement. One person was found, however, who took pity on the general distress, and who, from a collection of old refuse, kneaded a dough, which he offered to the public. Ever since then everybody who has fingers studies the science of the touch, and a day of public thanksgiving has been ordered because the Absolute has at last become *touchable*.

Where the real point of the contest, which the Science of Knowledge carries on against them, lies, not a single one amongst all our pretendedly philosophical German writers knows. I say, considerably, not a single one, and shall this time admit of no exceptions. Not a doubt is ever expressed by any one but that this system also holds the touch to be the only inner sense, and that it also is a groping and touching only somewhat different from theirs, and a little more wonderful. They, moreover, are very sure that the whole dispute is about objective truths, and that our system merely denies some things which they hold ; whilst our system is in reality rather a fight against their whole spiritual Being and Life, and requires, above all things, *clearness* from them, after which truth is pretty sure to follow of itself. In addressing them the Science of Knowledge would tell them : “ It matters little what you think ; for your whole thinking is already necessarily error, and whether

you err the one way or the other is very immaterial. But it does matter what you are inwardly and spiritually. Be the true, and you will also think the true ; live spiritually the One, and you will also see it."

But the former is not so very easy, and we have no reason to assume that at present there is more disposition amongst the Germans to do it than has been manifested by them during the last thirteen years, or, if we count in Kant — from whom the same thing might have been learned with only a little more exercise of individual ingenuity — during the last twenty-five years. Nevertheless, we will once more agitate this subject, regardless as to whether our effort again turns out fruitless or not.

But, in order to determine, above all things, the real point of dispute between the Science of Knowledge and the public, and the point wherein both parties agree, and thus to determine our present true object, let us premise :

The public desires — we, at present, accept its language until we throw it aside again further on — the public desires reality ; we desire the same, and thus far we are agreed.

On the other hand, the Science of Knowledge has produced the proof that the form of reflection which can be seized in its absolute unity, and has thus been seized by the Science of Knowledge, has no reality at all, but is merely an empty scheme, forming, from out of itself, by its inner divisions — which, also, can be seized and deduced from one principle — a system of equally empty schemes and shadows ; and this proposition the Science of Knowledge is determined to insist upon forever.

The public, which knows not how to arise, with its spiritual life, above this form of reflection, nor how to loosen it and contemplate it with freedom, has, without knowing it, its reality only in this form ; and, since it must have reality, it is inclined to consider the proof of the Science of Knowledge faulty because that proof destroys the reality which the public cannot help considering the only possible reality.

Now, if, under this condition of affairs, we assume for a moment that the public could be relieved, and made to

understand us, such a relief could be brought about only thus : We must, in common with the public, and before its eyes, shell off the form in which it always remains imprisoned, and show again that, although its reality is certainly destroyed, not *all* reality is thereby destroyed ; but that in the background of the form, and only after its destruction, true reality appears. Now, this is the very problem which I propose to attempt, at the proper time, by a new and utterly free realization of the Science of Knowledge in its first and profoundest fundamental principles.

If any one so chooses, he may consider such a work also as a fulfillment of an old promise to produce a new representation of the Science of Knowledge ; though I have long since considered myself absolved from that promise, being clearly convinced that the old representation of the Science of Knowledge is good and, as yet, sufficient. Public allusions to this promised new work have shown me that it was looked for chiefly in the hope that the study of this science might be made easier by it ; but to this hope I never had, nor have I now, great ability or inclination to respond.

As I have just now pronounced the old representation of the Science of Knowledge¹ to be good and correct, it follows that no other doctrine is ever to be expected from me. The essence of that Science of Knowledge consisted, first, in the assertion that the *Ego*-Form, or the Absolute form of reflection is the ground and root of all knowledge, and that only out of it everything arises that ever enters knowledge, and in the shape in which it is found in knowledge ; and, second, in the analytical-synthetical exhaustion of this form from the central point of a reciprocal determination between absolute substantiality and absolute causality ; and this character the reader will again find in all our present and future representations of the Science of Knowledge.

Now, if any one has arrived at the insight that Being — I must start, in order to begin, from this conception, which I shall shortly cancel again — can be only One, and not at all

¹ This is the Science of Knowledge published by J. B. Lippincott & Co. — Tr.

two — an in itself complete and perfect one, an identity — but on no account a manifold, then it may reasonably be asked from such a one that he should act according to this insight, and not act the very next minute in opposition to it; and that, unless he wishes to posit such a Being merely problematically, he should accept it positively and affirmatively, and posit it, true to his principle, only in positive Being or life, as that which, living immediately, can approve itself only in immediate living, and in no other manner. If he wishes to call this life Absolute — as he may, provided he does not desire thereby to express a distinction which would be opposed to the accepted Unity of Being — he must assume that the Absolute is of itself, and through itself, in this only possible inner life, and can be in no other manner; that the Absolute is only in immediate life, and that outside of immediate life there is no other Being; that all Being can, therefore, only be lived, but not realized in any other manner.

Now, although such a person cannot well deny that in this operation he nevertheless *thinks* life, and places it objectively before himself, he need only understand himself correctly in order to see at once that he does not mean this *thought* of his life, which is the product of his thinking, since he pretends to have thought life out and of itself, but not out of his thinking — his thinking being thus canceled by this very thought; and the substance of this thought, indeed, as the only possible true thought, canceling all thinking as claiming to have a significance in itself. But it would be utterly opposed to the presupposition if a person were to posit Being, and, since Being is the absolute, to posit the Absolute, not in a Unity, but in a manifold and in a visible creation and product of another outside of him. Such, however, is the conception of that Being from which we started. It is not of itself, but of thinking, and this Being is in itself dead, as it cannot, indeed, be otherwise, since its creator, thinking, is in itself dead, and proves itself thus dead in the only true thought — the thought of life. Moreover, this Being shows itself to be dead in its application, since it does not move from its place by itself, and can be eternally repeated only in speech, until thinking, by a

second position, grants it life and movement as accidental predicate. But all these predicates, afterwards assigned to Being, are necessarily arbitrary inventions; since, if thinking is to give us a credible characteristic of life, life must first enter thinking, and therein testify of itself immediately. But the thinking of a Being alluded to excludes, at the very beginning, life from it, and places itself out of all immediate contact with life. Hence it cannot report credibly, but can only invent—the possibility of which invention requires, moreover, still an explanation for itself.

If, nevertheless, it were maintained—in a certain respect, which we shall define more closely hereafter—that we are, or, which is the same, that consciousness is, this would have to be understood, from the above fundamental basis, as follows: That the one absolute life is our own, and ours the absolute life, since there cannot be two lives, but only one life; and that the Absolute can also be in us only *immediately living*, and can be only in life, and in no other manner; and, again, that the Absolute lives only in us, since it lives at all in us, and since it cannot live twice. But, now, in so far as we moreover assume that we are not merely the one life, but are, at the same time, *We*, or *Consciousness*, it also follows that the One life enters, in so far, the form of the *Ego*. If, again, as we may well presume, this *Ego* form should be penetrable, we could arrive at a clear insight as to what effects that form alone must have upon us and our consciousness; and, hence, as to *what is not pure, but formal, life*. If, then, we deducted this formal life from our total life, we should see what would remain to us as pure and absolute life—that which is commonly called the *Real*. A Science of Knowledge would arise which would at the same time be the only possible Science of Life (Doctrine of Living).

Now, so far as the firstly posited dead Being is concerned, it appears clearly that this is not at all the Absolute, but merely the ultimate production of the true absolute life, which has entered the *Ego* form in us; the ultimate, I say, and hence that in which, in this form, life has finished itself—died out and expired—and which is thus without any further reality. It

appears clearly that a truly living philosophy must proceed from life to Being, and that the way from Being to life must be utterly wrong, and must produce an utterly erroneous system, and that those who posit the Absolute as a Being have utterly eradicated it out of themselves. Even in the Science of Knowledge the Absolute cannot be contemplated by you *outside* of yourself, but you must be and live the Absolute in your own person.

I add the following two remarks: *Firstly*, the result just established declares every philosophy, except the philosophy of Kant and the Science of Knowledge, to be utterly wrong and absurd; *secondly*, however clear and self-evident the above statements may be, it is possible that there are readers who do not find it easy to submit to them. The reason is that it requires some exertion to realize the logical consequences which we insist upon, and to get them under free and considerate control, they being opposed to the natural tendency of mankind to think objectively. Nevertheless, we must insist on the realization of those consequences, as otherwise we remain in a state of blind groping, and arrive at no seeing; the whole instruction thus losing its effect for want of a proper organ to receive it.

Finally, we have insisted on proceeding from life to Being, and not from Being to life, merely to remove the chief cause of all error; but on no account to cut off the possibility, in case it should be necessary to go beyond even life, and to represent this also as not a Simple and the First, but as the production of a clearly-to-be-shown-up synthesis, though surely not a production of Being.

CHRISTIANITY AND THE CLEARING-UP.

BY FRANCIS A. HENRY.

I. Causes in the Past.

Fifteen hundred years ago the Christian world was convulsed by a bitter controversy, which turned on the question whether the Divine Son was of the same or of like substance with the Father; and, more than a thousand years later, it was rent into fragments by dissensions on such points as the commutation of spiritual punishment to a pecuniary fine, the sufficiency of Scripture independent of tradition, and the claims of the Bishop of Rome to universal supremacy.

In our day, religious speculation takes a very different course. Society has lost interest in such theological distinctions as were once topics of absorbing interest in the streets and shops of Constantinople, and no longer cares to argue such points of doctrine or practice as once divided all classes of the people of Europe. The questions which now beset the minds of many thinking men are no longer such as presuppose a belief in Christianity. These men have reopened a discussion which, in the view of the earlier Christian ages, was closed by faith forever. They have brought up again those deep problems of the human condition which were supposed to be settled forever by the creeds. They call in question the being of a God, the immortality of the soul, the reality of anything beyond the phenomena of Nature. As to these matters, the world was once content to accept the *dicta* of religious dogmatism, without a dream of asking proof, or doubting for an instant its infallibility. But now, in their consideration, free inquiry pays little heed to what religion has to say, for it holds her teaching to be only the conventional tradition of a "faith once delivered," and her arguments only one enormous *petitio principii*. And so, with an indifference to religious orthodoxy always genuine and often contemptuous, men turn to look at the absolute and infinite with their

own eyes ; and, as their mental vision is apt to be "limited," it commonly follows that the object of consideration is pronounced non-existent, or at least unknowable. Thus, free-thinkers become "advanced" thinkers. Beginning with insisting that all questions leading beyond the bounds of time and sense shall be discussed in the light or license of independent reason, they end by refusing to entertain any such questions at all. Beginning with scant respect for religious authority in contemplation of the mysterious facts of life, they end by concluding everything mysterious a fiction, and all religion the product of instincts and tendencies of the undeveloped mind — a superfetation of the mythic consciousness. Under the influence of a so-called "science" of physical phenomena, and a so-called "philosophy" of nescience, they compare all supramundane concerns to "the politics of the inhabitants of the moon," as being matters about which no one knows or cares to know ; and "conceive that they only show a proper regard for the economy of time when they decline to trouble themselves about them at all."¹ Thus, philosophy has an equal share with religion in their sweeping contempt ; for they rightly feel that religion and philosophy are one in spirit, have the same message to proclaim and the same interests at heart. They are pleased to tell us that "metaphysicians are a class of thinkers which, happily, is rapidly diminishing ;"² and, again : "All your Platos and Aristotles but fill the world with long beards and long words." "Speculations touching the divine attributes, the origin of evil, and the foundation of moral obligation are, in a peculiar degree, the delight of intelligent children and half-civilized men." To which "enlightened" statements of Macaulay we may oppose a remark of Bishop Berkeley : "He who hath not much meditated upon God, the human mind, and the *summum bonum*, may possibly make a thriving earthworm, but will most indubitably make a sorry patriot and a sorry statesman." It is a well-known saying of Novalis that

¹ Huxley.

² Froude.

“Philosophy can bake no bread, but she gives us God, freedom, and immortality.” But the extreme result of our “advanced” thought is the discovery that these are puzzles for children; that the civilized man is to cheek within himself the large discourse that looks before and after, and, like a shrewder beaver, turn his whole attention to the world of the five senses. All quest of insight into the mysteries within us and the mysteries without; into the inner of this strange universe in which, we know not how, we find ourselves — of this strange life which each of us is, somehow, living without memory of its beginning or foresight of its end; all eagerness of the mind, oppressed with the burden of its unknown being, to learn the answer to those still-recurring questions: What am I? Why am I? Whence? Whither? — all this, our newest wisdom tells us, is only the griping of a mental emptiness, a grasp at shadows, and a waste of time. Yet, surely, if these questions are not of essential interest to men, it is hard to see what questions can be. If these be called “essentially questions of lunar politics,” it is hard to see what questions may be thought to concern the inhabitants of earth. But, indeed, it is vain trying to suppress them with a nickname; they are too deeply and too intensely human, nor know we any other interests for men which are not themselves but lunar politics in their comparison. In the answer to these mighty questions, and the finding of the truth we seek, lies all that gives to human life its meaning or its worth; and that answer religion and philosophy undertake to give.

But these have fallen now on evil days, and for the first, at least, they are embittered by that memory of happier things which the poets deem the crown of sorrows. For time was when theology sat upon the throne of intellectual despotism; when Faith reduced to servitude her equal ally, Thought, and fettered her with formulas and churchly rule, until her onward movement was turned into an idle round, and her only action became a play of empty logic and the barren dialectic of the Schools; when religion held that all that was not with her was against her, and physical science had to hide her face and work in holes and corners, and free thought was brought to

the scaffold and the stake. Now, therefore, that theology wanders unregarded and uncared for, if she come to see that her own tyranny over men provoked their rebellion and explains their dislike—that an even-handed justice has made free thought her enemy, because she would not have it her friend—adversity will not be without its uses; and when she shall acknowledge that perfect liberty is due to thought, and pure charity to honest error, she may regain, for she will then deserve, her old ascendancy.

Meantime, for us who have at heart the interests of religion and philosophy, it is best not to groan over changed times and the loss of faith, but to see how the change has come about, what is the reason for it—for reason there must be—and what the remedy. I know no better way to open this inquiry than to make a brief study of the organic movement, or evolution of Thought, and then to follow this as it shapes the progress of history.

There are three planes of intellectual culture, or three phases of intellectual life, which I will name, respectively, those of belief, of understanding, and of reason. The first of these mental principles may be defined as *a persuasion of the mind as to the truth of anything suggested to it*. This is wide enough to cover, at the same time, religious faith and sense-perception; for, while these differ from each other in that one is of the seen and the other of the unseen, belief, in the sense of the above definition, is the common principle of both.

We say that we see a horse or a tree, but how do we *know* that these are real objects and not the bodiless creation of our minds? In Ferrier's phrase, we never see the object alone, by itself, but always the object *mecum*. All that we know of the matter is what passes within us—the internal phenomena of consciousness. But we are at once *persuaded* of the existence of an external object, and so promote our sensations to the rank and title of perceptions. It is, then, of the nature of Belief that the grounds of its action lie wholly within the mind itself, and lie below its consciousness. When we have producible grounds, we do not believe—we infer. For example: A friend is accused of a crime; the case against him is very

strong, but we "believe" in his innocence, in spite of the evidence. This belief, however, is not without a reason; it springs from our estimate of his character, and that from our acquaintance with the man. A very improbable statement is offered in defense, which is generally rejected as a fabrication, but we accept it because, to our judgment, any solution of the difficulty is less unlikely than that our friend should be guilty. Now, it is plain that this process of the mind is not belief in its strict and simple sense. It is, in fact, a kind of rapid and half-conscious reasoning, which is producible in logical form. As thus: A man who has hitherto lived a blameless life, and displayed an upright character, is one, in the highest degree, unlikely to be guilty of such a crime. But this man we know for such a one; therefore he is, in the highest degree, unlikely to be guilty of this crime. This is *Barbara*, the most regular form of the syllogism. Belief is essentially a different thing from this. It is a spontaneous act of the mind—immediate, and unconditioned by external influence. The mind believes simply because it is its nature to. It is constituted with this primordial faculty of apprehension as the body is gifted with the organ of vision.

Our view of Belief will become clearer by noting the contrast it presents with the second mental principle, Understanding.

This may be defined as *the faculty which establishes the truth of a proposition by showing its necessary consequence upon another proposition already accepted as true*. Here is the exact converse of Belief. That is immediate and simple; a direct grasp of an object without process or method, independent of support or warrant. Understanding, on the contrary, is nothing else than process, method, mediation, weighing of evidence, and evolution of proof. In the ordinary view this contrast marks Understanding as a faculty that ranks higher than Belief in the mental scale. It is supposed that convictions reached by reasoning are of more value, because of greater certainty, than those grasped by Belief; that the former are matter of positive knowledge, and the latter only of probable supposition. For, it is argued, the

action of Belief is not reducible to scientific form, or capable of scientific valuation. It seeks no proof and offers none. It is a leap in the dark, which has no means of substantiating the results it reaches, nor any way of showing how it reaches them. Men even believe what at the same time they confess themselves unable to comprehend. On the other hand, Understanding demands proof for every proposition it admits, and offers proof for every one it asserts. It welds link to link in a strong chain of reasoning. It walks on firm ground to the point it aims for, and every step it takes is sure.

This comparative estimate fancies it acquires a scientific basis in the statement that Belief is a "subjective" principle, and Understanding an "objective" one; a statement explained somewhat thus: The action of Understanding in logical or mathematical reasoning is impersonal in its character. It is wholly regulated by the "laws of thought." It is that of a spectator who notes and registers, but does not control or shape, the movement of necessary relations. Consequently, the truths of demonstration are recognized as existing "objectively," or, of their own necessity, independently of the mind surveying them. The square of the hypotenuse of a right-angled triangle is eternally equal to the squares of its other two sides, whether or not Euclid or any human being discover the fact. With Belief the case is quite opposite. It is determined by an internal impulse; it begins with an antecedent prepossession; it lives not in the dry light of passive observation, but amid the color and *chiaroscuro* of the mind's own atmosphere; its conclusions are gained by its own reaching toward them — it spins them out of itself as the spider spins his web. Formed under these personal or "subjective" conditions, the mind's beliefs cannot claim absolute authority — can have no weight except for the mind that holds them. All this assumes as unquestionable that, in so far as mental action is subjective, it is unreliable. Granting this assumption for argument's sake, it will be sufficient to meet the statement of fact with a direct contradiction: it is Belief that is objective, and Understanding that is subjective. For, just because Belief springs from an internal impulse is a reaching forward of the mind itself, or

a spinning of its own fibers, it follows that it belongs, not to the subjective or personal side of mind, but to the objective or impersonal. The subjective principle is the intelligent and voluntary activity. To this Belief does not belong. Belief is the mind's spontaneous act; it "does itself;" it is simply mental vision. On this plane of Belief the thinking with intelligence and purpose—subjective thinking—has not yet appeared. It enters with understanding, and is called *reflection*—the *bending back* of mind for a second look at the affirmations of Belief. If, then, objectivity be any guaranty of certainty, Belief, and not Understanding, is the principle to be relied upon.

But apart from this there is a fatal flaw in the claims of Understanding to merit greater confidence than Belief, although the claim is commonly admitted. For, retrace the reasoning process to its beginning, and it is plain that the original *first proposition*, from which all the others are deduced, and by that deduction proved to be true, itself has not been, and cannot be, established by this process; because, being the first, there is no other before it to derive it from or explain it by. There is no demonstration but is built on that which has not been, and cannot be, demonstrated. Consequently demonstration, as such, cannot guarantee certainty. Consequently, again, to refuse certainty to what cannot be demonstrated is to strike away the foundation of demonstration itself. The action of Understanding depends upon first principles, which must first be supplied to it. These *data* it calls "self-evident" truths, because it is unable to find any proof of them, and in regard to them it occupies precisely the position of Belief—that is, it simply recognizes them and accepts them.

The true result, then, of this comparison is that Belief, and not Understanding, is the faculty that supplies the ground of certitude. It is upon the spontaneous activity of intelligence that all its reflective achievement is grounded. I say achievement, for, granting that Understanding is dependent on another faculty, and all its labored fabric of mediation built on immediate insight, it does not follow that its careful, methodical procedure, therefore, comes to nothing or counts for nothing;

nor that Understanding has not useful and quite indispensable capacities, and a certain superiority over Belief to compensate for the inferiority we have noted. Belief apprehends the Absolute; Understanding comprehends the Relative. The one grasps principles, the other evolves consequents. The one gains view of the underlying generality, the other connects and coördinates particulars, assigning to each its relation to the others, and, by methods of its own, reducing the manifold to systematic unity. Belief gives an indefinite knowledge; Understanding, an exact knowledge. Belief knows, but Understanding *knows* that it knows, because it knows *how* it knows. And this subjective insight of Understanding, not the objective apprehension of Belief, is "knowing" in the only complete sense of the term. In this lies the claim of Understanding to the title of scientific intelligence, for intuition is no more science than the acorn is the oak.

Now, since, on the one hand, Belief supplies to Understanding a point of departure which it could not find for itself, and without which it could not move; and since, on the other hand, Understanding advances from that starting-point by a method of its own which Belief does not possess; since that is, each has what the other lacks and lacks what the other has — Belief and Understanding are seen to be, not antagonistic, but complementary, principles. The one has *matter*; the other has *form*. By itself each is incomplete, fragmentary, but together they are *momenta*, dynamic factors, of the principle which covers the concrete totality of mental action — the speculative reason. On this plane of intellect, matter and form are not sundered and held apart, but their mutual mediation has disclosed their essential unity, and in this unity the mind lives. Truth is seen as a unity of essential distinctions, and that insight neither denies the unity nor neglects the distinction. The actual is found not in the abstract universal, nor in the abstract particular, but in the concrete singular; not in the conditioned, nor in the unconditioned, but in the self-conditioning; not in mere phenomena and not in mere essence, but in essence as phenomenally self-revealed; not in the positive alone nor in the negative alone, but in the positive as constituted by the

negative. It is the function of the Speculative Reason to establish those first principles which Belief only asserts, and which Understanding declares to be beyond the reach of the scientific mind. To this reason, therefore, and to this reason only, the Absolute and Infinite are not something believed nor something disbelieved, but something known; for it thinks itself loose from the hold of Understanding, which would shut thought in with "limits" and keep it down with "laws." It finds its way out of those abstract categories which involve the mind in hopeless antinomies, and advances by principles as concrete as truth itself. It holds in the Dialectic the key to all wonders and the legible translation of the secret of the universe.

Now, it is important to see that these three mental principles do not lie side by side, each by itself, as independent faculties, though, for convenience, our analysis has treated them as if they did; for mind is one in its faculties, and one in the stages of its growth. As faculties *of mind*, they reside in an organic unity — they hold an organic relation to each other, and develop according to an organic law. Thus the logical life of thought is self-evolution through this three-phased process; beginning with the intuition of Belief, it proceeds through the reasoning of Understanding, and arrives at the pure thinking of Reason. First is the apprehension of the immediate unity; next the discernment of the mediating distinctions; and, finally, the inclusion of the distinctions in the self-mediating unity. Or, at briefest: First, the Thesis; next, the Antithesis; lastly, the Synthesis.

Such is the necessary movement of Thought through its constitutive principles. It now remains for us to see that this movement underlies and guides the general course of history. As much as this lies, indeed, in the very idea of history; that is, history is nothing else than the actualization of thought — the *expliciter* of that *impliciter*; for history is the continuity of human action. But what is *human* action? There is no action of any individual man but has a motive and a meaning; it is the execution of a purpose. We assume that there is a reason for

it. As, then, every particular action is the expression of a thought, and for every action there is some reason, so action in general is the expression of thought in general, and for action as such, there is reason as such. Action that is, is the action of reason, or reason in action. The action of man must be the action of mind. If, then, thought is the material of human action, or history, the general process of thought will be reproduced in the general progress of history.

It would be interesting to illustrate this point by reference to universal history. We should find that as thought begins with Belief, so the story of primitive culture has nothing earlier than religions and mythologies. It tells of intuition taken for inspiration; of poets, prophets, priests; of kings, vicegerents of a divine supremacy, and of heroes descended from the gods. Again, as in the process of thought, Belief leads to understanding, so in history the twilight time of mystery and marvel, of oracle and hierophant, is followed by the broad noon of practical sense and useful knowledge. The golden haze that swam before the eye of mental infancy settles into focus for a clearer, but narrower, vision. The various elements of civilization, held in solution in the religious consciousness, are precipitated into distinctness. Faith yields to science; poetry to prose; theocratic despotism to civil freedom. Wealth accumulates, bringing with it luxury and poverty, social refinement and social corruption. Life becomes complex, selfish, materialized. Lastly, as thought's final movement is to the speculative reason, so even this has an historic appearance in the Socratic philosophy, and a practical realization, when Aristotle's brilliant pupil achieved his vast design to Hellenize the world.

But I must confine myself to a rapid survey of the past life of modern nations, since it is with their present life, resulting from that past, that we are concerned. When Goths, Lombards, Burgundians, and Franks were settled in their new homes, and civilization again became possible, the first step to it had to be taken within the sphere of a twofold influence—that of the Empire and that of the Church. The imperial system furnished the *forms* of social and civil order, but the

content of the world's thought and life was given to it in Christianity. Now, what was given and how was it received?

The Christian revelation centers in the person of Christ. The single personality of a God who is man — a man who is God — declares that essential identity of Divine and human nature which was implied in the Hebrew conception of a personal God. The Incarnation is possible only through the essential homogeneity of all spiritual being, and in that lies the only ground of a spiritual reconciliation and reunion of God and man. But the unity of Divine and human, taken as immediate, is only the Serpent's "Ye shall be as gods." It is only the assertion of man's subjective independence — his abstract free will — which is precisely Evil. Man enters into the Divine — enters fully into his own nature — only in so far as he renounces his merely natural being and his merely willful will. Thus the Incarnation, in which the Word becomes not a man, but "flesh," is the recreation of humanity. It is "in Christ" that man returns to the Divine from the alienation of a false independence; and thus he finds his infinite or Divine being comprehended in the specific conception of the son. The distinctive principle of Christianity is, therefore, the principle of Mediation. Man realizes his spiritual essence by renouncing the merely natural, for that is the unspiritual. The precedent condition of his elevation above nature must, then, be the consciousness of his spirituality. That consciousness is nothing else than the recognition of his unity with the Divine, and it is the intuition of this unity that is given to men in Christ. Christ is ideal manhood, and, *as such*, the one Mediator between God and men. Hence the individual holds his new relation to God through his *essential humanity*. But that is the element of the identity of all individuals. All men hold the same relation; and, if it is held by man as man, it is held in common. Thus the spiritual life is not an isolation, but a communion of individuals. The Kingdom of God, a present life in the spirit of Christ, is the Christian Brotherhood — the Church. Thus the content of the Christian Religion is speculative in its significance. Its truth is this concrete oneness of subject and object, "Ye in me and I in you," this singularizing

of particulars through their universality, “We, being many, are one Body in Christ.”

Now, from this speculative or *absolute* character of Christian truth—from its being a unity of essential distinctions—it results that it cannot all at once be apprehended. It is learned only by a slow process in the world-training of the ages. At first the truth appears to men only in its immediate aspect, as *purely objective*—that is, *not essentially related* to their own being. As such it is apprehended by Faith. This is the Christian method and secret, and so the Christian world begins with that principle of Belief which we have found to be the logical beginning of thought. But thus to seize one-half of the truth and miss the other half is at once to base Christianity upon that infinite falsity which ruled the destinies of the Middle Ages; for, since the Christian God is *Spirit*, the revelation of the Divine contains, as an integral element, *man's relation* to the Divine. But, now, while Christianity is received as the absolute truth of thought and life, in that cognition is not given the recognition of self. And so the revelation of the infinite unity of Divine and human, seized only in its objective phase, appears rather as the declaration of their infinite difference. The Spirit *in which man is not mirrored to himself* stands over against him as alien to his being. The world throws itself in an agony of self-abasement at the feet of the Divine, and a gulf opens between the finite and the infinite—between God and man.

What becomes, then, of the heart of the Christian Religion—the principle of Mediation between them? This: Man, being mere finite, is incapable of sustaining any direct relation to the Divine. But, if this be so, Christ has really effected no reconciliation, no spiritual result. There is no meaning in the Scripture words: “Having, then, boldness to *enter into the holiest* by a new and living way, let us draw near in full assurance of faith.” If man in Christ is in no sense Divine, Christ is in no sense human; and so as men ceased to see themselves in Christ, and Christ in themselves, He melted into the general conception of the Divine, and, *as Christ*, was set aside. Hence came the fundamental heresy of the Middle Ages—the rejection

of Mediation through Christ alone ; for, since there was no common nature of God and man to form an internal element of Mediation, that was sought in an element external—the organization of the Church. Now, when it became a system of Mediation, the Church suffered a change, and assumed a new shape. Here it is important to see clearly. It is no fault of a spiritual institution that it takes on a temporal organization, for that is a necessity if it will hold a place in the life of the world. But in every organized institution the internal element is what is vital ; the external only exists for its sake. When the organization forgets that, as such, it is the shrine of a sacredness not its own, and assumes to stand alone, as in itself sacred, then the life of its internal spirit begins to faint and sicken. And this—the usurpation by the external, or temporal, of the place of the internal, or spiritual—was the fault of the Mediæval Church. Gradually the spiritual kingdom, governing from within, was changed into an ecclesiastical kingdom, governing from without. The free community of Apostolic times became a despotic hierarchy, in which the spiritual equality of Christians, their intercommunion in the common life of the Spirit, faded into a dream. Hence arose what we may call the great schism in the Church ; not that later one of pope against pope, but the early separation of the Clergy from the Laity. To the Clergy is given all spiritual insight and knowledge of divine things ; the Laity can stand in no direct relation to the divine. But thus they are cut off from the Church ; and, in effect, that term becomes synonymous with the Clergy. The Church, in this new sense, claims supreme authority in faith and morals. The truth is presented to men in a dogmatic system, shaped by Councils and Fathers of the Church. The development of this doctrine belongs exclusively to the Church. It determines ; the Laity has simply to receive on faith—faith without insight. Thus, faith becomes a matter of external legislation, and thence results compulsion and the stake. Again, the layman, in his absolute finitude, can hold no direct communication with the Divine Being. His prayers must be offered through mediators—the perfect dead ; and so comes saint-worship and

all the strange growth of a new mythology. With this, Christ assumes more definitely the character of the Judge. The Savior of men and Friend of sinners becomes the *Rex tremendi Majestatis* of the *Dies Irae*, and the Virgin Mother is specially invoked to appease the wrath of her Son. From the same principle, the finitude of consciousness, arises the perversion of the Eucharist. That is, in truth, the sacrament of the unity of man with God through Christ; it is the highest spiritual act, in that therein man lays hold on the consciousness of this spiritual communion. But such a view would overthrow the whole structure of Mediæval Christianity, and so the Host is declared the present Christ, *apart from reception* by the faithful. They have but to fall down before this mere thing, held up for their adoration in the hands of others; for the Clergy claim the ownership of this highest of human blessings. Again, in conduct the layman must not presume to judge for himself, for that would imply personal knowledge of the right. In *confession* he is bound to expose to the Church all particulars of his life and actions, and then is directed what to do. This, according to the general principle, cannot be moral amendment. His danger is not the internal death of sinfulness, but the external penalty of damnation. The terrors of hell are vividly painted to drive him to seek escape from them through the "means of grace" — an *arcantum* in possession of the Church. He is directed, then, to outward, not to inward, actions; mechanical prayers, mechanical penances; directions so avowedly unspiritual that they even may be vicariously performed; or, better still, the wealthy sinner may buy immunity in a draft on the merits of the Saints, laid up in the Church treasury. Thus subjective spirit goes to sleep, handing intellect over to an *Ecclesia Docens* and conscience to priestly authority. Faith becomes passive acceptance; moral life, passive obedience. The Church becomes on the one hand an initiated ruling caste, and on the other a *profanum vulgus* reduced to spiritual slavery.

If, within the Church, Christianity issued in this self-contradiction, we may expect to find the relation of religion to social life not less hopelessly perverted. In fact, social morality was

renounced in its three most essential features. Marriage is, indeed, reckoned a sacrament, but it is none the less degraded by the Church estimate of Celibacy as the holier state. Again, labor for one's own support, and the laying up the surplus, is, in truth, alike the basis of personal independence and of the common welfare, but, in contravention of this, Pauperism is regarded as the nobler life, and mendicancy claims a superior sanctity. Lastly, the morality, which in truth alone can form a social bond, is that of the heart and conscience — of mind and will as well as of deed; but this is neither sought nor would it find allowance. What is demanded is blind compliance with the commandments of men, a docile walking in the leading strings of the Church. In this way the three vows of the religious life — Chastity, Poverty, and Obedience — turn out the complete perversion at once of Christian principles and of social order.

Thus the Mediaeval Church appears in history as simply a reaction against the secular life of the time, and as such it subjects, but does not reform. The most energetic phase of this reaction is seen in Monachism. As concerns social morality, that institution, at its best, was an error and an evil, for it disregarded equally the claims of social duty, the teachings of the Gospel, and all rational instincts of human nature. The scheme of monastic life centered in the false principle of Oriental Dualism, that taught the inherent evilness of matter, and the consequent sinfulness of everything corporeal; and the extreme to which ascetic frenzy carried the principle remains recorded for our reading in all its painful and disgusting details. But a false principle of action refutes itself when it is put in practice, and the monasteries, having long fostered fraud, avarice, and cruelty, at length sank into the fleshly vices they especially sought to escape, and became notorious for gluttony, drunkenness, and debauchery.¹

¹ The testimony to this fact is overwhelming. As early as the year 1400 Clémangis could write as follows in his *Declamatio de corrupto Ecclesiæ statu*, and Clémangis, be it remembered, was no heresiarch, but an orthodox churchman: "*Si quis hodie desidiosus est, si quis a labore abhorrens, si quis in otio luxuriari volens, ad sacerdotium convolat, quo adepto, statim se cæteris sacerdotibus volup-*

The general fact here to which all Mediæval history bears witness is this: that religion, as it was practically defined by the Church, was completely divorced from morality. Whether, on the whole, religion had "passed the point where it becomes more injurious to public morals than would be its entire absence," is a question which the judicious and temperate Hallam considers a "very complex" one, although he is not prepared to pronounce an affirmative decision. But it had reached the point where crimes could be commended, when the perpetrators were zealous for the faith or duly considerate of priestly interests. A monkish chronicler tells, with high approbation, how a bishop made a nobleman drunk in order to cheat him out of an estate. And even Gregory of Tours, after relating the atrocious deed of Clovis, in the murder of a prince whom he had previously instigated to parricide, concludes: "For God daily subdued his enemies to his hand, because he walked before Him in uprightness, and did what was pleasing in His eyes." An incident related of Robert of France illustrates the prevalent confusion of moral perceptions. The king, concerned at the frequency of perjury by witnesses who swore upon the sacred relics, secretly emptied the reliquary, in the belief that this would prevent those who took oath in future from incurring the guilt of their intended crime. Such a story shows how the relation of religion to life, which the Apostles made internal and vital, had become purely external and mechanical, and explains how the world, for the first ten centuries, remained, on the whole, a heathen world—men, when they were ill, thinking of religion with terror, and, when they were in health, not thinking of it at all.

In its own life, too, that world reflects the contradiction between principle and practice in which we find the Church

tatum sectatoribus adjungit, qui magis secundum Epicurum quam secundum Christum viventes, et cauponulas seduli frequentantes, potando, commessando, pransitando, convivendo cum tesseris et pilâ ludendo tempora tota consumunt.
 * * * *Quid aliud sunt hoc tempore puellarum monasteria nisi quædam non dico Dei sanctuaria, sed Veneris execranda prostibula, sed lascivorum et impudicorum juvenum ad libidines explendas receptacula? ut idem sit hodie puellam velare quod et publicè ad scortandum exponere."*

involved. An imperial dignity : in theory, organically united with the Church — in fact, divided from it by the long contest of Guelf and Ghibelline ; in theory, the center of order for the Christian world — in fact, an empty title. A Feudal System whose theoretic bond, Fidelity, is a rope of sand, while unbridled selfishness lifts every man's hand against his neighbor, and lordship means license to plunder and oppress. A social character, the barbarous play of impulse, and a medley of wildest inconsistencies — lavish and rapacious, devout and dissolute, generous and cruel — now plunging into savage crime, now prostrate in extravagant self-loathing, now clutching with frantic aspirations at a superhuman sanctity. A social condition so distracted in its delirium of passion that the history of the whole period reads like “ a tale told by an idiot — full of sound and fury, signifying nothing.”

Finally, if we turn to the political relations of the Church and the world, we are met by the whole strange story of the rise of ecclesiastical power. During the first 500 years that followed the recognition of Christianity by Constantine no principle could seem more indisputably established than that of the subordination of the Church to the State, alike under the sway of Roman Emperor, of barbarian chief, and of the Frankish rulers of the empire restored. But when the imperial arm was withdrawn that alone could sustain the fabric of a settled order, in the anarchy of civil strife that followed the eager and ambitious churchmen saw their opportunity. In a time of ignorance and barbarism, when men lived from day to day without memory of the past or foresight of the future, it was possible for a class which monopolized all learning to put forth claims and pretensions before unheard of, and to found them on forged precedents at variance with every fact of history.

The False Decretals and the *Donation of Constantine* were the engine by which the ecclesiastics, taking advantage of the readiness of the suffering people to welcome a change of masters, effected the great revolution of the ninth century, and reversed the relative position of the Church and the State. The twofold object of these able and unscrupulous men was to

assert the supremacy of the ecclesiastical over the secular power, and the supremacy of the papacy over the Church. When the occasion came to enforce the principles of the Forgeries, the man was not wanting to the hour, and the double victory of Nicholas I. laid the foundation of papal omnipotence within the Church, and established the principle (which Gregory and Innocent afterward carried to its extreme length) that from the pope is derived the jurisdiction of secular princes, who are bound to execute his decrees—a principle which restored to Rome all the terror of her ancient name, when kings were her vassals and her word was the law of the world.

But hand in hand with her material advancement went her moral decline. From the days of Constantine the greed of worldly wealth had been the characteristic vice of churchmen; and when Gregory passionately besought Charles Martel to save, not religion, but church lands, from the Lombard invader, he was not the first to show a greater solicitude for her temporal possessions than for spiritual interests. Thenceforth, more than ever, the Church seemed bent on heaping up riches, and less than ever seemed to care by what means they were acquired. The reckless rapacity, the cynical venality, the tide of corruption, that surged from the Roman Court through every channel of the church system might now and again stir a man like Grosteste to a protest of indignant sorrow; but, in general, contemporary writers relate the infamous transactions of their time with a *naïveté* that evidently views them as matters of course. By such means the Church amassed the enormous wealth which became the bulwark of her political power and the instrument of her political intrigue, and which made her injunction, not to lay up treasures upon earth and not to put trust in riches, the cant of a transparent hypocrisy.

It had been a chief object with the builders of ecclesiastical power, first, to gain immunity from secular jurisdiction, and then, by ever bolder pretensions, to usurp almost the whole administration of justice. To combine this with their priestly powers was to control the life of every man both here and

hereafter; and when the text, "He that is spiritual judgeth all things, but himself is judged of no man," was made the maxim of a working system, and the pope was recognized as the fountain of justice, temporal and spiritual, it was found that no engine could be more effective to the construction of ecclesiastical absolutism, nor any source more fruitful of the all-pervading corruption that was eating out the life of the Church.

So it was that spiritual powers became the basis of temporal power. By the system of Confession the clergy were made at once a government and a police, while every one was bound to inform against himself. By their power to grant or withhold Absolution and the Sacraments they held in their hands the keys of heaven and hell; and by the power of Excommunication and Interdict they obtained, to borrow Dryden's figure, what Archimedes wanted — another world on which to rest their engines, so as to move this one at their pleasure. Thus it was not strange that, in her reaction against the secular world, the Church herself became secularized. In right of their vast temporal possessions the ecclesiastical body took stand as feudal lords, and the bishops and abbots were also counts and princes, maintaining all the rank and power of this secular dignity. In virtue of their monopoly of education, ecclesiastics entered the courts and councils of princes, and became the power behind the throne. They were lawyers, ambassadors, prime ministers; and, holding nearly every civil function, held the reins of State in every court of Europe, while every thread in the net-work of their policy ran direct to Rome. The kingdom of Christ's Vicar was a kingdom of this world. Men saw it busied with worldly aims and working for worldly interests, and its power over their hearts began to wane. The halo of its early sanctity, as now it traveled daily further from the East, began to fade into the light of common day, and the hour of her triumph wrote *Ichabod* upon the walls of Christian Rome.

Such, then, were the results of taking Belief for the ruling principle of human action. To this the world was brought — a hierarchic tyranny which cast a blight alike on personal

religion, social virtue, and civil freedom. I pass to the causes and results of the entrance of the second mental principle — Understanding — upon the historic stage.

The internal transition from the mediæval to the modern world took place through the Crusades. It lies on the surface to see in those holy wars the occasion of intellectual advance and the incitement to a various activity, but they have a deeper significance in the answer they gave to the religious spirit that prompted them. The ecclesiastical system had done its best to crush out the free spirit of man, but that could not be utterly destroyed, and out of the bosom of church life arose at length a dissatisfied restlessness and the eager craving for some closer hold on the Divine. It turns blindly to Christ, if haply it may feel after Him and find Him. There is the Host — a definite present existence; but the Host is found in every church, and this particular existence wears, after all, a character of vaguest generality. His human personality has disappeared, as regards time, but, as regards place, His life was limited to a particular spot, and there, in association at least, He seems to have a certain mundane permanence. Hence the pilgrimages to the Holy Land. But the holy places are in the hands of infidels, and Christendom arms to win possession of them for the Church. It gains the City and the Sepulcher. But at the Grave all the vanity of the sensuous appears, and men learn at last their long mistake. They find an empty tomb, and hear again the words there spoken: “Why seek ye the Living among the Dead? He is not here, but is risen.” Sadder and wiser they return, bidding farewell to a cherished fancy. The enthusiasm dies out, and the Kingdom of Jerusalem is lost again to the Turk.

From this negative result dates the introversion of the western mind. Spirit falls back upon itself. The subjective principle at last comes forth in a new spirit of free inquiry and self-reliant action. As such the new spirit is distinctly hostile to the ecclesiastical order, since that demands the passive submission of the individual, and so it contains the necessity of rupture with mediæval institutions. The profound,

though silent, revolution gradually effected during the next three centuries demands close and careful study; I can only sketch its outline. The new movement may be traced as, first, within the ecclesiastical system; then without it; and, finally, against it. Under the first head we note as the marked manifestations of its activity, first, the reform and extension of the monastic orders under Dominic, Francis, and Bernard, who, not content with the mere profession of the religious life, sought to make it a reality; secondly, the institution of the religious orders of Knighthood — those of the Temple, the Hospital, and others; thirdly, the rise of the so-called Gothic architecture, distinguished from the earlier Romanesque by its freedom and boldness of inventive conception, its exuberance of fancy, its Oriental profusion of ornament; and, lastly, the growth of scholastic divinity, through which the mind attains complete mastery of the abstract *forms* of thought, although philosophy remains the “hand-maid of the faith,” little *material* progress was to be made. But, since the church system necessarily retained the principle upon which it was built, the subjective movement *within* its sphere was a necessary failure. The monastic orders sank into torpor; the military orders, into corruption; architecture lost its creative spirit in elaboration of mechanical skill; and scholasticism fell into a vain wrangle over empty distinctions.

And so, secondly, the movement sought a new direction in secular life. We see it in the development of Feudal barbarism into the nobler life of Chivalry. The prime motive in the chivalric character, the sentiment of personal *honor*, is nothing else than the intuition of the infiniteness of subjectivity; and this is a product so impossible to extract from mediævalism that we cannot be surprised when we trace its origin directly to intercourse with the free-spirited Saracens of Spain and the East. The young knights found no truer model of the chivalric character than was displayed in their enemy Saladin, and the lofty soul of the great Cid was nurtured in the school of Moorish example.

A more important step was taken in the rapid rise of the Towns, and thence of that middle class which was to form the

material of a new society. The Crusades gave a powerful stimulus to commerce; commerce stimulated manufactures, since the town must export that would import; both led to wealth, and wealth to power. The cities formed leagues for the furtherance of common interests, and municipal freedom was found not easy to extinguish when it could build fortifications to defy a siege, and levy such armies as mustered under the standards of Venice or Genoa; when, above all, the first firearm had given the death-blow to the ancient art of war. The growing importance of the burghers, thus maintained by military strength, gained them a political existence, when in the thirteenth century they entered the English Parliament and the French States-General, the Spanish Cortes and the Imperial Diet. The towns were the birth-place of popular independence, which first appeared as a mere reaction against Feudalism, but soon evolved two institutions to serve as the positive basis of a new civil order. When the Italian cities acquired the right of determining controversies by a magistracy of their own election, a strong impulse was given to the study of jurisprudence. Bologna was the first to begin the teaching of the new-found code of Justinian, and soon all Europe was brought under the authority of a uniform system of civil law. Again, the progress of the commonalty brought with it the growth of the national spirit and the rise of national monarchy. No longer a Feudal suzerain, the king became the holder of a political power that rested on the support of the people, and, as chief of the State, reduced the lawless violence of the noble to the sway of royal authority.

Along with this advance in practical life there went an intellectual advance; and this brings us back to a topic already touched upon. Nothing is more important to the student or the intellectual development of Europe than the history of Scholasticism, though it has long been the fashion to mention it only with ridicule. It was the attempt of its founders to give the dogmas of the faith the form of a scientific system. Thus it was, as I have said, distinctly a product of the new subjective impulse, for it was an attempt to conciliate faith and reason by showing the rationality of the faith. When

dogma passed from the Church to the School, it left the position of an unquestionable authority, external to consciousness, and yielded to the claim of thought that it should become intelligible. At first, indeed, the only desire was to comprehend revealed truth; there was no disposition to question or dispute the teachings of the Church. Abelard's revolt against spiritual despotism was premature, and, hence, was summarily crushed; for the twelfth century was not prepared to sympathize with one who asserted that a knowledge of divine things lay within the capacity of reason, or one who taught a morality of the conscience and heart. But thought is nothing if not free; and, the door of theology once opened to her, it was impossible to keep her in subjection. When the rival schools of Aquinas and Scotus respectively set up as first principles the intellect and the will, this antithesis of theoretical and practical allowed Scotus to transfer the whole problem of theology to the practical sphere, and reduce faith to a principle of action; thus freeing philosophy from theology and breaking that implicit unity of reason and faith which was the foundation of the whole Scholastic enterprise. The way was thus opened for the revival of a deeper antithesis than that between intellect and will; one more fatal to the authority of the faith, the antithesis, namely, between thought and reality. Nominalism denied the substantiality of the generic, and declared that universals had no reality, but were only empty names in a world of individual existences. Realism, the converse doctrine, placed the reality of the individual thing in its ideal universal. The dispute arose from a failure to distinguish between being and existence. Universals have being, but, *as universals*, no existence; their existence is only *through* that of individual things. Again, individual things have existence, but, *as individuals*, no being; their being is only *in* that of universals. Since each party identified being and existence, it is plain that both were in some degree right, and both on the whole wrong. But it is also plain that the one doctrine could consist with religion and the other could not; for the one, with all its blindness and crudeness, was idealism, while the other, without knowing it or meaning it, was materialism. When nomi-

nalism averred that universals were simply mental conceptions, destitute, not only of existence in the phenomenal world, but of any objective reality whatever, it cut asunder thought and being, and so, in principle at least, struck the ground from under all infinite and spiritual truths. The Church felt her danger. Roscelinus, the father of the doctrine, was condemned by a council; Abelard, who gave it a qualified adherence, was effectually silenced, and for nearly two centuries Realism reigned unchallenged as the philosophy of the orthodox. But the opening of the fourteenth century found a revolutionary spirit abroad among men that could look on unmoved at the strange spectacle of a pope defied, resisted, and defeated; and when Ockham, the successor of Scotus to the leadership of the Franciscans, began to teach boldly the extremest Nominalism, he could number among his disciples, not only the secret adherents of a proscribed philosophy and the converts of his subtle reasoning, but all the young and ardent spirits, who, caring little for abstract dialectics, were ready to welcome any doctrine that represented rationalizing tendencies and opposition to traditional orthodoxy. Thus it was that Scholasticism cut its own throat, and, setting out to establish by argument the authority of faith, ended in establishing the authority of reason.

The secularization of intellect thus attained is generally visible. We see it in the eagerness for secular learning that crowded the universities, now established in all parts of Europe, and knit together by the bonds of constant intercourse;¹ and, further, in the commencement of vernacular literatures and a general cultivation of letters and art, the success of which we may estimate by its leading representatives, Dante, Chaucer, Gower, James of Scotland, Petrarch, Boccaccio, Giotto, Orcagna, and Froissart.

¹ The incessant journeyings of the "poor clerks," or "begging scholars," from one to another academic seat promoted a general free-masonry of learning, and at the same time helped to throw a new thought anywhere originating at once into the common stock. We find Wycliffe's teaching in the possession of Huss and Jerome, of Prague, so soon after its beginning at Oxford that it might seem a bird of the air had carried the matter.

The century that follows these great men ushers in what is commonly called the Renaissance. Such a term is rather convenient than accurate. The scholar knows that in history there is nothing isolated. No single age can be severed from its filial relation to the past and labeled with so large a name as new birth or revival. The whole movement of the human mind from the Crusades to the Reformation, in the unity and continuity of its various development, is the true Renaissance. Before the revival of learning there had to be, as Mr. Bryce acutely says, a revival of zeal for learning. In art, too, the sudden flower bloomed on a plant of steady growth, and the days that knew no Raphael had their brave men who lived before that Agamemnon. Undoubtedly, however, when Mahomet II. forced the gates of Constantinople and drove the Greeks to Italy, he labored better than he knew in the cause of European civilization. Two centuries earlier the Latin conquest and the long possession of that city had come and passed, barren of results; but now the time was fully ripe for the influence of Greek art and letters that quickened tenfold the pulse of intellectual life—and the invention of printing at the same moment gave the new learning a rapidity of diffusion before undreamed of. And now, while the inward world was thus expanding to the growing mind, the outward world suddenly widened before the mental eye through the discovery of America and the passage of the Cape.

Thus, in secular life, or without the Church, the subjective movement was successful and won for itself a field of action. But that which was not with the Church was necessarily against her, and every step of the secular advance was bringing it to the point where the ecclesiastical system barred the way, and where collision with it was inevitable. It is to be noticed that art and letters in their very natures transcended the Church principle. The thought of the artist transfuses his sensuous material, and transforms it into a reflection of the spiritual. Before the master-works of art, rich in idea and sentiment, soul holds converse with soul. But such spiritual elevation was at variance with that sense of dependence and bondage unto fear which the Church called piety. The

coarser and more graceless the sensuous image, the better it served the ecclesiastical purpose ; and the priest more willingly saw the people prostrate before a winking Madonna than rising into conscious sympathy with the Divine before a Madonna of Raphael.¹ And so with letters ; classic literature held up new standards of judgment, and quite other ideals, and a different view of human character, from those which mediæval life had made familiar. The spirit of the old Greek life seemed to many — as in many points it was — a truer and higher spirit than was found in the Christianity of the day ; and the thoughts of men were widened with a sense of their boundless capacities, as they pondered the story of ancient freedom. The Church might not perceive this alien influence in the new learning she tolerated or patronized, but warnings more distinct of the impending struggle had not been withheld. From the twelfth century onward, a succession of heretical sects had arisen in all parts of Europe, springing from the common impulse of reaction against ecclesiasticism, and all seeking the same general objects — freedom of faith and conscience, simplicity of doctrine, and purity of life. And, while persecution was continually active against them, and the argument of fire and sword readily invoked, it was plain that the spirit of revolt against the hierarchy, far from being extinguished, was

¹ Mr. Browning's "Fra Lippo Lippi" illustrates forcibly the collision between art and ecclesiasticism, as in the following :

"Have you noticed, now,
Your cullion's hanging face? A bit of chalk.
And, trust me, but you should, though! How much more
If I drew higher things with the same truth!
That were to take the Prior's pulpit-place,
Interpret God to all of you! Oh, oh,
It makes me mad to see what men shall do,
And we in our graves! This world's no blot for us,
Nor blank — it means intensely, and means good;
To find its meaning is my meat and drink.
'Aye, but you don't so instigate to prayer,'
Strikes in the Prior; 'when your meaning's plain,
It does not say to folks, remember matins,
Or, mind you fast next Friday.' Why, for this
What need of art at all? A skull and bones,
Two bits of stick nailed crosswise, or, what's best,
A bell to chime the hour with, does as well."

gathering strength, and wider spread. In the twelfth century the Church could crush the revolutionist of Brescia as she had silenced his master, Abelard; but in the fourteenth, when freethinker and demagogue were united in the person of Ockham, she could find no second Bernard to champion her cause. The bold Wycliffe could preach, unharmed, doctrines that struck at the root of the hierarchical system; doctrines not to be suppressed by the execution of an Oldcastle, and only rising in new strength from the ashes of the murdered Huss to inspire the fierce energy of the Bohemian war. The popular, or rather national, support given to Philip the Fair, in his contest with the Holy See, had marked the loss of the early spirit of submission to the Church, and little was left of the reverence she once inspired, to those who witnessed the scandals that followed, when Christendom was torn between the rival popes and contending factions of Pisa, Constance, and Basle. In the assertion of conciliar supremacy that broke the long tradition of papal autocracy; in the bold action and burning words of such men as Gerson, Hallam, Clémangis; in the dangerous spirit of innovation, the unsparing denunciation of abuses, and the cry "Reform," ever more widely echoed; and now in the fiery ardor of Savonarola, the independent energy of Colet, the biting raillery of Erasmus—in all this the Church might have read, without a Daniel, or a handwriting upon the wall. But in blindness it went its accustomed way—an Innocent selling to the brigands license to pillage, Borgia and Medici staining the papal robe with wine and blood, until the peddler of indulgences reached the market-place of Wittenberg, and the mine was fired that overthrew the structure of ecclesiastical power.

Ecclesiasticism in its every part had been based on objectivity alone; Protestantism was simply the revolt of the subjective principle and its struggle for independence. Thus the Protestant Reformation is more properly a revolution. At every point its attitude is destructive, not reformatory. Private judgment and justification by faith mean insight and conscience—freedom, intellectual and moral. The spiritual presence in the Eucharist, or the immediate relation of man to

God, means denial of their essential difference. That faith is not passive acceptance of an *outward*, but active assurance of an *inward*, means rejection of external mediation. That it is the gift of the Holy Spirit to all, or a consciousness grounded in common human nature, means abrogation of the essential distinction between priesthood and laity. To place the Bible in the hands of the people means destruction of the authority of church tradition. Under the old system, religion centered in church-membership; now all religious life was concentrated in the individual soul. And the Reformation, breaking from the actual organization of the church, broke also with the church idea. Thus the religious freedom attained was the emancipation of the individual, not the emancipation of the Christian communion. It was an abstract liberty that made each separate soul an independent and isolated unit. Hence the communion of Christians was based merely on the agreement of individuals, and thus there were soon as many sects as there were different shades of opinion, and as many shades of opinion as there were leading minds capable of forming original views. One result of this religious individualism was a curious superstition. The religious life had become an affair of subjective consciousness. Here, and not on the altar, is the divine presence, and the requirement is that this fact be realized in consciousness; in modern phrase, that religion be "experienced;" that his spiritual state, in its every modification, be constantly perceptible to the individual himself. This painful introspection reveals the presence of evil in the soul, and its obstinate persistence suggests to the tortured consciousness a new view of the power of the Evil One and his malign dominion over the human soul; and with this new prominence of the personal Devil in the creed of Protestantism arose that belief in diabolic possession which raged like a pestilence among the nations in the sixteenth century, and inspired the cruelty of terror that made the imputation of witchcraft a sentence of death.

Thus amid noise, and dust, and confusion the great battle was fought out. The reformers had their share of ignorance, prejudice, and passion. Enlightened men of comprehensive

and discriminating views, such as Erasmus, Colet, and More, could not obtain the leadership of a popular uprising. But, if we must regret the errors and excesses of more violent leaders, we must remember that they were inevitable. For, to repeat, the Reformation was, in its genesis, a reaction. It set up the subjective principle against the objective. But this subjective antithesis is simply the *other half* of the concrete truth of religion, and, consequently, its historic development was necessarily marked with the same exclusive self-regard, the same intolerance of the opposite, the same tendency to the extreme, which had marked the development of the earlier principle — the first half of the Christian truth. Meantime, however, an institution so deeply rooted as the mediæval Church was not to be destroyed at a blow. It stereotyped its system at Trent, with partial revisions. It came to a dead stop; severed itself from the advancing secular world; declared against free thought and learning, and handed education over to the Jesuits. In the main the Romanic nations continued in its obedience, while the Teutonic embraced the reformed religion. But this latter is heresy, and to be suppressed; and so Protestantism is forced into war for an independence which is acknowledged at the peace of Westphalia, and henceforth two rival religious systems divide the world.

We follow from this point the secular development of the Protestant principle, a movement named by the Germans *The Clearing-up*. When the Reformers threw off the authority of the Church, they transferred their allegiance to Scripture, the direct word of God. But the assertion that Scripture “shines by its own light” was found too bold; the meaning of the written word was often far from clear; intelligence had to be called in to interpret and expound, and so what was lost by the Church was ultimately gained by Reason. Thus Protestantism brought the world face to face with thought. Thought is the pure *abstractum* of spirit. In this infinitude it is at once essential inwardness and essential outwardness, and so in it alone is the assurance of truth. In this implicit consciousness and implicit confidence is the soul of the

Clearing-up. All goes in into thought. Descartes begins with it as the ultimate, irreducible residuum of analysis, and, therefore, the *principum* of synthesis. From it he educes his own existence and the existence of God. Again, the outward world is challenged to exhibit that reason which the *Ego* possesses. Bacon proposes to Physics the study of efficient causes, and to Metaphysics the study of final causes. Before this insight of the rational the shades of superstition vanish exorcised. Astrology becomes astronomy; alchemy, chemistry; and the art of medicine begins with the discarding of amulets against disease. It might seem, indeed, to contemporaries of Copernicus, Kepler, and Newton, that moon and stars, plants and animals, were now but just created, so wholly new is the interest which the self-recognition of Reason lends the contemplation of the universe. Nor is thought less active in the moral world. The subjective principle claims to determine the relation of the existent to the right. All received opinions and sanctioned institutions are brought to its bar for decision on their merits. International right is made, by Grotius, an induction from the social instinct, and commends itself to the sense of the just implanted in the minds of men. In like manner all law and government must find their new ground in natural law or the nature of man. Thus, Understanding becomes the absolute criterion, and takes the place of divine right. Protestantism was a clearing-up within Religion. In its war on the old Church there was no antagonism to Christian truth, but rather its appropriation; the subject made that objective his own. But private judgment, the individual's freedom of thought and conscience, is a first principle which may lead a long way—as far in the new direction as obedience to authority had led before. Luther brought in the truth that man's spiritual life must be wrought out in himself by himself, and cannot be a transaction effected for him and apart from him. He claimed the spirit's freedom of action; but the content of its action, the course of its life, he took for granted as a *datum* to faith. Now, it was insisted that this objective content of thought and life must also submit to the judgment of Understanding;

must be analyzed by its abstract laws, and become intelligible ; or else must take its place among the discarded superstitions of the past. For to this abstract culture Religion is indifferent, since Religion is the form in which truth exists for non-abstract consciousness. The so-called age of Reason requires that the results of thought be definite ; but to this grade of intellect the definite can only be the finite. The infinite, the divine, are not reducible to the grasp of Understanding : and, hence, all spiritual truth is rejected as the invention of priest-craft. Thus the movement which began by attacking the Mediæval Church went on to attack Christianity, and a lineal descent leads from the intensely religious Luther to the utterly irreligious Voltaire.

The movement took a different course under the different religions. In Protestant countries it went quietly on, spreading a leavening influence, encountering no opposition to its principle ; in the English Deistic controversy, for example, the orthodox, as well as their opponents, make their ultimate appeal to Reason. Consequently we find no Reformers roused to excited aggressiveness. Men were patient in the instinctive confidence that, the principle of religious liberty once established, civil and social liberty must soon follow. Indeed, it was already evident that the entire compass of secular relations was undergoing a change for the better. The German Clearing-up takes the direction of egoistic culture. All things have value only in proportion as they concern the individual and subserve his ends. In religion, the one topic of discussion is personal immortality ; in ethics, self-interest is the supreme principle ; in social affairs, utility ; art is a ministry to refined pleasure ; in letters, the prevalent form of composition is autobiography, in which every man is his own Boswell, and lingers fondly over "confessions" of his own sentiments and experience. For each man the world is an orange, and the end of life is to suck thereout the greatest advantage to the various faculties of the soul. Readers of Wilhelm Meister will remember how this genial individualism appears in the group of *Illuminati* there introduced. In England the movement wears more the aspect of a social tone.

“Enlightenment” affects a polite superiority to old-fashioned notions. It adopts the loose-fitting creed of Deism, and amuses itself with satirizing the whole brood of priests of all religions. Its tone of light indifference to the super-sensible, of easy Epicureanism in morals, is heard throughout all the literature that reflects the course and frivolous life of the age.

Far other was the course of things in Catholic France. When Henry IV. abjured his heresy, and the Reformation was overthrown in its hour of seeming victory, the ancient order entrenched itself, through the alliance of the Church and State, in all the irresponsibility of resistless power. The monarchy became a soulless tyranny, the court a sty of animalism, and the Church a naked mockery of faith and holiness that no longer cared to veil itself with a decent hypocrisy. Outside the gilded halls of Versailles all the earth was full of darkness and cruel habitations. To the people, despoiled and enslaved, the gift of life was made a curse; and those who are familiar with the picture of the time, in all its sickening details, must wonder, not at the fury that broke out in the Revolution, but at the patience that delayed the outbreak so long. It had its beginning in the sphere of abstract thought. The empiricism of Locke was carried out to its ultimate consequences in the sensualism — intellectual and moral — of Condillac and Helvetius. In these writers abstract thought gained a popular hearing, and the new philosophy met with enormous success. A mindless and heartless society was delighted to find in outspoken materialism a logical basis for its life of sensuality. But, when the ground is struck from under the spiritual and substantial, the traditional and positive are left without support. If man was just an animal, what was all social order but what it plainly enough appeared to be in France — a tyranny of the strong and cunning few over the weak and simple many? And so the philosophy of materialism was implicitly the philosophy of Revolution, and the clearing-up went on to rouse a deep sentiment against the constituted absolutism in Church and State. Of all who took part in this work, Voltaire was the most influential and

conspicuous. Upon all classes and orders, all prescriptions and usages, that helped to sustain the existing order, he waged incessant and relentless war. Dexterous and tireless, he used now argument, now wit; attacking now in front, now in flank; now beating down with passionate invective, now stinging to death with more terrible ridicule. The vocation of the "philosophers" was to destroy, and they accomplished it. Intellectually, they laid the Church and State in ruins.

But this result was wholly negative, and, this reached, the movement went on to construct a new social system in harmony with its principle. In the inevitable failure of this attempt appears the total inadequacy of an abstract principle to any concrete demand. As regards institutions, subjectivity can hold none but a negative attitude, for Understanding is not a faculty of the *material*, but purely of the *formal*, and, therefore, is simply a solvent of the concrete. It can create or sustain nothing. It is strictly the skeptical faculty, and, if taken for the supreme exercise of mind, the logical result is Pyrrhonism. Between this abstract thinking of Understanding and the concrete thinking of Reason there is an immeasurable chasm. The one may be compared to the motion of mill machinery, taken by itself, apart from the power which starts it and the grain it acts upon; the other, to the working of the mill in the unity of all its constituent elements — the power, the motion, the full hoppers, the production of the flour. The attempt in France was to turn out a superior flour by rapid working of an empty mill. The man who took the lead in this attempt was Rousseau. He took Voltaire's negative for his positive. In accordance with the abstract position generally attained, subjective will was made the absolute basis of social right. The State was no substantial unity, but an aggregate of individuals. The volitional atoms were made the starting-point, and the will of the State was voided of all intrinsic validity. To found the authority of law upon individual acquiescence, and the State upon an assumed contract of sovereign individuals; to seek the sources of civilization in the primitive instincts of a mythical state of nature, and to

represent simple savagery as the golden age of man — these were the chief features of the new gospel of political sentimentalism, whose latest preachers are Louis Blanc, Karl Marx, and the leaders of the Paris Commune; and whose practical effect can be nothing but the dissolution of all social and civil order. Yet, distinctly negative as was the individualism of Rousseau, it was hailed universally as a positive principle by men who were seeking a guiding-light for action. Voltaire had urged escape from the present social system, but whither was not declared until Rousseau reared the baseless fabric of his vision as the goal of the exodus. And then what an outburst of jubilant enthusiasm thrilled the land! Man was to shake off the bitter subjection of his minority, and now, for the first time since the sun had stood in the heavens, enter upon his full inheritance. The mountain-tops of aspiration glowed with the promise of a new day when all reality should be remodeled on a glorious ideal. Rousseau was courted, feasted, idolized as no man, except, perhaps, Mahomet, ever was before. We know the result. Paper constitutions were found rootless plants that would not grow, and Liberty, Equality, Fraternity turned in men's hands to Suspicion, Terror, and Death. The principles of Rousseau could only perpetuate revolution, and for eighty years French history has been only the back and forth of its obverse and reverse, anarchy and despotism.

With its defeat at Waterloo the revolutionary spirit throughout Europe received a check. In France the Bourbons were restored by foreign arms. In Italy, Hungary, and Belgium the revolution dived under ground and hid itself. In England a reaction against the Clearing-up set in, showing itself nearly at once in politics, religion, letters, and art. A conservative reaction under the government of Wellington; an ecclesiastical reaction in the Oxford movement; an artistic one in Pugin and the Pre-Raphaelites; a literary one in Scott, Wordsworth, Coleridge, and Carlyle. But mere reaction could not be permanent. The Tory government fell before the Liberals; the Tractarians were driven into the position of a Romanizing clique; and Romanticism in art and letters went

out of fashion. On all sides there was a general revulsion to the Clearing-up. The reaction of Scottish philosophy against Hume ran out, and Hume has been continued in Hamilton, Mansel, Spencer, Bain, Lewes, and Mill. Natural science under Darwin, Huxley, Tyndall, and others in England; Comte and his school in France; Helmholtz, Buechner, Haeckel, and others in Germany have gone back to D'Holbach's materialism, "What we know by our senses alone has reality," and to Laplace's atheism, "Nature has no need of the hypothesis of a God." In morals the same negative movement is carried on by Grote, Mill, Lecky, and Buckle; and in religion by Baur, Feuerbach, Strauss, Renan, Colenso, and Matthew Arnold. The foregoing names are taken at random as having a certain prominence, but the spirit of the Clearing-up saturates modern writers of all classes; we noted at the outset its distinct expression in Macaulay.

THE HISTORICAL CONSTRUCTION OF CHRISTIANITY.

[TRANSLATED FROM THE GERMAN OF F. W. J. VON SCHELLING; BEING THE EIGHTH LECTURE "ON THE METHOD OF UNIVERSITY STUDY" (AKADEMISCHEN STUDIUM).]

BY ELLA S. MORGAN.

The real sciences, in general, can be separated or particularized from the absolute or ideal sciences only by the historical element in them. But Theology, besides this general relation to history, has still another, which is altogether peculiar to it, and belongs specially to the nature of theology.

Since it, as the true center of the objective realization of philosophy, deals chiefly in speculative ideas, it is also the highest synthesis of philosophical and historical knowing; and to demonstrate this is the chief object of the following remarks.

I base the historical relation of Theology not alone upon

this: that the first origin of all religion, as of every other knowledge and culture, is conceivable only as derived from the instruction of superior personages — hence all religion in its first form was tradition; for, as regards the other current modes of explanation, some of which make the first idea of God or gods arise from fear, gratitude, or some other emotion, while others make them originate through a crafty invention of the first law-givers. However, it may be that the former conceive the idea of God only as a psychological phenomenon, and the latter neither explain how it ever occurred to any one to make himself the law-giver of a people, nor how he came to use religion, in particular, as a means of exciting fear without having already received the idea from some other source. Foremost among the multitude of false, senseless attempts of modern times are the so-called histories of mankind, which take their conceptions of the primitive condition of the race from descriptions compiled by travelers of the rude traits of barbarous nations, which, consequently, play a distinguished part in such histories. There is no condition of barbarism which has not come from the ruins of a former civilization. It is reserved to the future efforts of history to show how even those peoples, who live in a condition of barbarism, are peoples torn from their relation with the rest of the world by revolutions, and are partly remnants of nations, who, deprived of communication and the means of culture already attained, have fallen back into their present state. I consider the civilized condition undoubtedly the first condition of the human race, and the first establishment of states, science, religion, and the arts as simultaneous, or, rather, as one and the same; so that they were not really separated, but were in most perfect interpenetration, as they will be again in the final perfection of the race.

Neither is the historical relation of theology alone dependent on the fact that the particular forms of Christianity, in which religion exists with us, can only be known historically.

The absolute relation of theology is that in Christianity the world is looked upon as history, as the realm of morals, and that this general intuition constitutes its fundamental character.

This is seen most completely in contrast with the religion of ancient Greece. If I do not mention the older religions, especially the Indian, it is because, in this relation, it forms no contrast — without, however, in my opinion, being in unity with it. The necessary limits of the present investigation do not allow a complete exposition of this view, hence we shall only mention or allude to it incidentally. The mythology of the Greeks was a perfect world of symbols of ideas, which can be perceived realistically only as gods. Pure limitation on the one side, and undivided absoluteness on the other, is the determining law of each particular divinity, as well as of the world of gods as a whole. The infinite was seen only in the finite, and in this manner even subordinated to the finite. The gods were creatures of a higher nature, abiding, unchangeable shapes. Very different is the condition of a religion which is concerned immediately with the infinite itself, in which the finite is not conceived as symbol of the infinite, and at the same time for its own sake, but is conceived only as an allegory of the infinite, and in perfect subordination to it. The whole, in which the ideas of such a religion become objective, is necessarily itself an infinite, not a world finished and limited on all sides; the shapes are not abiding, but transitory; not eternal beings of nature, but historic forms in which the divine nature is only revealed transitorily, and whose fleeting appearance can only be held fast by faith, but can never become transformed into an absolute presence.

Where the infinite itself can become finite, there it can also become many; there polytheism is possible. Where the infinite is only expressed in the finite, it remains necessarily one, and no polytheism is possible except a co-existence of divine forms. Polytheism arises from a synthesis of absoluteness with limitation, so that in the same neither absoluteness, according to form, nor limitation is canceled. In a religion like Christianity this cannot be taken from nature, for it does not conceive the finite as symbol of the infinite, and with independent significance. Consequently, Christianity can be taken only from what falls in time — that is, from history; and, hence, Christianity is, in the highest sense and in its innermost

spirit, historical. Every particular moment of time is a revelation of a particular side of God, in each of which He is absolute: that which the Greek religion had as co-existent, Christianity has as a succession, although the time for the separation of the manifestations, and with it of receiving definite shape, is not yet come.

It has been already pointed out that nature and history are related as the real and ideal unities; and in the same way the Greek and the Christian religions are related — in the latter of which the divine principle has ceased to reveal itself in nature, and is recognized only in history. Nature is, in general, the sphere of potentiality of things, in which, by virtue of the reflection of the infinite into the finite, things, as symbols of ideas, have also a life independent of their significance. Hence God, in nature, becomes exoteric — the ideal appears through another than itself, through a being; but only in so far as this being is taken for the essence, the symbol independent of the idea, is the divine truly exoteric, but according to the idea it is esoteric. In the ideal world — hence in history particularly — the divine unveils itself and is the open mystery of the divine kingdom.

As in the sensuous images of nature, the intellectual world of Greek poetry lay as if imprisoned in a bud, obscure in its object and inarticulate in subject.

Christianity, on the contrary, is the revealed mystery, and is in its nature esoteric, as heathenism is in its nature exoteric.

Hence the whole relation of Nature and the ideal world had to be changed, and, as Nature, was revealed in Heathenism, while the ideal world, in Christianity, was withdrawn to the realm of mystery; and, in proportion as the ideal world became revealed, Nature recedes and becomes a secret. To the Greeks, Nature was in itself divine, for even their gods were not beyond or above Nature. To the modern world, Nature was a secret, for it did not comprehend Nature in and for itself, but only as the visible image of the unseen and spiritual world. The most active phenomena of Nature — as for instance, those of electricity and of bodies in a state of chemical change — were scarcely known to the ancients, or at least excited none of the

enthusiasm with which they are regarded in the modern world. The highest religious feeling, expressed in Christian mysticism, holds the secret of Nature and the incarnation of God for one and the same.

In the system of transcendental idealism I have already shown that we must accept three periods of history, that of Nature, of Fate, and of Providence. These three ideas express the same identity, but in different ways. Fate is also providence, as recognized in the world of real things; so also providence is fate, but seen in ideal things. The eternal necessity reveals itself in Time in identity with it as Nature, where the conflict between the infinite and the finite still remains concealed in the common germ of the finite. This was the case in the most flourishing time of Greek religion and poetry. With the revolt from Nature the eternal necessity was manifested in fate, thus entering on the real conflict with Freedom. This was the close of the ancient world, whose history, therefore, may be considered, on the whole, as the tragic period. The modern world begins with a universal "Fall of Man," a revolt of man from Nature. This identification with Nature is not sin so long as it is unconscious of the contrary; it may rather be called "the Golden Age." Consciousness of it destroys innocence, and, hence, immediately demands reconciliation and voluntary submission, in which Freedom comes out of the battle both conqueror and conquered. This conscious reconciliation — which takes the place of unconscious identity with Nature and of the conflict with Fate, and restores unity on a higher plane — is expressed in the idea of Providence. Hence Christianity, in history, introduces this period of Providence as the prevailing mode of viewing the world — a mode which looks upon the world as history and as ruled by Providence.

This is the great historical tendency of Christianity; this is the reason that the science of religion, in Christianity, is inseparable from history — is, indeed, one and the same with it. This synthesis with history, without which Theology itself cannot even be conceived, presupposes, on the other hand, the higher Christian view of history.

The contrast which is commonly drawn between History and Philosophy exists only so long as History is conceived as a series of accidental occurrences, or as mere empirical necessity. The former is the vulgar theory, to which the other is supposed to be superior, but its limitations are equally narrow. History also proceeds from an eternal unity, and has its roots in the absolute, like Nature or any other object of cognition. The contingency of events and actions seems, to the common understanding, to be founded on the contingent nature of individuals. But, I ask, What, then, is this or that individual, but that which has carried out this or that particular action? There can be no other conception of the individual; hence, if the action is necessary, so is the individual. That which, even from a low stand-point, is free, and consequently objective, can appear as accidental in all action — is merely that the individual takes for his deed what is already determined and necessary; but for the rest, and as regards the consequence, it is, for good or for evil, the instrument of absolute necessity.

Empirical necessity is nothing but a device for prolonging the reign of chance by infinite postponement of necessity. If we allow this kind of necessity in Nature to be valid only for the phenomenon, then how much more must it be allowed in history? What intelligent person will persuade himself that events like the development of Christianity, the migration of nations, the crusades, and so many other great events, had their real origin in the causes generally assigned to them? And, even if these were really the controlling ones, they are in this relation again only the instruments of an eternal order of things.

What is true of history in general is specially true of the history of religion, namely, that it is founded in an eternal necessity, and, hence, that a logical deduction of it is possible, by means of which it is closely and intimately one with the science of religion.

The historical logical deduction of Christianity can begin only from one point — that of the universal view that the world, in so far as it is history, necessarily appears to be specialized

from two sides, and this contrast, which the modern world makes against the old, is sufficient to explain the nature and all special peculiarities of Christianity. The ancient world is in so far the nature side of history as its prevailing unity or idea is the being of the infinite in the finite. The close of ancient and the beginning of modern times, whose dominant principle is the infinite, could only be brought about when the true infinite came into the finite—not to deify it, but to sacrifice God in His own person, and thus to reconcile the finite and infinite. Hence the great idea of Christianity is God incarnate in man—Christ as the summit and finality of the ancient world of gods. He makes finite in Himself the divine, but He does not take on humanity in its highest, but in its lowest, estate, and He stands there as the dividing limit of the two worlds decreed from eternity, although a transitory phenomenon in Time. He Himself returns into the invisible realm, promising instead of Himself, not the principle which, coming into the finite, remains finite, but the spirit—the ideal principle which leads the finite back to the infinite, and is thus the light of the modern world.

All other characteristics of Christianity are connected with this first idea. The presentation of the unity of the infinite and finite objectively by means of symbols, like the Greek religion, is impossible in the ideal tendency of Christianity. All symbolism belongs to the subjectivity; hence the solution of the contradiction which is visible internally, not externally, remains a mystery, a secret. The everywhere-present antinomy of the divine and the natural is canceled only through the subjective requirement in an incomprehensible manner to think both as one. Such a subjective unity is expressed in the definition of a miracle. The origin of every idea, according to this conception, is a miracle, because it arises in time without having a relation to time. No miracle can take place in a temporal manner; it is the absolute—that is, it is God Himself who is revealed in the miracle, and, consequently, the idea of revelation is absolutely necessary in Christianity.

A religion which exists as poetry in the race has as little need of an historical basis as nature—always open and

revealed — has of religion. Where the divine principle does not live in permanent forms, but passes away in fleeting appearances, it needs some means by which to hold them, and needs tradition to perpetuate them. Besides the mysteries peculiar to religion, there must be a mythology which is the exoteric side of religion, and which is founded on religion, as, conversely, the religion of the former kind was founded on mythology.

The ideas of a religion which is directed to the contemplation of the infinite in the finite must be expressed especially in being. The ideas of a religion founded on the perception of the finite in the infinite — in which all symbolism belongs only to the subject — can become objective alone through action. The original type of all contemplation of God as a moral agent (*durch Handeln*) is history, but this is endless, immeasurable; hence it must be represented by a progressive manifestation — eternal, and at the same time limited, which, again, is not real, like the State, but is ideal, and presents as in the immediate present the union of all in spirit with particularized existence in an individual as an immediate presence. This symbolic perception of God is the Church as a living work of art.

Now, as the moral agency (*Handeln*), which externally expresses the unity of the infinite and the finite, may be called symbolic, so the same considered internally, as mystic and mysticism, is a subjective symbolism. If the utterances of this mode of view have at most times met with contradiction and persecution in the Church, it is because they attempted to make the esoteric of Christianity exoteric; not because the inner spirit of this religion is opposed to the spirit of that mode of view.

If the actions and customs of the Church are to be considered as objectively symbolic, whose meaning is to be taken mystically, we may at least say that those ideas of Christianity which were symbolized in its dogmas have not ceased to be of purely speculative importance, their symbols having attained none of the life independent of their meaning, which the symbols of the Greek mythology had.

The reconciliation of the finite as lapsed from God, thorough His own birth into finite life, is the first thought of Christianity, and the completion of its whole view of the world and its history is stated in the idea of the Trinity, which, for that very reason, is simply necessary. It is well known that Lessing, in his "Education of the Human Race," endeavored to disclose the philosophic meaning of this doctrine, and what he says of it is, perhaps, the deepest speculative of his writings. But his theory fails to connect this idea with the history of the world, to wit, in this point: that the eternal Son of God, born of the essence of the Father of all things, is the finite itself, as it exists in the eternal intuition of God, and which appears as a suffering God, subject to the vicissitudes of time; who, at the summit of His manifestation in Christ, closes the finite world and reveals the infinite, or the supremacy of the Spirit.

If it were permissible in the present plan to go further into the historical deduction of Christianity, we should, in the same way, recognize the necessity of all the contrasts between Christianity and Heathenism, as well as the predominant ideas and subjective symbols of ideas. It is sufficient for me to have shown the possibility in general. If Christianity, not only in itself, but in its most eminent forms, is historically necessary, and if we connect the higher view of history itself as an issue from the eternal necessity, then we have given the possibility of conceiving Christianity historically as a divine and absolute phenomenon, and, consequently, a truly historical science of religion or of theology.

NOTES AND DISCUSSIONS.

IN MEMORIAM.

I. — F. W. LORING.

The autumn noon hung round us as we passed
 O'er the pale common, the familiar streets.
 We talked of thy new story, genial, frank,
 The wan September air, a falling leaf,
 Touching some points of beauty on the fall —
 The dower of Nature, in her tender mood,
 To earth (where the red lightning's arrow strikes,
 And carves its cross of death among the flowers) —
 And still we felt that dream of silentness;
 Murmurs of music, on the city's road.
 And thou! Loring, boy of a Roman brow,
 And tragic locks, and that contraction stern,
 Sweet to the salient future.

Much I prosed
 Of the Ice-king of Weimar and his tale,
 The faint, old, serio-comic tale of Meister,
 As thy thoughts, filled with an earnest life,
 Were not unfolded in that perfectness
 Thy wish enforced—child of such liberal hopes.
 Slowly we mused of the cold city's streets,
 And how one born and bred within her halls
 Should like a pilgrim beg, unloved, unknown,
 While strangers from far regions of the earth
 Are garnered in to steal his alms.

I said:

Loring! life stands before thee; I am old,
 And yet I can remember some such thoughts,
 Some dream of hope, or intervals of spring.
 'Tis said Time hath a wallet on his back;
 In this, you yet should gather fruit of gold.
 What if the story of your college lads
 Be not all you have hoped for, and you still
 Must in laborious hope rewrite,
 And then once more — rewrite a fading plot?

Sink not too much on plans; build up your verse —
 Songs of a softly swaying tenderness,
 Of queenly loves that dwell upon the heart;
 Life's melodies, spontaneous as your youth.
 He hastened to the studio where he dwelt,
 All earnest, quick with deeds, and half content
 To be half that he hoped.

Oft of him I dreamed.
 Alone, of all our youth, or seeming thus,
 He asked a poet's life, resolved to win
 The poet's splendor, cultivate that art,
 Yea, work it for itself — himself forgot.
 Choice in his friends, most certain with their hearts,
 Sufficient and unsacrificed to forms —
 So fared he forth that morn.

And then, upon those plains!
 A luring region of unhoarded wealth,
 Where golden rivers gleam to golden sands,
 And far in heaven their purple mountains soar;
 There, where the bright snake glitters thro' the sun,
 (His touch destruction) and the cougar screams
 O'er the salt reaches of earth's aridness,
 The sepulchers unblest of bird and flower,—
 Sunk in some vale, some deep and dismal vale,
 Thy burial vault, that Arizona vale,—
 In thy first youth, thy promise, and soft years,
 Killed, murdered, trampled out, destroyed.
 Loring! I might have wept thee, hadst thou lived.
 And never won thy poet's wreath! And now,
 At this, such bitter parting, such recoil,
 Once more I see that wan September noon,
 Those weeping locks, and list thy modest voice,
 A prayer of tender hope to God and man;
 And hear the murmur of these mournful streets,
 Made lonelier at thy parting, sad to tears,
 And think — this was a world thou loved and sang
 (A world too poor for thee), and blend my griefs
 With those who loved thee, thou lost Poet-boy.

II.— WEEP NOT!

Weep not for me, not for me,
 Nor dream of the whitening billow
 That shall serve me for a pillow —
 My couch on the lone fast-heaving sea;
 Weep not, weep not for me!

And a misty sky sweeps o'er me,
 And the wild surf sways without measure,
 And the white beach that was my pleasure,
 And the beat of the fast-heaving sea

Says, Weep not, weep not for me!

We shall die as we lived; it shall be,
 Dying, as in living — together;
 Our dirge in the wild misty weather,
 Our death in the fast-heaving sea.

Farewell, weep not, weep not for me!

III.—THE MAGDALEN.

Her eyes how fixed they seek the skies —
 Was earth so low, was life so vain?

Was time a wearing sacrifice,
 This hopeless wish, this empty pain?

“I cannot read the silent skies;
 Their light is darkness to my heart,
 Life is eternal sacrifice —
 Its livelong hours, its lifeless art.

“Thought cannot mend my breaking hope,
 Heaven will not warm such cold despair —
 I need some other soul to ope
 My doors of steel, and trust my prayer.

“Speeds there no sail o'er life's dark sea,
 Where weeps some heart whose hope has set,
 Who may uplift this cross from me,
 And both may thus their past forget?”

IV.—THE RETROSPECT.

Why should we mourn the fleeting days,
 Why grieve because the years are still —
 That Grecian art, that modern phrase,
 Like fluttering leaves drop o'er the hill?

If it may seem that all is gone,
 Which colored Time like golden flame,
 That love and hope and fame have flown,
 Trusting their servant but the name!

Yet in that just alloy of fate
 The sundered plans shall moulded fall,
 A hero's heart, a monarch's state,
 Thy changeful mood to glory call.

WILLIAM ELLERY CHANNING.

BOOK NOTICES.

ZEITSCHRIFT FÜR PHILOSOPHIE UND PHILOSOPHISCHE KRITIK. Herausgegeben von Dr. I. H. von Fichte, Dr. Hermann Ulrici, und Dr. J. U. Wirth. Halle: C. E. M. Pfeffer.

We have volumes 67, 68, 69, 70, and 71 of this periodical accumulated for notice. Volume 67 opens with an article, by Dr. Johann H. Loewe, on "The Simultaneity of the Genesis of Speech and Thinking;" and Dr. A. Dorner finishes his essay "On the Principles of Kant's Ethics. Dr. Steffens begins the discussion of the question, "What Advantages can We Derive from the Writings of Aristotle for our Knowledge of the History of Greek Philosophy from the Times of Thales to those of Plato?" Dr. Franz Hoffmann also has a first article on the subject, "Anti-Materialism," having a refutation of Buchner's recent writings in view. Dr. Ulrici reviews Brentano's "Psychology from an Empirical Stand-point," and Dr. Pfeleiderer's "Modern Pessimism." Dr. Fortlage reviews Dr. Ulrici's work, "On the Union of the Same or Similar Elements in the Substance of our Representations, in Reference to Body and Soul;" and Dr. Ulrici improves the occasion to reply to some of Dr. Fortlage's strictures. Ulrici lays particular stress on the fact that the term "unconscious representations of the mind" is contradictory, illogical, and unwarranted by the use of language; the word "*Vorstellung*" (representation) being applicable only to contents of our consciousness.

In volume 68 the article by Dr. Steffens, above referred to, is continued, and Dr. Hoffmann's concluded. Dr. Rehnisch contributes an article "On the Results of Moral Statistics." Dr. Sengler reviews Hölder's "Darstellung der Kantischen Erkenntnisstheorie;" also "Kant's Teleologie," and Witte's "Beiträge zum Verständnisse Kant's." Dr. Erdmann reviews Von Hartmann's Transcendental Realism; and Ulrici notices Dr. A. L. Kym's Metaphysical Investigations, George Henry Lewes' "History of Modern Philosophy," and Dr. McCosh's "Laws of Discursive Thought." He has also reviews of Alexander Jung's "Panacee and Theodicee," Volkmar's "Lehrbuch der Psychologie," and "La pena di morte e la sua abolizione dichiarate teoreticamente e storicamente secondo la filosofia Hegeliana per Pasquale d' Ercole, Professore nell' Università di Pavia."

Volume 69 closes Dr. Steffens' treatise; also that of Dr. Rehnisch. Professor Arth. Richter contributes "Kant als Ästhetiker;" Professor Spicker, "Mensch und Thier;" and Lorenz Muellner has an article on "Wilhelm Rosenkrantz's Philosophie." Of reviews we mention: Siebert's "Das Wesen der ästhetischen Anschauung," by Moritz Carrière, and Hermann's "Die Ästhetik in ihrer Geschichte," by the same. Ulrici reviews Lotze's "Logik," and Dr. Zeller's History of German Philosophy since Leibnitz.

In volume 70, Muellner finishes his essay on Wilhelm Rosenkrantz, and Edward Grimm has an article on "Malebranche's Erkenntnisstheorie" in relation to that of Descartes. Dr. Schloemilch has some "Philosophical Aphorisms of a Mathematician." Professor Fichte has a lengthy review of Perty's excellent work, "The

Soul-Life of Animals;" and Ulrici uses R. G. Hazard's letters to Mill as a text for a general polemic against Mill's philosophy. Both of these reviews, notably that of Fichte, are more in the nature of original and independent articles than of mere criticism of another author's work, and deserve special attention. Dr. Schulze has an article on Leibnitz's Theodicee; and Professor Franz Hoffmann contributes an article on Von Baader's Place in the History of German Philosophy. We have as yet received only the first number of volume 71. It is opened by Dr. Ulrici in an article on "How we Arrive at the Representation of the Differences of Things;" which is followed by an article from the pen of Professor I. H. Fichte commemorating the testimony of the great German "Naturforscher," K. E. von Baer—whose death, in November, 1876, has called renewed attention to his works—in favor of a teleological view of the universe. Theodor von Barnbueler has an article on "Analysis and Synthesis." Professor Hoffmann reviews Dr. Wigand's "Darwinismus;" and also Dr. L. Weis' work on "Idealism and Materialism." M. Carrière has an article on Fechner's "Vorsehule zur Aesthetik;" Dr. Lasson notices Paul Janet's "Les Causes Finales;" and I. H. Fichte reviews G. Mehring's work, "Die philosophisch Kritischen Grundsätze der Selbst-Vollendung oder die Geschichts-Philosophie."

A. E. K.

THE CANADIAN MONTHLY AND NATIONAL REVIEW. Toronto: Adam, Stevenson & Co.

We have received the May number for 1876 of this excellent monthly, with an article on "Science and Religion," by John Watson, M. A., Professor of Philosophy, Queen's University, Kingston. The article is in the nature of a reply to Professor Tyndall, and like other articles of Professor Watson, which our readers have seen, is of extraordinary merit.

PRINCIPIA OR BASIS OF SOCIAL SCIENCE; BEING A SURVEY OF THE SUBJECT FROM THE MORAL AND THEOLOGICAL, YET LIBERAL AND PROGRESSIVE, STAND-POINT. By R. J. Wright. Philadelphia: J. B. Lippincott & Co.

This work is interesting as treating a subject—Socialism—which is engaging so much of public attention of late years from a new *quasi*-religious point of view. It is, however, also valuable for the information which it affords.

A. E. K.

SOUL PROBLEMS, WITH OTHER PAPERS. By Joseph E. Peck. New York: Charles P. Somerby. 1875.

The motto of this pamphlet is: "For every man must, according to the measure of his understanding and leisure, speak that which he speaketh, and do that which he doeth."—*King Alfred*.

A SERIES OF ESSAYS ON LEGAL TOPICS. By James Parsons, Professor in the Law Department of the University of Pennsylvania. Philadelphia: Rees Welsh. 1876.

There are seven essays in this handsomely-printed little book of 153 pages: "Law as a Science;" "Parties to an Action;" "The Statute of Frauds, Section Fourth;" The Project of a Digest of the Common Law, either as a Preliminary to a Code or as a Finality;" "Can a Use be limited upon a Use at Common Law?" "The Doctrine of Accord and Satisfaction;" and "The History and Growth of civil Institutions." Mr. Parsons is an uncompromising opponent of the Code as against the Common-Law System, and lets no occasion slip to advance his views on that topic.

PERCY BYSSIE SHELLEY AS A PHILOSOPHER AND REFORMER. By Charles Sotheran. New York: Charles P. Somerby. 1876.

Mr. Sotheran is well known as a writer on spiritualism and kindred subjects. This neatly-printed pamphlet has a portrait of Shelley and a view of his tomb. It is dedicated to Mr. Charles W. Frederickson, of New York.

ELEMENTS DE PHILOSOPHIE POPULAIRE. Par O. Merten, Professor de Philosophie à L'université De Gand. Namur: Librairie de Ad. Wesmael-Charlier. 1876.

A modest little work which proposes to furnish for general readers the chief results obtained from the application of the empirical method of observation to philosophy.

INAUGURAL ADDRESS. By S. S. Laurie, A. M., Professor of the Theory, History, and Practice of Education in the University of Edinburgh. Edinburgh: Edinonston & Douglas. 1876.

Mr. Laurie shows in this address not only the experienced educator, but also the scholar of philosophical culture and mode of thinking.

THE HISTORICAL JESUS OF NAZARETH. By M. Schlesinger, Ph. D., Rabbi of the Congregation Anshe Emeth, Albany, N. Y. New York: Charles P. Somerby. 1876.

A condensed sketch of the life of Christ, and of the first spread of His teachings.

A CRITICAL ACCOUNT OF THE PHILOSOPHY OF KANT. WITH AN HISTORICAL INTRODUCTION. By Edward Caird, M. A. London and New York: MacMillan & Co. 1877.

"The object of this work," says Mr. Caird in the preface, "is to explain the Critical Philosophy in its relation to the general development of Philosophy, and especially to the stages of that development which immediately preceded it." We can assure the reader that this object has been accomplished with rare success. The latter part especially, namely, the relation of Kant's system of Transcendental Philosophy to "the stages which immediately preceded it," is so fully set forth, and is, taking it all together, so new to even the best informed of Kant's students that it seems entirely out of place to apply a word of censure in regard to the exposition of the Critical Philosophy itself. We hope at a future time to give our readers an extended account of this great work, but, for the present, we confine ourselves to giving an outline of the rich contents of Mr. Caird's work, by transcribing the headings of its several parts and chapters.

Introduction.—Chapter I. The Critical Problem. Chapter II. The Critical Spirit in Ancient and Mediæval Philosophy. Chapter III. The first Period of Modern Philosophy—Descartes and Spinoza. Chapter IV. The second Period of Modern Philosophy—Locke, Berkeley, and Hume. Chapter V. The second Period of Modern Philosophy—Leibnitz. Chapter VI. The second Period of Modern Philosophy—The Wolfian Philosophy.

The Philosophy of Kant.—Part I. The Pre-critical Period. Part II. The Criticism of Pure Reason. Chapter I. The Problem of the Critique, and Kant's Preliminary Statement and Sense. Chapter II. Understanding and Sense. Chapter III. Argument of the *Æsthetic*. Chapter IV. Criticism of the *Æsthetic*. Chapter V. General View of the Analytic. Chapter VI. The two Logics and the Discovery of the Categories. Chapter VII. Kant's Preliminary Statement of the object of the Transcendental Deduction. Chapter VIII. The Transcendental

Deduction of the Categories as stated by Kant. Chapter IX. Criticism of the Transcendental Deduction. Chapter X. The Schematism of the Categories. Chapter XI. The Principles of Pure Understanding. Chapter XII. Kant's General View of the Empirical Science. Chapter XIII. The Distinction of the Phenomena and Noumena, and the Amphiboly of the Reflective Conceptions. Chapter XIV. The Transcendental Dialectic; the Nature and Origin of the Ideas of Reason. Chapter XV. The Transcendental Paralogism of Rational Psychology. Chapter XVI. Rational Cosmology, as explained and criticised by Kant. Chapter XVII. Criticism of the Kantian Doctrine as to the Nature, Origin, and Solution of the Antinomies of Rational Cosmology. XVIII. The Ideal of Reason, and the Criticism of Rational Theology. Chapter XIX. The Regulative use of the Ideas of Reason.

A. E. K.

PHILOSOPHISCHE MONATSHEFTE. Leipzig: 1877. Verlag von Erich Koschny.

The thirteenth volume (1877) of this excellent periodical appears under the editorship of Dr. C. Schaarschmidt, assisted by Dr. F. Ascherson, and fully justifies our high expectations. Of noticeable articles in this volume of the *Monatshefte* we mention: Dr. J. H. Witte, on "Die Axiome der Geometrie," and Dr. Richard Hasenelever's "Zur Analysis der Raumvorstellung," as all tending to show how much people's minds are still bothered to arrive at a philosophical comprehension of the fundamental principles of mathematics. Professor K. Boehm has an article on "Memory;" and Professor Lasson discusses the Theory of the Beautiful. We would also point out Dr. Gass' review "Schleiermacher als Philosoph." The Bibliographical department of the *Monatshefte* is excellently conducted by Dr. F. Ascherson.

Besides the above, the volume contains the following: "Ueber Wesen und Aufgabe der Philosophie," by the editor; "Ueber die Philosophie des Giordano Bruno, by Professor Barach; "Die Philosophie seit Kant," von Dr. J. H. Witte; "Die Vorläufer des Kopernikus," by G. V. Schiaparelli; "Ueber den Christlichen Staat," by Professor Lutterbeck; "Die Phantasie als Grundprincip des Weltprocesses," reviewed by Franz Hoffmann: Ernst Renan's speech on Spinoza, delivered at Hague, February 21st, 1877; Professor Bergmann's speech on Science and Life, delivered on the occasion of the German Emperor's last birth-day; "Kant und Fries," by G. Knauer; "Wigand und Darwinismus, by Dr. L. Weis; "Caro's Problèmes de morale sociale," by Dr. Jodl; "Analysis of Actuality," by O. Bertling; "Die Grundlagen der Psychophysik," by P. Langer; "Lange's Logische Studien," by G. Knauer; "Martin Knutzen und seine Zeit," by the editor—Knutzen was Kant's teacher in philosophy during Kant's university studies—"Die Gottesidee in der indischen Philosophie," by Professor Jacobi; "Zur Leibnitz Litteratur," by the editor; "Zur Theorie des Gedächtnisses und der Erinnerung," by K. Boehm; "In Sachen der Psychophysik," by O. Liebmann; "Zur Spinoza Litteratur," by the editor; and a number of book reviews, notices, miscellanies and announcements.

The fourteenth volume of the *Monatshefte*, 1878, opens with an able article from the pen of the editor, on "That which is True and that which is False in Critical Philosophy," and points out with great clearness the remarkable errors into which those Neo-Kantians of modern Germany have fallen, who, under Kant's name, have tried to pass current doctrines of the most barbarous materialism. It seems to us that these revivers of Kant-worship have been greatly led into their errors by the revilers of Kant of half a century ago, who falsely abused him for entertaining

the same gross materialism which the Neo-Kantians pretend to admire in him. Kant will never be properly understood and appreciated until Fichte's works are more studied. Fichte, indeed, has written the only intelligible *compendia* to Kant's writings. He has taken hold of Kant's system in its entirety—so much so, indeed, that he was able to reproduce it. All the other of Kant's critics have taken up only *parts* of Kant's sayings, and have naturally found in them a mass of contradictions.

"Aus der vierten Dimension," by Carl Stumpf; and "Johann Kepler," by Professor Eucken, show further interest in the metaphysical basis of mathematics. The other articles of the first number of this volume are: "Grote on the Moral Ideals," by A. Lasson; Caspari's "Die Grundprobleme der Erkenntnissthatigkeit," by Dr. Meinong; "Steinthal's Ursprung der Sprache," by L. Weis; "Renan's Philosophical Dialogues and Fragments," by the editor; "Hartmann's Neukantianismus, Schopenhauerianismus und Hegelianismus," by G. Gerhard; "Herbert Spencer's Principles of Biology," by Dr. Siegfried, and some minor book reviews and notices.

A. E. K.

DIE PHANTASIE ALS GRUNDPRINCIP DES WELT PROCESSES. By J. Frohschammer, Professor der Philosophie in Muenchen. Muenchen: Theodor Ackermann. 1877.

This is an attempt to represent "Phantasy," or imagination, as the fundamental principle of all the workings of nature, as well as of mind and history, in the same manner in which Schopenhauer tries to represent the "Will," and Von Hartmann the "Unconscious," as such principle. The work is divided into three books, the first of which treats of "phantasy as a subjective faculty of the soul," and especially of "its activity in cognition, and its objective character." The second book discusses "Objective Phantasy," and its development into a subjective (soul) in the process of nature." The third book, finally, describes "the development of the subjective phantasy (now become a subject or a soul), into a self-conscious spirit, or human personality."

A. E. K.

PHILOSOPHIE DE LA RELIGION DE HEGEL TRADUITE POUR LA PREMIERE FOIS ET ACCOMPAGNEE DE PLUSIEURS INTRODUCTIONS ET D'UN COMMENTAIRE PERPETUEL. Par A. Vera. Tome première. Paris: Librairie Germer-Baillière.

French is the language of clearness. It filters the thought that seeks expression in its rapid colloquial sentences. It is too polite to be obscure. Even German metaphysics has to appear easy and entertaining, like a man of the world, when it goes into French society. Hegel himself becomes quite companionable in Professor Vera's translations. No small achievement this, to have revealed a mind which, by all save its immediate disciples, was regarded as divine in one respect at least—its absolute unknowableness. Foreign students of philosophy had, until recently, seldom penetrated further than the doorway of Hegel's system. A look into the First Book of his Logic was enough for them. It seemed, like the entrances of the royal tombs near Thebes, a steep descent into utter darkness, and they turned away and comforted their pride of plain-seeing by calling the darkness Nonsense. Had they gone down, they might have found pictures of a truer world than the one they were content to live in. But, of late, the greatest of all thinkers since Aristotle is becoming known beyond the limits of his own language. Perhaps other countries, by virtue of their exclusively empirical habits of thinking, are the better prepared to estimate his greatness when discovered. They have worked through empiricism, and feel the need of a different method. They have ended where Hegel begins—in nothing. The ultimate conclusion of their knowl-

edge is that nothing can be known. They are, therefore, in a good mood to be led anywhere, since, even in utter darkness, they cannot learn less than Nothing.

German thought may be in the same, or nearly the same, condition; but this is no sign, as some gregarious reasoners imagine, that it has transcended Hegel's stand-point. German thought had, at the end of the last century and the beginning of the present, an epoch of speculation corresponding to the Elizabethan period in English literature. It flowered and ripened all at once. From Kant to Hegel it had a summer-tide of philosophy. But it has no more transcended Hegel than English poetry has transcended Shakespeare. On the contrary, it only saw its possibilities in him, and has had to actualize them in its own slow and seasonal way. In this process it could not skip a single grade of demonstration. The teacher could teach the pupil no more at any time than the pupil had capacity to learn, and the intellect of a nation learns only by its sense of need. The German people, as a people, had not then, have not yet consciously, felt the intellectual want which Absolute Truth alone can satisfy. It has just now, a century after Kant, begun to ask the questions which Kant set himself to answer, and which he answered by pronouncing them unanswerable and vain. By and by it will reach Fichte, then Schelling, and then Hegel.

Nor is it strange, that in its present Kantian stage, German thought should borrow back the very ideas which it awhile lent to other nations. More strictly and impatiently empirical than itself, these actions have developed empiricism faster. English science, without suspecting its own tendency, has run, by the very emptiness of its discoveries, into the metaphysics it was at the same time denouncing. The theories which it hailed as new and original—such as evolution, correlation of forces, relativity of knowledge—were delivered by Kant, and carried up into higher categories by Hegel, long before it was seized with this sudden fancy for masked metaphysics. So we Americans send obscure singers to Europe and worship them as *prima-donnas* when they return under Italian names. Germany may be Darwinian to-day, but this is only to say that it understands Hegel's logic as far as the second book. Meanwhile, the other nations, who have been on that stage of thinking longer, may get out of it sooner; and Germany may have to learn her own Hegel, as she is now learning Kant, from their more popular demonstrations of his truth. What if Hegel, too, should find his Herbert Spencer!

There are already many indications of such an advance. Schools of enthusiastic Hegelians have sprung up in Merton College, Oxford, and in the University of Glasgow, and are represented by such works as Stirling's *Secret of Hegel*, Wallace's translation of Hegel's *Smaller Logic*, Caird's *Criticism of Kant*, and Bradley's *Ethical Studies*—all vigorous and generative productions. In America, the numbers, though scattered, are growing of those who think they have found in Hegel a solution for many unsolved enigmas of nature and of life. In France and Italy, and even in Spain, a goodly company of elect minds are persuaded that they see in Hegel's thought a veritable day-spring. Of these last the undoubted leader is Professor Vera. M. Taine, in his *Italy*, says of the University of Naples, with which Professor Vera is connected: "The university contains a thousand students and sixty professors. German erudition and methods prevail. Hegel is read with facility. M. Vera, his most zealous and best accredited interpreter, has a chair here. M. Spaventa is trying to discover an Italian philosophy, and shows Gioberti to be a sort of Italian Hegel. * * * Lately a great crowd thronged to an exposition of the *Phenomenology of Hegel*; they translate his technical terms and abstractions without any difficulty." Think of crowds thronging to an exposition of the *Phenomenology*! The man who draws them must have

a remarkable power of traction. Professor Vera we take to be such a man. He speaks from a full mind, has been a life-long student of speculative philosophy, deems it honor enough to shine with the reflection of Hegel's light, and has proved his devotion to the great teacher by translating and expounding his most difficult works. The *Philosophy of Religion* is the last of more than a dozen volumes of such disinterested labor.

It was in the *Philosophy of Religion* that Professor Vera first got a glimpse of Hegel's thought, and his desire to comprehend this work led him to the study of the whole system to which it belongs. And now, after having worked through the system, he has returned to his beginning, as the true end alike of speculation and life. And this was Hegel's own view. In no other of his works did he so clearly manifest the divine uses of his logic. The logic itself was pure thought in solution, without any distinct conceivable form—a ferment of categories rising and vanishing like bubbles, if possible, of idealism never to be realized. In the *Philosophy of Nature*, of *Right*, of *Spirit*, many of these categories appear in form and function as the conscious reason of humanity. But in the *Philosophy of Religion* we have the whole substance of the Logic brought home to the profoundest needs of the soul. There thought becomes worship.

In his six chapters of introduction the translator has given an anticipatory survey of the work itself, illustrating some of its truths, finely, by an application of them to the criticism of phases of false philosophy and false religion, which have appeared since Hegel's day—especially the negative phases of certain recreant disciples of Hegel himself, like Strauss and Feuerbach. The criticisms are too ardent and polemical, we think, for a great treatise on the philosophy of religion.

Professor Vera had before him, however, the example of the author, who, in his own introduction, indulges in some very torturesome vivisections. But controversy is calmer now than it was in Hegel's time. Serenity, rather than rage, is taken as the impress of power. Reasoning gains nothing by denunciation. And one who overlooks the progress of humanity, from the elevation of philosophy might well keep his temper, even though forced to take notice of the ephemeral vandalism of Strauss. Still, Professor Vera's loss of temper is never violent, and always gives a glow to his style which makes it pardonable in a work otherwise so excellent.

R. T. II.

THE PRINCETON REVIEW: *No. 1, January; No. 2, March, 1878.* New York.

We note that this venerable periodical assumes a new dress, typographically, and becomes a "Bi-monthly," in its fifty-fourth year (at the exceedingly low price of 50 cents a number, and \$2 a year. The January number contains 232 pages; the March number 400 pages. At this rate the subscriber will get three large volumes in one year for \$2). Under the editorial management of Dr. McCosh, as might have been supposed, this Review devotes a larger space to metaphysical questions than hitherto. In the January number, John T. Duffield discusses the question of "Evolutionism Respecting Man and the Bible;" George P. Fisher defines and condemns "Materialism in the Pulpit;" Francis Wharton treats of "Casuistry: Theological and Legal." But the best is the beginning of a series of articles on "Contemporary Philosophy," by Dr. McCosh. In the first he treats the historical phases, noticing the course of lectures on philosophical subjects at the German universities. (From 1874 to 1877 there were 216 on History of Philosophy, 131 on Logic, 120 on Psychology, 39 on Metaphysics, 32 on Ethics; total, 537 courses of lectures on philosophy in three years!) He discusses

the "Defects of the Historico-Critical Method," which is too liable to drift into the channels of preconceived theories, leaving the student without the capacity of investigating the mind for himself. Professor Bowen's new and most noteworthy book on "Modern Philosophy" receives notice, especially its treatment of Schopenhauer and Von Hartmann. Professor Caird's "Critical Account of the Philosophy of Kant," excites some concern, lest the study of Hegel and Kant shall undermine the native Scotch philosophy, "and probably the underlying principles of the old theology of Scotland." Professor Flint's "Theism" is noticed with favor.

In the March number, President Chadbourne discusses "Design in Nature;" Professor Bowen, "Dualism, Materialism, or Idealism;" Professor Archibald Alexander, "German Thought and Schopenhauer's Pessimism;" Dr. Hickok, "Evolution from Mechanical Force." In addition to these excellent and timely discussions, Dr. McCosh continues his notice of "Contemporary Philosophy," this time taking up the subject of "Mind and Brain." Under this head he touches upon Carpenter's "Mental Physiology," Ferrier's "Functions of the Brain," Sir Henry Holland's "Chapters on Mental Physiology," giving in the course of his article a very clear, brief statement of the conclusions of Ferrier.

It is, indeed, a very important phase of discussion just now—this of the so-called "Physiology of the Mind." One should read carefully the profound article of Dr. Hickok, above noted, in connection with the critical orienting of Dr. McCosh.

One must speak gratefully of the high standard of the philosophical discussions in our American theological quarterlies—especially *The Bibliotheca Sacra*, *The New Englander*, and *The Princeton Review*. It is a good omen to see a new vigor infused into an important department already excellent hitherto.

W. T. H.

THE JOURNAL OF SPECULATIVE PHILOSOPHY.

VOL. XII.]

JULY, 1878.

[No. 3.]

SOME CONSIDERATIONS ON THE NOTION OF SPACE.

BY J. E. CABOT.

All bodies are extended, or exist in Space — that is, they are outside of us, and outside of each other; and this *outness* we imagine indefinitely prolonged in all directions — as indefinite *room* for others. Yet, although Extension is the most general character of bodies, when we ask ourselves what it is, we find only negative predicates; it is pure indifference to every one of the sensible qualities; they may all be changed without touching the extension of the body; and we can at last only define this extension as the *otherness*, the mutual externality, of the parts.

How, then, do we get any knowledge of it; or to what possible impressions does it correspond?

It is natural to us to say that we *see* the place, distance, direction, and extent of bodies — that the separateness of the letters on this page, for example, is visible, just as the black color of the ink and the whiteness of the paper are visible. This was the prevalent opinion before Berkeley, and many psychologists seem to be returning to it.¹ Evidently, however,

¹ *E. g.*, Stumpf: "Ueb. d. psychische Urspr. d. Raumvorstellung." Leipzig, 1873. Rühl: *Vierteljahrsch. f. wissensch. Phil.*, 1877, 2tes H., p. 215.

this is a figurative way of speaking; for it is not meant, I suppose, that Extension is an affection of the optic nerve; in other words, that it is a color. If this *is* meant, then we are entitle to ask, What color? Some one, I forget who, has suggested that Space is of a bluish tint; Mr. Riehl considers it to be a consciousness of black and white, or of light and shade. If these hypotheses are to be taken in earnest, they require us to suppose the existence, as a physical fact, of an indefinite *substratum* as a ground-work upon which all particular colors are spread out, and as the condition of their being perceived. This, I think, is too much like the old notion of a Substance without attributes, existing merely as the subject of attributes, to find favor with scientific men.

No visual impression of any kind can be the condition of our perception of Space, for blind persons in whose experience this condition is wanting have this perception. Indeed, if Space be a sensation, it is one that is common evidently to several of our senses—probably in some measure to all. Many animals hunt principally by scent, and blind persons discriminate position and distance with great accuracy by hearing alone. M. Delbœuf² considers our association of Space with sight and touch to be merely a matter of habit, connected with the superior development of particular organs in the human race, and thinks that we can easily imagine a nose or an ear that should *see* Extension as truly as our eyes *see* it. A nose or an ear differentiated to the same extent with our eyes, viz., having upon the sensitive surface one spot of intenser sensibility, provided with a refracting medium capable of presenting a wide field of sound or scent, and with a movable tube permitting the field to be freely explored in all directions—would, we can hardly doubt, be able to discriminate positions in Space, if not as well, yet as really, and in substantially the same way, with our eyes or hands. On the other hand, an eye reduced to the same conditions with our nose or ear would possess as little power of discrimination.

Is Space, then, an occult quality in bodies, which modifies

² Psychologie comme science naturelle. See, also, *Rév. Philos.*, 1876, p. 745.

our apprehension of them without our being able to identify it with any nervous affection, or in any way to demonstrate its presence apart from the inferences to which it gives rise? Science is jealous of occult qualities, and rightly, for it is an hypothesis very hard to control. No doubt we have a sense of Extension — just as we have a sense of right and wrong; but to allege this sense only states the problem, without any attempt to solve it.

On reflection, it is evident, I think, that no simple feeling of any kind can be conceived as giving us by itself the impression of Extent; we cannot suppose it constituting a surface, or consisting of parts arranged above or below, or on the right or left hand of each other. Our feelings are by their very nature internal; occupy no room, and exist, as Hume said, *nowhere* but only in being felt. Nor can any assemblage of these zeroes give us what they do not themselves contain.

Evidently the extension of a body is not a quality, like weight, color, odor, etc., belonging to each part of it independently of the rest, but resides wholly in the relative position of the parts, of whatever nature they may happen to be. Hence it is that the particular character of the impressions makes no difference in their extent. Seen Extension is the very same thing with that which is felt, heard, or smelt, and in all these cases it is equally distinct from the sensations with which it is associated. A sound or a smell is localized, not as definitely perhaps, yet as really, as a color or a touch; and in all alike the situation is a fact of a different order from the nervous affection.

Assuming, then, that Extension is not a sensible quality, but a relation which may subsist among impressions of any quality, or, at any rate, of various qualities, the next question is how we become aware of it. The only grounds of relation between our various sensations are resemblance, and sequence in Time. Affections of the same organ are more or less like each other: every taste is a taste, every sound a sound, and even black and white are alike colors, however they differ within this limit. Affections of different organs are neither like nor unlike; and, finally, all our sensations are related in

the time of their occurrence, as being either before, after, or simultaneous with some other.

Such being the materials with which Experience has to work, it is natural to look to successiveness in time as the experience originally corresponding to the outward fact of a diversity of parts; and, on the other hand, to the similarity of like sensations as giving us the impression of continuity or juxtaposition.

Accordingly, many psychologists have traced the notion of Extension to the compound impression of a series of feelings so closely associated with a single feeling as to become identified with it—*e. g.*, if I move my hand back and forth with different degrees of rapidity, I get a series of impressions (of points successively touched, varying pressures upon the tissues, successive muscular efforts, etc.), succeeding each other at different rates, and thus conveying the impression of mere distance or extent. Then, if the motion be interrupted by contact with a resisting object (as, where different parts of the same thing are successively touched, or the hand is passed across a smooth, hard surface) — or, if the consciousness of it is interrupted by the consciousness of accompanying muscular effort, the amount of which remains the same whatever the rate of movement may be — the diversity of successive feelings is changed, by association with the feeling that remains the same, into the complex image of a diversity of parts in one object. The order of the impressions is, in the first place, detached from their particular sequence, and then, by a further step, it is apprehended as a diversity which is, also, from another point of view, identity, and these are associated together as one fact.

To this theory, in the form in which it was propounded by Dr. Thos. Brown, Sir Wm. Hamilton objected that the diverseness or remoteness here spoken of is remoteness in Time, not in Space; and he might have added — perhaps he did — if it were to become obliterated, the result would be, not that we should become conscious of objects in Space, but that we should cease to be conscious of events in Time.

Mr. J. S. Mill, in his Examination of Hamilton's Philoso-

phy, rejects this criticism rather roughly, with the *argumentum baculinum* that, whatever our notion of length in Space may be, it is, as a matter of fact, constructed by the mind's laws, out of the notion of length in Time. What those laws of the mind are, that can give us the notion of a *synchronous succession*, he does not explain, but it is safe to say that this is not the notion of Space. The obliviscence of Duration is a phenomenon that is familiar to us in all our habitual actions, and we find nothing of the kind in it. Any set of complicated movements often repeated comes to seem like one; a practiced player upon the piano-forte, *e. g.*, comes to regard the successive adjustment of his hands, etc., as a single act; but there is no appearance here of a construction of Space.

Whatever plausibility belongs to any of the various attempts that have been made to evolve Extension from purely intensive feelings, with the help of the consciousness of movement, is due to the fact that, in assuming this consciousness, they assume the whole of their case. The movement must start from some point, and this point is already spacial. Now, if we may look upon our sensations as things existing outside of us at particular distances in definite directions, there is no further difficulty in the matter. But just this is our question: How they can have any *place* except in our consciousness — or how we come to imagine that they have any other? It seems impossible that a purely sentient being, having no knowledge of Extension, should ever arrive at such a notion.

Let us suppose the case of such a being, and, in order to cut off the associations with Extension that so obstinately cling to our visual sensations, let us further suppose that he is blind, but that his sense of hearing is so developed as to present to him a wide auditory field in which he can discriminate particular sounds with great accuracy. Now, let us bring him into a concert-room where a large orchestra is playing, and seat him in the middle of the front row. He will at once single out (let us say) the violoncello, and he will be more or less dimly aware of the first and second violins on either side, and of the other instruments further off. Judging from analogy, we should say that he will probably, after a while, turn his ear first

in one direction and then in another, so as to bring various instruments successively before him—just as we see a baby turn its eyes from one bright spot on the ceiling to another. In short, he will act just as if he knew that they are co-existing things at certain distances and in certain directions from him and from each other. But to conclude that he *has* such a knowledge seems to me an important step, and a step entirely in the air, for it is supposing him to reason in contradiction to his premises. He has every reason to believe that he has created the violoncello, and that he will successively create the violins and the other pieces, and annihilate them the next moment—just as he creates a sweet taste by putting a lump of sugar upon his tongue, and destroys it by tasting something else. All these facts are parts of him—of that series of feelings which he is—and it is utterly inconceivable that any association or combination of them, or such further facts as that certain of them occur now successively, and now all at once, should ever lead him to the contrary opinion, or to the belief that different parts of one object can be present at once, and yet be distinct from each other. How should similar sensations be distinguished except as present or not present? Shall we say that he has an innate capacity for distinguishing them as signs of different objects, which accordingly may exist even when they are not perceived? No doubt we are conscious of such a faculty in ourselves; but this consciousness no more explains this faculty than the *virtus dormitiva* explains the action of opium in putting us to sleep; it is only another statement of the fact. Evidently there is something that needs explanation in the claim to perceive as existing all at once something which is in reality successive. The only object that he knows of is the sensation he actually feels; the only *place* is place in a sequence of feelings, and this is indivisible and admits of no discrimination, and no relation of different things of the same kind, except between that which exists and that which does not exist. The presence of several feelings at once must mean the coincidence of affections of different organs; such as a smell, a taste, and the feeling of a smooth surface occurring at the same time with the sound to which he is listening. But these do not form parts

of one whole, nor, whether they occur all at once or successively, is there any Space between them.

Of course our blind man will be free to admit the existence of certain general conditions, normally accompanying his particular sensations — that is to say, certain preliminary feelings generally announce to him that he is in a position to evoke a sweet taste, or the sound of the violoncello, etc. But the assertion that these conditions are *external* to him, and continue to exist whether they are felt or not ; that, besides their quality as sensations, they have another quality as signs, in virtue of which they are *somewhere* all the time, ready to evoke similar sensations : or are capable of serving as fixed points, in relation to which the position of other sensations can be fixed, must seem to him a most violent paradox, and it would not be mitigated, so far as I can see, by the universal prevalence of such an opinion, or by any degree of regularity in the order of phenomena. How should he ever come to suppose that they are anything else than just what they appear to be?

In order to admit such a conclusion he must first have come, not merely to distrust his senses, but to the implicit assumption that their informations are of no value whatever ; that their value lies in what they *prove*, not in what they are — in short, he must have begun to think, instead of merely to feel.

To think is to apprehend the universal relations of our particular and personal experiences ; to discover what they signify, or what hypothesis they oblige us to adopt. If it be asked why we put ourselves to this trouble, why, instead of contentedly dwelling in our sensations, we at once go beyond them, try to account for them, and make them intelligible, the only answer is that we cannot help it ; that such is our nature. A being like that above supposed, who makes no assumption as to the meaning of his impressions, draws no inferences from them, but just takes them as they are, is the abnormal man, the idiot. The normal man, at the first awakening of consciousness, finds himself with this presumption in his mind : that every one of his sensations is a sign, or has *some* necessary relation to the rest of the universe.

The first *naïve* expression of this discovery is given in the sense of Space — the indefinite *otherness*, the externality and mutual externality of all objects of perception. This is the first aspect of the conception of reality, and by contrast the negation of the reality of the present sensation.

It is impossible to antedate this experience, or to derive it from any simpler *data*. We can analyze it into its implied elements, but then we must not mistake these for facts of Experience, for we have no such experience.

In discussions of Space, as this notion presents itself to common-sense, we are apt to leave out of view this fundamental negation of immediate feeling, upon which it rests, and to take up the matter further on, where this indefinite otherness of the real world has become so familiar, and the presumption of it so instinctive that we are only vaguely conscious of it as a general background underlying all our perceptions. At the same time, it is so intimately associated with each one of them, and above all, of course, with the most familiar — viz., those of sight and touch — that we not unnaturally imagine it as something positive, and suppose that we *see* or *feel* Extension as if it were a general color or surface, distinct from all particular colors and surfaces, instead of being, as it is, not indeed the negation of color or resistance, but the negation of any reality in the sensible qualities taken by themselves.

But this vague image of the general relatedness of objects — if we treat it as if it were derived from experience, by merely leaving out of view the special qualities of our sensations, as visual, tactual, etc., and retaining their positions — dissolves as soon as we endeavor to realize it to our minds in a particular case; for it is, in truth, the picture of a relation without related terms. Our sensations, when we have abstracted from them their special qualities, are simply nothing at all, and cannot be brought into relations with each other or with anything else; and we have to fill out their empty forms with an occult quality of *localization*, which really signifies only the exigencies of our theory.

This is the position of the *local-sign* theory, proposed by

Lotze and adopted, with some modifications, by Helmholtz and by Wundt.³ In this theory, Experience appears (though sometimes under protest) as a *logical* function, a process of interpretation and inference, and not as the simple reflex of a physical process. But, as it is still supposed that all knowledge of matters of fact or of sensible things must be derived immediately from Sensation, the question at once occurs, What is the sensation that informs us of the difference between (say) one edge of a sheet of white paper and the other edge? There is no difference in the sensations. The different positions of the retinal images? This is not a sensation, any more than the width of the sheet is a sensation; it is a physical fact, and our question is how this quantitative fact is derived from nervous affections, which admit of no differences except of quality and degree.

The local-sign theory has no answer to give to this question; it can only urge that there *must have been* a quality in our sensations, or in some of them, which informed us of the position of their objects — else we could never have come to distinguish one part of our body from the others. Lotze⁴ conjectures that every impression that can be localized may consist of a fixed association of two elements: a physical process which gives rise to the consciousness of a particular quality (a color, a feeling of warmth, etc.), and a parallel process of unknown nature, perhaps connected with innervation feelings, which is the same for all kinds of impressions, but different for different parts of the body. We cannot tell, says Wundt, precisely in what these differences consist, because we only make use of them for the sake of localization; and apparently have forgotten what they were before we so used them. To such straits are scientific men reduced in their anxiety to avoid metaphysics.

It would be more scientific, I think, to state the fact just as we find it — viz., to say that these differences, so far as we know, do not *exist* until we use them; that the relation of Extension

³ Grundzüge d. physiol. Psychologie, 478 f.

⁴ Mikrokosmos I, 357.

and its terms come into being together, in our perception of external objects; and that we have no knowledge of either of them apart from the other. A single object, alone in the universe, would be nowhere, and it would be unextended, until we conceived it as divided into parts, standing in relations to each other.

In short, our case is that we have no discernment of things as they are by themselves, directly corresponding to our nervous affections, but only of phenomena — *i. e.*, of things determined and made what they are by the relations which the mind discovers in them; things as they must be thought, not things as they are felt. The object seen is not the impression on the retina, nor anything corresponding to it — for nothing can correspond to one affection of my nervous system except another affection of it — but such a thing “as must be present in order to produce, under the normal conditions of observation, these retinal images.”⁵ Or, rather, not *these*, for that is impossible, but images requiring the same interpretation. Accordingly, whatever presents the evidence requiring that interpretation presents the object, whether it is there or not. No reader, probably, sees in this page a blank space (or two blank spaces) “big enough to contain eleven full moons;” but the reason why everybody does not see it is that most persons see what is to them convincing proof that the page is full of letters, and, accordingly, supply the letters where they are wanting. A practiced observer, who has turned his attention to these matters, sees the *lacuna*; but, if he supposes that by any study or any perfection of apparatus he will ever come to see things “just as they are,” without any interference of the mind, he is the victim of misplaced confidence in a metaphysical theory. He will only substitute new hypotheses for the old.

To wind up these somewhat cursory remarks: The notion of Space, like all our notions, and like the whole content of our experience, is the workmanship of the mind operating with *data* of which, because they lie below consciousness, we know nothing directly. If we call these *data* sensations,

⁵ Helmholtz: Populäre wissenschaftl. Vorträge, 2tes H., p. 91.

then it is clear that there is no sensation of Space as an objective fact, because there is no sensation of any *object* — because Sensation is its own object, and has no other. “There is something there,” means something *else* than my sensation. If we say (as we may) that to be conscious of a feeling is to be conscious that it has relation to *something* beyond itself, then there is no objection to the position that we have a feeling, or a sense, of Space, which needs only to be clearly set before the mind and to have its implications made explicit, in order to become the notion of Space; only that, as it differs from those organic feelings which we commonly call sensations precisely in this, that it *can* be made more explicit — in other words, that we can discriminate those operations of the mind for which it stands — it becomes superfluous and misleading to insist on the fact that it is *also* a sensation. Superfluous because any of our experiences may take the form of sensations, if we dwell only on the personal impressions they make upon us; and misleading because saying this seems to say that they are nothing more — as if we were to say of a man that he is an animal.

If, finally, it be asked, as it has been lately asked, whether the notion of Space, then, is a purely mental creation, or whether it corresponds to something independent of the mind, the answer is that this depends upon what we mean by the mind.

If we mean a consciousness of feelings, past and present, connected by the thread of memory, evidently such a sequence cannot create a system of necessary relations between its various parts — still less be conscious of them as all present at once. To such a consciousness spacial existence must appear as something altogether strange and incomprehensible — an ultimate fact, not to be reconciled with the other facts of experience. The feelings of an infant when first it begins to dawn upon him that there is something outside of himself we may conjecture to be of this sort. But there is no reason why we should endeavor to perpetuate this infantile state of mind.

If we mean Self-consciousness — the mind returning upon itself and its impressions, and qualifying these as true or false,

real or unreal, through their rational interpretation as signs of something ulterior (which is our actual state) — we may say that Space is the creation of the mind, just as we may say that the sense or the notion of right or wrong is the creation of the mind — since nothing is right or wrong until somebody sees it to be so — without meaning that it is anything unreal, or admitting the possibility of a state of things in which these distinctions would not hold good.

BRUTE AND HUMAN INTELLECT.

BY WM. JAMES.

Every one who has owned a dog must, over and over again, have felt a strange sense of wonder that the animal, being as intelligent as he is, should not be vastly more so. His conditions would be easier to understand if he were either more universally stupid or more generally rational. The quickness with which he learns the signs which indicate that his master is going out, such as putting off slippers and putting on overcoat, seems incompatible with his utter inability to learn that dropping more coal into the grate will make a hotter fire. Accordingly, quite apart from theological and metaphysical prejudice, it is not surprising that men's opinions regarding the mental state of brutes should have oscillated between the two extremes of claiming for them, on the one hand, reasoning powers in no essential respect other than those of man, and, on the other, of denying to them all properly intellectual attributes whatever, and calling their powers of appropriate action the result of "instinct," or, still worse, of mere blind mechanism. Most of us adopt a medium course, and feel as if our domestic pets had real, though peculiarly limited, intellectual powers, and at various times attempts have been made to define exactly what this limitation consists in. It has been said that they were like men dreaming; that they could not form abstract ideas; that they had no proper self-consciousness; that they were incapable of apprehending the

notion of a sign as such ; that they were incapable of language ; and that these incapacities, severally or all together, were sufficient to explain the observed differences. All these statements are, no doubt, true in the main. Every one in fact feels them to be true when he goes into the midst of his quadrupedal relatives, and yet these formulas hardly clear up the matters much, for they themselves express results, rather than elementary factors in the case. *Why* does not a dog frame abstract ideas? *Why* does he not reflect on his self, or *ego*? And the rest. If we could find the elementary point of divergence in his mental constitution which leads to all these peculiar shortcomings, we should be much better off.

Now, it seems to the writer that to a certain extent we can reduce all the above differences, and others too, to one simpler difference ; and, although this last is itself by no means ultimate, still, to have ascertained it will be a real progress as far as it goes, and may put us, moreover, on the track of further definite inquiries. A new question distinctly formulated is always a philosophic gain.

To make clear if possible what this common root is which makes our dog's thoughts seem so different from our own is the object of the present essay. If it dwells chiefly on his thoughts, and little on his passions, emotions, and so forth, it is for obvious reasons : first, the lack of space ; and, second, the relative plainness of the latter phenomena. But, to find what difference there is between brute thinking and human thinking, we must begin by forming a clear idea of what human thinking is.

To say that all human thinking is essentially of two kinds — reasoning on the one hand, and narrative, descriptive, contemplative thinking on the other — is to say only what every reader's experience will corroborate. If, further, it be asked what the latter kind of thinking is, every one will reply that in the main it consists of a procession through the mind of groups of images of concrete things, persons, places, and events, together with the feelings which they awaken, and in an order which, if our attention is guided by some dominant interest, such as recollecting an actual set of facts, or inventing a coherent story, is in the main derived from our actual experience of the

order of things in the real outward world. If, on the contrary, there be no presiding interest, but our thoughts merely bud one out of the other according to the caprice of our reverie, there may occur very abrupt transitions between one set of images and the next, so that we may juxtapose thoughts whose *things* were never juxtaposed since the world stood. In the case where there is a presiding interest the link by which one thought is made to succeed another is in the main that known to psychologists by the name of "association by contiguity." We are apt to go over the circumstances as they happened or were likely to happen. The thought of a last summer's sunset will call up the vessel's deck from which I saw it, the companions of my voyage, and the arrival into port.

In reverie, on the other hand, "association by similarity" is more prominent. A sunset may lead me to think of the letters of the Greek alphabet, and I may at first be quite unable to give the steps by which so incongruous a consequence was suggested to me. When ascertained, however, I may see that I was reminded in succession of the recent attempts to explain nearly all mythology by solar myths, of Hercules' history as such a myth, of Hector's funeral pyre, of Homer, and whether he could write, and then of the Greek alphabet.

Where contiguity predominates we have a dry, prosaic, literal sort of mind; and, on the contrary, where similarity has free play, we are apt to call the person fanciful, poetic, or witty. But both cases agree, the reader will notice, in this: that the thinker passes along from one concrete whole of representation to another. His thought is always of matters taken in their entirety. Having been thinking of one, he finds later that he is thinking of another, to which, as it were, he has been naturally lifted along, he hardly knows how. If an abstract quality figures for a moment in the procession, it arrests the attention but for a moment, and fades into something else; and it is never very abstract. Thus, in thinking of the sun-myths, I may have a gleam of admiration at the *gracefulness* of the primitive human mind, or a moment of disgust at the *narrowness* of modern interpreters. But, in the main, I think less of qualities than of whole things, real or possible, just as I may experience them.

Having mentioned the two kinds of association, let us now pause for a moment before proceeding further, and form a somewhat more distinct notion of the way in which they differ from each other. The law of association by contiguity has been thus stated: "Actions, Sensations, and states of Feeling, occurring together or in close succession, tend to grow together, or cohere, in such a way that, when any of them is afterwards presented to the mind, the others are apt to be brought up in idea."¹

The same writer has expressed the law of Similarity as follows: "Present Actions, Sensations, Thoughts, or Emotions tend to revive their LIKE among previously-occurring states."² Let us make schematic diagrams of these two modes of association. Since all logical processes are to-day hypothetically explained as brain processes, by translating ideas into cells and their connections into fibers, the same figures will do for an imaginary representation of what goes on in the brain — each circle being supposed to represent a group of cells united by fibers, whilst the dotted lines are fibers alone.

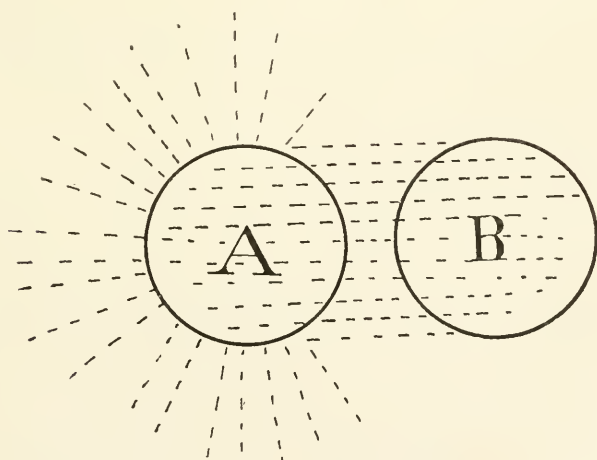


FIG. 1.

¹ Bain's Mental and Moral Science, p. 85. London, 1868.

² *Ibid.*, p. 127.

Fig. 1 represents association by contiguity; all the elements of the whole A are operative together, and call up all the elements of B together, B having been previously experienced in company with A. In Fig. 2, on the contrary, where associa-

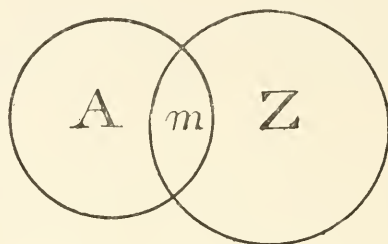


FIG. 2.

tion by similarity is represented, most of the elements of A are inactive. The single element, *m*, breaks out from its concert with them — a concert which would naturally have resulted in their combining in the only *united* action possible to them, viz., the arousal of B — and calls up a whole with which *it* alone has contiguous associations, the whole Z. But, now, does not a mere glance at the figure show us that A and Z are called similar only because they are in part identical? identical in the character *m*, which vibrates throughout both? This *m*, it is true, may be larger or smaller; but, whichever it is, it cannot, as it exists in Z, fitly be said to be associated with itself as it exists in A. On the contrary, it is one and the same *m* in both. Association properly so called obtains between the residual ingredients of A and Z respectively. Each set of these is associated with the common *m*, and, moreover, associated with it by contiguity pure and simple. All association, therefore, is at bottom association by contiguity — that alone binds two ideas together. What in ordinary parlance is called contiguous association is only the particular case of it in which all the items of a cluster of ideas operate *together* to call up another cluster with which in its totality they were each and all once experienced. What we call “similarity” is only the other special case, in which a *part* of a cluster acts, as we say, on its own hook, and revives another cluster with whose

totality *it* alone has been experienced. The two clusters cohere together by respectively cohering by their *residual* characters with *it*. But this cohesion is contiguous. The *m* — the character by which the clusters are identical in the fullest sense of the term — is the common heart of both, and indirectly keeps them together by its contiguity with their several other parts. Contiguity is, then, the only operative bond of association. Identity is no association at all. What is called similarity is a resultant, compounded of both identity and contiguity.

Having thus parenthetically defined our notions of association, let us pass on to reasoned thinking. Wherein does it differ from the contemplative — or, as we may now call it, empirical — thinking, which we have alone considered hitherto? Reason may be, and often is, defined in two ways: Either as the power to understand things by their causes, or as the power, if the notion of an end is given, to find the means of attaining it. That is, reason has a theoretic and a practical sphere. But in their essence the two spheres are one; they involve the same form of process, which is simply that of finding an intermediate representation, *m*, which will, in a peculiarly evident manner, link together two *data*, A and Z. In the theoretic sphere *m* is the “reason” for “inferring” Z; in the sphere of action it is the “means” (or the instrument) for “attaining” Z. The immensely superior utility of reasoned to merely habitual thinking lies in this: that by reason we may infer or attain Z, even though Z and A may never have been conjoined in our actual experience. In empirical thinking this would be impossible. To get at Z at all in empirical thought we must already have passed, in some concrete case, from A to it. If in the theoretic sphere that has happened, then when A next recurs it will suggest Z — pass us on to it by a law which we blindly obey, we know not why. Whilst, if the previous experience was in the realm of practice, the notion of the end, Z, coinciding with our actual circumstances, A, will together resuscitate a representation of the manner, *x*, in which we formerly passed from one to the other.

In reasoned thought, on the other hand, no previous expe-

rience is needed of the concrete case we have to deal with. We pass over the bridge, *m*, whose relations to the terms A and Z we may never have been aware of before. What is *m*? It is always a partial character (or a combination of such, with their suggestions) imbedded in the totality of one or both of our items of thought, which we dissect out and fix our attention upon. Particular cases of reasoning vary enormously in complication. Thus, in theoretic reasoning, Z may from the first be an abstract attribute, and then, probably, the extraction of the partial characters will be performed solely upon A. Vermilion is heavy, for example. Why? Because it contains mercury, and that is heavy. Sometimes, again, A and Z are both concretes, and *m* unites them by our noticing that it is a common, identical, partial character in both. Thus I may perceive five frames to be equal to four shillings as soon as, in the mass of different suggestions of each, I discern the common character of being equal to a dollar. Equivalence to a dollar is the *m* here, as mercury was in the previous case. Or, I may be in an inclosure, over the north wall of which some one is calling to me; but I may see no way of getting to him till I observe that in the south wall there is a passage to the street, and that the street will lead me to my friend. Here the *m* is double; first, the inclosure yields the character of a southern exit to the street, and the street, among its other included characters, contains that of leading to the spot I wish to reach.

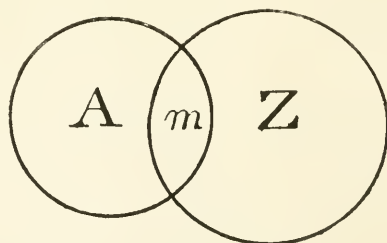


FIG. 3.

The accompanying diagrams will symbolize the process in these simple cases. In Fig. 3 the mercury, or the dollar value, involved as an ingredient in A calls up the Z, with which it is

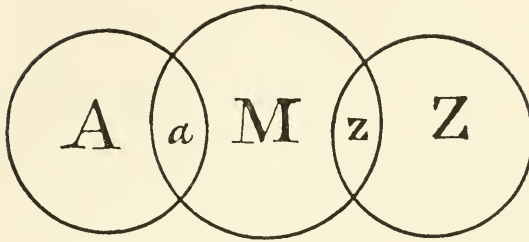


FIG. 4.

equally congruent, and binds it and the A together. In Fig. 4 the southern exit, *a*, is part of the larger whole, M, the street, one of whose other parts is *z*, which is also congruent with Z, the place of my friend.³

The most complicated cases may be symbolized by a mere extension of the last diagram, such as Fig. 5 (p. 244) shows us.

Here the reason or process for passing from A to Z consists of a long series of links, each of which is constructed in the same fashion. A partial character, *a*, imbedded in A, will redintegrate (that is, recall) its associates, and among them *b*, which in like manner recalls *c*, and so forth until Z is reached. Or the analysis of Z into *z*, which calls up *y*, and so on, may be simultaneously begun. In that case the two ends of the chain advancing towards each other will meet somewhere in the middle, *m* being a term resulting from both analyses — consequently identical in each. The result is, of course, the same. The whole chain of steps may in a large way be called the “reason,” M, why A and B are related to each other as they are; or any partial number of them taken together may become

³ The reader will, of course, observe the difference between these and the ordinary syllogism diagrams of logical treatises. Fig. 3, for example, if taken to symbolize a syllogism, would yield no valid conclusion. The syllogisms of logical treatises differ, however, from the living acts of reasoning, which I am here describing, by this very point: that they are ideally perfect, while our concrete acts of reasoning are almost always liable to error, and to the particular form of error which Fig. 3 makes manifest. Only *so far as we are right* in identifying in our thought the total A and the total Z, with their ingredient, *m*, and in ignoring the outlying portions of the circles, can we reason from one to the other. If either identification be inapt, we have made a blunder. And it is just in this that the difficulty of going right lies. Which part of a phenomenon — which *m* — shall we consider its essence in any given case? What concept shall subsume it?

the "means" by which we reach Z from A, if the junction of these terms be a practical problem.

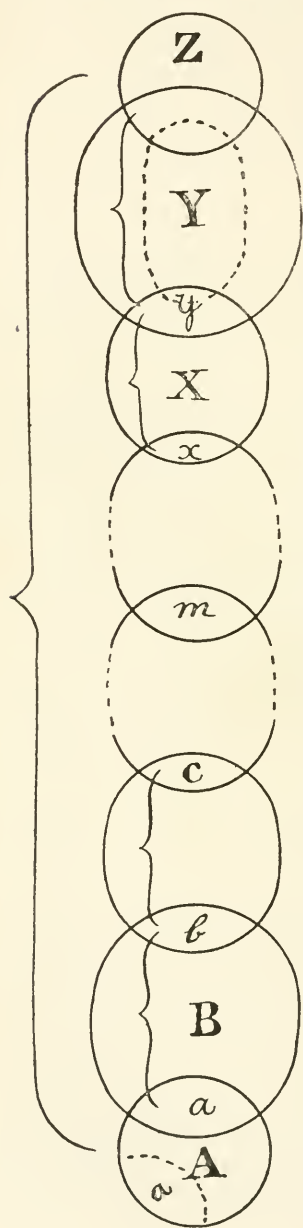


FIG. 5.

The large bracket, uniting directly A to Z, symbolizes their junction when we know it merely empirically, as when we simply learn that alkalies will cure some cases of dyspepsia, or citric acid remove ink-spots. The small brackets represent that in almost every case in which the partial characters, *a* and *b*, *b* and *c*, and so on, suggest each other, it is equally by virtue of an empirical connection of the same sort that they do so. Even when they form two features of the same phenomenon, we are seldom able to say *why* they do so. For instance, we may go on to learn that sodic carbonate calls forth in a dog's stomach a flow of gastric juice, on the one hand, and that some cases of human dyspepsia, on the other hand, seem due to a defect of this flow. Z here, the cured dyspepsia, involves the flow, as a partial character contained in its phenomenal totality. A, the alkaline application, contains it in like manner. It is a character identically in A and Z. But why it exists in A — why soda involves among its innumerable properties that of making gastric juice flow — no one can yet say. It is empirically known, and that is all. Just so if we take the cured dyspepsia. It involves among its other attributes the notion of the food being

dissolved. This solution, Z, redintegrates the total notion of a normal digestion, Y, which, among its other partial characters, contains that of an abundance of gastric juice, *y*. Why *y*, in the phenomenon Y, should produce Z, we cannot rationally state; or, at least, we can make but a single approximation to a rational statement. Pepsin and acid will dissolve meat, and gastric juice contains both these ingredients. The smaller dotted circle may be taken to represent this additional reason — which, however, itself is merely a new empirical statement. Such empirical laws as these are called “proximate” reasons. The terms which are coupled in them might, for aught we can understand to the contrary, have been coupled in other ways. But in some rare cases we can carry our dissection of characters so far that we find a link or more in the chain formed of a couple of characters whose disjunction we cannot even conceive. Such a couple as this is an axiom, or “ultimate” reason for the phenomenal *data* it binds together. The nature of such ultimate reasons has long been a bone of contention among philosophers. The *a-priori* school has asserted that the two characters thus evidently joined — *e. g.*, the characters of straightness and shortness in a line — are at bottom but two aspects of the same character, a primordial synthesis; whilst the empiricists have contended that they are distinct in essence, and that their bond owes its illusory appearance of necessity and evidence merely to the familiarity which great generality has produced in our minds. Into this quarrel we, of course, cannot enter. The *a-priorists* would have to modify our diagram, in case the bond $c \sim x$ were such an axiom, by making these two segments coalesce into one, as at *m*. These two letters would then merely represent the two manners in which the fundamental fact, *m*, looks towards the terms of the main proposition. Action and reaction, having a sensation and knowing it (J. Mill), swiftness and mechanical effectiveness, would be examples of terms united in this way.

This will no doubt have been found by the reader a pretty dry description. We may sum it up by a simple definition: Reasoning is the substitution of parts and their couplings

for wholes and their couplings. The utility of the process lies wholly in the fact, that when we have got the parts clearly in our minds, *their* couplings become more obvious, more evident, than were the couplings of the wholes. Later we shall ask why the parts are more obviously connected than the wholes; but here the reader must pause to notice one fact, and that is the absolute necessity that the partial character taken as a reason should be the right one. If in the total called sodic carbonate we do not light upon the ingredient "makes gastric juice flow," but on some other ingredient, such as "effervesces with acids," it will be worse than useless to lead us to the anti-dyspeptic conclusion. In Fig. 5, *a* is the only partial character of A which leads to Z, and, for example, has no connection with it. But if it were required to find the reason for another Z—for instance, why a man who has just taken a spoonful of the carbonate for "acidity" should feel a pressure at the epigastrium—*a* (if it stood for the effervescence) would be the right character to choose. In a word, we may say that the particular part which may be substituted for the whole, and considered its equivalent in an act of reasoning, wholly depends on our purpose, interest, or point of view at the time. No rules can be given for choosing it except that it *must lead to the result*, and to follow this rule is an affair of *genius*. This, which is a matter of the deepest philosophic importance, must merely be noticed here in passing, and not further discussed.

Before leaving the diagrams it may be well again parenthetically to call attention to their resemblance to the diagram by which association by similarity was represented (Fig. 2). There, also, partial characters reintegrated their circumstances, and so passed us on to ideas of new wholes. But there, as a rule, we were not aware of the partial characters *in se*. They operated without separately attracting our notice. In reasoning proper they only operate by attracting our attention; but it is obvious that a man starting from the fact A might evolve the truth Z in either way, by consciously using the right successively imbedded characters to deduce Z, or, on the other hand, by merely obeying their influence and at last finding Z

suggested to him, he knows not how. Later on we shall see how similar association and reasoning do often coincide in this way in their results.

Let us now, by a few concrete examples, clear up whatever obscurity our abstract account may have left upon the reader's mind. We have to illustrate two points: first, that in every reasoning an extracted character is taken as equivalent to the entire *datum* from which it comes; and, second, that the couplings of the characters thus taken have an extreme degree of evidence. Take the first point first.

Suppose I say, when offered a piece of cloth, "I won't buy that; it looks as if it would fade," meaning merely that something about it suggests the idea of fading to my mind, my judgment, though possibly quite correct, is purely empirical; but, if I can say that into the color enters a certain dye which I know to be chemically unstable, and that *therefore* the color will not last, my judgment is reasoned. The notion of the dye which is one of the ingredients of the cloth is the connecting link between the latter and the notion of fading. So, again, an uneducated man will expect from past experience to see a piece of ice melt if placed near the fire, and the tip of his finger look coarse if he views it through a convex glass. A child may open a refractory door by lifting it bodily on its hinges; or he may know enough to tip sideways a stopped mantel-clock, to make it tick again after winding it up — in each case, because the process "always" has the desired effect — and in none of these cases could the result be anticipated without full previous acquaintance with the entire phenomenon.

It is not reasoned; but a man who should conceive heat as a mode of motion, and liquefaction as identical with increased motion of molecules: who should know that curved surfaces bend light rays in special ways, and that the apparent size of anything is connected with the amount of the "bend" of its light-rays as they enter the eye; who should perceive that this particular door sags on its *sill*, or should reflect that no clock can tick until its pendulum swing, and that tipping may start the oscillations of a hidden pendulum — such a man would handle all these objects intelligently, even though he had never in his

life had any concrete experience of them ; and he would do this because the ideas which we have above supposed him to possess mediate in his mind between the phenomena he starts with and the conclusions he draws. But these ideas or reasons for his conclusions are all mere extracted portions or circumstances singled out from the mass of characters which make up the entire phenomena. The motions which form heat, the bending of the light-waves, are, it is true, excessively recondite ingredients : the hidden pendulum is less so ; and the sticking of the door on its sill is hardly so at all. But each and all bear a more evident relation to the consequent idea than did the antecedent in its full totality.

The difficulty is, in each case, to extract from the antecedent phenomenon that particular ingredient which shall have this very evident relation to the consequent. Every phenomenon or so-called "fact" has an infinity of aspects or properties. Even so simple a fact as a line which you trace in the air may be considered in respect to its form, its length, its direction, and its location. When we reach more complex facts, the number of ways in which we may regard them is literally countless. They are perfect well-springs of properties, which are only little by little developed to our knowledge ; but each of which may in time come to be regarded as the essence of the phenomenon or fact in question, while the rest can be for that occasion ignored. Thus a Man is a complex fact. But out of the complexity all that an army commissary need pick out as important for his purposes is his property of eating so many pounds a day ; the general, of marching so many miles ; the chair-maker, of having such a shape ; the orator, of responding to such and such feeling ; the theater-manager, of being willing to pay just such a price, and no more, for an evening's amusement. Each of these persons singles out the particular side of the entire man which has a bearing on *his* concerns, and not till this side is distinctly and separately conceived can the proper practical conclusions be drawn. The existence of the separate side or partial aspect which each of these several persons may substitute for the whole complex man in laying his plans is the *reason* for those plans.

These simple examples show sufficiently that our first point is true. Each case of reasoning involves the extraction of a particular partial aspect of the phenomena thought about. Whilst Empirical Thought simply associates the phenomena in their entirety, Reasoned Thought couples them by the conscious use of this extract.

And, now, to prove the second point: Why are the couplings of extracts more evident and obvious than those of entire phenomena? For two reasons: First, the extracted characters are more general than the concretes, and the connections they may have are, therefore, more familiar to us, as having been more often met in our experience. Think of heat as motion, and whatever is true of motion will be true of heat; but we have had a hundred experiences of motion for every one of heat. Think of the rays passing through this lens as bending towards the perpendicular, and you substitute for the unfamiliar lens the very familiar notion of a particular change in direction of a line, of which notion every day brings us countless examples. The other reason why the relations of the extracted characters are so evident is that their properties are so *few*, compared with the properties of the whole, from which we derived them. In every concrete total the characters and their consequences are so inexhaustibly numerous that we may lose our way among them before noticing the particular consequence it behooves us to draw. But, if we are lucky enough to single out the proper character, we take in, as it were, by a single glance all of its possible consequences. Thus the character of scraping the sill has very few suggestions, prominent among which is the suggestion that the scraping will cease if we raise the door; whilst the entire refractory door suggests an enormous number of notions to the mind.

Take another example. I am sitting in a railroad car, waiting for the train to start. It is winter, and the stove fills the car with pungent smoke. The brakeman enters, and my neighbor asks him to "stop that stove smoking." He replies that it will stop entirely as soon as the car begins to move. "Why so," asks the passenger. "It *always* does," replies the brakeman. It is evident from this "always" that the con-

nection between car moving and smoke stopping was a purely empirical one in the brakeman's mind, bred of habit. But, if the passenger had been an acute reasoner, he, with no experience of what that stove always did, might have anticipated the brakeman's reply, and spared his own question. Had he singled out of all the numerous points involved in a stove's not smoking the one special point of smoke pouring freely out of the stove-pipe's mouth, he would, probably, owing to the few associations of that idea, have been immediately reminded of the law that a fluid passes more rapidly out of a pipe's mouth if another fluid be at the same time streaming over that mouth; and then the rapid draught of air over the stove-pipe's mouth, which is one of the points involved in the car's motion, would immediately have occurred to him.

Thus a couple of extracted characters, with a couple of their few and obvious connections, would have formed the reasoned link in the passenger's mind between the concrete phenomena, smoke stopping and car moving, which were only linked as wholes in the brakeman's mind. Such examples may seem trivial, but they contain the essence of the most refined and transcendental theorizing. The reason why physics grows more deductive the more the fundamental properties it assumes are of a mathematical sort, such as molecular mass or wave length, is that the immediate consequences of such a mathematical notion are so few that we can survey them all at once, and promptly pick out the one which concerns us.

To reason, then, we must be able to extract characters, and not *any* characters, but the right characters for our conclusion. If we extract the wrong character, it will not lead to that conclusion. Here, then, is the difficulty: How are characters extracted, and why does it require the advent of a genius in many cases before the fitting character is brought to light? Why does it need a Newton to notice the law of the squares, a Darwin, to notice the survival of the fittest? To answer these questions we must begin a new research, and see how our insight into facts naturally grows.

All our knowledge at first is vague. When we say that a thing is vague, we mean that it has no subdivisions *ab intra*,

nor precise limitations *ab extra*, but, still, all the forms of thought may apply to it. It may have unity, reality, externality, extent, and what not — *thinghood*, in a word, but thinghood only as a whole. In this vague way, probably, does the room appear to the babe who first begins to be conscious of it as something other than his moving nurse. It has no subdivisions in his mind, unless, perhaps, the window is able to attract his separate notice. In this vague way, certainly, does every entirely new experience appear to the adult. A library, a museum, a machine-shop, are mere confused wholes to the uninstructed, but the machinist, the antiquary, and the bookworm perhaps hardly notice the whole at all, so eager are they to pounce upon the details. Familiarity has in them bred discrimination. Such vague terms as “grass,” “mould,” and “meat” do not exist for the botanist or the anatomist. They know too much about grasses, moulds, and muscles. A certain person said to Mr. Kingsley, who was showing him the dissection of a caterpillar, with its exquisite viscera, “Why, I thought it was nothing but skin and squash!” A layman present at a shipwreck, a battle, or a fire is helpless. Discrimination has been so little awakened in him by experience that his consciousness leaves no single point of the complex situation accented and standing out for him to begin to act upon. But the sailor, the fireman, and the general know directly at what point to take up the business. They “see into the situation” — that is, analyze it — with their first glance. Knowledge, then, if it begins thus with vague confusion, is not, as some philosophers say, purely and simply the result of association. To quote Mr. Martineau, in an admirable passage, “It is an utter falsification of the order of nature to speak of sensations grouping themselves into aggregates, and so composing for us the objects of which we think; and the whole language of the theory [of association], in regard to the field of synchronous existences, is a direct inversion of the truth. Experience proceeds and intellect is trained, not by association, but by *Dissociation*: not by reduction of pluralities of impression into one, but by the opening out of one into many; and a true psychological his-

tory must expound itself in analytic, rather than in synthetic, terms.⁴

According to this, any original Whole of experience is an eternal well of ever new and more delicately differenced ingredients, which little by little come to light. A man's reasoning powers may, then, if our previous account of reasoning is correct, be said to be in direct proportion to his ability to break up these wholes and dissociate their ingredients.

How, then, do we come to dissociate the elements of the originally vague syncretism of consciousness? By noticing or attending to them, of course. But what determines which element we shall attend to first? There are two immediate and obvious answers: first, our practical interests; and, second, our æsthetic interests. The dog singles out of any situation its smells, and the horse its sounds, because they may reveal facts of practical moment. The child notices the candle-flame or the window, and ignores the rest of the room, because these objects give him a vivid pleasure. So, the country boy dissociates the blackberry, the chestnut, and the wintergreen, from the vague mass of other shrubs and trees, for their practical uses, and the savage is delighted with the beads, the bits of looking-glass, brought by an exploring vessel, and gives no heed to the features of the vessel itself, which is too much beyond his sphere. These æsthetic and practical interests, then, are the weightiest factors in making particular ingredients stand out in high relief. What they lay their accent on, that we notice; but what they are in themselves, we cannot say. We must content ourselves here with simply accepting them as irreducible ultimate factors in determining the way our knowledge grows.

Now, a creature which has few interests, practical or æsthetic, will dissociate few characters, and will, at best, have limited reasoning powers; whilst one whose interests are very varied will reason much better. Man, by his immensely varied practical wants, and his æsthetic feelings, to which every sense

⁴ James Martineau: *Essays Philos. and Theolog.* p. 273. Boston, 1836.

contributes, would, by dint of these alone, be sure to dissociate vastly more characters than any other animal, and, accordingly, we find that the lowest savages reason incomparably better than the highest brutes. But if these were the only operators of dissociation, man's superiority would rest here, and he would remain a savage. We must have recourse to another cause to explain dissociation of characters to which the spur of acute practical or æsthetic interest is lacking, and which we attend to, as we say, merely out of disinterested curiosity. Why are such characters not left slumbering forever? how do we single them out at all? They are singled out by a process which many psychologists have recognized; but none, perhaps, as emphatically as it deserves. This process is so important that we shall perhaps do well to baptize it by a special name, and call it the *Law of dissociation by varying concomitants*. This law would run as follows: "In order that a character, possessing no vivid practical or æsthetic interest be dissociated from a group, it must have been previously experienced in connection with *other* characters than those of that group." As Spencer says, "If the property A occurs here, along with the properties B, C, D, there along with C, F, H, and again with E, G, B, * * * it must happen that by multiplication of experiences the impressions produced by these properties on the organism will be disconnected and rendered so far independent in the organism as the properties are in the environment, whence must eventually result a power to recognize attributes in themselves, apart from particular bodies.⁵" As expressed still better by Mr. Martineau, "When a red ivory ball, seen for the first time, has been withdrawn, it will leave a mental representation of itself, in which all that it simultaneously gave us will indistinguishably co-exist. Let a white ball succeed to it; now, and not before, will an attribute detach itself, and the *color*, by force of contract, be shaken out into the foreground. Let the white ball be replaced by an egg, and this new difference will bring the *form* into notice

⁵ Spencer: Psychology, vol. 1, p. 345.

from its previous slumber, and thus that which began by being simply an object cut out from the surrounding scene, becomes for us first a *red* object, then a *red round* object, and so on. Instead, therefore, of the qualities, as separately given, subscribing together and adding themselves up to present us with the object as their aggregate, the object is beforehand with them, and from its integrity delivers them out to our knowledge one by one.”⁶

In other words, an absolutely unchanging group of attributes could never be analyzed. If all liquids were transparent, and no non-liquid was transparent, it would be long before we had separate names for liquidity and transparency. If the color blue, for example, were a function of position above the earth's surface, so that the higher a thing was, the bluer it became, one word would serve for blue and high. We have, in truth, a number of sensations whose concomitants are invariably the same. When, for example, we look at a near object, we have two sets of sensations: one, that produced by converging the eye-balls; the other, that which results from accomodating the focus. For every distance of the object these sensations are, in common life, immutably linked. The consequence is that we are wholly unable to separate them from each other in our consciousness, or to separate them as a whole from the particular distance on the part of the object to which they testify. The genius of Helmholtz has shown what a vast number of such unseparated sensations underlie our perceptions. We never think of them except as imbedded in the totality of the perception to which they belong. Helmholtz calls them its “unconscious premises.” We may, however, bring them separately to our consciousness by an artificial device which consists in nothing but varying their concomitants. I may, for example, by prisms cause my eyes to change their convergence when looking at a near object, and I may succeed, at least, in accomodating my focus for the nearness of the object, in spite of the very un-

⁶ James Martineau: *Essays Philos. and Theolog.*, pp. 271, 272. Boston, 1866.

usual convergence of the eye-balls. In this case I shall end by becoming aware of the accommodation in itself, and afterwards succeed in reproducing it at will without the prisms.

Why the repetition of the character in combination with different wholes will cause it thus to break up its adhesion with any one of them, and roll out, as it were, alone upon the table of consciousness, must here be left a mystery. Mr. Spencer appears to think that the mere fact of its being repeated more often than any one of its associates will, of itself, give it a degree of intensity equivalent to the accent derived from interest.

This, at first sight, has a plausible sound, but breaks down when examined closely. It is not always the often-repeated character which is first noticed when its concomitants have varied a certain number of times; it is even more likely to be the most novel of all the concomitants which will succeed in arresting our attention. If a boy has seen nothing all his life but sloops and schooners, he will probably never distinctly have singled out in his notion of "sail" the character of being hung lengthwise. When for the first time he sees a square-rigged ship, the opportunity of extracting the lengthwise mode of hanging as a special accident, and of dissociating it from the general notion of sail, is offered. But there are twenty chances to one that that will not be the form of the boy's consciousness. What he *notices* will be the new and exceptional character of being hung crosswise. He will go home and speak of that, and perhaps never consciously formulate what the often-repeated peculiarity consists in. Leaving, then, the question of *how* and *why* the law operates as one of the most interesting questions of psychology, we may content ourselves with simply registering it as empirically true.

So far, then, we have found out two things: *First*, a reasoning animal must easily dissociate and extract characters; *second*, in order to do so, characters must have some peculiar æsthetic or practical interest for him; *third*, or, failing in that, must form variable connections in his experience.

The English writer who has professed to give the most thorough account of the evolution of the mind is Mr. Herbert

Spencer, in his "Principles of Psychology." Perhaps a brief criticism of his theory will be the easiest manner in which fully to clear up what may still seem obscure in our own. Spencer, throughout his work, ignores entirely the reactive spontaneity, both emotional and practical, of the animal. Devoted to his great task of proving that mind from its lowest to its highest forms is a mere product of the environment, he is unwilling, even cursorily, to allude to such notorious facts (which, nevertheless, in *principle* are perfectly consistent with his fundamental idea) as the existence of peculiar idiosyncrasies of interest or selective attention on the part of every sentient being. He regards the creature as absolutely passive clay, upon which "experience" rains down. The clay will be impressed most deeply where the drops fall thickest, and so the final shape of the mind is moulded. Give time enough, and all sentient things must end by assuming an identical mental constitution—for "experience," the sole shaper, is a constant fact, and the order of its items must end by being exactly reflected by the passive mirror which we call the sentient organism. The law of dissociation would work, on this theory, only for the first reason suggested above. That is, in the varied shufflings and rearrangements of characters which natural groups of objects and events afford, the character which objectively recurred the oftenest would be the first one noticed by us; the rest would passively follow in the order of their frequency, as experience presented them; and "experience" here would mean the mere presence of the outward fact to the animal's senses.

How Mr. Spencer came to give so inadequate an account, we shall not here inquire. But every reader will already cry out against his interpretation of the word "experience" as being equivalent to the mere presence of a certain outward order. Millions of items of the outward order are present to my senses which never properly enter into my experience. Why? Because they have no interest for me. My experience is what I agree to attend to. Only those items which I notice shape my mind—without selective interest, experience is an utter chaos. Interest alone gives accent and emphasis, light and

shade, background and foreground — intelligible perspective, in a word. It varies in every creature, but without it the consciousness of every creature would be a gray chaotic uniformity, impossible for us even to conceive. If Spencer's account were true, a race of dogs bred for generations, say in the Vatican, would have characters of visual shape, sculptured in marble, presented to their eyes, in every variety of form and combination. The result of this reiterated "experience" would be to make them dissociate and discriminate before long the finest shades of these peculiar characters. In a word, they would infallibly become, if time were given, accomplished *connoisseurs* of sculpture. The reader may judge of the probability of this consummation. Surely an eternity of experience of the statues would leave the dog as inartistic as he was at first, for the lack of an original interest to knit his discriminations onto. Meanwhile the odors at the bases of the pedestals would have organized themselves in the consciousness of this breed of dogs into a system of "correspondences" to which the most hereditary caste of *custodi* would never approximate, merely because to them, as human beings, the dog's interest in those odors would forever be an inscrutable mystery. Mr. Spencer has, then, utterly ignored the glaring fact that subjective interest may, by laying its weighty index-finger on particular items of experience, so accent them as to give to the least frequent associations far more power to shape our forms of thought than the most frequent ones possess.

But, if Mr. Spencer is at fault in his account of those cases where powerful interests do the analytic work, we think he is hardly less so in the cases where powerful interest is absent, and "where the law of dissociation by varying concomitants" has all alone to play into the hands of disinterested curiosity. Mr. Spencer writes as if, under these circumstances, man, before he could single out a character, would have merely to wait until such time as nature should sufficiently have varied the concomitants of that character for him. He would single out the notion quadruped, for example, earlier than the notion vertebrate, because vertebrate co-existed more uniformly than quadruped with the other animal attributes. On page 464 of

his first volume he writes as if any character frequently repeated in the outer world will, *ipso facto*, tend to stand out prominently in the mind. An "accumulation of experiences" is by itself sufficient to shake out the imbedded character. If this were true, man, to dissociate characters, would be wholly at the mercy of the order of frequency in which they outwardly had been present to him. But the fact is that man is, even in the absence of the stronger interests, in the highest degree independent of this outward order, and has within himself a means of abridging in the most striking manner the slow work of nature. This means is nothing else than our familiar friend, *association by similarity*. But here the plot begins to thicken, and as we are approaching the elementary difference we sought between the mind of man and the mind of brutes we will pause an instant, and, by going back a few steps, advance with all the greater impetus.

What does the reader do who wishes to see in what the precise likeness or difference of two objects lies? He transfers his attention as rapidly as possible, backwards and forwards, from one to the other. The rapid alteration in consciousness shakes out, as it were, the points of difference or agreement, which would have slumbered forever unnoticed if the consciousness of the objects compared had occurred at widely distant periods of time. What does the scientific man do who searches for the reason or law imbedded in a phenomenon? He deliberately accumulates all the instances he can find which have any analogy to that phenomenon, and, by simultaneously filling his mind with them all, he frequently succeeds in detaching from the collection the peculiarity which he was unable to formulate in one alone; even though that one had been preceded in his former experience by all of those with which he now at once confronts it. These examples show that the mere general fact of having occurred at some time in one's experience, with varying concomitants, is not by itself a sufficient reason for a character to be dissociated now. We need something more; we need that the varying concomitants should in all their variety be brought into consciousness *at once*. Not till then will the character in question escape from

its adhesion to each and all of them, and stand revealed alone. Spencer's account omits this last condition, which will immediately be recognized by the reader as the ground of utility in Mill's famous methods of induction, the "method of Agreement," that of "Difference," of "concomitant variations," etc.

But, now, is it not immediately obvious that this condition is supplied in the organization of every mind in which similar association is largely developed? If the character *m* in the midst of *A* will call up *C*, *D*, *E*, and *F* immediately — these being phenomena which resemble *A* in possessing *m*, but which may not have entered for months into the experience of the animal who now experiences *A*, why, plainly, such association performs the part of the deliberately rapid comparison referred to above, and of the systematic simultaneous consideration of like cases by the scientific investigator. Certainly this is obvious, and no conclusion is left to us but to assert that, after the few most powerful practical and æsthetic interests, our only instrument for dissecting out those special characters of phenomena, which, when once possessed and named, are used as reasons, *is this association by similarity*. Without it, indeed, the deliberate procedure of the scientific man would be impossible; he could never collect his analogous instances. But it operates of itself in highly-gifted minds without any deliberation, spontaneously collecting analogous instances, uniting in a moment what in nature the whole breadth of space and time keeps separate, and so permitting a perception of identical points in the midst of different circumstances, which minds governed wholly by the law of contiguity could never begin to attain.

Diagram 6 (p. 260) shows this. If *m*, in the present representation *A*, calls up *B*, *C*, *D*, and *E*, which are similar to *A* in possessing it, and calls them up in rapid succession, then *m*, being associated almost simultaneously with such varying concomitants, will "roll out" and attract our separate notice.

so much is clear to the reader, he will be willing to admit that the mind *in which this mode of association most prevails* will, from its better opportunity of extricating characters,

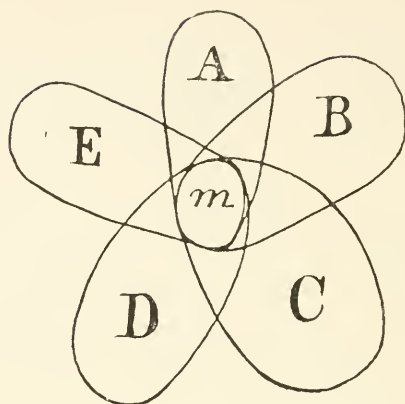


FIG. 6.

be one most prone to reasoned thinking; whilst, on the other hand, a mind in which we do not detect reasoned thinking will probably be one in which association by contiguity holds almost exclusive sway.

I will try now to show, by taking the best stories I can find of animal sagacity, that the mental process involved may as a rule be perfectly accounted for by mere contiguous association, based on experience. Mr. Darwin, in his "Descent of Man," instances the Arctic dogs, described by Dr. Hayes, as scattering, when drawing a sledge, as soon as the ice begins to crack. This might be called by some an exercise of reason. The test would be, Would the most intelligent Esquimau dogs that ever lived act so when placed upon ice for the first time together? A band of men from the tropics might do so easily. Recognizing cracking to be a sign of breaking, and seizing immediately the partial character that the point of rupture is the point of greatest strain, and that the massing of weight at a given point concentrates there the strain, a Hindoo might quickly infer that scattering would stop the cracking, and by crying out to his comrades to disperse save the party from immersion. But in the dog's case we need only suppose that they have individually experienced wet skins after cracking, that they have often noticed cracking to begin when they were huddled together, and that they have observed it to cease

when they scattered. Naturally, therefore, the sound would redintegrate all these former experiences, including that of scattering, which latter they would promptly renew.

A friend of the writer gave as a proof of the almost human intelligence of his dog that he took him one day down to his boat on the shore, but found the boat full of dirt and water. He remembered that the sponge was up at the house, a third of a mile distant; but, disliking to go back himself, he made various gestures of wiping out the boat and so forth, saying to his terrier, "Sponge, sponge; go fetch the sponge." But he had little expectation of a result, since the dog had never received the slightest training with the boat or the sponge. Nevertheless, off trotted the latter to the house, and, to his owner's great surprise and admiration, brought the sponge in his jaws. Sagacious as this was, it required nothing but ordinary contiguous association of ideas. The terrier was only exceptional in the minuteness of his spontaneous observation. Most terriers would have taken no interest in the boat-cleaning operation, nor noticed what the sponge was for. This terrier, in having picked those details out of the crude mass of boat experience distinctly enough to be reminded of them, was truly enough ahead of his peers on the line which leads to human reason. But his act was not yet an act of reasoning proper. It might fairly have been called so if, unable to find the sponge at the house, he had brought back a dipper or a mop instead. Such a substitution would have shown that, imbedded in the very different appearances of these articles, he had been able to discriminate the identical partial attribute of capacity to take up water, and had reflected, "For the present purpose they are identical." This, which the dog did not do, any man but the very stupidest could not fail to do.

If the reader will take the trouble to analyze the best dog and elephant stories he knows, he will find that, in most cases, this simple contiguous calling up of one whole by another is quite sufficient to explain the phenomena. Sometimes, it is true, we have to suppose the recognition of a property or character as such, but it is then a character which the mere practical interest of the animal may have singled out. A dog, noticing his mas-

ter's hat on its peg, may possibly infer that he has not gone out. Intelligent dogs recognize by the tone of the master's voice whether the latter is angry or not. A dog will perceive whether you have kicked him by accident or by design, and behave accordingly. The character inferred by him, the particular mental state in you, whether represented in his mind by images of further hostile or friendly acts, or in whatever other way, is still a partial character extracted from the totality of your phenomenal being, and is his reason for crouching and skulking, or the reverse. Dogs, moreover, seem to have the feeling of the value of their master's personal property, or at least a particular *interest* in objects their master uses. A dog left with his master's coat will defend it, though never taught to do so. We know of a dog accustomed to swim after sticks in the water, but who always refused to dive for stones. Nevertheless, when a fish-basket, which he had never been trained to carry, but merely knew as his master's, fell overboard from a boat, he immediately dove after it and brought it up. Dogs thus discern, at any rate so far as to be able to act, this partial character of *being valuable*, which lies hidden in certain things. Stories are told of dogs carrying coppers to pastry-cooks to get buns, and it is said that a certain dog, if he gave two coppers, would never leave without two buns. This may have been mere contiguous association, but it is possible that the animal noticed the character of duality, and identified it as the same in the coin and the cake. If so, it is probably the maximum of canine abstract thinking. Another story told to the writer is this: A dog was sent to a lumber-camp to fetch a wedge, with which he was known to be acquainted. After half an hour, not returning, he was sought and found biting and tugging at the handle of an axe which was driven deeply into a stump. The wedge could not be found. The teller of the story thought that the dog must have had a clear perception of the common character of serving to split which was involved in both the instruments, and, from their identity in this respect, inferred their identity for the purposes required.

It cannot be denied that this interpretation is a possible one,

but it seems to us to far transcend the limits of ordinary canine abstraction. The property in question was not one which had direct personal interest for the dog, such as that of mere belonging to his master is in the case of the coat or the basket. If the dog in the sponge story had returned to the boat with a dipper, it would have hardly been more remarkable. It seems more probable, therefore, that this wood-cutter's dog had also been accustomed to carry the axe, and now, excited by the vain hunt for the wedge, had discharged his carrying powers upon the former instrument in a sort of confusion — just as a man may pick up a sieve to carry water in, in the excitement of putting out a fire.⁷

Thus, then, the characters extracted by animals are very few, and always related to their immediate interests or emotions. That dissociation by varying concomitants, which in man is based so largely on association by similarity, hardly seems to take place at all in the mind of brutes. One total thought suggests to them another total thought, and they find themselves acting with propriety, they know not why. The great, the fundamental, defect of their minds seems to be the inability of their groups of ideas to break across in unaccustomed places. They are enslaved to routine, to cut and dried thinking, and if the most prosaic of human beings could be transported into his dog's sensorium, he would be appalled at the utter absence of fancy which reigns there. Thoughts will not call up their similars, but only their habitual successors. Sunsets will not suggest heroes' deaths, but only supper-time. This is why man is the only metaphysical animal. To wonder why the universe should be as it is presupposes the notion of its being different, and a brute which never reduces the actual to fluidity by breaking up its literal sequences in his imagination can never form such a notion. He takes the world simply for granted, and never wonders at it at all.

⁷ This matter of confusion is important and interesting. Since confusion is mistaking the wrong part of the phenomenon for the whole, whilst reasoning is, according to our definition, based on the substitution of the right part for the whole, it might be said that confusion and reasoning were generically the same process. There are, however, other and more subtle considerations which intervene and prevent us from treating the matter further in this place.

Another well-known *differentia* of man is that he is the only laughing animal. But humor has been defined as the recognition of certain identities in things different. When the man in Coriolanus says of that hero that "there is no more mercy in him than there is milk in a male tiger," both the invention of the phrase and its enjoyment by the hearer depend on a peculiarly perplexing power to associate ideas by similarity.

Language is certainly a capital distinction between man and brute. But it may readily be shown how this distinction merely flows from those we have pointed out, easy dissociation of a representation into its ingredients, and association by similarity.

Language is a system of *signs*, different from the things signified, but able to suggest them.

No doubt brutes have a number of such signs. When a dog yelps in front of a door, and his master, understanding his desire, opens it, the dog may, after a certain number of repetitions, get to repeat in cold blood a yelp which was at first the involuntary interjectional expression of strong emotion. The same dog may be taught to "beg" for food, and afterwards come to do so deliberately when hungry. The dog also learns to understand the signs of men, and the word "rat" uttered to a terrier suggests exciting thoughts of the rat-hunt. If the dog had the varied impulse to vocal utterance which some other animals have, he would probably repeat the word "rat" whenever he spontaneously happened to think of a rat-hunt — he no doubt does have it as an auditory image, just as a parrot calls out different words spontaneously from its repertory, and having learned the name of a given dog will utter it on the sight of a different dog. In each of these separate cases the particular sign *may* be consciously noticed by the animal, as distinct from the particular thing signified, and will thus, so far as it goes, be a true manifestation of language. But when we come to man we find a great difference. He has a deliberate intention to apply a sign to everything. The linguistic impulse is with him generalized and systematic. For things hitherto unnoticed or unfelt, he *desires* a sign before he has

one. Even though the dog should possess his "yelp" for this thing, his "beg" for that, and his auditory image "rat" for a third, the matter with him rests there. If a fourth thing interests him for which no sign happens already to have been learned, he remains tranquilly without it and goes no further. But the man *postulates* it, its absence irritates him, and he ends by inventing it. This *general purpose* constitutes, I take it, the peculiarity of human speech, and explains its prodigious development.

How, then, does the general purpose arise? As soon as the notion of the sign *as such*, apart from any particular import, is born; and it is born by dissociation from the outstanding portions of a number of concrete cases of signification. The "yelp," the "beg," the "rat," differ as to their import — and as to their own physical constitution. They agree only in so far as they have the same *use* — to be signs, to stand for something more important than themselves. The dog whom this similarity could strike would have grasped the sign *per se* as such, and would have become a speaker in the human sense. But how can the similarity strike him? Not without the juxtaposition of the similars (in virtue of the law we have so often repeated, that in order to be segregated an experience must be repeated with varying concomitants) — not unless the "yelp" of the dog at the moment it occurs *recalls* to him his "beg," by the delicate bond of their subtle similarity of use — not till then can this thought flash through his mind: "Why, yelp and beg, in spite of all their unlikeness, are yet alike in this: that they are actions, signs, which lead to important boons. Other boons, *any* boons, may then be got by other signs!" This reflection made, the gulf is passed. Animals probably never make it, because the bond of similarity is not delicate enough. Each sign is drowned in *its* import, and never awakens other signs and other imports in juxtaposition. The rat-hunt idea is too absorbingly interesting in itself to be interrupted by anything so uncontiguous to it as the "beg for food," or "the door-open yelp," nor in their turn do they awaken the rat-hunt.

In the human child, however, these ruptures of contiguous

association are very soon made; far off cases of sign-using arise when we make a sign now; and soon language is launched. The child in each case makes the discovery for himself. No one can help him except by furnishing him with the conditions. But as he is constituted, the conditions will sooner or later shoot together into the result.⁸

The exceedingly interesting account which Dr. Howe gives of the education of his various blind-deaf mutes illustrates this point admirably. He began to teach Laura Bridgman by gumming raised letters on various familiar articles. The child was taught by mere contiguity to pick out a certain number of particular articles when made to feel the letters. But this was merely a collection of particular signs out of the mass of which the general purpose of *signification* had not yet been extracted by the child's mind. Dr. Howe compares his situation at this moment to that of one lowering a line to the bottom of the deep sea in which Laura's soul lay, and waiting until she should spontaneously take hold of it and be raised into the light. The moment came, "accompanied by a radiant flash of intelli-

⁸ There are two other conditions of language in the human being, additional to association by similarity, that assist its action, or rather pave the way for it. These are: first, the great natural loquacity; and, second, the great imitativeness of man. The first produces the original reflex interjectional sign; the second (as Bleek has well shown) fixes it, stamps it, and ends by multiplying the number of determinate specific signs which are a requisite preliminary to the general conscious purpose of sign-making, which I have called the characteristic human element in language. The way in which imitativeness fixes the meaning of signs is this: When a primeval man has a given emotion, he utters his natural interjection; or when (to avoid supposing that the reflex sounds are exceedingly determinate by nature) a group of such men experience a common emotion, and one takes the lead in the cry, the others cry like him from sympathy or imitativeness. Now, let one of the group hear another, who is in presence of the experience, utter the cry; he, even without the experience, will repeat the cry from pure imitativeness. But, as he repeats the sign, he will be reminded by it of his own former experience. Thus, first, he has the sign with the emotion; then, without it; then, with it again. It is "dissociated by change of concomitants;" he feels it as a separate entity and yet as having a connection with the emotion. Immediately it becomes possible for him to couple it deliberately with the emotion, in cases where the latter would either have provoked no interjectional cry or not the same one. In a word, his mental procedure tends to *fix* this cry on *that* emotion; and when this occurs, in many instances, he is provided with a stock of signs, like the yelp, beg, rat of the dog, each of which suggests a determinate image. On this stock, then, similarity works in the way above explained.

gence and glow of joy ;" she seemed suddenly to become aware of the general purpose imbedded in the different details of all these, signs and from that moment her education went on with extreme rapidity.

Another of the great capacities in which man has been said to differ fundamentally from the animal is that of possessing self-consciousness or reflective knowledge of himself as a thinker. But this capacity also flows from our criterion — without going into the matter very deeply, we may say that the brute never reflects on himself as a thinker, because he has never clearly dissociated, in the full concrete act of thought, the element of the thing thought of and the operation by which he thinks it. They remain always fused, conglomerated — just as the interjectional vocal sign of the brute almost invariably merges in his mind with the thing signified, and is not independently attended to *in se*.⁹

Now, the dissociation of these two elements probably occurs first in the child's mind on the occasion of some error or false expectation which would make him experience the shock of difference between merely imagining a thing and getting it. The thought experienced once with the concomitant reality, and then without it or with opposite concomitants, reminds the child of other cases in which the same provoking phenomenon occurred. Thus the general ingredient of error may be dissociated and noticed *per se*, and from the notion of error or wrong thought to that of thought in general, the transition is easy. The brute, no doubt, has plenty of instances of error and disappointment in his life, but the similar shock is in him most likely always swallowed up in the accidents of the actual case. An expectation disappointed may breed dubiety as to the realization of that particular thing when the dog next expects it. But that disappointment, that dubiety, while they are present in the mind, will not call up other cases in which the material details were different ; but this feature of possible error was the same. The brute will, therefore, stop short of dissociating

⁹ See an interesting article on the "Evolution of Self-consciousness" in "Philosophical Discussions," by Chauncey Wright. New York: Holt & Co., 1877.

the general notion of error *per se*, and *a fortiori* will never attain the conception of Thought itself as such.

We may then, we think, consider it proven that the most characteristic single difference between the human mind and that of brutes lies in this deficiency on the brute's part to associate ideas by similarity—characters, the abstraction of which depends on this sort of association, must in the brute always remain drowned, swamped in the total phenomenon which they help constitute, and never used to reason from. But *other* characters (few and far between) may be singled out by practical interests.

But, now, since nature never makes a jump, it is evident that we should find the lowest men occupying in this respect an intermediate position between the brutes and the highest men, and so we do. Beyond the analogies which their own minds suggest by breaking up the literal sequence of their experience, there is a whole world of analogies which they can appreciate when imparted to them by their betters, but which they could never excogitate alone. This answers the question we asked some time back, why Darwin and Newton had to be waited for so long. The flash of similarity between an apple and the moon, between the rivalry for food in nature and the rivalry for man's approbation, was too recondite to have occurred to any but exceptional minds. Genius, then, is identical with the possession of Similar Association to an extreme degree. Professor Bain, in his admirable work on the "Study of Character," says: "This I count the leading fact of genius. I consider it quite impossible to afford any explanation of intellectual originality except on the supposition of unusual energy on this point." He proceeds to show how alike in the arts, in literature, in practical affairs, and in science, association by similarity is the prime condition of success. But as, according to our view, there are two stages in reasoned thought, one where similarity merely *operates* to call up cognate thoughts, and another further stage, where the bond of identity between the cognate thoughts is *noticed*, so minds of genius may be divided into two main sorts, those who notice the bond and those who merely obey it. The first are the abstract reasoners, the

men of science, and philosophers — the analysts, in a word ; the latter are the poets, the critics — the artists, in a word, the men of intuitions. These judge rightly, classify cases, characterize them by the most striking analogic epithets, but go no further. At first sight it might seem that the analytic mind represented simply a higher intellectual stage, and that the intuitive mind represented an arrested stage of intellectual development ; but the difference is not so simple as this. Professor Bain has said that a man's advance to the scientific stage (the stage of noticing and abstracting the bond of association) may often be due to an *absence* of certain emotional sensibilities. The sense of color, he says, may no less determine a mind away from science than it determines it toward painting. There must be a penury in one's interest in the details of particular forms in order to permit the forces of the intellect to be concentrated on what is common to many forms.¹⁰ In other words, supposing a mind fertile in the suggestions of analogies, but, at the same time, keenly interested in the particulars of each suggested image, that mind would be far less apt to single out the particular character which called up the analogy than one whose interests were less generally lively. A certain richness of the æsthetic nature may, therefore, easily keep one in the intuitive stage. All the poets are examples of this. Take Homer: "Ulysses, too, spied round the house to see if any man were still alive and hiding, trying to get away from gloomy death. He found them all fallen in the blood and dirt, and in such number as the fish which the fisherman to the low shore, out of the foaming sea, drag with their meshy nets. These all, sick for the ocean water, are strewn around the sands, while the blazing sun takes their life from them. So there the suitors lay strewn round on one another." Or again: "And as when a Mæonian or a Carian woman stains ivory with purple to be a cheek-piece for horses, and it is kept in the chamber, and many horsemen have prayed to bear it off; but it is kept a treasure for a king, both a trapping for his horse and a glory to the driver — in such wise were thy stout thighs, Menelaos, and legs and fair ankles stained with blood."

¹⁰ Bain: "Study of Character," p. 317.

A man in whom all the accidents of an analogy rise up as vividly as this, may be excused for not attending to the ground of the analogy. But he need not on that account be deemed intellectually the inferior of a man of drier mind, in whom the ground should not be eclipsed by the general splendor. Rarely are both sorts of intellect, the splendid and the analytic, found in conjunction. Plato among philosophers, and M. Taine, who cannot quote a child's saying without describing the "*voix chantante, étonnée, heureuse*" in which it is uttered, are only exceptions, whose strangeness proves the rule.

An often-quoted writer has said that Shakespeare possessed more *intellectual power* than any one else that ever lived. If by this he meant the power to pass from given premises to right or congruous conclusions, it is no doubt true. The abrupt transitions in Shakespeare's thought astonish the reader by their unexpectedness no less than they delight him by their fitness. Why, for instance, does the death of Othello so stir the spectator's blood and leave him with a sense of reconciliation? Shakespeare himself could very likely not say why; for his invention, though rational, was not ratiocinative. Wishing the curtain to fall upon a reinstated Othello, that speech about the turbaned Turk suddenly simply flashed across him as the right end of all that went before. The dry critic who comes after can, however, point out the subtle bonds of identity that guided Shakespeare's pen through that speech to the death of the Moor. Othello is sunk in ignominy, lapsed from his height from the beginning of the play. What better way to rescue him at last from this abasement than to make him for an instant identify himself in memory with the old Othello of better days, and then execute justice on his present disowned body, as he used then to smite all enemies of the State? But Shakespeare, whose mind supplied these means, could probably not have told why they were so effective.

But though this is true, and though it would be absurd in an absolute way to say that a given analytic mind was superior to any intuitional one, yet it is none the less true that the former *represents* the higher stage. Men, taken historically, reason by analogy long before they have learned to reason by abstract

characters. We saw sometime back how association by similarity and true reasoning were identical in their results. If a philosopher wishes to prove to you why you should do a certain thing, he may do so by using abstract considerations exclusively; a savage will prove the same by reminding you of a similar case in which you notoriously do as he now proposes, and this with no ability to state the *point* in which the cases are similar. In all primitive literature, in all savage oratory, we find persuasion carried on exclusively by parables and similes, and travelers in savage countries readily adopt the native custom. Take, for example, Dr. Livingstone's argument with the negro conjurer. The missionary was trying to dissuade the savage from his fetichistic ways of invoking rain. You see, said he, that, after all your operations, sometimes it rains and sometimes it doesn't, exactly as when you have not operated at all. But, replied the sorcerer, it is just the same with you doctors; you give your remedies, and sometimes the patient gets well and sometimes he dies, just as when you do nothing at all. To that the pious missionary replied, the doctor does his duty, after which God performs the cure if it pleases Him. Well, rejoined the savage, it is just so with me. I do what is necessary to procure rain, after which God sends it or withholds it according to His pleasure.¹¹

This is the stage in which proverbial philosophy reigns supreme. "An empty sack can't stand straight" will stand for the reason why a man with debts may lose his honesty; and "a bird in the hand is worth two in the bush" will serve to back up one's exhortations to prudence. Or we answer the question: "Why is snow white?" by saying, "For the same reason that soap-suds or whipped eggs are white"—in other words, instead of giving the *reason* for a fact, we give another *example* of the same fact. This offering a similar instance, instead of a reason, has often been criticised as one of the forms of logical depravity in men. But manifestly it is not a perverse act of thought, but only an incomplete one. Furnishing parallel cases is the necessary first step towards abstracting the reason imbedded in them all.

¹¹ Quoted by Renouvier: "Critique Philosophique." October 19, 1876.

As it is with reasons, so it is with words. The first words are probably always names of entire things and entire actions — extensive, coherent groups. A new experience in the primitive man can only be talked about by him in terms of the old experiences which have received names. It reminds him of certain ones from among them, but the *points* in which it agrees with them are neither named nor dissociated. Pure similarity must work before the abstraction which is based upon it. The first words are probably names of entire things and entire actions — extensive, coherent groups. Similarity working before abstraction, which as a rule we have seen to be based upon it, the first adjectives will be total nouns embodying the striking character. The primeval man will say not “the bread is hard,” but “the bread is stone;” not “the face is round,” but “the face is moon;” not “the fruit is sweet,” but “the fruit is sugar-cane.” The first words are thus neither particular nor general, but *vaguely* concrete. Just as we speak of an “oval” face, a “velvet” skin, or an “iron” will, without meaning to connote any other attributes of the adjective-noun than those in which it *does* resemble the noun it is used to qualify. After a while certain of these adjectively-used nouns come only to signify the particular quality for whose sake they are oftenest used; the *entire thing* which they originally meant receives another name, and they become true abstract and general terms. Oval, for example, with us suggests *only* shape. The first abstract qualities thus formed are, no doubt, qualities of the same sense, found in different objects — as big, sweet; next, analogies between different senses, as “sharp” of taste, “high” of sound, etc.; then, analogies of motor combinations, or form of relation, as simple, confused, difficult, reciprocal, relative, spontaneous, etc. The extreme degree of subtlety in analogy is reached in such cases, as when we say certain English art critics’ writing reminds us of a close room in which pastilles have been burning, or that the mind of certain Frenchmen is like old Roquefort cheese. Here language utterly fails to hit upon the bases of resemblance.

Over an immense department of our thought we are still, all of us, in the savage state. Similarity operates in us, but abstraction has not taken place. We know what the present case

is like, we know what it reminds us of, we have an intuition of the right course to take, if it be a practical matter. But analytic thought has made no tracks, and we cannot justify ourselves to others. In ethical, psychological, and æsthetic matters, to give a clear reason for one's judgment is universally recognized as a mark of rare genius. The helplessness of uneducated people to account for their likes and dislikes is often ludicrous. Ask the first Irish girl why she likes this country better or worse than her home, and see how much she can tell you. But if you ask your most educated friend why he prefers Titian to Paul Veronese, you will hardly get more of a reply; and you will probably get absolutely none if you inquire why Beethoven reminds him of Michael Angelo, or how it comes that a mere reclining figure by the former can suggest all the moral tragedy of life. His thought obeys a *nexus*, but can't name it. And so it is with all those judgments of *experts*, which even though unmotivated are so valuable. Saturated with experience of a particular class of materials, an expert intuitively feels whether a newly-reported fact is probable or not, whether a proposed hypothesis is worthless or the reverse. He instinctively knows that, in a novel case, this and not that will be the promising course of action. The well-known story of the old judge advising the new one never to give reasons for his decisions, "the decisions will probably be right, the reasons will surely be wrong," illustrates this. The doctor will feel that the patient is doomed, the dentist will have a premonition that the tooth will break, though neither can articulate a reason for his foreboding. The reason lies imbedded, but not yet laid bare, in all the countless previous cases dimly suggested by the actual one, all calling up the same conclusion, which the adept thus finds himself swept on to, he knows not how or why.

A final conclusion remains to be drawn. If the theory be true which assigns to the cerebral hemispheres definite localities in which the various images, motor and sensible, which constitute our thoughts are stored up, then it follows that the great cerebral difference between habitual and reasoned thinking is this: that in the former an entire system of cells vibrating at any one moment discharges in its totality into another entire

system, and that the order of the discharges tends to be a constant one in time; whilst in the latter a part of the prior system still keeps vibrating in the midst of the subsequent system, and the order—which part this shall be, and what shall be its concomitants in the subsequent system—has little tendency to fixedness in time. But this physical selection, so to call it, of one part to vibrate persistently whilst the others rise and subside, which is the basis of similar association, seems but a minor degree of that still more urgent and importunate localize-vibration which we can easiest conceive to underlie the mental fact of interest, attention, or dissociation. In terms of the brain-process, then, all these mental facts resolve themselves into a single peculiarity: that of indeterminateness of connection between the different tracts, and tendency of action to focalize itself, so to speak, in small localities which vary infinitely at different times, and from which irradiation may proceed in countless shifting ways. (Compare Diagram 6.) To discover, or (what more befits the present stage of nerve physiology) to adumbrate by some at least possible guess, on what chemical or molecular-mechanical fact this instable equilibrium of the human brain may depend, should be the next task of the physiologist who ponders over the passage from brute to man. Whatever the physical peculiarity in question may be, *it* is the cause why a man, whose brain has it, reasons so much, whilst his horse, whose brain lacks it, reasons so little. We have ourselves tried our best to form some hypothesis, but wholly without success. We bequeath, therefore, the problem to abler hands.

But, meanwhile, this mode of stating the matter suggests a couple of other inferences, with which we may conclude. The first is brief. If *focalization* of brain activity be the fundamental fact of reasonable thought, we see why intense interest or concentrated passion make us think so much more truly and profoundly. The persistent *focalization* of motion in certain tracts is the cerebral fact corresponding to the persistent domination in consciousness of the important feature of the subject. When not “focalized,” we are scatter-brained; but, when thoroughly impassioned, we never wander from the point.

None but congruous and relevant images arise. When roused by indignation or moral enthusiasm, how trenchant are our reflections, how smiting are our words. The whole net-work of petty scruples and bye-considerations which, at ordinary languid times, surrounded the matter like a cobweb, holding back our thought, as Gulliver was pinned to the earth by the myriad Liliputian threads, are dashed through at a blow, and the subject stands with its essential and vital lines revealed.

The last point is relative to Spencer's theory that what was acquired habit in the ancestor may become congenital tendency in the offspring. So vast a superstructure is raised upon this principle, both by Mr. Spencer and by others, that the paucity of empirical evidence for it has alike been matter of regret to its adherents, and of triumph to its opponents. The pointer pup, the birds on desert islands, the young of the tame rabbit, and Brown-Séquard's epileptic guinea-pigs constitute the whole beggarly array of proof. In the human race, where our opportunities for observation are the most complete, we seem to have no evidence whatever which would support the hypothesis, unless it be the probable law that city-bred children are more apt to be near-sighted than country children, and that is not a *mental* law. In the mental world we do not observe that the children of great travelers get their geography lessons with unusual ease, or that a baby whose ancestors have spoken German for thirty generations will, on that account, learn Italian any the less easily from its Italian nurse. But, if the considerations we have been led to are true, they explain perfectly well why this law of Spencer's *should not* be verified in the human race, and why, therefore, in looking for evidence on the subject, we should confine ourselves exclusively to lower animals. In them fixed habit is the essential and characteristic law of nervous action. The brain grows to the exact modes in which it has been exercised, and the inheritance of these modes — then called instincts — would have in it nothing surprising. But in man the negation of all fixed modes is the essential characteristic. He owes his whole preëminence as a reasoner, his whole human quality, we may say, to the facility with which a given mode of thought in him may suddenly be broken up into elements, which re-combine anew. Only at the price of

inheriting no settled instinctive tendencies, is he able to settle every novel case by the fresh discovery by his reason of novel principles. He is, *par excellence*, the *educable* animal. If, then, Spencer's law were found exemplified in him, he would, in so far forth, fall short of his human perfections, and, when we survey the human races, we actually do find that those which are most instinctive at the outset are those which, on the whole, are least educated in the end. An untutored Italian is, to a great extent, a man of the world; he has instinctive perceptions, tendencies to behavior, reactions, in a word, upon his environment, which the untutored German wholly lacks. If the latter be not drilled, he is apt to be a thoroughly loutish personage; but, on the other hand, the mere absence in his brain of definite innate tendencies enables him to advance by the development, through education, of his purely reasoned thinking, into complex regions of consciousness that the Italian probably could never approach.

We observe an identical difference between men as a whole, and women as a whole. A young woman of twenty reacts with intuitive promptitude and security in all the usual circumstances in which she may be placed. Her likes and dislikes are formed; her opinions, to a great extent, the same that they will be through life. Her character is, in fact, finished in its essentials. How inferior to her is a boy of twenty in all these respects. His character is still gelatinous, uncertain what shape to assume, "trying it on" in every direction. Feeling his power, yet ignorant of the manner in which he shall express it, he is, when compared with his sister, a being of no definite contour. But this absence of prompt tendency in his brain to set into particular modes is the very condition which insures that it shall ultimately become so much more efficient than the woman's. The very lack of pre-appointed trains of thought is the condition by which general principles and heads of classification are formed; and the masculine brain deals with new and complex matter indirectly by means of these, in a manner which the feminine method of direct intuition, admirably and rapidly as it performs within its limits, can vainly hope to cope with.

HEGEL ON CLASSIC ART.

[TRANSLATED FROM THE SECOND FRENCH EDITION OF CHARLES BÉNARD'S TRANSLATION OF THE SECOND PART OF HEGEL'S *ÆSTHETICS*.]

BY WM. M. BRYANT.

CHAPTER VI.—OF THE IDEAL OF CLASSIC ART.

I. The Classic Ideal.

1. The Ideal as free Creation of the Imagination of the Artist.—2. The new Gods of Classic Art.—3. External Character of the Representation.

1. As the Ideal of Classic Art comes to be realized only by the transformation of preceding elements, the first point to develop consists in making manifest that it is truly sprung from the creative activity of the spirit; that it has found its origin in the inmost and most personal thought of the poet and of the artist.

This seems contradicted by the fact that Greek mythology rests upon ancient traditions, and is related to the religious doctrines of the peoples of the Orient. If we admit all these foreign elements—Asiatic, Pelasgic, Dodonian, Indian, Egyptian, Orphic—how can we say that Hesiod and Homer gave to the Greek gods their names and their form? But these two things—tradition and poetic invention—may be very easily reconciled. Tradition furnishes the materials, but it does not bring with it the precise idea and the form which each god is to represent. This idea these great poets drew from their own genius, and they also discovered the actual forms appropriate to it. Thus were they the creators of the mythology which we admire in Greek art. The Greek gods are for this reason neither a poetic invention nor an artificial creation. They have their root in the spirit and the beliefs of the Greek people—in the very foundation of the national religion; these are the absolute forces and powers, whatever is most elevated in the Greek imagination, inspired in the poet by the muse herself.

With this faculty of free creation, the artist, we have already seen, takes a position altogether different from that which he had in the Orient. The Indian poets and sages have, also, for their point of departure the primitive *data*, consisting of the elements of nature—the sky, animals, the rivers—or the abstract conception of Brahma; but their inspiration is the annihilation of personality. Their spirit loses itself in wishing to represent ideas so foreign to their inner nature, while the imagination, in the absence of rule and of measure, incapable of directing itself, allows itself to wander in the midst of conceptions which have neither the character of freedom nor that of beauty. It is like an architect obliged to accommodate himself to an unequal soil, upon which rise old *debris*, walls half destroyed, hillocks and rocks; forced, besides, to subordinate his plans to particular ends. He can erect only irregular structures which must be destitute of harmony, and of which the aspect must be wholly irrational and fantastic. Such is not the work of a free imagination, creating according to its own inspirations.

In Classic Art the artists and poets are also prophets and teachers; but their inspiration is personal.

a. At first that which constitutes the essence of their gods is neither a nature foreign to spirit, nor the conception of a single god who admits of no sensuous representation and remains invisible. They borrow their ideas from the human spirit, from the human heart, from human life. Thus man recognizes himself in these creations; for what he produces outwardly is the most beautiful manifestation of himself.

b. They are on this account only the more truly *poets*. They fashion at their will the matter and the idea so as to draw from them figures free and original. All these heterogeneous or foreign elements they cast into the crucible of their imagination; but they do not form therein a *bizarre* mixture which suggests the cauldron of the magician. Everything that is confused, material, impure, gross, disordered, is consumed in the flame of their genius. Whence springs a pure and beautiful creation wherein the materials of which it has been formed are scarcely perceptible. In this respect their

task consists in despoiling tradition of everything gross, symbolic, ugly, and deformed, and afterward bringing to light the precise idea which they wish to individualize and to represent under an appropriate form. This form is the human form, and it is not employed here as a simple personification of the acts and accidents of life; it appears as the sole reality which corresponds to the idea. True, the artist also finds his images in the real world; but he must remove whatever of accidental or inappropriate they present before they can express the spiritual element of human nature, which, siezed in its essence, should represent the everlasting might of the gods. Such is the free, though not arbitrary, manner in which the artist proceeds in the production of his works.

c. As the gods take an active part in human affairs, the task of the poet consists in acknowledging therein their presence and their activity, as well as in signalizing whatever is remarkable in natural events, in human deeds, and in fate—in all which the divine powers appear to be involved. Thus the poet fulfills in part the role of priest, as well as that of prophet. We moderns, with our prosaic reason, explain physical phenomena by universal laws and forces; human actions, by personal wills. The Greek poets, on the contrary, saw, above all these phenomena, their divine author. In representing human acts as divine acts, they showed the diverse aspects under which the gods reveal their power. Thus a great number of these divine manifestations are only human acts, when such or such divinity intervenes. If we open the poems of Homer, we find there scarcely any important event which may not be explained by the will or the direct influence of the gods. Such interpretations belong to the mode of seeing, to the faith born in the imagination of the poet. Thus, Homer often expresses them in his own name, and places them only in part in the mouth of his personages, whether priests or heroes. Thus, at the beginning of the *Iliad*, he has explained the pestilence by the wrath of Apollo; further on he will cause it to be predicted by Calchas. It is the same with the recital of the story of the death of Achilles, in the last canto of the *Odyssey*. The shades of the lovers, conducted by Hermes to the mead

ows where blooms the asphodel, there encounter Achilles and other heroes who have battled on the Trojan plain. Agamemnon himself relates to them the death of the young hero: "The Greeks had fought all day; when Jupiter had separated the two armies, they bore the noble body upon vessels and embalmed it, shedding tears. Then they heard coming from the sea a divine sound, and the Achaians, alarmed, would have rushed to their ships had not an old man, in whom years had ripened experience, arrested them." He explained to them the phenomenon, by saying: "It is the mother of the hero who comes from the depth of the ocean, with the immortal goddesses of the sea, to receive the body of her son." At these words fear abandoned the sage Achaians. From that moment, indeed, there was no longer anything in it strange to them. Something human, a mother, the sorrowful mother of the hero, came before them; Achilles is her son, she mingles her moans with theirs. Afterward Agamemnon, turning to Achilles, continues to describe the general grief: "About thee gathered the daughters of old ocean, uttering cries of grief. They spread over thee vestments perfumed with ambrosia. The muses also, the nine sisters, caused to be heard, each in her turn, a beautiful song of mourning; and there was not then an Argive there who could restrain his tears, so greatly had the song of the muses melted all hearts."

2. Still, of what nature are the creations which classic art produces in following such a method? What are the characteristics of the new gods of Greek art?

a. The most general idea that we should form of them is that of a concentrated individuality, which, freed from the multiplicity of accidents, actions, and particular circumstances of human life, is collected upon itself at the focus of its simple unity. Indeed, what we must first remark is their spiritual and, at the same time, immutable and substantial individuality. Far removed from the world of change and illusion, where want and misery reign, far from the agitation and trouble which attach to the pursuit of human interests, retired within themselves, they rest upon their own universality as upon an everlasting foundation where they find repose and

felicity. By this alone the gods appear as imperishable powers, of which the changeless majesty rises above particular existence. Disengaged from all contact with whatever is foreign or external, they manifest themselves uniquely in their immutable and absolute independence.

Yet, above all, these are not simple abstractions — mere spiritual generalities — they are genuine *individuals*. With this claim each appears as an ideal which possesses in itself reality, life; it has, like spirit, a clearly-defined nature, a *character*. Without character there can be no true individuality. In this respect, as we have seen above, the spiritual gods contain, as integrant part of themselves, a definite physical power, with which is established an equally definite moral principle, which assigns to each divinity a limited circle in which his outward activity must be displayed. The attributes, the specific qualities which result therefrom, constitute the distinctive character of each divinity.

Still, in the ideal proper, this definite character must not be limited to the point of exclusive being; it must maintain itself in a just medium, and must return to universality, which is the essence of the divine nature. Thus each god, in so far as he is at once a particular individuality and a general existence, is also, at the same time, both part and whole. He floats in a just medium between pure generality and simple particularity. This is what gives to the true ideal of Classic Art its security and infinite calm, together with a freedom relieved from every obstacle.

b. But, as constituting beauty in Classic Art, the special character of the gods is not purely spiritual; it is disclosed so much the more under an external and corporeal form which addresses itself to the eyes as well as to the spirit. This, we have seen, no longer admits the symbolic element, and should not even pretend to (*affecter*) the Sublime. Classic beauty causes spiritual individuality to enter into the bosom of sensuous reality. It is born of a harmonious fusion of the outward form with the inward principle which animates it. Whence, for this very reason, the physical form, as well as the spiritual principle, must appear enfranchised from all the accidents

which belong to outer existence, from all dependence upon nature, from the miseries inseparable from the finite and transitory world. It must be so purified and ennobled that, between the qualities appropriate to the particular character of the god and the general forms of the human body, there shall be manifest a free accord, a perfect harmony. Every mark of weakness and of dependence has disappeared; all arbitrary particularity which could mar it is canceled or effaced. In its unblemished purity it corresponds to the spiritual principle of which it should be the incarnation.

c. Notwithstanding their particular character the gods preserve also their universal and absolute character. Independence must be revealed, in their representation, under the appearance of calmness and of a changeless serenity. Thus we see, in the figures of the gods, that nobility and that elevation which announces in them that, though clothed in a natural and sensuous form, they have nothing in common with the necessities of finite existence. Absolute existence, if it were pure, freed from all particularity, would conduct to the sublime; but, in the classic ideal, spirit realizes and manifests itself under a sensuous form, which is its perfect image, and whatever of sublimity it has is shown to be grounded in its beauty, and as having passed wholly into itself. This is what renders necessary, for the representation of the gods, the classic expression of grandeur and of beautiful sublimity.

In their beauty they appear, then, elevated above their own corporeal existence; but there is manifest a disagreement between the happy grandeur which resides in their spirituality and their beauty, which is external and corporeal. Spirit appears to be entirely absorbed in the sensuous form, and yet at the same time, aside from this, to be merged (*plongé*) in itself alone; it is, as it were, the moving presence of a deathless god in the midst of mortal men.

Thus, although this contradiction does not appear as a manifest opposition, the harmonious totality conceals in its indivisible unity a principle of *destruction* which is found there already expressed. This is that sigh of sadness in the midst of grandeur which men full of sagacity have felt in the pres-

ence of the images of the ancient gods, notwithstanding their perfect beauty and the charm shed around them. In their calmness and their serenity they cannot permit themselves to indulge in pleasure, in enjoyment, nor in what we especially term satisfaction. The eternal calm must not even extend so far as to admit of a smile nor the pleasing contentment with itself. *Satisfaction*, properly speaking, is the sentiment which is born of the perfect accord of our soul with its present situation. Napoleon, for example, never expressed his satisfaction more profoundly than when he had attained to something with which all the world was dissatisfied; for true satisfaction is nothing else than the inner approbation which the individual gives himself, because of his own acts and personal efforts. Its last degree is that common-place feeling (*bourgeois sentiment*, *Philisterempfindung*) of contentment which every man can experience. Now, this sentiment and this expression cannot be granted to the immortal gods of Classic Art.

It is this character of universality in the Greek gods which people have intended to indicate by characterizing them as cold. Nevertheless, these figures are cold only in relation to the vivacity of modern sentiment; in themselves they have warmth and life. The divine peace which is reflected in the corporeal form comes from the fact that they are separated from the finite; it is born of their indifference to all that is mortal and transitory. It is an adieu without sadness and without effort, but an adieu to the earth and to this perishable world. In these divine existences the greater the degree in which seriousness and freedom are outwardly manifested, the more distinctly are we made to feel the contrast between their grandeur and their corporeal form. These happy divinities deprecate at once both their felicity and their physical existence. We read in their lineaments the destiny which weighs upon their heads, and which, in the measure that its power increases (causing this contradiction between moral grandeur and sensuous reality to become more and more pronounced), draws Classic Art on to its ruin.

3. If we ask what is the outer mode of manifestation suitable to Classic Art, it needs only to repeat what has already

been said : In the Classic ideal, properly speaking, the spiritual individuality of the gods is represented, not in situations where they enter into relation one with another, and which might occasion strifes and conflicts, but in their eternal repose, in their independence, freed as they are from all species of pain and suffering — in a word, in their divine calmness and peace. Their determinate character is not developed so as to excite in them very lively sentiments and violent passions, or to force them to pursue particular interests. Freed from all collision, they are delivered from all embarrassment, exempt from all care. This perfect calm (wherein appears nothing void, cold, inanimate, but which is full of life and sensibility), although unalterable, is for the gods of Classic Art the most appropriate form of representation. If, then, they take part in the attainment of particular ends, the acts in which they engage must not be of a nature to engender collisions. Free from offense on their own part, their felicity must not be troubled by these conflicts. Among the arts it is, therefore, *Sculpture* which more than the others represents the Classic ideal with that absolute independence wherein the divine nature preserves its universality united with the particular character. It is, above all, Ancient Sculpture, of a severer taste, which is strongly attached to this ideal side. Later it was allowed to be applied to the representation of situations and characters of a dramatic vitality. Poetry, which causes the gods to act, draws them into strife and conflicts. Otherwise, the calm of the plastic, when it remains in its true domain, is alone capable of expressing the contrast between the greatness of spirit and its finite existence with that seriousness of sadness to which we have already referred.

II. The Circle of the Gods.

1. Plurality of Gods — 2. Absence of Systematic Unity. — 3. Fundamental Character of the Circle of Divinities.

1. Plurality of gods, or Pantheism, is absolutely essential to the principle of Classic Art. In this plurality the divine world forms a special circle of divinities, of which each is in

itself a genuine individual, and in nowise an allegorical being. Each god, though possessing a special characteristic, is a complete totality which combines in himself the distinctive qualities of the other divinities. By this means the Greek gods possess a genuine wealth of character. They are neither particular existences nor abstract generalities. They are the one *and* the other; and, with them, the one is the consequence of the other.

2. Because of this species of individuality, Greek polytheism could not constitute a very real totality, a systematic whole.

The Greek Olympus is composed of a multitude of distinct gods, but which do not form a constituted hierarchy. The orders here are not rigorously fixed. Whence the freedom, the serenity, the independence of these personages.

Without this apparent contradiction these divinities would be embarrassed the one by the other — checked in their development and their power. Instead of being real personages, they would be only allegorical beings, personified abstractions.

3. If we consider more closely the circle of the principal Greek divinities according to their fundamental and simple character, such as sculpture especially represents it, we do indeed find essential differences; but in particular points these differences are canceled. The rigor of distinctions is tempered by an inconsequence which is the condition of beauty and of individuality. Thus, Jupiter possesses the sovereignty over gods and men, but without on this account placing in jeopardy the free independence of the other gods. He is the supreme god; nevertheless, his power does not absorb theirs. He has relation with the sky, with lightning and thunder, with the principle of life in nature; in a special manner, with the power of the State, order established by law. He represents, also, the superiority of knowledge and of spirit. His brothers rule over the sea and over the subterranean world. Apollo appears as the god of science, the preceptor of the muses. Artifice and eloquence, ability in negotiations, etc., are the attributes of Hermes, who is charged, also, with conducting souls to the lower world. Military force is the characteristic of Mars. Vulcan is skilled in mechanic arts. Poetic inspiration, the

exhilarating virtue of wine, scenic games, are attributed to Bacchus. Divinities of the other sex run through a similar circle of ideas. In Juno the conjugal tie is the chief characteristic. Ceres teaches and propagates agriculture; but also the spiritual element of property, of marriage, and of civil rights, with which civilization and moral order begin. Minerva is moderation, prudence, and wisdom; she presides over legislation. The warrior virgin, full of wisdom and reason, is the divine personification of the Athenian genius; the free, original, and profound spirit of the city of Athens. Diana, on the contrary, completely distinguished from the Diana of Ephesus, has, as her essential characteristic, the shy independence of virginal chastity. She loves the chase, and she is in general the maiden, not of a discreet and silent sensibility, but of a serious character, who possesses a lofty soul and lofty thoughts. Venus Aphrodite, with charming Cupid — who, after having been the ancient Titanic Eros, is become a child — represent the mutual attraction of the two sexes, and the passion of love.

Such are the principal ideas which constitute the basis of the spiritual and moral divinities. As regards their sensuous representation, we may still indicate sculpture as the art capable of expressing this particular side of the gods. Indeed, if it expresses individuality by what is most original in it, for the same reason it passes beyond the austere grandeur of the earlier statues, and combines and concentrates a multiplicity and wealth of individual qualities in that unity of the person which we call *character*. It renders this last in all its clearness and simplicity; it fixes in the statues of the gods their most perfect expression. In one respect sculpture is more ideal than poetry; but, on the other hand, it individualizes the character of the gods under the wholly particular human form. Thus it accomplishes the anthropomorphism of the Classic Ideal. As being this perfect representation of the classic ideal in an outward form, adequate to its idea, the images of Greek sculpture are ideal figures in the highest degree. They are eternal and absolute models, the central point of Classic Beauty. And their type must remain the basis

of all other productions of Greek art, where personages enter into movement and manifest themselves in particular acts and circumstances.

III. Of the Individuality Appropriate to each of the Gods.

1. Materials for this Individualization.—2. Preservation of the Moral Character.—
3. Predominance of Harmony and of Grace.

In order to represent the gods in their true individuality it does not suffice to distinguish them by certain special attributes. Besides, Classic Art does not restrict itself to representing these personages as immobile and concentrated within themselves; it also shows them in movement and in action. The character of the gods is then particularized, and presents special traits which compose the physiognomy appropriate to each god. This is the accidental, historic, positive side, which figures in mythology and also in art as an element which is accessory, indeed, but which is also necessary.

1. These materials are furnished by history or by fable. They are the antecedents, the local peculiarities, which give to the gods their living individuality and originality. Some are borrowed from symbolic religions which preserve a trace in the new creations; the symbolic element is absorbed in the new myth. Others are taken from the national origin which attaches to heroic times and to foreign traditions. Still others, finally, proceed from local circumstances relating to the propagation of myths, to their formation, to the usages and ceremonies of worship, etc. All these materials fashioned by art give to the Greek gods the appearance, the interest, and the charm of living humanity. But this traditional side, which originally had a symbolic meaning, has lost it little by little; it was destined only to complete the individuality of the gods; to give them a more human and more sensuous form; to add, by these details, often little worthy of divine majesty, the side of the arbitrary and the accidental. Sculpture, which represents the pure ideal, must, without excluding it altogether, permit its

appearance only in the least possible degree ; it represents it as accessory, in the coiffure, the arms, the ornaments, the external attributes.

2. Another source for the more precise determination of the character of the gods is their intervention in the actions and circumstances of human life. Here the imagination of the poet, as an inexhaustible source, pours forth in a multitude of particular stories, giving account of the characteristics and actions attributed to the gods. The problem of art consists in combining in a natural and lively manner the action of divine personages with human actions, so that the gods appear to be the general cause of what men themselves do and accomplish. The gods are thus the inner principles which reside in the depth of the human soul ; they constitute its own passions, so far as these are elevated, and also its personal thought ; or it is the necessity of the situation, the force of circumstances, of which man suffers the fatal action. This it is which enters into all the situations where Homer causes the gods to intervene, as well as into the method by which they influence events.

3. But upon this side the gods of Classic Art abandon more and more the silent serenity of the ideal in order to descend into the multiplicity of individual situations and actions, and into the conflict of human passions. Classic Art thus finds itself drawn on to the last degree of individualization ; it falls into the agreeable and the graceful. The divine is absorbed into the finite, which addresses itself exclusively to the sensibilities, which are again found there and satisfied at random in the images fashioned by art. The seriousness of the divine character gives place to *grace*, which, instead of impressing man with a holy reverence and elevating him above his individuality, leaves him a tranquil spectator, and pretends to no other aim than that of pleasing him.

This tendency of art to be absorbed in the externality of things, to cause the particular finite element to prevail, marks the point of transition which leads to a new form of art ; for, once the field opens to a multiplicity of finite forms, these place themselves in opposition to the idea, its generality, and

its truth. Then begins to appear the distaste of reason for these representations which no longer correspond to their eternal object.

CHAPTER VII. — DESTRUCTION OF CLASSIC ART.

I. Destiny.

Independently of the outward causes which have occasioned the decadence of art and precipitated its fall, many internal causes, taken in the very nature of the Greek ideal, render this fall inevitable. At first the Greek gods, as we have seen, bear in themselves the germs of destruction, and the imperfection which they conceal is unveiled by the representations of Classic Art itself. The plurality of gods and their diversity make them already accidental existences; this multiplicity cannot satisfy the reason. Thought dissolves them and makes them enter again into a single divinity. Besides, the gods do not remain in their eternal repose; they enter into action — participate in the interests and passions, and mingle in the collisions, of human life. This multitude of relations, whereby they engage as actors in this drama, destroys the divine majesty, contradicts their grandeur, their dignity, their beauty. In the genuine ideal itself, that of sculpture, we remark something inanimate, insensible, cold, a serious air of silent sadness, which indicates that something higher weighs upon their heads; necessity, destiny, supreme unity, blind divinity, immutable fatality, to which are subjected both gods and men.

II. Destruction of the Gods through their Anthropomorphism.

1. Absence of True Personality. — 2. Transition from Classic Art to Christian Art. — 3. Destruction of Classic Art in its own Domain.

I. But the chief cause is that, absolute necessity not forming an integrant part of their personality and being foreign to them, the particular, individual side is no longer held to its dependence, but develops more and more without rule and without

measure. They permit themselves to be drawn into the external accidents of human life, and fall into all the imperfections of anthropomorphism. Whence the ruin of these beautiful divinities of art is inevitable. Moral consciousness turns away from them and reprobates them. The gods, it is true, are moral persons, but under the human and corporeal form. Now, true morality appears only with consciousness, and under a purely spiritual form. The point of view for beauty is neither that of religion nor that of morals. Infinite, invisible spirituality; this is the divine for the religious consciousness. For the moral consciousness the good is an idea, a conception, a duty which commands the sacrifice of the senses. It is in vain, then, to be enraptured with Greek art and beauty, to admire those fine divinities; the soul does not wholly recognize itself in the object of its contemplation or of its worship. What it conceives as the *true ideal* is a spiritual, infinite, absolute, personal God, endowed with moral qualities, with justice, with goodness, etc. This is that of which the gods of Greek polytheism, notwithstanding their beauty, fail to furnish us the image.

2. As to the transition from Greek mythology to a new religion and a new art, it can no longer be effected in the domain of the imagination. At the origin of Greek art the transition appears under the form of a conflict between the old and the new gods, in the very realm of art and of imagination. Here it is upon the more serious ground of *history* that this revolution is accomplished. The new idea does not appear as a revelation of art, nor under the form of the myth or the fable; but in history itself, by the course of events, by the appearance of God Himself upon the earth, where He is born, dies, and is resuscitated. This is a source of ideas which art has not invented, and which it finds outside itself. The gods of Classic Art have existence only in the imagination; they are visible only in stone and in wood; they have never been at once both flesh and spirit. This real existence of God in flesh and in spirit Christianity has for the first time exhibited in the life and acts of a God present among men. This transition, then, could not be accomplished in the domain of art, because the God of

revealed religion is the real and living God. Compared with Him, His competitors (*adversaires*) were only imaginary beings, which could not seriously be placed in opposition to him upon the plain of history. The opposition and the conflict could not then offer the character of a serious strife and be represented as such either by art or by poetry. Hence, whenever it has been attempted among the moderns to make of this subject a poetic theme, it has always been done in a frivolous and impious manner, as in the *War of the Gods*, by Parry.

On the other hand, it is vain to regret, as has often been done in prose and in verse, the Greek ideal and Pagan mythology as being more favorable to art and to poetry than the Christian faith, to which a higher moral truth is accorded, but which is regarded as inferior from the point of view of art and of the beautiful.

Christianity has its art and its poetry in itself; its ideal differs essentially from the Greek ideal and Greek art. Here every parallel is superficial. Polytheism is anthropomorphism. The gods of Greece are beautiful divinities under the human form. So soon as the reason comprehended God as spirit and as infinite being, with this conception there appeared other ideas, other sentiments, other exigencies, which ancient art is incapable of satisfying, to which it could not attain, and which, therefore, called forth a new art, a new poetry. Hence regrets are superfluous and comparison has no meaning; it is nothing more than a mere text for declamation. The serious objections which it has been possible to urge against Christianity are its tendencies to mysticism, to asceticism. These are, indeed, contrary to art, but they are, also, only exaggerations of the Christian principle. But the thought which constitutes the basis of Christianity, the true Christian sentiment, far from being contrary to art, is especially favorable to it. Whence has sprung up a new art, inferior, it is true, on certain sides, to antique art—for example, in sculpture; but which is superior to it on other sides, by all the loftiness of its idea as compared with the Pagan idea.

3. The causes which, in its own domain, have induced this delay may be recognized at a glance in the situations of antique

society, which announce both the ruin of art and that of religion. We recognize the vices of that social order where the State was all, the individual nothing for himself. This was the radical vice of Greek society. In this identification of man and the State the rights of the individual are unknown. Whence he seeks to open up a distinct and independent way, separates himself from the public interest, pursues his own ends, and, finally, works for the overthrow of the State. Whence the egotism which little by little undermines this society, and whence, too, the ever-growing excesses of the demagogue.

Again, there arises in the more exalted souls the necessity of a higher freedom in a State organized upon the basis of justice and right. At length man retreats within himself, and, abandoning the written law, religious and civil, takes his own conscience for the rule of his conduct. Socrates marks the advent of this idea. At Rome, in the last years of the Republic, among the energetic souls, is revealed this antagonism and this disintegration of society. Fine characters offer us the spectacle of private virtues by the side of the enfeeblement and corruption of public customs.

Thus the new principle rises with energy against a world which contradicts it, and undertakes the task of exhibiting it in all its corruption. A new form of art is developed, wherein the conflict is no longer that of the reason in opposition to reality; it is a living picture of society, which, by its excesses, destroys itself with its own hands. Such is the *comic* in the form in which it was treated by Aristophanes among the Greeks, in applying it to the essential interests of the society of his time, without anger, indeed, and with a pleasantry full of gayety and of serenity.

III. Satire.

1. Difference between the Destruction of Classic Art and that of Symbolic Art. —
2. Satire. — 3. The Roman World as a World of Satire.

But this solution, which still admits the possibility of art, we see disappear in the same measure that opposition, pro-

longing itself as such, introduces, instead of poetic harmony, a prosaic relation to the two sides. Whence the classic form of art is destroyed, the ruin of its gods is consummated; the world of the beautiful is ended in history. What is the form of art which, in this transition to a more elevated form, can still find a place and hasten the advent?

1. We have seen symbolic art terminate, also, by the separation of the form from the idea, in a multitude of particular classes, viz., Comparison, Fable, Enigma, etc. Now, if it is true that a similar separation constitutes, from our present point of view, the principle of the destruction of the ideal, we must ask, What is the difference between this mode of transition and the preceding?

a. In the symbolic phase of art, and in that phase which consists in comparison, form and idea are, notwithstanding their affinity, naturally foreign the one to the other. The two principles are in accord, although it is precisely their relations and resemblances which are the basis of their combination or of their comparison. But, since they remain thus separated and foreign at the very center of their union, there cannot be said to be hostility between them when they come to be separated. The tie being feeble, they do not suffer when it is broken. The ideal of Classic Art, on the contrary, has its principle in the perfect identification of idea and form, of spiritual individuality with the corporeal form. Whence, if the two elements which present us so complete a unity are separated, this takes place only because they can no longer be mutually supported; they must renounce this intimate harmony only to pass to an absolute incompatibility, to an irreconcilable enmity.

2. As the character of the relation has changed, so also has that of the elements. In symbolic art there are ideas more or less abstract, general thoughts symbolically represented. Now, in the form which prevailed at this epoch of transition from Classic to Romantic Art, the basis is, indeed, also composed of abstract thought, similar sentiments, rational principles; but it is not those abstract verities in themselves; it is their realization in the individual consciousness, in the personal and

free reason of man, which constitutes one of the terms of opposition. What essentially characterizes this epoch of transition is the manifestation of spirit as penetrated with the sentiment of its freedom and of its independence. It endeavors to represent the efforts which the spirit makes to prevail over an old form, and, in general, over a world no longer suited to it. At the same time, man strips himself of sensuous reality, retires within himself; he seeks inner satisfaction, peace, happiness. But, in isolating himself from society, he condemns himself to an abstract existence, and cannot enjoy the plenitude of his being. Before him is a world which appears to him to be evil and corrupt. In this way art assumes a serious and reflective character. Intrenched in its intolerant wisdom, strong and confident in the verity of its principles, it places itself in violent opposition to the corruption of the time. Now, the knot of this drama presents a prosaic character. An elevated spirit, a soul penetrated with the sentiment of virtue; in view of a world which, far from realizing its ideal, offers it only the spectacle of vice and of folly; rises against it with indignation, rails at it with jest, overwhelms it with the arrows of its scathing irony. The form of art which undertakes to represent this strife is the satire. With the ordinary theories one is greatly perplexed to know in what class it should be placed; it has nothing in common with the epic poems; it does not belong to lyric poetry; nor is it any the more a poetry inspired by the inward pleasure which accompanies the sentiment of free beauty and extends itself beyond. In its grim humor it restricts itself to characterizing with energy the discord which resounds between the real world and the principles of abstract morality. It produces neither true poetry nor a genuine work of art. Thus the satirical form cannot be regarded as a special class of poetry; but, considered in a general manner, it is this form of transition which terminates classic art.

3. Its true domain is not Greece, which is the native land of beauty. Such as we have described it, satire is a gift belonging especially to the Romans. The spirit of the Roman world is the reign of abstract law, the destruction of beauty, the ab-

sence of serenity in customs, the ebbing of domestic and natural affections—in general, the sacrifice of individuality, which devotes itself to the State, and finds its passive dignity, its rational satisfaction, in obedience to law. The principle of this political virtue, in its cold and austere severity, on the outer side, brought all national individualities into subjection; while, within, formal Right was developed with the same rigor and the same exactitude, even to the point of attaining to its perfection. But this principle was contrary to true art; so that we cannot find at Rome any art which presents a character of freedom and of grandeur. The Romans accepted and learned from the Greeks both sculpture and painting, together with epic, lyric, and dramatic poetry. It is to be remarked that what may be deemed unworthy among the Romans are the comic farces, the Fescennines, and the Atellanes. On the contrary, the comedies wrought with art, those of Plautus and of Terence, are of Greek origin. Ennius drew already from Greek sources, and prosaized the mythology. The Romans were able to claim, as properly belonging to them, only the forms of art which, in their principle, are prosaic—for example, the didactic poem, when its object is the enforcement of morality, and when it gives to its general reflections the purely external ornaments of measure, images, comparisons, and of a fine diction and elegant rhetoric. But Satire must be placed before every other. The disgust which the spectacle of the world inspires in virtue—such is the sentiment which seeks to express itself, often in declamations hollow enough.

This form of art, prosaic in itself, can become poetic only when it places before our eyes the image of a corrupt society which destroys itself with its own hand. It is thus that Horace, who, as a lyric poet, exercised himself in the Greek form and according to the Greek method, traces for us in the *Epistles* and *Satires*, where he is most original, a living portrait of the customs of his time, and of all the follies which were before his eyes. We find there a model of fine pleasantries and of good taste, but not in the same degree the genuine poetic gayety which contents itself with rendering ridiculous that which is evil. With others, on the contrary,

the satire is only a parallel, a contrast between vice and virtue. Here discontent, anger, and hatred break forth outwardly, under forms which moral wisdom borrows from eloquence. The indignation of a noble soul rises against corruption and servility. By the side of the vices of the day it traces the image of the ancient customs, of ancient liberty, of the virtues of another age, with no hope of seeing them revive, sometimes without genuine conviction. To the feebleness and mobility of character, to the miseries, to the dangers, to the opprobrium of the present, it can only oppose the stoical indifference and imperturbable firmness of the sage. This discontent gives to history, also, such as the Romans have written it, and to their philosophy as well, a similar tone. Sallust rises against the corruption of manners to which he himself was not a stranger. Titus Livius, with his elegance of rhetoric, seeks consolation for the present in the description of ancient days. But it is, above all, Tacitus who, with a pathos full of dignity and depth, unveils all the perversity of his time in a picture of striking truth.

Later, finally, we see the Greek Lucian, with a lighter spirit and a gayer mood, attack heroes, philosophers, and gods alike, mocking especially at the ancient divinities because of their anthropomorphism. But often, when recounting the action of the gods, he falls into verbosity and becomes tedious, especially for us who are entirely convinced against the religion which he wishes to destroy. On the other hand, we know that from the point of view of beauty, notwithstanding his pleasantries and his sarcasms, the fables which he turns into ridicule preserve their eternal value.

But art could not rest in this disagreement between human consciousness and the real world without departing from its native principle. The spirit must be conceived as the infinite in itself, the Absolute. Now, although it does permit finite reality to subsist in opposition to it as true and independent, it cannot remain in hostility to it. The opposition must give place to a new conciliation, and to the classic ideal must succeed another form of art, of which the characteristic is Infinite Subjectivity, or personality.

THE SCIENCE OF EDUCATION.

A PARAPHRASE OF DR. KARL ROSENKRANZ'S "PEDAGOGICS AS A SYSTEM."

BY ANNA C. BRACKETT.

II. The Form of Education.

* § 23. The general form of Education follows from the nature of mind. Mind is nothing but what it itself creates out of its own activity. It is, at first, mind as undeveloped or unconscious (in the main) ; but, secondly, it acquires the power of examining its own action, of considering itself as an object of attention, as if it were a quite foreign thing — *i. e.*, it reflects (in this stage it is really ignorant that it is studying its own nature) ; and, finally, it becomes conscious that this, which it had been examining, and of whose existence it is conscious, is its own self: It attains self-consciousness. It is through this estrangement from itself, given back to itself again and restored to unity, but it is no longer a simple, unconscious unity. In this third state only can it be said to be free — *i. e.*, to possess itself. Education cannot create ; it can only help to develop into reality the previously-existent possibility ; it can only help to bring forth to light the hidden life.

§ 24. All culture, in whatever line, must pass through these two stages of estrangement and of reunion ; the reunion being not of two different things, but the recognition of itself by thought, and its acceptance of itself as itself. And the more complete is the estrangement — *i. e.*, the more perfectly can the thought be made to view itself as a somewhat entirely foreign to itself, to look upon it as a different and independent somewhat — the more complete and perfect will be its union with and acceptance of its object as one with itself when the recognition does finally take place. Through culture we are led to this conscious possession of our own thought. Plato gives to the feeling, with which knowledge must necessarily begin, the name of wonder. But wonder is not knowledge ;

it is only the first step towards it. It is the half-terrified attention which the mind fixes on an object, and the half-terror would be impossible did it not dimly forebode that it was something of its own nature at which it was looking. The child delights in stories of the far-off, the strange, and the wonderful. It is as if they hoped to find in these some solution to themselves—a solution which they have, as it were, asked in vain of familiar scenes and objects. Their craving for such is the proof of how far their nature transcends all its known conditions. They are like adventurous explorers who push out to unknown regions in hopes of finding the freedom and wealth which lies only within themselves. They want to be told about things which they never saw, such as terrible conflagrations, banditti life, wild animals, gray old ruins, Robinson Crusoes on far-off, happy islands. They are irresistibly attracted by whatever is highly colored and dazzlingly lighted. The child prefers the story of Sinbad the Sailor to any tales of his own home and nation, because mind has this necessity of getting, as it were, outside of itself so as to obtain a view of itself. As the child grows to youth he is, from the same reasons, desirous of traveling.

§ 25. Work may be defined as the activity of the mind in a conscious concentration on, and absorption in, some object, with the purpose of acquiring or producing it. Play is the activity of the mind which gives itself up to surrounding objects according to its own caprice, without any thought as to results. The Educator gives out work to the pupil, but he leaves him to himself in his play.

§ 26. It is necessary to draw a sharp line between work and play. If the Educator has not respect for work as an activity of great weight and importance, he not only spoils the relish of the pupil for play, which loses all its charm of freedom when not set off by its antithesis of earnest labor, but he undermines in the pupil's mind all respect for any real existence. On the other hand, he who does not give to the child space, time, and opportunity for play prevents the originality of his pupil from free development through the exercise of his creative ingenuity. Play sends the child back to his work

refreshed, because in it he loses himself without constraint and according to his own fancy, while in work he is required to yield himself up in a manner prescribed for him by another.

Let the teacher watch his pupils while at play if he would discover their individual peculiarities, for it is then that they unconsciously betray their real propensities. This antithesis of work and play runs through the entire life, the form only of play varying with years and occupations. To do what we please, as we please, and when we please, not for any reason, but just because we please, remains play always. Children in their sports like nothing better than to counterfeit what is to be the earnest work of their after-lives. The little girl plays with her dolls, and the boy plays he is a soldier and goes to mimic wars.

It is, of course, an error to suppose that the play of a child is simply muscular. The lamb and the colt find their full enjoyment in capering aimlessly about the field. But to the child play would be incomplete which did not bring the mind into action. Children derive little enjoyment from purely muscular exercise. They must at the same time have an object requiring mental action to attain it. A number of children set simply to run up and down a field would tire of the exercise in five minutes; but put a ball amongst them and set them to a game and they will be amused by it for hours.

Exceptional mental development is always preceded, and is, indeed, produced by, an exceptional amount of exercise in the form of play on the part of the special faculties concerned. The peculiar tendencies exhibited in play are due to the large development of particular faculties, and the ultimate giant strength of a faculty is brought about by play. The genius is no doubt born, not made: but, although born, it would dwindle away in infancy were it not for the constant exercise taken in play, which is as necessary for development as food for the maintenance of life.

§ 27. Work should never be treated as if it were play, nor play as if it were work. Those whose work is creative activity of the mind may find recreation in the details of science; and those, again, whose vocation is scientific research can find rec-

reation in the practice of art in its different departments. What is work to one may thus be play to another. This does not, however, contradict the first statement.

§ 28. It is the province of education so to accustom us to different conditions or ways of thinking and acting that they shall no longer seem strange or foreign to us. When these have become, as we say, "natural" to us — when we find the acquired mode of thinking or acting just what our inclination leads us to adopt unconsciously, a *Habit* has been formed. A habit is, then, the identity of natural inclination with the special demands of any particular doing or suffering, and it is thus the external condition of all progress. As long as we require the conscious act of our will to the performance of a deed, that deed is a somewhat foreign to ourselves, and not yet a part of ourselves. The practical work of the educator may thus be said to consist in leading the mind of the pupil over certain lines of thought till it becomes "natural" or spontaneous for him to go by that road. Much time is wasted in schools where the pupil's mind is not led aright at first, for then he has to unlearn habits of thought which are already formed. The work of the teacher is to impress good methods of studying and thinking upon the minds of his pupils, rather than to communicate knowledge.

§ 29. It is, at first sight, entirely indifferent what a Habit shall relate to — *i. e.*, the point is to get the pupil into the way of forming habits, and it is not at first of so much moment what habit is formed as that a habit is formed. But we cannot consider that there is anything morally neutral in the abstract, but only in the concrete, or in particular examples. An action may be of no moral significance to one man, and under certain circumstances, while to another man, or to the same man under different circumstances, it may have quite a different significance, or may possess an entirely opposite character. Appeal must be made, then, to the individual conscience of each one to decide what is and what is not permissible to that individual under the given circumstances. Education must make it its first aim to awaken in the pupil a sensitiveness to spiritual and ethical distinctions which knows that nothing is in its

own nature morally insignificant or indifferent, but shall recognize, even in things seemingly small, a universal human significance. But, yet, in relation to the highest interests of morality or the well-being of society, the pupil must be taught to subordinate without hesitation all that relates exclusively to his own personal comfort or welfare for the well-being of his fellow-men, or for moral rectitude.

When we reflect upon habit, it at once assumes for us the character of useful or injurious. The consequences of a habit are not indifferent.

Whatever action tends as a harmonious means to the realization of our purpose is desirable or advantageous, and whatever either partially contradicts or wholly destroys it is disadvantageous. Advantage and disadvantage being, then, only relative terms, dependent upon the aim or purpose which we happen to have in view, a habit which may be advantageous to one man under certain circumstances may be disadvantageous to another man, or even to the same man, under other circumstances. Education must, then, accustom the youth to consider for himself the expediency or in expediency of any action in relation to his own vocation in life. He must not form habits which will be inexpedient with regard to that.

§ 31. There is, however, an *absolute* distinction of habits as morally good and bad. From this absolute stand-point we must, after all, decide what is for us allowable or forbidden, what is expedient and what inexpedient.

§ 32. As to its form, habit may be either passive or active. By passive habit is meant a habit of composure which surveys undisturbed whatever vicissitudes, either external or internal, may fall to our lot, and maintains itself superior to them all, never allowing its power of acting to be paralyzed by them. It is not, however, merely a stoical indifference, nor is it the composure which comes from inability to receive impressions — a sort of impassivity. It is that composure which is the highest result of power. Nor is it a selfish love of ease which intentionally withdraws itself from annoyances in order to remain undisturbed. It is not manifested because of a desire to be out of these vicissitudes. It is, while in them, to be not of

them. It is the composure which does not fret itself over what it cannot change. The soul that has built for itself this stronghold of freedom within itself may vividly experience joy and sorrow, pain and pleasure, and yet serenely know that it is intrenched in walls which are inaccessible to their attacks, because it knows that it is infinitely superior to all that may chance or change. What is meant by active habit in distinction from passive habit is found in our external activity, as skill, facility, readiness of information, etc. It might be considered as the equipping of our inner selves for active contest with the external world; while passive habit is the fortifying of our inner selves against the attack of the external world. The man who possesses habit in both these forms impresses himself in many different ways on the outer world, while at the same time, and all the time, he preserves intact his personality from the constant assaults of the outer world. He handles both spear and shield.

§ 33. All education, in whatever line, must work by forming habits physical, mental, or moral. It might be said to consist in a conversion of actions which are at first voluntary, by means of repetition, into instructive actions which are performed, as we say, naturally—*i. e.*, without any conscious volition. We teach a child to walk, or he teaches himself to walk by a constant repetition of the action of the will upon the necessary muscles; and, when the thinking brain hands over the mechanism to the trained spinal cord, the anxious, watchful look disappears from the face, and the child talks or laughs as he runs: then that part of his education is completed. Henceforth the attention that had been necessary to manage the body in walking is freed for other work. This is only an illustration, easily understood, of what takes place in all education. Mental and moral acts, thoughts, and feelings in the same way are, by repetition, converted into habits and become our nature; and character, good or bad, is only the aggregate of our habits. When we say a person has no character, we mean exactly this: that he has no fixed habits. But, as the great end of human life is freedom, he must be above even habit. He must not be wholly a machine of habits, and education must enable him

to attain the power of breaking as well as of forming habits, so that he may, when desirable, substitute one habit for another. For habits may be (§ 29), according to their nature, proper or improper, advantageous or disadvantageous, good or bad; and, according to their form, may be (§ 32) either the acceptance of the external by the internal or the reaction of the internal upon the external. Through our freedom we must be able, not only to renounce any habit formed, but to form a new and better one. Man should be supreme above all habits, wearing them as garments which the soul puts on and off at will. It must so order them all as to secure for itself a constant progress of development into still greater freedom. In this higher view habits become thus to our sight only necessary accompaniments of imperfect freedom. Can we conceive of God, who is perfect Freedom, as having any habits? We might say that, as a means toward the ever-more decided realization of the Good, we must form a habit of voluntarily making and breaking off habits. We must characterize as bad those habits which relate only to our personal convenience or enjoyment. They are often not essentially blameworthy, but there lies in them a hidden danger that they may allure us into luxury or effeminacy. It is a false and mechanical way of looking at the affair to suppose that a habit which had been formed by a certain number of repetitions can be broken off by an equal number of refusals. We can never utterly renounce a habit which we decide to be undesirable for us except through decision and firmness.

§ 34. Education, then, must consider the preparation for authority and obedience (§ 17); for a rational ordering of one's actions according to universal principles, and, at the same time, a preservation of individuality (§ 18); for work and play (§ 25); for habits of spontaneity or originality (§ 28). To endeavor by any set rules to harmonize in the pupil these opposites will be a vain endeavor, and failure in the solution of the problem is quite possible by reason of the freedom of the pupil, of surrounding circumstances, or of mistakes on the part of the teacher, and the possibility of this negative result must, therefore, enter as an element of calculation into the work

itself. All the dangers which may in any way threaten the youth must be considered in advance, and he must be fortified against them. While we should not intentionally expose the youth to temptation in order to prove his strength of resistance, neither should we, on the other hand, endeavor to seclude him from all chance of dangerous temptation. To do the former would be satanic; while to do the latter would be ridiculous, useless, and in fact dangerous in the highest degree, for temptation comes more from within than from without, and any secret inclination will in some way seek, or even create, its own opportunity for gratification. The real safety from sin lies, not in seclusion of one's self from the world¹—for all the elements of worldliness are innate in each individual—but in an occupying of the restless activity in other ways, in learning and discipline; these being varied as time goes on, according to the age and degree of proficiency. Not to crush out, but to direct, the child's activity, whether physical or mental, is the key to all real success in education. The sentimentalism which has, during the last few years, in this country (the United States), tended to diminish to so great an extent the actual work to be performed by our boys and girls, has set free a dangerous amount of energy whose new direction gives cause for grave alarm. To endeavor to prevent the youth from all free and individual relations with the real world, implies a never-ending watch kept over him. The consciousness of being thus "shadowed" destroys in the youth all elasticity of spirit, all confidence, and all originality. A constant feeling of, as it were, a detective police at his side obscures all sense of independent action, systematically accustoming him to dependence. Though, as the tragic-comic story of Peter Schlemihl shows, the loss of a man's own shadow may involve him in a series of fatalities,² yet to be "shadowed" constantly by a companion, as in the pedagogical system of the Jesuits, undermines all naturalness. And, if we endeavor to guard too strictly against what is evil and wrong, the pupil reacts, bringing all his intelligence into the

¹ "When me they fly, I am the wings."—*Emerson*.

² The story of Peter Schlemihl, by Chamisso, may be read in the English translation published in "Hedge's German Prose Writers."

service of his craft and cunning, till the would-be educator stands aghast at the discovery of such evil-doing as he had supposed impossible under his strict supervision. Within the circle of whatever rules it may be found necessary to draw around the young there must always be left space for freedom. Pupils should always be led to see that all rules against which they fret are only of their own creation ; and that as grave-stones mark the place where some one has fallen, so every law is only a record of some previous wrong-doing. The law "Thou shalt not kill" was not given till murder had been committed. In other words, the wrong deed preceded the law against it, and perfect obedience is the same as perfect freedom. No obedience except that which we gain from the pupil's own convictions has real educational significance.

§ 35. If there appears in the youth any decided deformity opposed to the ideal which we would create in him, we should at once inquire into its history and origin. The negative and positive are so closely related, and depend so intimately on each other, in our being that what appears to us to be negligence, rudeness, immorality, foolishness, or oddity may arise from some real necessity of the pupil which in its process of development has only taken a wrong direction.

§ 36. If it should appear, on such examination, that the wrong action was the result of avoidable ignorance, of caprice, or willfulness on the part of the pupil, this calls for a simple prohibition on the part of the teacher, no reason being assigned. His authority must be sufficient for the pupil without any reason. When the fault is repeated, and the pupil is old enough to understand, then only should the grounds of the prohibition be stated with it. This should, however, be done in few words, and the educator must never allow himself to lose, in a doctrinal lecture, the idea of discipline. If he do, the pupil will soon forget that it was his own misbehavior which was the cause of all the remarks. The statement of the reason must be honest, and must be presented to the youth on the side most easy for him to appreciate. False reasons are not only morally wrong, but they lead the mind astray.

We also commit a grave error when we try to unfold to the youth all the possible consequences of his wrong act, for those possible consequences are too far off to affect his mind. The long lecture wearies him, especially if it be in a stereotyped form; and with teachers who are fault-finding, and who like to hear themselves talk, this is apt to be the case. Still more unfortunate would it be if we really should affect the lively imagination of a sensitive youth by our description of the wretchedness to which his wrong-doing, if persisted in, might lead him, for then the conviction that he has already taken one step in that direction may produce in him a fear which in the future man may become terrible depression and lead to degradation.

§ 37. If to censure we add the threat of punishment, we have then what in common language is called scolding.

If threats are made, the pupil must be made to feel that they will be faithfully executed according to the word.

The threat of punishment is, however, to be avoided; for circumstances may arise which will render its fulfillment not only objectionable, but wrong, and the teacher will then find himself in the position of Herod and bound "for his oath's sake" to a course of action which no longer seems the best. Even the law in affixing a penalty to definite crimes allows a certain latitude in a maximum and minimum of awarded punishment.

§ 38. It is only after other means of reformation have been tried, and have failed, that punishment is justifiable for error, transgression, or vice. When our simple prohibition (§ 36), the statement of our reason for the prohibition (§ 36), and threat of punishment (§ 37) have all failed, then punishment comes and intentionally inflicts pain on the youth in order to force him by this last means to a realization of his wrong-doing. And here the punishment must not be given for general bad conduct or for a perverse disposition — those being vague generalities — but for a special act of wrong-doing at that time. He should not be punished because he is naturally bad or because he is generally naughty, but for this one special and particular act which he has committed. Thus the punishment will act on the

general disposition, not directly, but through this particular act, as a manifestation of the disposition. Then it will not accuse the innermost nature of the culprit. This way of punishment is not only demanded by justice, but it is absolutely necessary in view of the fact of the sophistry inherent in human nature which is always busy in assigning various motives for its actions. If the child understands, then, that he is punished for that particular act which he knows himself to have committed, he cannot feel the bitter sense of injustice and misunderstanding which a punishment inflicted for general reasons, and which attributes to him a depravity of motives and intentions, so often engenders.

§ 39. Punishment as an educational means must, nevertheless, be always essentially corrective, since it seeks always to bring the youth to a comprehension of his wrong-doing and to a positive alteration in his behavior, and, hence, has for its aim to improve him. At the same time it is a sad testimony of the insufficiency of the means which have been previously tried. We should on no account aim to terrify the youth by physical force, so that to avoid that he will refrain from doing the wrong or from repeating a wrong act already done. This would lead only to terrorism, and his growing strength would soon put him beyond its power and leave him without motive for refraining from evil. Punishment may have this effect in some degree, but it should, above all, be made to impress deeply upon his mind the eternal truth that the evil deed is never allowed in God's universe to act unrestrained and according to its own will, but that the good and true is the only absolute power in the world, and that it is never at a loss to avenge any contradiction of its will and design.

It may be questioned whether the moral teaching in our schools be not too negative in its measures; whether it do not confine itself too much to forbidding the commission of the wrong deed, and spend too little force in securing the performance of the right deed. Not a simple refraining from the wrong, but an active doing of the right would be the better lesson to inculcate.

In the laws of the state the office of punishment is first to

satisfy justice,³ and only after this is done can the improvement of the criminal be considered. If government should proceed on the same basis as the educator, it would make a grave mistake, for it has to deal, not with children, but with adults, to whom it concedes the dignity of full responsibility for all their acts. It has not to consider the reasons, either psychological or ethical, which prompted the deed. The actual deed is what it has first of all to deal with, and only after that is considered and settled can it take into view any mitigating circumstances connected therewith, or any peculiarity of the individual. The educator, on the other hand, has to deal with those who are immature and only growing toward responsibility. As long as they are under the care of a teacher, he is at any rate partially accountable for what they do. We must never confound the nature of punishment in the State with that of punishment as an educational means.

§ 40. As to punishment, as with all other work in education, it can never be abstractly determined beforehand, but it must be regulated with a view to the individual pupil and his peculiar circumstances. What it shall be, and how and when administered, are problems which call for great ingenuity and tact on the part of the educator. It must never be forgotten that punishments vary in intensity at the will of the educator. He fixes the standard by which they are measured in the child's mind. Whipping is actual physical pain, and an evil in itself to the child. But there are many other punishments which involve no physical pain, and the intensity of which, as felt by the child, varies according to an artificial standard in different schools. "To sit under the clock" was a great pun-

³ That is, punishment is retributive and not corrective. Justice requires that each man shall have the fruits of his own deeds; in this it assumes that each and every man is free and self-determined. It proposes to treat each man as free, and as the rightful owner of his deed and its consequences. If he does a deed which is destructive to human rights, it shall destroy his rights and deprive him of property, personal freedom, or even of life. But corrective punishment assumes immaturity of development and consequent lack of freedom. It belongs to the period of nurture, and not to the period of maturity. The tendency in our schools is, however, to displace the forms of mere corrective punishment (corporal chastisement), and to substitute for them forms founded on retribution — *e. g.*, deprivation of privileges. See secs. 42 and 43.

ishment in one of our public schools — not that the seat was not perfectly comfortable, but that one was never sent there to sit unless for some grave misdemeanor. The teacher has the matter in his own hands, and it is well to remember this and to grade his punishments with much caution, so as to make all pass for their full value. In some schools even suspension is so common that it does not seem to the pupil a very terrible thing. “Familiarity breeds contempt,” and frequency implies familiarity. A punishment seldom resorted to will always seem to the pupil to be severe. As we weaken, and in fact bankrupt, language by an inordinate use of superlatives, so, also, do we weaken any punishment by its frequent repetition. Economy of resources should be always practiced.

§ 41. In general, we might say that, for very young children, corporal punishment is most appropriate; for boys and girls, isolation; and for older youth, something which appeals to the sense of honor.

§ 42. (1) Corporal punishment implies physical pain. Generally it consists of a whipping, and this is perfectly justifiable in case of persistent defiance of authority, of obstinate carelessness, or of malicious evil-doing, so long or so often as the higher perceptions of the offender are closed against appeal. But it must not be administered too often, or with undue severity. To resort to deprivation of food is cruel. But, while we condemn the false view of seeing in the rod the only panacea for all embarrassing questions of discipline on the teacher's part, we can have no sympathy for the sentimentality which assumes that the dignity of humanity is affected by a blow given to a child. It is wrong thus to confound self-conscious humanity with child-humanity, for to the average child himself a blow is the most natural form of retribution, and that in which all other efforts at influence at last end. The fully grown man ought, certainly, not to be flogged, for this kind of punishment places him on a level with the child; or, where it is barbarously inflicted, reduces him to the level of the brute, and thus absolutely does degrade him. In English schools the rod is said to be often used; if a pupil of the first

class, who is never flogged, is put back into the second, he becomes again subject to flogging. But, even if this be necessary in the schools, it certainly has no proper place in the army and navy.

§ 43. (2) To punish a pupil by isolation is to remove him temporarily from the society of his fellows. The boy or girl thus cut off from companionship, and forced to think only of himself, begins to understand how helpless he is in such a position. Time passes wearily, and he is soon eager to return to the companionship of parents, brothers and sisters, teachers and fellow-students.

But to leave a child entirely by himself without any supervision, and perhaps in a dark room, is as wrong as to leave two or three together without supervision. It often happens when they are kept after school by themselves that they give the freest rein to their childish wantonness, and commit the wildest pranks.

§ 44. (3) Shutting children up in this way does not touch their sense of honor, and the punishment is soon forgotten, because it relates only to certain particular phases of their behavior. But it is quite different when the pupil is isolated from his fellows on the ground that by his conduct he has violated the very principles which make civilized society possible, and is, therefore, no longer a proper member of it. This is a punishment which touches his sense of honor, for honor is the recognition of the individual by others as their equal, and by his error, or by his crime, he had forfeited his right to be their equal, their peer, and has thus severed himself from them.

The separation from them is thus only the external form of the real separation which he himself has brought to pass within his soul, and which his wrong-doing has only made clearly visible. This kind of punishment, thus touching the whole character of the youth and not easily forgotten, should be administered with the greatest caution lest a permanent loss of self-respect follow. When we think our wrong-doing to be eternal in its effects, we lose all power of effort for our own improvement.

This sense of honor cannot be developed so well in family life, because in the family the ties of blood make all in a certain sense equal, no matter what may be their conduct. He who has by wrong-doing severed himself from society is still a member of the family, and within its sacred circle is still beloved, though it may be with bitter tears. No matter how wrong he may have been, he still can find there the deepest sympathy, for he is still father, brother, etc. It is in the contact of one family with another that the feeling of honor is first developed, and still more in the contact of the individual with an institution which is not bound to him by any natural ties, but is an organism entirely external to him. Thus, to the child, the school and the school-classes offer a means of development which can never be found in the family.

This fact is often overlooked by those who have the charge of the education of children. No home education, no private tutorship, can take the place of the school as an educational influence. For the first time in his life the child, on being sent to school, finds himself in a community where he is responsible for his own deeds, and where he has no one to shield him. The rights of others for whom he has no special affection are to be respected by him, and his own are to be defended. The knowledge gained at the school is by no means the most valuable acquisition there obtained. It must never be forgotten by the teacher that the school is an institution on an entirely different basis from the family, and that personal attachment is not the principle on which its rule can be rightly based.

§ 45. This gradation of punishment from physical pain, up through occasional isolation, to the touching of the innermost sense of honor is very carefully to be considered, both with regard to the different ages at which they are severally appropriate and to the different discipline which they necessarily produce. Every punishment must, however, be always looked at as a means to some end, and is thus transitory in its nature. The pupil should always be conscious that it is painful to the teacher to punish him. Nothing can be more effectual as a means of cure for the wrong-doer than to perceive in the man-

ner and tone of the voice, in the very delay with which the necessary punishment is administered, that he who punishes also suffers in order that the wrong-doer may be cured of his fault. The principle of vicarious suffering lies at the root of all spiritual healing.

III. The Limits of Education.

§ 46. As far as the external form of education is concerned, its limit is reached in the instrumentality of punishment in which we seek to turn the activity which has been employed in a wrong direction into its proper channel, to make the deed positive instead of negative, to substitute for the destructive deed one which shall be in harmony with the constructive forces of society. But education implies its real limits in its definition, which is to build up the individual into theoretical and practical Reason. When this work goes properly on, the authority of the educator, as authority, necessarily loses, every day, some of its force, as the guiding principles come to form a part of the pupil's own character, instead of being super-imposed on him from without through the mediation of the educator. What was authority becomes now advice and example; unreasoning and implicit obedience passes into gratitude and affection. The pupil wears off the rough edges of his crude individuality, which is transfigured, so to speak, into the universality and necessity of Reason, but without losing his identity in the process. Work becomes enjoyment, and Play is found only in a change of activity. The youth takes possession of himself, and may now be left to himself. There are two widely differing views with regard to the limits of education; one lays great stress on the powerlessness of the pupil and the great power of the teacher, and asserts that the teacher must create something out of the pupil.

This view is often seen to have undesirable results, where large numbers are to be educated together. It assumes that each pupil is only "a sample of the lot" on whom the teacher is to affix his stamp, as if they were different pieces of goods

from some factory. Thus individuality is destroyed, and all reduced to one level, as in cloisters, barracks, and orphan asylums, where only one individual seems to exist. Sometimes it takes the form of a theory which holds that one can at will flog anything into or out of a pupil. This may be called a superstitious belief in the power of education. The opposite extreme may be found in that system which advocates a "severe letting alone," asserting that individuality is unconquerable, and that often the most careful and circumspect education fails of reaching its aim because the inherent nature of the youth has fought against it with such force as to render abortive all opposing efforts. This idea of Pedagogy produces a sort of indifference about means and ends which would leave each individuality to grow as its own instinct and the chance influences of the world might direct. The latter view would, of course, preclude the possibility of any science of education, and make the youth only the sport of blind fate. The comparative power of inherited tendencies and of educational appliances is, however, one which every educator should carefully study. Much careless generalization has been made on this topic, and opinion is too often based upon some one instance where accurate observation of methods and influences have been wanting.

§ 47. Education has necessarily a definite *subjective limit* in the individuality of the youth, for it can develop in him only that which exists in him as a possibility. It can lead and assist, but it has no power to create. What nature has denied to a man education cannot give him, any more than it can on the other hand annihilate his original gifts, though it may suppress, distort, and measurably destroy them. And yet it is impossible to decide what is the real essence of a man's individuality until he has left behind him the years of growth, because it is not till then that he fully attains conscious possession of himself. Moreover, at this critical time many traits which were supposed to be characteristic may prove themselves not to be so by disappearing, while long-slumbering and unsuspected talents may crop out. Whatever has been forced upon a child, though not in harmony with his individu-

ality, whatever has been driven into him without having been actively accepted by him, or having had a definite relation to his culture — will remain perhaps, but only as an external foreign ornament, only as a parasitic growth which weakens the force of his real nature. But we must distinguish from these little affectations which arise from a misconception of the limits of individuality that effort of imitation which children and young people often exhibit in trying to copy in their own actions those peculiarities which they observe and admire in perfectly-developed persons with whom they may come in contact. They see a reality which corresponds to their own possibility, and the presentiment of a like or a similar attainment stirs them to imitation, although this external imitation may be sometimes disagreeable or ridiculous to the lookers-on. We ought not to censure it too severely, remembering that it springs from a positive striving towards true culture, and needs only to be properly directed, and never to be roughly put down.

§ 48. *The objective limit* of education consists in the means which can be applied for it. That the capacity for culture should exist is the first condition of success, but it is none the less necessary that it be cultivated. But how much cultivation shall be given to it must depend in very great degree on the means which are practicable, and this will undoubtedly again depend on the worldly possessions and character of the family to which the pupil belongs. If he comes of a cultivated and refined family, he will have a great advantage at the start over his less favored comrades; and, with regard to many of the arts and sciences, this limitation of education is of great significance. But the means alone will not answer. Without natural capacity, all the educational apparatus possible is of no avail. On the other hand, real talent often accomplishes incredible feats with very limited means; and, if the way is only once open, makes of itself a center of attraction which draws to itself as with magnetic power the necessary means. Moral culture is, however, from its very nature, raised above such dependence.

If we fix our thought on the subjective limit — that of individuality (§ 47) — we detect the ground for that indifference

which lays little stress on education (§ 46, end). If, on the other hand, we concentrate our attention on the means of culture, we shall perceive the reason of the other extreme spoken of—of that pedagogical despotism (§ 46) which fancies that it is able to prescribe and enforce at will upon the pupil any culture whatever, without regard to his special characteristics.

§ 49. Education comes to its *absolute limit* when the pupil has apprehended the problem which he is to solve, has comprehended the means which are at his disposal, and has acquired the necessary skill in using them. The true educator seeks to render himself unnecessary by the complete emancipation of the youth. He works always towards the independence of the pupil, and always with the design of withdrawing so soon as he shall have reached this stand-point, and of leaving him to the full responsibility for his own deeds. To endeavor to hold him in the position of a pupil after this time has been reached would be to contradict the very essence of education, which must find its result in the independent maturity of the youth. The inequality which formerly existed between pupil and teacher is now removed, and nothing becomes more oppressive to the former than any endeavor to force upon him the authority from which, in reality, his own efforts have freed him. But the undue hastening of this emancipation is as bad an error as an effort after delay. The question as to whether a person is really ready for independent action—as to whether his education is finished—may be settled in much the same way in education as in politics. When any people has progressed so far as to put the question whether they are ready for freedom, it ceases to be a question; for, without the inner consciousness of freedom itself, the question would never have occurred to them.

§ 50. But, although the pupil may rightly now be freed from the hands of instructors, and no longer obtain his culture through them, it is by no means to be understood that he is not to go on with the work himself. He is now to educate himself. Each must plan out for himself the ideal toward which he must daily strive. In this process of self-transformation a friend may aid by advice and example, but he cannot educate,

for the act of educating necessarily implies inequality between teacher and pupil. The human necessity for companionship gives rise to societies of different kinds, in which we may, perhaps, say that there is some approach to educating their members, the necessary inequality being supplied by various grades and orders. They presuppose education in the usual sense of the word, but they wish to bring about an education in a higher sense, and, therefore, they veil the last form of their ideal in mystery and secrecy.

By the term *Philister* the Germans indicate the man of a civilized state who lives on, contented with himself and devoid of any impulse towards further self-culture. To one who is always aspiring after an Ideal, such a one cannot but be repulsive. But how many are they who do not, sooner or later, in mature life, crystallize, as it were, so that any active life, any new progress, is to them impossible?

FICHTE'S CRITICISM OF SCHELLING.

[TRANSLATED FROM THE GERMAN OF J. G. FICHTE.]

BY A. E. KROEGER.

II. Concerning the Fate Hitherto Experienced by the Science of Knowledge.

1. Description of the state of our Literature generally.—It is by no means our purpose here to repeat how the public has conducted itself towards the Science of Knowledge ever since its first appearance, but to explain this conduct and to show up its grounds; and since these grounds lie, doubtless, in the state of our literature generally, as it has existed and still exists, we shall best give the proposed information by first furnishing a thorough description of this state of our general literature.

The pain and deep sorrow which overcomes us at being forced to leave the pure ether of profound thought, wherein

we would gladly dwell always, and to descend into the abyss of intellectual and moral error, it is not necessary to describe. Surely it is not inclination which leads us to this business; we have to overcome a deep repugnance in resolving to undertake it; and this resolve we have formed, not because we think our work will really help the matter, but because it is our duty to act, as if it might possibly be of use in it, and because it is at any rate necessary that the whole evil should be shown up in all its loathsomeness, so that a wholesome terror may strike the public. Nay, even though it were true that there is no help for the present generation, and that this age must be abandoned as beyond salvation, it would still be necessary to raise up this terror for the new up-growing generation, that it may not follow the footsteps of its predecessors.

I have only two general remarks to premise:

Firstly. Whether that which I shall designate as the character of our learned public is valid for all of its members without exception, or only for the great majority of them, may be left undetermined; and I will cheerfully admit the latter to those of my scientific readers who are conscious of never having uttered, in speech or writing, such statements as I shall hereafter cite—for it certainly is not pleasant for me to imagine the number of the guilty ones larger than it is. My remarks refer only to those who—after a severe self-examination—feel themselves referred to.

Secondly. The general reply to such reproaches as ours is this: “You have exaggerated the matter, or spoken altogether untruthfully; we are not as you describe us to be.” The ground of this their mistake—which ground, however, generally remains concealed to them—is this: in all their utterances they only say what has been said; and this their saying again of sayings never allows them to get to say the subject-matter itself. Now, they cannot but believe that we do things in the same way. They believe that we are desirous of reporting their speech, of saying what they say; and thus, of course, it happens that, in our characteristics of them, they do not discover their own sayings, and hence conclude that they

are shamefully traduced. But our desire was rather to say what they really and in truth *are* and *live*. (Thus their *life* can be shown up very well by what they *are*; for, whether they know it or not, their life is the source and premise of their being.) Hence, if it should happen that, in trying to explain also in words this their life and being, they say the very reverse of what we assert them to be, the explanation is as follows: that which they thus say of themselves is not an expression of their true being, but rather a speech committed to memory, a mask bought in market, wherewith they badly enough conceal their natural skin.

And now to our business. That the organ for speculative philosophy, which alone makes clear, puts in order, and furnishes the ground for all other knowledge, and without which all meddling with the sciences is only a blind, accidental groping—that this organ, I say, is utterly wanting in the present cultivators of science, has already been shown in our former remarks, and has been proved by the fate of our own speculation, to the satisfaction of any one who is able to understand us. Now, it would not be so much of a reproach for our present age to share the lack of this organ with all former ages, did not this great distinction arise: that those previous ages never heard a word of true speculation, whilst, during the last twenty-five years, two different authors, using each an utterly independent style and method, have in a continuous series of writings placed before the public the rules of true speculation, and exemplified them on various subjects.

But what shall I say, when it is as clear as sunlight that amongst all these cultivators of science even the conception of the science itself, in its purely formal and external qualities, has almost vanished—nay, that they internally tremble at this conception, and passionately oppose the slightest attempt made to awaken its memory, and that the only consolation of their life is the hope that a science will never be realized, and the only object of their endeavors is to prevent its realization. Would not this consideration lead us to imagine that in the place of an experienced, learned public we have now to deal

with violent enemies of science, who hold up the mask of learnedness only in order to be the more secure and victorious in their attacks upon science?

Science, as sure as it is science, has an absolute and unchangeable evidence in itself, absolutely annihilating all doubt and all possibility of a doubt in it; and, since this evidence can be possible only in one unchangeable manner, it results that science has its firm, unchangeable, external form. This belongs to the essence of science, as such; only on this condition is it science; and thus it has always been held and believed wherever a scientific public has had existence. But what do our pretended men of learning hold in respect to this point? How many may there be amongst them who have not at one time or another allowed expressions like these to escape their lips: "Somebody considers himself alone wise and a philosopher;" "Somebody wants Philosophy to be a complete whole;" "It is necessary in meeting the objections of opponents to place one's self on their stand-point;" (as if there could be more than one stand-point for each truth!) "In investigating truth one ought not to be so very strict, but ought to live and let live," etc., by all of which expressions the Science of Knowledge is asked to abandon its absolute, fundamental character? All these expressions are uttered by them, moreover, as axioms which no sensible man can doubt, with a childish *naïveté*, and so utterly without a presentiment of their own absurdity that there is no doubt they expect not only the approval of all other men, but are even convinced that the scientific man, whom they accuse of arrogating to himself alone wisdom and philosophy, has never considered the matter in the light of these their axioms, and that now, since they have reminded him, he cannot help seeing it and being thoroughly ashamed of himself. Now, supposing these same authors and learned men should at some other time, in speaking of the nature of science, express themselves very much as we have done above; would this be considered their earnest meaning? How could it? They would only *say* it, but *believe* the contrary; for, in judging present facts, they always act by the contrary — and some of them even exemplify this by adding to

such merely *said* confessions with a touching *naïveté*, “ This is certainly true *in the abstract*, but by no means *in the concrete* ; ” whereby they, indeed, clearly confess that they hold the above conception of a science to be only the empty conception of a clownish and playful thinking, which will never, they trust, become earnest.

The inner essence of science is grounded upon itself, and makes itself absolutely through itself, and out of itself, as it makes itself ; it absolutely annihilates all arbitrariness, and the very first requisite of a scientific man is this : that all inclinations in him should submit to the holy law of truth, and that he should be forever resolved to submit in quiet resignation to whatever shall force itself upon him as the truth. Can we believe that this condition has been complied with — or, merely, that they consider it possible that anybody should require it of them — by men who seriously tell us, in the presence of the whole public, that our truth does not please them, who begin to describe their feelings when they are requested to accept it, and who then sketch out the features of a truth which would please them, requesting us to alter our truth in conformity to these sketches of theirs ; and who, when we refuse, get mad and passionate, and complain that we want to tear their hearts out of their bodies — which, indeed, we gladly would do if we knew how, but in this our inability leave the matter to Divine Grace ? Or shall we believe that this condition has been complied with by those who, independently of the content of our doctrine, complain that the form is not sweet enough, who require us to teach them kindly, and who want to know why we have applied to them such rough shakes, which have nearly disturbed the placid serenity of their dear souls, and who request us to improve and to sugar-coat our medicine in future, since, otherwise, they are resolved (as a well-deserved punishment for us) not to be taught by our teachings. And yet it is not possible to believe that there are many exceptions to this mode of thinking, when we see how our new doctrine is opposed by no other weapons than those of disinclination, and those of a desire to create that same feeling in the breasts of readers, whose sympathy

and equal ignorance are expected, and of expressed surprise that this new doctrine should be so immensely at variance with common opinion — as if one ought to accept something as true because it is the common opinion !

The very first knowledge which is to be required of the man of science is this : that science is not a mere play and pastime, not a luxury to heighten the delights of life, but something to be demanded of all mankind, and the only possible source of all its further development ; that truth is a blessing and the highest of all blessings, involving all other blessings ; whilst error is the source of all evil, is sin, and the source of all other sins and vices ; and that the man who checks truth and helps to propagate error commits the most grievous sin against the whole human race. Can this knowledge be supposed to exist in those who, throughout their whole lives and throughout all their writings and works, have evinced, and do evince, the most absolute indifference in regard to truth and error ; who continue every day of their lives to teach without ever *knowing* anything ; who, without the conviction that what they teach is truth, nevertheless continue to teach it, on the chance that they may have hit the truth, and who thus, having inwardly become one concrete hypocrisy and lie, yet continue to live on lying, and to eat, drink, and clothe themselves with lies ? I say without conviction, for it is a truth of heavenly clearness, which of itself alone secures to mankind the possession of truth, and which, although it discovers the corruption of those men, and is, therefore, hateful in their sight, cannot be given up ; this truth, namely, that Evidence carries along with it a specifically different inner and convincing power, which can never be on the side of error ; that every one can, therefore, know, under all circumstances of his life, whether his thoughts take hold of him with that power or not, and that, hence, every one, of whom it appears afterwards that he has been in error, must have known, at least — though he may not have recognized his error as error — that it did not take hold of him with the power of truth ; and that, hence, he might have known at first, if he had but considered maturely, that he did not recognize it as truth. Hence he can escape in no way the

proof that he has acted recklessly and without due respect of truth.

What can possibly be the source of this culpable recklessness? Only laziness, negligence, egotism, and deep moral corruption. Life everlastingly tears us out of ourselves and drives us hither or thither as it chooses, playing with us according to its caprice. To gather one's self together in opposition to this tendency, and thus to hold one's self until the end, costs exertion, self-denial, labor; and this hurts our tender flesh. It is already something, to but take hold of one's self thus at times; but, in order to attain the highest place in the highest of all sciences — speculation — it is necessary that this absolute self-control should have been practiced until it has become a complete art, and until it has become impossible ever to be hurried along by the current of blind imagination; and to get so far requires, again, a clear, sober, and considerate mode of living. How could the impotency of our present days, indeed, suffer such a state of things to come to pass?

But, even if it had been in their power to acquire this art, would they have had the will to acquire it; and would they have accounted this power to collect themselves their honor, or their disgrace? I say, their disgrace! For it is a long time since the rivalry with that nation¹ — which now so cruelly punishes us for our good intention and our inability to rival it — has made the very appearance of German earnestness, thoroughness, and diligence contemptible in our eyes, and has induced us to make a play of scientific pursuits, giving ourselves up wholly to the current of the notions that may strike us, as the only thing which is likely to make us appear in possession of the envied “ease of manner” of that nation. In order to be safe against appearing like pedants, we have become literary snobs, and have not succeeded even in that to any extent. I should like to make inquiry, particularly amongst our younger literary men, how many would rather have it said of them that truth came to them by a happy disposition of their nature, without much trouble or exertion, than that they found

¹ The French translation.

truth through diligence and earnest thought? How many of them would consider themselves more honored by the title of "a genius" than by being called industrious and careful thinkers? How many of them would not rather consider the latter epithet as disgrace to them, as signifying that they were rather limited and untalented minds, for which nature had done nothing at all! Thus their dreaminess and floating upon the current of self-arisen notions, which is so comfortable, has proved at the same time to be an honor; and, hence, we take more delight in it than in troublesome earnestness.

Now, why could not those men, who, as it has appeared in immeasurable clearness, did know so altogether nothing of science that even the conception of that science and the very first conditions of its acquirement were unknown to them — why could not those men, I say, have stopped pretending to be men of science, and have refrained from writing, teaching, and judging as if they were the most thorough scholars. Moreover, since the only possible motives of action, love of truth and of science, of which they never had a spark in them, could not have impelled them, they could have been so impelled only by such external motives as: wishing to pass for authorities, love of glory, and of other emoluments which are usually connected therewith. Sure enough, they *are* driven and inspired by these motives to such an extent that they hate and fear the real science, which they correctly prophesy will result in the loss of their own reputation, more than anything else, and that no means are too bad for them, by applying which they may hope to check the breaking of light at least so long as they live — live in a shameless battle for an existence a thousandfold forfeited by them, and which they themselves would curse if they had but a spark of honor in their breasts.

By this, their stupid self-conceit, therefore, are they so blinded and possessed that it leads them to the most ridiculous and incredible absurdities. While they always presuppose that no one is quite correct, and that a sure and absolute truth can nowhere be found, they yet forget this principle so utterly when it is to be applied to their own persons that all their arguments are based on the very opposite

principle, and that all their arguments presuppose the following : why, we who speak have undoubtedly the true truth inborn in us, and, hence, the man who contradicts us must necessarily be in the wrong — never considering that the man who contradicts them may take advantage of the same privilege of blind self-conceit for his own assertions. Nay, it has even been known to occur, and is still known to occur every day, that a man imagines himself to have stamped a doctrine with the infallible seal of condemnation by asserting that he cannot understand it, or that it seems so difficult to him as to make his head swim ; thus presupposing with truly childish *naïveté* that the whole world has the same exquisite opinion of himself which he cherishes, and that the whole world places that opinion as an absolute axiom higher than all its own judgments, and never reflecting, in the intoxication of his self-conceit, what would be the proper answer for him.

It is true the present description of the literary condition of our times has been drawn chiefly with a view to explain from it the fate which the Science of Knowledge has met hitherto ; but the times wherein I draw it will, perhaps, exonerate me, when I remark, at the same time, that the political condition² of our age, by which it seems, unless a miracle brings salvation in an unforeseeable manner, that all the culture and products of culture which mankind has attained in thousands of years must be doomed to destruction, until, after other thousands of years, savages and barbarians now unknown shall again begin the same path of civilization ; that this political condition, I say, has solely arisen from the condition of our literature. It has been coming upon us as a result of the general inability to take firmly hold of any one object, and to penetrate it in its true essence, and to *will* the remedy against this inability wholly and earnestly, without at the same time willing its opposite, and to carry it out with stern consequence, leaving aside all minor objects. But from whom, indeed, could the men who have decided our fate have learned this firmness, when the men in whose schools they were first taught, and

² The following passage refers to Napoleon's conquest of Germany.

from whom they still daily seek entertainment — though, perhaps, merely for the joke of the thing — give them no other example than that of utter dissoluteness? Wherever there is a literature, the literary men form their age, and, if they get rotten, everything else around rots only so much the more.

But, to return to our proper subject, how was it possible to make these men, who were yet in doubt concerning the first alphabet of all instruction, namely, whether science was at all possible, believe that a Science of Science was possible; or how could one have led these men, who were not at all capable of collecting their thoughts, and who boast of not being so, to the very highest and completest thinking? Nothing was to be expected but what really did result, namely, that they would turn the words and forms of this science into jokes for the amusement of their readers, and, if its author remained serious, heap abuse and anger upon him.

Two remarks in conclusion. If those who are hurt by this description should again utter their minds on the subject, they will most certainly repeat what they always say — that I have exaggerated and stated untruths. Not for their sake, but for the sake of a better future generation — if such a thing be possible — I now state that everything I have said rests on the announced axiom that each one who is afterwards discovered to have been in error might well have known at first that he was not convinced, and that he, therefore, cannot deny having acted recklessly and immorally. But that these men are in error in almost all of their assertions, a better future generation — had the possibility of such a better one not been so well provided against — would soon discover.

Next they will repeat what they also say every time, that I only wish to vent my passion; and for this assertion they will also find a plausible ground in the fact that they have not blessed me with their approval and laudations. Now, we have not kept from them that, so long as they are what they are, we heartily despise, not only them, but also their approval; but they are firmly convinced that it is altogether impossible that any man should not entertain the same admiring opinion of them which they cherish themselves. They will, therefore,

never put faith in this assurance of ours, but will hold it to be an empty pretext and a mask to hide something else. They will, therefore, not believe us again now, though we renew that assurance, and would like to have them take note that, in order to make one's approval an honor, one should first be honorable; and that we would thankfully accept their approval after they had first merited ours, but that until then we should consider it a great disgrace and a proof of badness on our own part if we did please them.

NOTES AND DISCUSSIONS.

SENTENCES IN PROSE AND VERSE.

Different persons took their special views of Nirvana among the Buddhists. They had their Kants and Hegels, who made their special interpretations.

All I have learnt of writing is to scratch a little. I have learnt to (sometimes) omit the word "very." These published discourses do not read as when delivered, so many years ago — fourteen years, is it [the essays]?

It is worth while to pay Henry surveyor's wages for doing other things. He is surely forecasting, and he does much more than is bargained for. When he does anything, I am sure the thing is there. He has that common sense, which is as good as Shakespeare's.

I wish to feel the water, as my tub at home is not large enough. I never have those changes of raiment, you speak of, in the spring, and I think I may have had the same towel this morning which I used yesterday. That [an old button] is a very ancient coin, left after the first deluge [bath at Walden Pond].

Thomas, when he is sick, is spleeny. He thinks he shall die, must go to his sister, and that he cannot earn half his wages; and it is all very dreadful. It seems miraculous how differently people view their colics and belly-aches. Some laugh at their dumps, and appreciate the satire, as they ought, at its value.

Walking out in the autumnal woods with G. B., he thought all Maud was filled with the witchery of the golden colors, but, on looking, he found only those two lines:

"And out he walked when the wind like a broken worldling wailed,
And the flying gold of the ruined woodlands drove thro' the air."

She is such a perfect little serenity — her *Serene Lowness*, we might call her.

The power of free testamentary disposition implies the greatest latitude ever given, in the history of the world, to the volition or caprice of the individual. — *Maine*.

There is no time unfavorable to the publication of a work of real merit. — *J. P. Kemble.*

If all the world were of one religion,
Many a living thing should die;
But I will never forget my true love,
Nor in any way his name deny.

— *Old ballad [Wiltshire].*

The lawless science of our law—
That codeless myriad of precedent,
That wilderness of single instances.

— *Tennyson.*

A woman, left alone with all her fears, which keep her company by night and day, and are most constant, fond, and faithful guests.

He is ordained to call, and I to come. — *Mrs. Browning.*

The tendency of the vulgar is to embody everything. — *Macaulay.*

The universe is but an atom before the vastness of one's self. — *Macready.*

The story is told of one of our generals of the guard, who complained because his soldiers had lost their step—"Go find me this step," said he. — *Tourgénéff.*

Man is descended from the *catarrhini*, or narrow-nosed apes. This is the *twenty-first special* stage of his development. — *Hæckel.*

I believe the Devil hath a Power to transpeciate a Man into a Horse. That Eve was edified out of the rib of Adam, I believe. — *Sir Thos. Browne.*

Women are certainly great fools, but Nature made them so. — *Mary Woolstonecraft.*

O Death, that makest Life so sweet,
O Fear, with mirth before thy feet,
What have ye yet in store for us —
The conquerors, the glorious?

His honor, rooted in dishonor, stood,
And faith unfaithful kept him falsely true.

— *Tennyson.*

Clouds in the evening sky more darkly gather,
And shattered wrecks lie thicker on the strand.

— *Von Salis.*

Zealous, yet modest, innocent, tho' free,
Patient of toil, serene amid alarms,
Inflexible in faith.

— *Beattie [Scotland].*

A rich, but deafening, concert—O gurglee-ee, O gurglee-ee, some of

the most liquid notes ever heard, as if produced by some of the water of the Pierian spring, flowing through some kind of musical water-pipe, and at the same time setting in motion a multitude of fine, vibrating metallic springs, like a shepherd merely meditating most enrapturing tunes on such a water-pipe [blackbirds].

If you make the *least* correct observation of nature this year, you will have occasion to repeat it, with illustrations, the next, and the season, and life itself, is prolonged.

They give you a piece of nature, and that is themselves, smacking their lips like a coach-whip [early New England writers].

The thunder-cloud is like the ovary of a perfect flower. Other showers are merely staminiferous or barren.

I walk with vast alliances; I am the Allied Powers—the Holy Alliance.

Warm and bright afternoon, with yellow butterflies in the washed road [September 21].

Those sentences are good and well-discharged which are like so many little resiliences from the spring-board of our life.

The apples and the melons seem at once to feed my brain.

What is the church-yard but a grave-yard?

I cannot stay to be congratulated; I would leave the world behind me.

Dear Lord! Thou art all grief and love,
But which Thou art most, none can prove.

—Henry Vaughan.

Chambers of rain, where heaven's large bottles lie.

—Henry Vaughan.

The busy wind all night
Blew thro' thy lodging, where thy own warm wing
Thy pillow was [a bird's nest].

—Henry Vaughan.

Bethink, poor heart, what chilling kind of jest
Mad Destiny, this tender stripling played,
For a warm breast of ivory to his breast,
It dropped a flat of marble on his head.

—Hafiz.

The roguish wind and I
Are surely an amorous pair;
He points his arrows by thine eyes,
He strokes thy flowing hair.

—Hafiz.

Kneel down, thou soft heart,
A good work mayst thou do;
O, pray for the dead
Whom thine eyelashes slew.

—Hafiz.

Hoard Knowledge in thy memory,
 An easy load to bear;
 Ingots of gold and diamonds
 Many others lug with care.

— *Hafiz.*

Fine tints without fine forms — the subterfuge of the blockhead. —
William Blake.

Think what it would be to educate a fool — to build a universe with
 farthing balls. — *William Blake.*

What an unequal world is this — not ruled by justice, or even a pre-
 tence at justice, but by circumstances alone, and external illusions.
 — *Mrs. Oliphant.*

Jesus felt His words were for eternity, so He trusted them to the
 uncertain air. — *Theodore Parker.*

Who shall attempt to foreshorten God? — *Theodore Parker.*

My eye roams to the stars, and returns to the frost on my window,
 which reflects their light. — *Theodore Parker.*

Impulse is but a quicker perception of reasons that prove the truth.
 — *Haydon.*

Adopt a resolution — rather, what resolution you like — then stand by
 it, and execute it with your whole might. Better a bad one than
 none at all. — *Frederick the Great.*

Elle étoit de nombre de ces personnes, qui sont si bonnes, que,
 pour ainsi dire, elles ne sont bonnes a rien. Les vieilles et les laides
 sont ordinairement le partage de bon Dieu. — *Wilhelmina of Prussia.*

I could not encounter the loneliness of the crowd. — *Macready.*

She is more beautiful than lovely. — *George McDonald.*

But now hath all, in a single day, vanished with thee; yes, all
 hast thou with thee swept, and, like a hurricane, art passed away. —
Electra [lament for Orestes].

To find her feet by singing rills,
 Adoring and alone —
 O'er grassy fields; to the still hills,
 Her solemn seat and throne.

— *E. G. Tuckerman.*

The sailing star
 That spurs Orion's heel.

— *E. G. Tuckerman.*

The last heart-breaking gleam of light
 That dies along the West.

— *E. G. Tuckerman.*

The house stands vacant in its green recess,
 Absent of beauty as a broken heart;

The wild rain enters, and the sunset wind
Sighs in the chambers of their loveliness.

—*E. G. Tuckerman.*

Yet, in the gathering silence,
When the hill-tops faint and fail,
And the tearful tints of twilight now
No longer edge the vale ;
When the crimson-faded clouds have parted
To the westward, one by one—
In the passionate silence,
I love to steal alone,
By river and by runside,
Through knots of aspen gray,
And hearken for the voices
Of a music ceased away.

—*E. G. Tuckerman.*

WM. ELLERY CHANNING.

CONCORD, MASS., Oct. 1877.

SPIRITUAL EPIGRAMS.

[FROM THE "CHERUBIC WANDERER" OF ANGELUS SILESIVS.]

Ah, yes, I would a phoenix be,
And burn my heart in Deity !
Then should I dwell by His dear side,
And in the self of God abide.

I do believe there is no death,
Though every hour I die ;
Yet every hour, with new delight,
A better life draws nigh.

I hold that, since by death alone
God bids my soul go free,
In death a richer blessing is
Than all the world to me.

The cross of Golgotha can never save
Thy soul from deepest hell,
Unless with loving faith thou set'st it up
Within thy heart as well.

Out from thyself, thyself depart ;
God then shall fill thine empty heart ;
Cast from thy soul life's selfish dream —
In flows the Godhead's living stream.

FREDERICK R. MARVIN.

NEW YORK CITY.

A FRAGMENT OF THE "SEMITIC" PHILOSOPHY.

The distinguishing attribute of spirit is life or action. The distinguishing attribute of matter is existence or extension. Man, as an object of thought, as a phenomenon, is a dualism consisting of spirit and matter. But man in himself, as a subject, or author of action, is a unit, a spiritual unit, a spirit; being the spiritual or living element of the human dualism.

The life or action of man is that of his spirit, and in that action a dualism everywhere appears, consisting of two kinds of action, each concrete with the other; although in every act one kind is predominant. First, man's life or action is individual and social; his social action being joint with that of God, or other spirits like himself.

The individual action of man is unconscious and conscious, as well as immediate and mediate. His unconscious action is unfelt, and is, therefore, unknown or unnoticed at the time it takes place. It is only known afterwards by its effects, which are its signs, and by other circumstantial evidence. The body of man, for instance, with the sensuous ideas, are formed of matter by the spirit's unfelt, unconscious, immediate action, in order to facilitate its conscious action, and as instruments for that purpose. The proof of this fact needs only to be briefly suggested. The spirit is present as an interested agent when the body is repaired and constantly renewed, and when the ideas are made for its use; the material nature of the body is unquestioned, while the material nature of the somewhat analogous sensuous ideas appears from their want of life, and from their possession of proportionate extension, relative place, and other material attributes.

Man's conscious action is practical and speculative. Feeling, in all its varieties, including will, is only a mark of the phases of his conscious action. His practical conscious action, whether intended to affect matter only, or also spirit, is the moving and transforming of matter, and is always mediate; the body being the means or instrument which his spirit immediately employs to move other matter, and matter being the means which his spirit uses to communicate its action to other spirits.

Speculative conscious action, or thought, is immediate and mediate. Immediate speculative action, called presentative perception, or intuition, is the spirit's superficial view or knowledge of outward things in gross, or in bulk, while, and so far as, they are actually present to it. Its focus of clear and distinct knowledge is very limited.

Mediate speculative action, which may be called insight, uses the sensuous ideas with the body as its means or instruments of thought; and with them it penetrates the surface of outward things and analyzes them, collects and constructs for its deliberate scrutiny a counterpart in miniature of the whole outward world, of the distant as well as the near, of the absent as well as the present, and in the present both traces back, as its cause, the past, and forecasts, as its effect, the future. The body, viewed as an outward idea, or instrument of thought, furnishes the spirit a standard of comparison for extension, as the hand's breadth, the foot, the pace; and also for solidity, weight, and other sensible qualities of matter; and in its motion, as the immediate effect of spiritual action, it indicates spirit as the original immediate cause of all other motion. While the body furnishes a normal outward standard, the sensual or inward ideas are exact relative inward standards of comparison, being material images, infinitely small, of the outward objects which they represent, and precisely proportioned to them in size, form, relative position, color, sound, and other sensible qualities. As such the sensuous ideas are auxiliary bodies, performing an office for all reasoning analogous to the part enacted by the auxiliary magnitudes of the higher mathematics for mathematical reasoning. They are functions, and functions of functions—qualitative as well as quantitative functions; and functions of spiritual action as well as of mere matter.

Owing to the original or primordial dualism of the universe as known by man, every object of outward material nature exhibits to man's thought marks of spiritual action. The sensuous ideas themselves, with the body, as material objects, exhibit such marks. In the first place, they show marks of the action of man's own spirit, and thereby they enable the spirit, indirectly, to know itself, its own nature, in its own action—to see there a reflection of itself. In the next place, the sensuous ideas, as functions of outward objects, represent the marks of other spiritual action which those objects always display. Every finite object of organized matter, as such, with its sensuous idea, has the marks of the life or action of a finite spirit, animal or vegetable, inhabiting it; for in the organic object there is life, or something living, and whatever lives is spirit. Inorganic matter, constituting artificial objects, bears also marks of the action of finite spirit. But all natural or inartificial inorganic matter, as such, and as an infinite whole, by means of its corresponding body of sensuous ideas, presents a system of spiritual action manifested by uniformities of motion and of forces, all indicating unity of design, and all exactly analogous to the action of a finite spirit, except in

their perfection and infinity — which indicate their author to be a spirit of superhuman or infinite power — operating, therefore, immediately on matter, expressing in it his thought in and by his acts, and needing, therefore, no finite instrumentalities of thought or outward action, like man's sensuous ideas, or language, or body. This one infinite and designing or personal spirit man calls God.

Thus the individual speculative action of man, by means of the sensuous ideas as perfect instruments of thought, leads him to a knowledge of the action of God; which he sees to be as infinite, at once speculative and practical, and to constitute the highest uniformities or principles in Nature; being, as such, when viewed as addressed to man, the Law or Word of God, expressing His character and His providence. This knowledge is obtained by man independently of human language; so that, although human language is necessary for the communication of man's thought to man, it is not necessary in the communion of man with God. For this communion the sensuous ideas suffice, being common to all men, the learned and the unlearned. This fact — showing that by means of the sensuous ideas men may reach the highest principles without having the language to express them — will explain several interesting phenomena: as, the "speaking with tongues," mentioned in the New Testament, the mystic communion of unlearned men with God in revivals of religion, the wonders performed by unlettered genius in invention and in action, and occasionally the noble conduct of a whole nation according to the loftiest and purest principles.

In this way the Semitic or Divine Philosophy, by showing that all men, even without the culture acquired through artificial language, have in the sensuous ideas, as perfect instruments of thought, the means to attain the highest principles of speculative and of practical action, inspires the hope that, with the advantage of the moderate degree of such culture afforded by public education, the attainment of those principles and a corresponding individual and social conduct may in the future be confidently expected in the whole body of the common people. But the consideration of man's joint or social action must be reserved for another occasion.

PHILIP C. FRIESE.

BALTIMORE, MD., May, 1878.

PROFESSOR DR. OTTO PFLEIDERER, of the University of Berlin, will publish, the coming autumn, a new work on the Philosophy of Religion, in which he will take strong ground in favor of the Speculative view, as opposed to the Empiricism and Scepticism now prevalent.

ON THE MULTIPLICITY OF CONSCIOUS BEINGS.

[A correspondent writes us that the exposition of the question, "Does Correlation of Forces presuppose conscious Beings?" in the October number (p. 433) of 1877, seems inconclusive as regards the demonstration of the "Multiplicity of conscious Beings." The following supplement to that discussion is offered here:]

1. The one absolute conscious being knows himself; *i. e.*, makes himself an object, and thus makes himself *objective* — *i. e.*, creates.

2. This process of making *objective* necessarily involves the union of two incompatible or incongruent extremes: (*a*) the objectified, created object is, as such, passive, dependent: determined through another — *i. e.*, through the *ego*, or determining; (*b*) and yet this object, in order to be self-object, or the self of the absolute, must be self-active, self-object: self-determining, and not passive and dependent. This can only happen through the object's becoming self-active and creating its own nature — canceling its own passivity; and this is a process of evolution or development — culture, in short.

3. Hence the consciousness of the absolute can be only through the independent consciousness of its object (corollary: hence there cannot be one God without two, which are one); and this independence cannot be primary, but must be a *become* (although through a process which has eternally become, and is always becoming — *i. e.*, all its stages existing through all time) the "eternally begotten Son" (hence it, the object, starts always as a determined, and makes itself a determining).

4. But since the object is given as a determined, and has to elevate itself to a self-determining in order that the divine self-consciousness may be (or, in order that any self-determining may be — or, in order that Being may be *at all*), it follows that its initial existence is manifold, because all determined-ness, all passivity, all finitude, is through external limitation, at first, and is thus qualitative; and, secondly, it elevates itself to independence only through making its external limit or otherness to be *for it* — *i. e.*, a *reflection* of the first being — so that its dependence upon another becomes dependence upon itself, and it becomes a total and independent (in other words, its quality becomes quantity). The otherness of quality and finitude becomes *repetition of self*; hence otherness as it is found in quantity, and thus *indifference*. To restate this fourth position summarily, the form of objectivity in which the determinations are from without is that of finitude, and, hence, of multiplicity — that of *things*; and this stage is, and can be, canceled only into that of multiplicity of independent beings as its next phase.

5. Then the externality of quantity and multiplicity is a finitude,

again, which is impervious to all determination acting from without — *i. e.*, from the absolute — upon it. It can be removed only through the self-activity of the monads, or atomic ones, which, through their own energy, cancel in themselves the exclusiveness (or qualitative character) of their natures, and, by taking on the nature of others — *i. e.*, causing the determinations of others within themselves — become *generic*, or species, in place of atomic individual. This is education, or *culture* — by which the individual, who has nothing at start of his own, determines himself in the forms of the race, or of the universal, and thus elevates himself to a reflection (or image) of the self-determining absolute. Thus it involves Free Will, or Freedom and Independence, and yet results in a free conformity to the absolute. It involves, also, *Grace*, or the spectacle of the universal, given free as object to the Individual, so that he may determine himself in conformity therewith.

6. Thus the universe always presents, and has presented, the process of the *objective God* (the Son) in all the degrees of evolution at all times: (*a*) the unconscious part called Nature — being the realm of necessity or determination from without (or *excluding* negation, or limitation); (*b*) the realm of spirit, or of rational beings, each individual of which annuls the external determinations of nature, and wills itself universal determinations — *i. e.*, *total* determinations — in their place.

The plurality of individuality remains. But the unity of the realized, Absolute Will, is attained — the unity of institutions (of Society, State, Church, etc.).

This is the *Church* as the great invisible unity of all men striving to realize in themselves the Absolute. In this Church the Absolute becomes adequately objective; not in the visible Church simply — *i. e.*, in the living, bodily humanity — but in all intelligent beings living in the body and out of it; especially in the immortals growing perfect, after the body.

W. T. H.

POLYCRATES SENDS ANACREON FIVE TALENTS.

Two sleepless nights the sweet Anacreon spent
 What time Polycrates five talents sent:
 Distressed by anxious cares such wealth to keep,
 Whom only song had ever robbed of sleep,
 The third morn the gift returned, with word, "Bare love
 And verse were all the goods he knew the care of."

JOHN ALBEE.

THE JOURNAL OF SPECULATIVE PHILOSOPHY.

VOL. XII.]

OCTOBER, 1878.

[No. 4.]

CHRISTIANITY AND THE CLEARING-UP.

BY FRANCIS A. HENRY.

II. Remedies for the Present.

In a previous number we have given some account of the rise and progress of the Clearing-up, and of the causes which have led to the predominance of Understanding in the intellectual life of modern times. Even that imperfect sketch may help to show that the study of history supplies the true light in which to view the relation of Christianity to the modern world, and that, to know the age we live in, we must know all time as one in the natural descent that links the present to the past. Looking upon the “ages of faith,” we see a blending of light and shade, and the complex interaction of good and evil forces. The priest works upon the superstitious terrors of the ignorant, but his aim is the repression of barbarism. He uses craft, fraud, treachery—but he is contending against brute force. He builds up a spiritual tyranny—but violent disorders need violent remedies, and nothing short of tyranny could make itself heeded and respected in that confused and lawless time. Who wills the end must will the means; and if we acknowledge the immense services of the Mediæval Church to the cause of civilization, we should

remember that "had religion been more pure, it would have been less permanent, and that Christianity has been preserved by means of its corruptions." The Christian scholar will not borrow the rose-colored glasses of romancers or Pre-Raphaelites to look back lovingly on days that have had their trial and their failure. He will agree with the sagacious Milman that "Religion, to be herself again, must shake off, not merely the vices, but the virtues, of Mediæval Christianity." He must agree with the conviction of the Clearing-up that the Mediæval system fell from no mere *corruption*, if by that is meant a fungus growth of abuses that overlaid what at first was pure and faultless. In such a view the system itself escapes condemnation, for what is evil appears as foreign to it. Such a corruption would not have reached a vital part, and such a Church could have been reformed from within, by leaders like Gerson, D'Ailly, and Nicholas of Cusa. But it was a corrupt tree that brought forth that evil fruit; corrupt in root as in branch. It was the ripened growth of false principles, and no decay of an original excellence, that brought the revolution of the sixteenth century. Yet, for the very reason that we admit in the Mediæval Church a long course of error and the final prevalence of evil over good, we must contend that this affords the Clearing-up no ground for sweeping inferences against Christianity; for our capital charge against the Mediæval system is that it failed to comprehend, and, therefore, it perverted and misrepresented, the religion of Christ. Nor does it seem the part of wisdom to keep up, as some still do, a passionate outcry against the priest-craft and superstition of the past. The day of priest-craft and superstition is over for this modern cycle; the red rag that rouses the fury of a bull is not more powerless for actual harm; and whatever the sins of unenlightened ages, further denunciation of them at the present time seems superfluous. Indeed, denunciation is unphilosophic. Whatever the excesses of the objective principle, we should know them to be inevitable. There is a logic in life that exacts the extreme consequences of all principles of action. Man's education can only be through his own experience; he learns truth by means of error; and they

who have marked in what strange ways the action of evil is the ministry of good, may bow in confidence to the ordering of One whose ways are not as our ways, and in whose sight a thousand years are as one day.

Again, looking at the Clearing-up, we see in it a like mingling of the true and the false. It asserted the rights of the subject — that is, it insisted that all that demands my acknowledgment shall commend itself to my judgment as reasonable. But the “subject” for which this supremacy was claimed was not self-conscious Reason, but the self-conscious individual; not the universal *Ego*, but the finite, empirical *Ego*. Thus mistaking the abstract for the absolute, it took the reverse of wrong for right, and mere reaction against error for the establishing of truth; and while it thought itself winning the freedom of human reason, it was only enthroning the individual above society, and founding in his contingent will and private opinion the constitution of the Rational. And yet, one-sided and merely antithetic as it inevitably was, the Clearing-up was the one thing needful for the progress of humanity. Mind could not expand and develop until it had wrested itself loose from the shackles of authority and struck for independence; and we who have entered upon our heritage of modern freedom must feel a burden of deepest gratitude to those who in darker days did victorious battle to deliver the minds and souls of men from tyranny and social wrong. So feeling, we shall have no denunciation of the Clearing-up to utter in the interests of religion or the State; but we can see that the subjective movement has done its work; the reaction has run itself out; the negative has stretched itself to its ultimate tenuity. The lesson of history lies, in fact, in this nut-shell: the mediæval principle took us too far in one direction; the modern principle is taking us too far in the other. The age of belief maintained the rights of the object, and with such exclusiveness as to deny the rights of the subject; the age of understanding asserts the rights of the subject, and, with the same exclusiveness, denies the rights of the object. It is plain, then, that the one need of the present is a third principle that shall be comprehensive of subject and object; that shall include the

positive elements of each of the former principles without the negative elements of either. Life constituted on such a principle would be a true age of Reason. On this speculative plane all the spiritual truths of the human condition, grounded in the nature of God and of man, would be restored to consciousness in the light of understanding, and, through the principle of the Clearing-up, personal insight and assent. I have spoken of history as the evolution of the necessary process of thought. If this theory be correct, the age of speculative comprehension must, like the others, be eventually realized in history; and since the first two phases of the process have had already their historic day, and faint dawnings of a third can even now be seen by all who scan the East, we have reason to think that the final age of history is not far off from us.

It may be said that to make the course of history a necessary process is to render nugatory any active effort to hasten or to guide the progress of events; that a world which advances by its own necessity must bear humanity with it at its own speed to its own goal. But it is of no such external and mechanical necessity that I speak. The necessity that lives in Reason is *its own* necessity, and that is freedom. He reads history to little purpose who does not recognize amid its changing scenes the presence of a power which is steadily shaping its course to the end of spirit's full self-realization, and that power it is not in men to foil or defeat. This recognition is the true *Theodicea*, the vindication of God in history. Divine Providence dwells, not above us, in the clouds, interfering at odd times for a special purpose in the affairs of men, but with us, right here, amidst the events of every day; guiding, overruling the general movement of the world, so that its total result shall tell to the advancement of the supreme design. But it is also true that this divine work is carried on, not by passive, but self-active, forces. The planets roll with an unvarying motion, but man's life is a play-ground of contingency. His ignorance, his mistakes, his self-will, his narrow views and narrow aims, while they cannot thwart the divine end, yet can hinder and delay the process of spiritual

development, and make it difficult and painful. Had Brutus and Cassius understood the silent revolution which had already overthrown the Republic, they might have spared themselves a useless murder. Had Charles I. understood the demand for limitation of the royal power, the constitutional change might have been as peacefully effected as that of 1832. Thus, that human progress shall be smooth and steady, with least of friction, lapse, or digression, depends upon the intelligent action of men in each generation, their comprehension of the present in its genesis from the past, their quickness to discern in its tendencies the signs of the future. If Christian men will rise to a view of their faith as a religion for all time, the same yesterday, to-day, and forever — not because cast in the mould of any one epoch, or narrowed to the notions of any one clique, but one through the ages, because it meets the distinctive needs of every age, and in all times and places is one with the nature of man — then they will learn the secret of that unfailing power which makes Christianity as able to satisfy the world's mind to-day, as in former days it satisfied the world's heart. And to do this, Christian thought must meet fairly and answer fairly the thought of the Clearing-up. It will not do on the one hand to ignore or to denounce the Clearing-up, nor on the other hand to make with it a hasty and a hollow peace. Knowing the Clearing-up in its genesis, spirit, and tendencies, we know that it is the part of the Christian religion neither blindly to oppose it nor blindly to surrender to it, but to embrace and transcend it, winning its own consent to an abrogation which is not destruction, but fulfillment.

Looking with this purpose for a systematic expression of modern thought in regard to spiritual things, we find it in the First Part of Mr. Spencer's "*First Principles of a New Philosophy.*" The work scarcely bears out its title, for, like all who share the prevalent misunderstanding of Kant, Mr. Spencer remains in the general position of Hume, confronting an unbridged chasm between psychology and ontology. As Dr. Stirling has remarked, the Scottish School, so called, may be eliminated in its entirety from the history of philosophy. The

historic steps are from Locke to Hume, and from Hume to Kant. With Hume, Empiricism reached its logical culmination in the questions: How do we know that there is any substantiality under the phenomena of sense-perception? How do we know that there is any necessary connection in the course of things? How do we know that there is any real unity in this complex of fluctuating fancies and feelings which we call the soul or the self? In other words, knowledge being founded in experience, and experience being limited to the contingent and particular, how reach a knowledge of the universal and necessary? This is the question on which hangs the existence of philosophy, and of anything that can be called science or knowledge. The Scottish writers failed to answer it, or even to perceive its gravity; and, hence, their whole industry is philosophically beside the point. In falling back to Common Sense, Reid simply abandoned philosophy as such, and so, what he took for the positive basis of a practical knowledge became, with Hamilton, a negative basis for what he called philosophic ignorance. Paradoxical as it seems, the authority of Kant, whose one object was to find the answer to Hume, was claimed for this return to Humism. The general awe inspired by Hamilton's vast learning—which here, as in most other cases, shows itself to be the thinnest scratching of the mere surface—established his odd perversion of Kant as the long-sought exposition of that obscure and perplexing writer, whose immense achievement was distorted into this trivial result: "Things in themselves—Matter, Mind, God—all that is not finite, relative, and phenomenal, as bearing no analogy to our faculties, is beyond the verge of our knowledge." That is, the mind works under conditions, and can only know what is similarly conditioned. This was simple, and soon took popular phrase. We know only phenomena; the real object in itself we do not know. But is there any such unknown object? It is plain that its existence has become a gratuitous supposition. If there is no knowledge of the Absolute, we have no right to affirm its existence. If all that is known to exist involves relativity, that which is out of all relation cannot be known to exist. In Hamilton's view, the Absolute is a

purely negative conception — equivalent, as Dean Mansel expresses it, to the Inconceivable — and the logical inference is that no such Absolute exists. But here religious interests become affected, and so Hamilton falters at this step to positive denial and falls back on doubt (he calls it faith), abandoning logic to talk mistily about a “wonderful revelation which inspires belief in the existence of something beyond the sphere of comprehensible reality.” Here Mr. Spencer takes up the question to give it a somewhat unexpected turn. He holds without reserve the general doctrine of nescience. He admits, moreover, that what is unthinkable as positive — what is thought as pure negation — must be thought as non-existent. He shows that Hamilton and Mansel are driven by their premises to accept this logical conclusion, and that any hinting on their part at a positive consciousness of the unconditioned, “supernaturally at variance with the laws of thought,” is a virtual throwing-up of their whole philosophy. But for himself he contrives an escape from the logical conclusion by going outside of logic to “the more general or psychological aspect of the question.” Here he finds, “besides the definite consciousness formulated by logic, an indefinite consciousness which cannot be formulated,” and this consciousness assures us of the positive existence of the Unconditioned. “To say that we cannot know the Absolute is to affirm that there *is* an Absolute. In the denial of our power to learn *what* it is, lies the assumption *that* it is. * * *

The Noumenon, named as the antithesis of the Phenomenon, is throughout thought of as an actuality. It is impossible to conceive that our knowledge is a knowledge of Appearances only, without at the same time conceiving a Reality of which they are appearances; for appearance without reality is unthinkable. Strike out from the argument the terms Infinite and Absolute, and put in their place (Hamilton’s equivalent) ‘negation of conceivability,’ or (Mansel’s) ‘absence of conditions which render consciousness possible,’ and the argument becomes nonsense.” He proceeds to argue that the antithesis between Relative and Absolute, or Knowable and Unknowable, is a correlation, and, perceiving the mutual determination of correlatives, he points out that if the Absolute be conceived as mere negation, the conception of the

Relative itself disappears. The Relative, he says, is existence under conditions; the abstraction of these conditions is the abstraction of them *only*, leaving an indefinite, but positive, something as a permanent element of thought. The tenability of this position will be considered later.

The unconditioned, then, exists, but since it is unconditioned, it is in no possible way further to be known; we know that it is — we cannot know anything about it. We come, says Mr. Spencer, to this “negative result: that the reality existing behind all appearances must ever be unknown.” We see in these passages a dualism that was unknown to the materialism of the last century. For that the immediate, sensuous object was the ultimate and only reality. Mr. Spencer now asserts that everything immediate is *phenomenal*, is a manifestation of an essence; but when he says that that essence is essentially inscrutable, and must ever be unknown, he cuts his own ground from under him. If the phenomenon *is* phenomenon, it manifests the essence, and then essence is not unknowable, nor unknown. But if the phenomenon does not manifest the essence, then it is no *phenomenon*, no manifestation of aught but itself; consequently, it exists independently of essence; consequently, there is no need of any essence, and the hypothesis of an unknowable essence is purely gratuitous, and falls to the ground. We must conclude, then, to an essence manifested and known, or to no essence at all. And since Mr. Spencer tells us that “appearance without reality is unthinkable,” he is bound to take the former alternative. This would lead him to recast the sentence above cited: “It is impossible to conceive that our knowledge is a knowledge of appearances only, without at the same time conceiving a reality of which they are appearances; for appearance without reality is unthinkable.” A slight modification would make it an adequate statement: It is impossible to conceive that our knowledge is a knowledge of appearances *only*, and not at the same time a knowledge of the reality of which they are appearances; for as appearance without reality is unthinkable, so knowledge of appearance without knowledge of reality is equally unthinkable.

Still, in this 26th section, Mr. Spencer is not wanting in

originality and acuteness ; he even comes within a step of the speculative position as to the negative. He holds the general view that the absolute is a negative ; for, like the rest, he puts all positive determination in *external* conditions, never asking where *they* come from ; but, unlike the rest, he sees that this negative is not a *mere* negative, that it does not vanish into emptiness. But a persistent negative is not merely a correlative — it is negation of negation, or a self-related. If he had taken this step to self-relation, the whole matter would have turned over in his hands, and he would have seen that the true negative is the relative, the conditioned, and that this is the immanent negation of the self-conditioned absolute. Without this further step, however, his criticism of Hamilton and Mansel remains quite ineffective. He does not find his way out of nescience, but falls back into the slough even more hopelessly. The very settling the question of the absolute's existence settles more firmly the impassable limits of human knowledge, and Mr. Spencer's philosophy results in the extreme of distinctly subjective skepticism. It is a complete change of front. The old skeptics questioned the existence of any absolute reality, because evidence of equal weight could be brought for and against it. Their difficulty was an external one. If there were any reality, the mind would doubtless be competent to apprehend it ; but was there any reality ? Now the difficulty is an internal one. The absolute reality is contended for and insisted on, but the mind is declared constitutionally incapable of apprehending it. Thus the Clearing-up devours its own offspring. As, in the revolution, subjective will pulls down institutions which are its only shelter and home, only to perish in their ruins, so, in the new philosophy, subjective thought attacks truth only to achieve its own suicide ; and, beginning with Descartes in the exalting sense of its infinite power, ends with Spencer in the assertion of its absolute impotence ; thus virtually returning to that mediæval stand-point of the finitude of consciousness from which it set forth.

To pass now to a somewhat more detailed consideration. It is Mr. Spencer's laudable undertaking to find a philosophic reconciliation of Science and Religion ; let us briefly examine

his method and his result. He holds that "in the unceasing battle of opinion under the banners of Religion and Science" there is truth on both sides—each having a basis in ultimate fact. And since both are grounded on the reality of things, they must be fundamentally in harmony. There must be a residuum of common agreement after all points of difference are eliminated; or an ultimate truth which both will avow because each maintains it in its own interest. And, this found, we have the basis of the desired reconciliation. So far, all promises well; but analyzing, in turn, religious and scientific ideas in quest of their common element, Mr. Spencer finds the ultimate truth of the one to be the "tacit conviction" that the existence of the universe, with all it contains, is wrapped in insoluble mystery; and the ultimate truth of the other, a similar recognition that the ultimate truth of anything is incomprehensible. In this they coincide, and thus "the basis of reconciliation must be this deepest, widest, most certain of all facts—that the Power which the universe manifests to us is utterly inscrutable." Such a "basis of reconciliation" recalls Sandy McKaye's comment on the preaching of the Socialist *doctrinaire* "It's verra like unitin' o' men by just pu'in' aff their elaes, an' tellin' 'em, There! ye're a' brithers noo, on the one broad foondamental principle o' want o' breeks." In this sentence about the power which the universe manifests to us, and which, nevertheless, remains inscrutable, we have the assertion of absolute knowledge and absolute ignorance in the same breath; but we must accustom ourselves to this sort of thing from Mr. Spencer, and control as we can the solicitude it rouses to find him wielding so incautiously these dangerous two-edged weapons. The Unknowable, then, is found in ultimate religious and scientific ideas—God, Creation, the Soul, Time, Space, Matter, Force, etc. At once the question arises, Whence come these terms? If these things are unknowable, they are, so far as we are concerned, all the same thing. We can make no distinctions in what is unknown. What is the difference between God and Time, or Space and Force? If there is nothing to which these distinct terms correspond, how did they get into lan-

guage? If there is anything to which they correspond, that correspondence is knowledge. Mr. Spencer, however, calmly proceeds to show that these distinct ideas are severally unknowables, by a very simple — and, indeed, childish — method. He tests them all by the criterion of conceivability, and, finding them inconceivable, is satisfied that his point is established. The true conclusion is simply that he has taken the wrong tool. It is impossible to cut steel with an ivory knife, but it is quite possible to cut steel — and quite possible to know what is inconceivable. Conception is the image-using fancy, and is naturally at fault in dealing with the unpicturable notions of thought. Let us see, for instance, how Space is regarded by thought and by imagination; and, first, by thought: “If finite, Space must be limited from without; but such external limitations would require Space to exist in; hence they would not limit, but continue, it. Therefore, Space can only end in, or be limited by, itself, and thus is universally continuous or infinite.”¹ Mr. Spencer considers it thus: “Of Space, we cannot assert either limitation or absence of limitation. We are totally unable to form any mental image of unbounded space, and yet totally unable to imagine bounds beyond which there is no space. Again, it is impossible to think of a limit to the divisibility of Space; yet equally impossible to think of its infinite divisibility.” It is very true that the infinite cannot be imagined, and if the result of thought is correct, and space is infinite, then Mr. Spencer’s result is just what is to be expected. It confirms the result of thought. If Space could be imagined, *then* a real contradiction in the intelligence would appear.

Mr. Spencer goes on to apply his conceivability principle in a spirit of childlike confidence. He puts us on the sea-shore, and remarks that when we note how only the upper spars of distant ships are visible against the sky, we form a notion of the curvature of such portion of the earth’s surface as we can see; but if we try to follow out this curved surface in imagination, until all its meridians meet in the antipodes, we

¹ JOURNAL OF SPECULATIVE PHILOSOPHY, Vol. I, p. 10.

find ourselves utterly baffled. Again: "The piece of rock on which we stand can be mentally represented with something like completeness" — that is, we can think of its top, sides, and under-surface nearly at the same time — but to do so with the earth we find impossible; and thus "We form of the earth, not a conception properly so called, but only a symbolical conception." That is, conception is adequate when its object is of a certain size; if it overgoes that size, the conception of it becomes symbolical. "We must predicate nothing of objects too great or too multitudinous to be mentally represented, or we must do so by means of extremely inadequate representations — mere symbols of them." This is to imply that the certainty of our knowledge is in direct ratio of its approximation to sense-perception; and that is the first principle, not of a "new," but of a quite familiar, philosophy. Indeed, it is the negation of philosophy, for thought is generalization. According to Mr. Spencer, the clown — or, indeed, the animal — is the true philosopher. But if the size of the object is to be the criterion of certainty, that size should be stated. A piece of rock is also an object indefinitely "great" and "multitudinous." A microscope of the highest power would expand it to "inconceivable" proportions. On the other hand, the earth as seen from the moon would contract within the limits of conceivability. The size of the object reduces then to our sensuous image of it, and that varies indefinitely according to the varying conditions of vision. Mr. Spencer is bound to conclude, therefore, that all our conceptions are symbolical; and if that makes them unreliable, we can have no reliable knowledge of anything perceived, whether great or small. Thus the conceivability principle proves too much, and that is to prove nothing. Mr. Spencer would be the last to deny that we do know the size and shape of the earth, and many other inconceivable things about it. Consequently, he admits by implication that it is unnecessary for a thing to be conceivable in order to be known. But explicitly, as well as implicitly, Mr. Spencer admits the whole case against him. Every one of his puzzles brings him to an alternative of inconceivables — as above, it is inconceivable that

space should be either finite or infinite. But in every case he holds himself constrained, by the laws of thought, to accept *one* of the alternatives, and to pronounce of space, for instance, that it *is* either finite *or* infinite. Thus, the laws of thought really decide the point, and the test of imagination is given up. Inability to conceive space as either finite or infinite does not prevent our knowing that it *is* either finite or infinite. Mr. Spencer seems dimly to perceive that something has happened to the conceivability principle, but he is only led to work it backwards as well as forwards. He remarks, further on: "Is it not just possible that there is a mode of being transcending intelligence and will, as these transcend mechanical motion? It is true we are totally unable to conceive any such higher mode of being. But this is not a reason for questioning its existence; it is rather the reverse. Have we not seen how incompetent our minds are to form an approach to a conception of that which underlies all phenomena? Is it not proved that this incompetency is the incompetency of the conditioned to grasp the unconditioned?" etc. Really, if inconceivability is just as good for an affirmative as for a negative, it is good for neither, and Mr. Spencer might better have said nothing about it. We cannot conceive of a higher mode of being than that of spirit; still, there *may* be, and the fact that we cannot conceive it really tells (now) in favor of the supposition. For we know that space exists, though its nature is inconceivable—that is, conceivability is of no sort of consequence. We may just as well conceive the truth of the inconceivable as not; in fact, it is rather the likelier for being inconceivable. And so, thought throws the rein on the neck of imagination, which forthwith gallops into the boundless *maybe*. And this calls itself philosophy! It is sufficiently evident that everything built on the necessity of conceivability to knowledge falls to the ground. What Mr. Spencer builds on the application of the principle to ultimate ideas is "the relativity of all knowledge;" and he goes on to establish his empirical result by rational demonstration.

The relativity of knowledge is proved by analysis of the process and of the product of thought. For the first analysis

Mr. Spencer relies mainly on Hamilton and Mansel, whom he quotes at length, to the following purport: The former says, "To think is to condition; and, hence, thought is only of the conditioned." The latter adds, "To know is to distinguish, and that is to limit; knowing is also a relation; hence the Infinite and Absolute cannot possibly be objects of knowledge." If only the legitimate conclusion were drawn from the elaborate and imposing arguments of Mr. Spencer's authorities, none would be inclined to dispute it; for it comes simply to this innocent truism: that which is out of relation to consciousness is not in relation to consciousness; or, that which *ex vi termini* is beyond the conditions of knowledge is not within those conditions. To conclude, therefore, that the Infinite and Absolute are unknowable is evidently to take those terms as equivalent to the Unrelated and Unconditioned—that is, to take them in a sense purely abstract and purely negative. This is not the sense in which these terms are employed by the speculative thinker. Of such an Absolute he never speaks; and hence, for him, the whole argument relied on by Mr. Spencer is based upon an *ignoratio elenchi*, and nothing at all has been advanced in proof of the relativity of knowledge.²

² In the famous "Edinburgh" article quoted by Mr. Spencer, the expositor and critic of Kant asks: "Why distinguish Reason (*Vernunft*) from Understanding (*Verstand*) simply on the ground that the former is conversant about the unconditioned, when it is sufficiently apparent that the unconditioned is conceived only as the negation of the conditioned?" If it had occurred to him to answer his own question, and to find the reason of Kant's distinction, he might have spared himself the labor of citing his long list of authorities—among whom it is interesting to find such eminent thinkers as Arnobius, Alstedius, St. Peter Chrysologue, Pius II., Voltaire, Leo Hebraeus, Palingenius, Cardinal de Cusa, and two nameless Rabbis, whose little epigrams, however, have no sort of pertinence—to support his general conclusion that "The highest reach of human science is the scientific recognition of human ignorance," and that "Doubt is the beginning and the end of our efforts to know." He might have rated less highly the philosophic value of a random string of trivial quotations, and he certainly would not have been caught including Kant with Socrates and Aristotle among his witnesses to nescience. His way of citing Socrates, by the by, is certainly peculiar: "Socrates (as we learn from Plato, Xenophon, Cicero, etc.) was declared by the Delphic Oracle the wisest of the Greeks. And why? Because he taught that all human knowledge is but qualified ignorance." To those who have learned something of the father of speculative philosophy from Plato—to say nothing of "Xenophon, Cicero, etc."—this will be a novel statement of the scope and purport of his teaching. But, really,

Moreover, this phrase, the relativity of knowledge, is an ambiguous one. It may mean (1) that all that is known is "relative," since an object of thought always involves relations to thought—in other words, that knowledge is only a knowledge of relations. Or it may mean (2) that all that is known is "relative," as distinguished from an "absolute" which exists out of all relation, and beyond knowledge—in other words, that knowledge is only of the phenomenal. Mr. Spencer uses the phrase now in one sense and now in the other, apparently unconscious of the wide distinction between them. Taken in the first sense, the relativity of knowledge does not require us to assume an absolute, or non-relative, beyond consciousness. Taken in the second sense, that assumption is necessitated; for if there is no absolute beyond the bounds of knowledge, that which is within those bounds will not be a relative. It is clear, then, that no arguments to prove the relativity of knowledge in the first sense are of any avail to prove it in the second sense. Now, the second sense is the one Mr. Spencer is contending for, but all the arguments he brings forward, under this first head of proof, only go to establish the principle in the first sense. Hence these arguments fail to prove the only important point. More than this, however: to prove the first sense—that knowledge is only of relations—is actually to disprove the second sense: that knowledge is only of the phenomenal. As thus: if knowledge is in all cases a relation, then that which is out of relation to consciousness is unknowable. It is essential to maintain this conclusion; for if the absolute be knowable, there is an end at once of the relativity of knowledge. Unhappily, to hold this position is just as destructive

the advocate cannot be allowed to put in his own testimony under cover of the witness. Hamilton "calls" the Delphic Oracle only to the fact of Socrates' wisdom. We admit the fact on other evidence, not valuing the Oracle's opinion as highly as Hamilton seems to do. But it was never the Oracle's habit to give reasons for its declarations, and we must object to their being put in its mouth. Hamilton says it was because he taught nescience that the Oracle declared Socrates the wisest of the Greeks. Every court would rule this assertion out of evidence, and insist that the Oracle take the stand and be examined in the regular way.

as to surrender it; for, if there is no possible knowledge of the absolute, how can it ever be established that the known is a *relative*? In order to show that all that is known is relative to an absolute, both terms of the comparison must be present to consciousness — that is, the absolute must be an object of knowledge. Hence, on the supposition of an unknowable absolute, the phenomenal character of the known becomes a baseless assumption, and knowledge appears to be, not “relative,” but absolute. The negation of this negative absolute — the denial that any being exists out of all relation to consciousness and beyond the possibility of knowledge — is the only legitimate conclusion from the fact that all thinking is relationing. This conclusion, as we have seen, Mr. Spencer seeks to avoid by resorting to the “indefinite” consciousness.

“The very demonstration,” he says, “that a *definite* consciousness, of the Absolute is impossible to us, unavoidably presupposes an indefinite consciousness of it. The arguments by which the relativity of knowledge is demonstrated distinctly postulate the positive existence of something beyond the relative. Throughout, the Absolute has been present to the mind, not as a nothing, but as a something.” The question is, What is meant in this passage by the relativity of knowledge? If it means that knowledge is of the phenomenal, undoubtedly the existence of something beyond the relative is postulated; unfortunately, however, the relativity of knowledge in this sense has not been demonstrated. If it means that knowledge is only of an object in relation to thought, then the existence of an Absolute out of relation to thought, and beyond the limits of knowledge, is a groundless, gratuitous fancy. If “the Absolute has been present to the mind as a something” — that is, as a positive existence — then it is an object of thought, and consequently is not devoid of relation, nor beyond the bounds of knowledge. If, on the other hand, it is devoid of relation to thought, it cannot be present to the mind as a positive existence. Mr. Spencer has created for himself a logical dilemma from which there is no possible escape. Either the Absolute is beyond thought, and then it cannot be known to exist, or it is known to exist be-

cause it is within thought, and then it is not the Spenceirian Absolute. Whence it may be seen that the attempt to save anything to existence after it has been denied to thought issues in inevitable failure.

Mr. Spencer next proceeds to analyze the *product* of thought. He examines the rationale of explanation, and shows with a variety of illustration (a natural method with those who confuse thinking with imagination) that to explain is to reduce a given fact to a more general one. But the ultimate fact, the *most* general cognition, cannot be reduced to a more general one; and, hence, cannot be explained. Thus explanation eventually brings us down to the inexplicable. But the inexplicable is the unknowable. Hence there is no knowledge of the absolute, or all knowledge is relative. This hardly seems the true conclusion. All explanation rests upon the inexplicable; and this means that all knowledge rests upon the unknowable. We must conclude, then, not that all knowledge is relative, but that no knowledge is possible. Relative knowledge based on absolute ignorance is not knowledge at all. Again, if all knowledge be relative, or of the apparent, the knowledge of this fact is also relative, or only apparent. All general judgments concerning the intellect, being made by the intellect, are subjects themselves of their own predication. But here Mr. Spencer makes an unconscious exception. He knows absolutely that there can be no absolute knowledge. "The man of science truly *knows* that in its ultimate essence nothing can be known." This statement, like the one above about the manifested power which is inscrutable, is at once the assertion and the denial of absolute knowledge. The important point, however, is that Mr. Spencer's argument really leads to a positive conclusion. To explain a notion is to subsume it under a more general; hence the limit of explanation is reached at the ultimate genus, or universal. But by the hypothesis, the more general is the more clearly known; hence the universal, or inexplicable, is the perfectly clearly known. This supplies a positive basis for knowledge, and we conclude that all knowledge is positive, or simply that knowledge is knowledge. It appears, then, that it is not explana-

tion, or the reduction to the more general, that makes a thing known; for, if the reducing process ends in an unknown, all the explaining comes to nothing but the fact that the reduction may be carried down to the universal, for that is to carry it to what is immediately known.

Now, what is this universal, this ultimate genus whose Extension (quantity) is unlimited, and whose Comprehension (quality) is null? It is plain that it is unconditioned Being—the blank form of being—from which all determinate qualifications have been eliminated by abstraction. And this is what Mr. Spencer and the rest call the Absolute; what Hamilton and Mansel say is a pure negative; and what Mr. Spencer maintains is a positive, when he says that “the Absolute is present to the mind, not as a nothing, but as a something;” and that “In the antithesis to the relative is the abstraction of conditions, but not the abstraction of existence.” When he tells us, therefore, that everything about the Absolute is unknowable except the fact of its existence, it is obvious that this is not owing to the “limits of thought,” or the “relativity of knowledge,” but to the simple fact that, concerning being void of all determinateness, there is nothing whatever to know except that it is. Again, how is this pure abstraction of being something positively known, and the basis of all knowledge? Simply because, instead of being an object out of relation to consciousness, as Mr. Spencer supposes, it is itself nothing else than relation to consciousness in abstract universality. And this Mr. Spencer himself, paradoxically enough, comes very near telling us. He takes the definite, complex conception of a piano and abstracts one determination after another—strings, hammers, keys, pedals—to arrive at the simple, indefinite notion of existence in general. He says: “That which is common to all thoughts, ideas, and conceptions, and cannot be got rid of, is what we predicate by the word existence.” That is to say, every predicate other than being contains being plus determination, and so may be subsumed under being. You may strip a thing of its every rag of qualification; you may abstract the general idea of qualification itself; but being resists abstraction. In Mr.

Spencer's words, "you cannot get rid of it." In the very attempt to annihilate it, thought is forced to reaffirm it; there is no "is." Thus the limit of analysis is the turning-point to synthesis; the residuum which resists abstraction is the *principium* of the concrete; it is abstract *being*. And the point is that it is the universal and necessary predicate; the essential category of thought; the essentially permanent element in consciousness; in Mr. Spencer's words, "the necessarily indestructible mental element." He says: "Our consciousness of the unconditioned, being literally the unconditioned consciousness, or raw material of thought to which in thinking we give definite forms, is the very basis of our intelligence;" is "the substance of consciousness;" is "the obverse of self-consciousness." It is impossible that Mr. Spencer can understand the full force and bearing of his own statements. The truth is all here, if he would only see it. Explanation is knowledge, because it is possible reduction to being, and at that point "all objectivity dissolves into the thinking;" so that reduction to being is reduction to that synthesis of the correlatives subject and object, which is self-consciousness.

The statements above quoted, properly understood, should lead Mr. Spencer to retract his former declaration that self-consciousness is impossible. "A cognition of self," he says, "is absolutely negated by the laws of thought. The fundamental condition of consciousness is the antithesis of subject and object, and on this primitive dualism Mr. Mansel founds his refutation of the German absolutists. Clearly, a cognition of self implies a state in which the knowing and the known are one, in which subject and object are identified, and this Mr. Mansel rightly holds to be the annihilation of both." Such is the persistent blindness of the abstract understanding in presence of concrete fact. It is not easy to discuss questions of speculative content with those who remain at the stand-point of reflection; but it is impossible to do so with those who do not remain consistently on any chosen ground. This is the case with Mr. Mansel. When the "laws of thought" get him into difficulties, he has an easy way of giving them up and going to something else. When, for instance, it becomes convenient for him to assert a cognition of self, he remarks: "Let

system-makers say what they will, the unsophisticated sense of mankind refuses to acknowledge that mind is but a bundle of states of consciousness." This sudden appeal to common sense, after so much labored logic, recalls the clever feat of the man in the nursery-rhyme who scratched out his eyes by jumping into one bush and scratched them in again by jumping into another. It may be doubted, however, whether eyes can really be regained by any such second jump. Mr. Spencer's mild comment on his friend is that he "does not seem altogether consistent;" but he himself is liable to the same criticism, for, when he says that our consciousness of unconditioned being is "the obverse of self-consciousness," he refutes his own theory of the impossibility of self-cognition, and names accurately the object which is identified therein with the subject.

The identity of thought and being — the fact that the objective *principium* is "the substance of consciousness" — is the truth really contained in Mr. Spencer's brief statements, and it answers completely other of his objections to absolute knowledge. He says: "Every act of consciousness implies likeness;" "cognition is only possible through an accompanying recognition;" and, hence, he concludes that since the Absolute and Infinite cannot be likened, classed, or recognized, they cannot be known. But if abstract being — which is identical with his Infinite and Absolute — is the "obverse of self-consciousness," it *is* likened and classed — or, rather, identified — in the act of consciousness. The cognition of being *is* distinctly a recognition; for in its presence the consciousness is face to face with itself. If *cogito ergo sum* be thought a doubtful leap, *cogito ergo est* is an inevitable step — or, indeed, an identical proposition. Again: "Knowing is the formation of a relation in consciousness parallel to a relation in the environment. No thought can express more than relations, and so the relativity of knowledge is self-evident." Granting his premises, it only follows that self-knowing, being a relation parallel to one in the environment, gives us a knowledge of the self-related Absolute. If thought can express self-relation, there is no need of its doing more, and the self-relativity, or absoluteness, of knowledge is self-evident.

Thus self-consciousness is the basis of all knowledge. Nor

need any start at this, fancying they scent subjective idealism. We have left that far behind. The anxiety to eliminate all subjective elements from philosophical inquiry is now an anachronism. This ghost of subjectivity, supposed on the authority of Hamilton to be raised by Kant, has been in truth effectually laid by him. We now know that psychology itself is ontological—that the subject itself is objective; for those terms name only a formal distinction in the unity of spiritual life. That which is the ultimate ground of all objectivity is found in the consciousness, and identified by the *Ego* with itself. Hence mind is no mere attribute of the individual; it is not the particularity which we are, but the universality which is we, and the constitutive essence of all that is.

Such is the principle of the relativity of knowledge; and now let us look at the reconciliation of Religion and Science which is founded on their common acceptance of that principle. Undoubtedly, Mr. Spencer is entirely in earnest with the nescience doctrine; but it sounds like a burlesque upon it to read that only in so far as religion and science have renounced all pretension to faith and knowledge have they been true to themselves; that whenever religion “shows a secret fear lest all things may some day be explained,” or “betrays a lurking doubt whether the incomprehensible cause is really incomprehensible,” she is irreligious; and that whenever science “assumes any knowledge of causal agencies,” she is unscientific. Stated in this naked way, Mr. Spencer’s position appears to be a purely gratuitous assumption. He tells us that true religion consists in the tacit conviction that the mystery of the universe is impenetrable, and then he complains of the inconsistency of religion in not holding firmly to this principle. That is to say, he admits the fact that all religions agree in professing to reveal the mystery of the universe. Even granting, then, as matter of fact, Mr. Spencer’s assertion of the “tacit conviction,” we have a balanced state of facts which will support opposite inferences equally well or equally ill; and if Mr. Spencer charges inconsistency to one side, it is open to us to charge it to the other, and to say that only in

so far as religion has claimed to possess a positive revelation of truth has she been true to her own character, and that her inconsistency has been to allow faith to lose its true nature while retaining its name.

To come to the practical point, let us see what religion gains and what she surrenders by accepting the terms of alliance offered by Mr. Spencer. She gains the existence of an Absolute. This has naturally seemed an important concession, and many have felt that the impartiality which asserts existence adds weight to the denial of intelligibility; and that a philosopher, who offers a positive affirmation where a dean of the English Church brings up in helpless and hopeless doubt, may claim to be trusted in his reservations. But let us not be duped by mere words. What *is* this Absolute that Mr. Spencer concedes? We have seen that it is simply the abstract universal, the pure being of Pantheism. We may deify this abstraction if we please, but we ought to know that in doing so we renounce the God of Christianity. But supposing Mr. Spencer did concede the existence of the Christian God; what would *that* concession, with his qualification, amount to? There is a God: that is Theism; but there is an unknown God whom I know that I cannot know: that is virtual Atheism. It is a dead blank. What room does it leave for either piety of the intellect or piety of the heart? When our pulpits are reduced to preaching the one great religious truth, the inscrutability of the First Cause, our missionary labors will be singularly lightened. "The heathen in his blindness bows down to wood and stone," and will have to be converted *from* the error of such positive belief; but, once this is done, we shall not have anything to convert him *to*, and may sail serenely away with our good work accomplished, leaving him to the "tacit conviction" that the universal mystery is insoluble. At home the spreading of the new Evangel will be equally simple in method. We have only to make a clean sweep of all dogma, and condense the creeds into a single article: We know that we can know nothing about God. We may refer to Hamilton for the statement that "The last and highest consecration of true religion must be an altar to the

unknown and unknowable God ;” and if any are disposed to prefer the authority of one Paul of Tarsus on this point, they should learn of Mr. Spencer that “ The negation of absolute knowing contains more religion than all dogmatic theology.”

There needs no argument to show that, without questioning his motives, Mr. Spencer’s concession to religion is a mockery, and his reconciliation a betrayal with a kiss. A more important point is this : that Mr. Spencer’s doctrine of religious nescience is merely Dean Mansel’s doctrine in its logical consistency. Says Mr. Spencer : “ Some do indeed allege that though the forms of consciousness are such that the absolute cannot be brought within them, yet we must represent the absolute to ourselves under these forms. As writes Mr. Mansel : ‘ It is our duty to think of God as personal, and it is our duty to believe that He is infinite.’ That this is not the conclusion here adopted, needs hardly be said. If there be any meaning in the foregoing argument, duty requires us neither to affirm nor deny personality. Our duty is to submit ourselves to the established limits of our intelligence, and not perversely to rebel against them. Let those, who can, believe that there is eternal war set between our intellectual faculties and our moral obligations. I, for one, admit no such radical vice in the constitution of things.” This is another instance of Dean Mansel’s jumping from the bush of logic into the bush of faith. Mr. Spencer naturally objects to his second jump, and tells him he must stay in the first bush, and take the consequences of going without eyes. Dean Mansel’s result is simply this : We cannot know anything : therefore we may believe what we like, for no one can convict us of error. Mr. Spencer says no ; not if you mean by belief any positive consciousness. “ We cannot know anything ” is a universal negative, and from such a premise no conclusion is to be drawn. Your own ignorance must remain the sum and substance of your creed—the only thing you are entitled to believe. And Mr. Spencer is clearly right. For the question is not what Dean Mansel may think or hope or attempt, but a question of fact. Can he get out of his first bush ? Can eyes

once scratched out by logic be scratched in by faith? What *is* faith, on Dean Mansel's principles? We know what his prayer-book means by the words, "We who know Thee now by faith;" "God, in knowledge of whom standeth our eternal life." This follows the Bible: "This is life eternal: that they should know Thee, the only true God, and Jesus Christ whom Thou hast sent;" "Till we all come, in the unity of the faith and of the knowledge of the Son of God, unto a perfect man." Dean Mansel's faith, at all events, is *not* this. It is in unity, not with knowledge, but with ignorance. We have seen the dean's master come down from Mars Hill still a professed worshiper of the unknown God, but here they are at variance with a greater than St. Paul. They must hold either that life eternal is *not* the knowledge of God, or else that life eternal is equally impossible for men.³ Belief in what one knows he cannot be sure of is in fact only self-stultification, or an acted farce. Such faith is an empty word; it is *lucus a non lucendo*; it is virtual infidelity. Christianity is something to which Hamilton and Mansel have no right to make pretension. The only religion that is left them is that of Spencer and of Brahmanism, with its deified pure being or pure thought.

Now, we owe Mr. Spencer gratitude for showing us what Manselism really is, so that there may be no further mistake about it. It has been embraced by many as the sure refuge of orthodoxy, and Mr. Spencer only speaks truth when he says that this disposition to reduce faith to a mere unintelligence of an unintelligible "pervades all the cultivated theology of the present day." Now, to take up this false position, to welcome this Trojan horse of nescience, is a suicidal course. The Philistinism that changes the terms "true" and "false" into "sound" and "dangerous;" that receives all its opinions at second hand, and takes alarm at anything like originality, and

³ They might perhaps reply that the eternal life of knowledge of God and communion with Him belongs wholly to our future state of glory. But an eternal life *ex vi termini* is not a life that begins at a future time, and the statement that the eternal life is not a present life contradicts the first principles of Christianity and the express language of the New Testament. See, for example, St. John's Epistle and St. Paul's to the Ephesians.

suspects everything that does not bear the stamp of a well-worn formula ; the ignorant prejudice and weak timidity that are so eager to stifle and cry down all attempt at intellectual grasp of religious truth—these do not “earnestly contend for,” but they surrender, “the faith once delivered to the saints.” They who warn off the holy ground, and prosecute trespassers on the sacred mysteries, have made it possible for Mr. Spencer to say in good faith what sounds like bitter satire, that it is “irreligious,” to assign any attributes to the Absolute Being, for that is to assume that it may so far be understood ; that it is “imperfect belief,” “skepticism,” and “the most serious form of irreligion,” to cherish the fancy that any knowledge of divine truth is possible to finite man. They who are fond of repeating that “We cannot, by searching, find out God,” and “A God understood would be no God at all,” have made it impossible for us to resent as an insult Mr. Spencer’s humiliating reconciliation, tendered on our supposed confession that all religious belief reduces to a conviction that metaphenomenal things are wrapped in inscrutable mystery. In fact, the principle here—the finitude of consciousness, which seems to commend itself to piety—is the fundamental principle of Pantheism, and on this foundation nothing but Pantheism can be reared. And so, we find the language that decries poor human reason and exalts above it a blind and passive faith, while it is uttered in the supposed interests of religion, is echoed in the real interests of the positive philosophy. “Whatever,” pronounces Mr. Lewes, in the very tone of a Bernard at Sens, “Whatever is inaccessible to reason should be strictly interdicted to research.”

There is, then, no difference between the right and left wings of the nescientists, the churchmen led by Mansel, and the naturalists led by Spencer, save such as arises from the inconsistency and lack of thoroughness with which the former apply the common principle. And it is well that Mr. Spencer’s reconciliation brings this clearly into sight. For it draws the issue distinctly, and speaks in plain words : Choose ye this day whom ye will serve ; the phantom God of Hamilton, Mansel, and Spencer, whom you are to know that you cannot know, or

the living God of the Bible, the Heavenly Father, who is not far from every one of you.

It ought to be plain enough to thinking men that there can be no reconciliation between Religion and nescience. Religion is a revelation. Where it addresses intellect it lives, and only can live, as a positive apprehension. It dies with negation or with doubt. If, then, religious teachers hope to maintain and advance their true cause, they must break decisively with the nescience philosophy, and that in its principle, not only in its consequences. But what shall be their next step? One thing is plain—there can be no return to the ages of unthinking, unquestioning faith. That is over and past for the Christian nations, and no more to be regained than middle life can regain its childhood. For good or ill the world's teeth are grown, and it is useless to go on feeding it with milk. To the student of Mediaeval life such a return to the past would hardly seem desirable; but even if there are any who can study it thoroughly, and yet honestly think it a golden age, let us remind them that to return to it could only be to begin history over again—that is, *not* to remain in the simplicity of the early faith, but be led to the necessity of a new Clearing-up.

We reach here the vital point, namely, the necessity in which the Christian clergy are placed to comprehend the present historic crisis. Merely to anathematize the skeptical spirit of the time as perverse and vicious is to ignore the historic necessity of the Clearing-up, and that is to make history the play of chance, and Providence a myth. To preach renunciation of reflective thought, and exhort the skeptic quietly to give up questioning, is mere blindness to the nature of mind and to the movement that underlies the progress of the generations. But few will be found to say with Faraday: "I prostrate my reason in the matter of Religion. If I applied to it the processes of thought I employ in scientific research, I should be an infidel." And such a result, if generally attainable, would hardly be satisfactory—would be indeed the sufficient condemnation of unfaithful stewards of the mysteries of God. Intellectual error must be cleared up intellectually; it cannot be extinguished emotionally. Rationalism may

be a great evil, but irrationalism is scarcely a desirable alternative. In fact, it is not an alternative. Religion may attempt to suppress reason, but we know from history that the attempt is vain. Reason will not be suppressed. If the Christian Church abdicates its guidance, her ancient sovereignty over the minds of men will pass to her enemies. Her motto must be the French maxim, *Be of your own time* ; or, as our own poet has it :

"New occasions teach new duties ;
Time makes ancient good uncouth ;
They must upward still and onward
Who would keep abreast of Truth."

What we have to do is to meet the modern spirit fairly and lead it up to higher ground. History shows us Faith and Understanding successively tried and found wanting. Our path must be onward to a wisdom deeper and more complete than either. The problem before us is to restore to men all that Understanding, all that the Clearing-up, has deprived them of. But that restoration must be through the intellect, in the light of the Clearing-up, and in harmony with its principle of subjective insight. Of old the Truth spoke to the simple and unlearned, saying, *Arise and follow me* ; to-day He gives the same summons to the cultured intellect. It is time that earnest, thinking men should know that "the riddle of the painful earth" is not insoluble and not unsolved ; time they should know that the secret of a rational universe is powerless to resist reason ; time they should know that their spiritual freedom, their personal immortality, their sonship to a Divine Father, are not fables or doubtful theories, but demonstrable facts. Amid the perplexity and confusion of the present, with its clamor of discordant voices, it is the clear intelligence of the deepest religious truths that alone can bring peace to the unquiet hearts of men. And this end is quite within our reach if, as I say, we will comprehend the spirit of the present crisis, and take the historic step it points to.

The spirit of the Clearing-up is that of general negation of the traditional positive ; and so, negation of the Clearing-up is negation of negation, and that is reaffirmation on a new and

higher plane — on the plane of speculative insight, of a truly “positive” philosophy, which declares: “In the Christian religion God has revealed Himself—that is, He has given us to understand what He is. And the possibility of knowing Him thus afforded us renders such knowledge a duty. God wishes no narrow-hearted souls or empty heads for His children, but those whose spirit — of itself indeed poor — is rich in the knowledge of Him, and who regard this knowledge as their dearest possession.”⁴ To a similar effect, St. Paul writes, “The spirit searcheth all things, yea, the deep things of God. We have received the spirit which is of God that we might know the things given to us of God.” We have noted some curious disagreements between the teaching of nescientist Christians and that of Holy Scripture, but the difference in their case is not more marked than is the unity between the same Scripture and the German Hegel, whom the British philosophers — probably on their principle of the relativity of all knowledge — profess to refute at the moment when they confess they do not know what he means.

What is proposed, then, to Christian teachers is an alliance with German philosophy. If in the Spenceirian reconciliation religion is simply swallowed, and not a shred of her positive belief is left, on the other hand, her alliance with the true philosophy will gain for her the solid establishment of every vital article of the faith. The Triune God, as First Principle of the universe — the Light of the World which solves all mysteries; the spiritual nature of man which makes him one with God in essence, free, immortal, child of the Divine — these dogmas appear as logical results of the most logical, the only logical, of all procedures; for speculative logic is a very different thing from formal logic. They are no longer things believed or disbelieved, but things known; they are the absolute certainties. I am aware that German philosophy has to the orthodox ear an uncanny sound. In fact, we may almost say that a kind of horror of it, as of an unclean thing, “permeates all the cultivated theology of the present day.” But

⁴ Hegel: *Philosophy of History*.

this horror is generally strongest with those who claim no personal or definite knowledge of the philosophy in question. As it is the night that our fancy peoples with ghosts, and only in the dark that innocent objects assume dreadful proportions, so ignorance is the native element of prejudice. Yet, in part, the prejudice here may justify itself by reference to the deliverances of self-styled friends; and it must be explained that philosophy has suffered more from such friends than from her enemies. The distinguished trio, Hamilton, Mansel, and Spencer, may dilate upon the "insanities of Idealism," and empirical science, its mind wholly given to the crass concretes of sense, may deride a science of the pure Idea, and this philosophy can survive, but her good name is more seriously compromised when a Strauss or a Rénan claim to be her representatives or patrons. *Noscitur a sociis* is a rule by which philosophy is content to be tried, but for that reason she must distinctly disclaim acquaintance with the loud and intrusive persons who give themselves airs of intimacy with her, when it is capable of demonstration that such intimacy is a purely groundless pretense. But, after all, that the Clearing-up, in general, should fail to understand her; that the moderate party should condemn her boastful impotence in grasping at the Unconditioned; that the radicals should claim her as leader in spreading the mere negative of Rationalism; that the materialists should sneer at the whole metaphysical quest as moonshine or lunar politics—all this was to be expected, and does not greatly concern philosophy. For while she must regard as the one evil of the present this running of the Clearing-up into a Clearing-out of all spiritual and substantial interests, in which nothing is left us but enlightened pride in our simian ancestry, yet she cannot but feel amused at what Dr. Stirling calls "the simple ways of this odd thing that calls itself an 'advanced thinker' nowadays," and encouraged to hope that such "advance" must be at last the beginning of the end. But towards Religion she stands quite otherwise related, and it is hard to find her foes in those of her own household. It is hard that, when she offers her the hand of fellowship, saying, "You believe in God, believe also in me," Religion should gather up her gar-

ments and turn suspiciously away. It is hard that, when she would bring Religion to know the things that belong to her own peace, prejudice should drive her off with insult to fight the common battle alone.

I have said that the advance of Religion to a speculative holding of its dogmas is the historic step demanded — the historic necessity of the present. Something further may be allowed in illustration of this point. So far as essentially concerns thought, the Clearing-up culminated in the writings of Hume, and from him passed direct to Kant and the speculative insight; and thence Reason has moved steadily on through the full circle of its faculty, and taken possession of a new objective world. The best brief statement as to the Germans is Dr. Stirling's: "As Aristotle, with considerable assistance from Plato, made explicit the abstract universal that was implicit in Socrates, so Hegel, with less assistance from Fichte and Schelling, made explicit the concrete universal that was implicit in Kant." Speculative philosophy now means, not loose reflection, nor elevation of mind and breadth of view, nor pregnant suggestions of genius, but an exact science, containing certain definite *matter* in a certain definite *form*, and to be mastered by the same kind of mental labor that is required for the Calculus, or Newton's "*Principia*." It appears, then, that an *internal transition* from Understanding to Reason has already taken place, and thus the intellectual position of the world to-day is an exact parallel with its position at the close of the Crusades. Then the principle of Belief had lost its controlling sway, and the internal transition to Understanding had taken place in the hidden depths of the general consciousness. Yet the first expression of that subjective impulse, which held within it the madness of '93 and the worship of Reason, was seen in the monastic revival and the increased power of the papacy. And this may encourage us who reflect that it is since Kant we have heard so much about our father, the monkey. There is a period of slack water at the turn of the great tides of human thought, when the surface-movement is running itself out in the old direction, and no coming change is apparent; but down below

a deep under-current is slowly gathering, and the moments are numbered until the new set of the water shall bear all floating things the other way. Of late years, indeed, the movement of this under-current has become here and there dimly perceptible. In America the political theories of the Clearing-up which Jefferson and others imported from France are giving place to more concrete conceptions, and time is exposing the fatal fallacy of individual sovereignty. Mr. Spencer may echo Calhoun, and define the Nation as an historic accident, and government as a necessary evil; but the more thoughtful of us are learning to look upon the State as a conscious organism—as a moral personality. And their struggle, suffering, and sacrifice for the nation's sake, their obedience unto death, have led American citizens to see that in their relation to the common Whole, and in that alone, stands the realization of their individual freedom and the substance of their individual life. So, too, in Italy the agitation by Mazzini and Garibaldi, for a merely individual independence, has been followed by the creation of a national unity and a national life, through the statesmanship of Cavour. In Germany the seed-thoughts of Hegel have struck into the national consciousness, and borne fruit in the fusion of sectional autonomies in one majestic state. And even in France the spirit of revolution has at last received a check, and the past few years have witnessed her first attempts at constitutional self-government.

The same under-current shows a surface-sign in the increasing interest and respect for higher education. The self-made man is scarcely the popular hero that once he was. His crude self-sufficiency is found too weak to bear the strain of complex requirement that modern life puts on us. There is a growing recognition of the need of trained faculty. Educational standards are higher, the foundations are deeper, and the edifice more solid and exact. In literature, again, appears a spirit more serious, more earnest, more mature. Belles Lettres are less cultivated, the loose chat of cultivated taste is of less moment to us, and such Essays as Leigh Hunt's (to take the first name that occurs) would find fewer readers now than at

the date of their publication. We shut up our *Noctes Ambrosianæ*, as we agree with Hume that "The writer who tells us no more than we may hear in any clever coffee-house conversation is of no great value." Originality and brilliancy are no longer accounted such prime qualifications of the author as they were forty years ago. De Quincey's "impassioned" prose, with its devotion to mere language, seems to us as superficial in matter as it is perfect in form; and we can see how the necessity to be always the "man of genius" led Coleridge to fritter away in like manner the powers of a still stronger mind. Our recent writers have left off attitudinizing in the once favorite element of the emotional, to meet the growing demand for weight and substance, for solid learning and solid thought.

These various indications, these scattered hints of this intellectual under-current, are the signs of this time, and so are signs of the coming time. For, as a French writer says, "*L'Avenir, c'est le présent bien vu*," or, as we may put it, foresight is insight. The aspect of the years that approach us is indeed bright with the promise of a boundless achievement. Thought, no longer the treasure of single scholars, is now the common patrimony of the race. The sacred fire that burned on solitary beacon-heights above a land that lay in darkness now lights the crowded streets of cities. The world begins to move by masses, with a solid momentum of advance never known before. Every day men and nations are making broader and deeper the foundations of the civilization of the future; for every day they come closer to an intelligence of principles, and to the speculative truth that life is a fabric woven of ideas. But a shadow of uncertainty falls across the prospect and lends it a graver interest. Will man learn now, or only by further painful experience, the truth contained in Hegel's simple but weighty utterance: "Only in religious belief is society possible"? Will the coming time bring us no more than intellectual growth and a civilization more highly organized? Is the ideal of social progress to center only in moral relations, and overlook the organic connection which binds morals to religion? Or shall we learn that the moral consciousness is grounded on the religious con-

sciousness, and that the right conduct of men is the outflow of their devotion to their Father? Are we to have, after all, only the fullest development of spiritual independence? Or shall we learn that independence consists only in dependence, and that the spirit has no life apart from his union with the Divine? Shall we found the Equality and Fraternity of men in the blind cry of the Revolution which fought only for individual rights; or in the vague proposition of Positivism that human nature is fundamentally one and homogeneous? Or, remembering that animal nature is also fundamentally one and homogeneous, while yet the animal kingdom remains divided against itself, shall we now learn that the brotherhood of men must remain an empty phrase until we see it springing from our sonship to God; that it is because we are all one in our relation to Him, that we are all one in our relation to each other; and that only as we see in other men the likeness of our Father do we know them for our brothers? We have seen that the constitution of Mediæval Christianity was such as to preclude the possibility of spiritual advance within it. That advance was forced to begin in revolt, and continue on a reactionary principle as a wholly secular movement—with results that most will admit to be not wholly desirable. The world should learn by its own experience. It is evident that the one necessity of the day is that religion shall take the lead of intellectual movement—inspire it with a right spirit and direct it to the highest end. Let her speak to this age in a language it can understand, and her great truths will awaken its deepest interest. We all meet men of the day who say to us with a sad sincerity, Would I could believe as you do! To be superior to the superstitions of the vulgar is somehow not so all-satisfying as it used to be found. They look upon the simple believer, and almost unconsciously their half-contemptuous compassion is dashed with something like respect, changed to something like envy, as they contrast the peacefulness of positive conviction with the forlorn emptiness of their own “enlightenment.” The cry of the Clearing-up was, “Give me the portion of goods that falleth to me,” and with that intellectual provision it left the Father’s house and wan-

dered into a far country. But now it is turning unsatisfied from empty husks, and casting doubtful but longing eyes up to Heaven and God. Never was there a time when the proud heart of man so yearned to throw itself upon the bosom of Religion and sob itself to rest. But for this there must first be ministry to the *mind* diseased. The trouble with the age is in the thinking faculty, and that is the organ that needs treatment. And not in the comparative study of Religions, nor in Mr. Arnold's odd fancies about the Bible, but only in a philosophic Christianity, will the cure be found.

Here arises a question. Philosophy is a severe and abstruse science. Religious truths, being practical principles for all, must be made popularly apprehensible. Will not, then, a Christian teaching, which is the scientific thinking out and demonstration of fundamental Christian truths, be too lofty, remote, and abstract for its purpose? On a full understanding of all the points involved, this question would withdraw itself. Such answer as can be given here must be brief. Undoubtedly the way of life is so plain that the wayfarer, though a fool, need not err therein. But we are not now dealing with fools—that is, with simple piety and humble faith. We are considering the intellectual difficulties of intellectual men with regard to Christianity. Professor Seeley thus marks the different attitude of the two sorts of hearers: Present to an ordinary man the two sayings, “Love your enemies,” and “The Word was made flesh.” The first will give him difficulty; he will find it a hard saying. But the second will make no distinct impression upon his mind, and he will say he *believes* it—which only means he has no wish to dispute it. Present the same two sayings to a thinker. He may find no great difficulty in the first. A retired life may have removed him from occasions of enmity, and thoughtful habits have calmed his passions. But the second will give him trouble. If he has regarded the *logos* as a technicality of extinct philosophies, he will be staggered at finding it made the center of a theology for all time. Here, then, a philosophic theology would address the thinker, and it would not matter if what it said to him were not popularly intelligible. Those who feel no phil-

osophic difficulties have no need of a philosophic resolution of them. It is enough that those whose minds are unsettled and perplexed should be led to the quieting of all doubtfulness. But it is not to be supposed that a philosophic christianity is all theology, or limited to addressing the "thinker" to the neglect of the "ordinary man." Philosophy does not make religion a thing too abstract or remote for any single practical end, but it would change somewhat the prevalent spirit of its practical teaching. It is sometimes said that religion is not a creed, but a life. It would be truer to say that it is both a creed and a life, and a life because it is a creed. Now, a speculative dealing with the creed, with the intellectual side of Christianity, keeps ever distinctly in mind that the truth is a truth for life, for action — not a mere intellectual scheme. It distinctly disavows any intention of cutting the *thought* of Christianity apart from the *life* of Christianity; for that is just the long error of the past which it is anxious to bring to an end. When the faith "once delivered" is regarded as a dry deposit of dogma, to be jealously guarded by the distinctions and definitions of systematic divinity — not as an ever-fresh well-spring of truth for men's daily use; when it is not "safe" for them to take it as a vital thing into their warm, living hearts and consciousness, but it must be handled gingerly by professors with the nice instruments of formal logic, lest they get some view about it that is not "orthodox" — then Christianity looks no longer like an actual growth, rooted in the nature of things, and their highest flower and fruit, but seems to be a mechanical, artificially-concocted scheme, whose wooden joints and sapless tissues are only a parody on life; then, indeed, Christian truth becomes too remote and abstract for any religious use. As to this common fling of "abstract," let me say, in a word, that speculative philosophy does away forever with abstractions. It is what it is because it deals solely, and it alone deals thoroughly, with the concrete. The fact is that the practical teaching of a speculative christianity would be infinitely stronger, fuller, and more direct than is that of the dogmatic Christianity of the Protestant communions or of the Anglican Church. It would find its way

out of the dust and confusion raised by the struggle with Rome of 300 years ago, and that without merely going back to a period anterior—an ante-Nicene golden age, when the complex questions of the Reformation had not *as yet* historically emerged. It would go back to the spirit of Apostolic times—that is, it would talk to the men of *this* age. It would go to them, find out where to reach them, how to win them; adapt itself with tact to every disposition, “if by any means it might gain some;” not considering its own dignity, nor content with going through a perfunctory routine, careless of the growing indifference to it. There are men who don’t care for sermons on the Atonement taken up with discussing the different theories of it; who don’t care for sermons on the Incarnation from which Nestorius and Eutyches crowd out the Son of Man. They ask, What has your Christianity to say to me, living here this life of darkness, and puzzle, and struggle, and sorrow, and trial, and failure? What is your message to enlighten, strengthen, cheer? And we would answer, not merely, Come to church; not merely, Come to Jesus, in the technical sense; but, Come *home*—home to your Father God, and the Son of God, your Brother. God is your Father! That is an old saying; yes, but you are to take it in a new sense, in a real sense. This is not a doctrine you are to accept; it is a fact you are to know, to live in, to live by. Get out of the lazy lap of conventional ecclesiasticism; get out of conventional notions and phrases that have stiffened and dried up, and face the spiritual facts of your being on your own feet as a man. Take them into the depth of your soul. These are the realities; these are your nearest, dearest, deepest interests; nay, in these only stands your *human* life. Your self-consciousness is only complete in your religious consciousness. Is it not a proverb, like father, like son? You, too, are essentially divine. Live, then, as an infinite spirit—for there is no such thing as finite spirit. Make your ideal unity with God an actual communion, and you shall come fully to yourself; the universe shall be transfigured to your eyes, and your place and path in it bathed in celestial light. There can be no attempt here to give the full volume of utterance, but some-

what in such a tone we may conceive that such a speculative christianity would practically speak. And if it must look alone to Hegel as its great master in theology, it might well choose for its practical teacher the great English churchman of our time, the large-hearted, noble-minded Maurice.

SCHILLER'S ETHICAL STUDIES.

BY JOSIAH ROYCE.

The history of literature is full of philosophic problems ; no period in it more so than that of the German classical literature. The philosophic problems concerned are, indeed, not those of the most purely theoretical interest ; they are, on the contrary, the great practical problems of life. But their general interest is none the less for that reason, as one is easily convinced by a very superficial consideration. It is with the philosophic problems that engaged the attention of a great literary man, the second of the great leaders of the classical literature, the popular and much-loved Schiller, that the following essay treats. Not a contribution to philosophy, but only an attempt to aid in the understanding of the poet, shall form the substance of our task. It is from an age full of outer and inner conflicts that our subject is taken. We shall seek to describe only one of the heroes, and him only in respect to one of his great adventures.

Schiller is profoundly an ethical poet. Not that he began life as a great ethical theorist. On the contrary, his early philosophic education was neglected, and until he was full thirty years old he knew of the great movements of thought of his day only superficially and by hearsay. But still, from the "Ode to Rousseau" down to "William Tell," you always find Schiller grappling with some problem as to the conduct of life. If he cannot speak the language of the school, he speaks his own language, and that is commonly much better. If he cannot give a final solution for his difficulties, as the schools always

do for theirs, that only makes his expression more poetic, his development freer, and his ideas more life-like. And when at last he is brought to spend three or four years on abstract, ethical, and æsthetic studies, the consequence is a return with greater vigor than before to the work of poetic production, and a daring effort to put all the results of his thinking into poetic form, and so to make them of worth for real life. From first to last his motto seems to be that nothing is too earnest for the earnestness of life, and nothing relating to life too barren for the transforming hand of poetry.

Popular instinct has long since recognized this fact of the ethical tendency of Schiller. To his own nation he appears as the poet of freedom, of ideal aspiration, of active striving for the better. The history of literature contrasts him with Goethe by making him the representative of the element of restless progressive effort in the classical period, as Goethe is the representative of the element of repose, of trust in nature, of self-surrender to life as a process, instead of self-affirmation in life as a free construction. No reader can mistake this tendency in Schiller. It is the merit, as it is the weakness, of all his best work, that it is throughout determined by ideas that have relation to action. Whatsoever things are in his eyes pure, lovely, of good report — these, and no others, he seeks to realize in his poetry. And so, as his ethical conceptions develop, his poems develop with them. In short, when you study the principles that governed Schiller's thought on practical questions, you enter at once into the laboratory where his genius worked, and witness at least a part of the process, in so far as that can be made visible, by which his productions reached maturity. And this is the ground of the importance of Schiller's ethical studies in the history of his life and works.

These studies were, as we have indicated, not for the first the fruit of an intimate and systematic acquaintance with philosophy, or with the special branch of it concerned. It is much rather true that Schiller finally came to busy himself quite systematically with philosophy because he had first long been an independent student of ethical problems, and had been unable to solve them satisfactorily.

In fact, to give a complete account of Schiller's ethical studies one would have to write a running commentary on all his works from first to last. And, at the same time, to take notice only of those of his writings wherein his opinions are stated in technical language, as a result of his special studies undertaken at one particular period, would be to give a false impression, and substitute only a very small part for a whole. We may perhaps avoid both errors by briefly sketching Schiller's development up to the time when he felt himself led to a special study of philosophy in hope of solving his difficulties and clearing his ideas on ethical and æsthetic problems; by then giving some account of this period of theory and its results, and by finally indicating the consequences which all this had for the poet's last and greatest period of productive activity.

The general chronology of Schiller's life favors such a division of the subject. And as this chronology is of some importance for the formation of clear ideas as to his course of development, I take the liberty of pausing for a moment over it.

Schiller was born November 10, 1759, and died May 9, 1805. A glance at the dates of his works assures one that by far the greatest of them belong to the last ten years of his life, from the beginning of 1795 on. The philosophic lyrics, the mass of the ballads, the dramas from "*Wallenstein*" to "*Tell*," the correspondence with Goethe, would all have been lost to the world had Schiller's illness of the year 1792 and the following year proved fatal—a result which seemed at the time very imminent. The works between 1780 and 1795 may, in the next place, be considered as falling under three periods: that from 1780 to 1783, inclusive, in which his first dramas, "*Die Räuber*," "*Fiesco*," and "*Kabale und Liebe*," together with the "*Odes to Laura*," and a few minor lyrics, fall; that from 1784 to 1788, inclusive, a transition period in his poetic style, marked principally by "*Don Carlos*," the tale known as the "*Geisterseher*," and the "*Philosophische Briefe*;" and that from 1789 to 1794, the transition period in his mental development, in which he gives up poetic production almost altogether, and busies himself first with his-

tory, then with philosophy. Finally, in this last-mentioned period, we have, as the sub-period of special philosophic study, the years '91, '92, '93, and '94. In these, Schiller busied himself principally with the Kantian philosophy, and wrote the well-known series of æsthetic essays.

We have, accordingly, first to treat of Schiller's ethical studies, systematic or otherwise, as they find expression in his writings previous to the year 1791. We shall then be prepared to speak of Schiller the Kantian, from the year 1791 to the year 1795, and shall look ahead for a single moment at Schiller the classical poet, belonging to no school, and in fact to no nation, but to the history of the human mind as a whole, and to the literature of the world at large.

An unsolved theoretical problem may be, to a simple investigator, a source of pleasure. But an unsolved practical problem is to a poet only a cause of trouble. In so far as Schiller in his early views on ethical questions is uncertain, we may expect to find him unhappy. And, indeed, when we consider the problems that arouse his anxiety, we shall not be astonished. Let us mention some of these problems.

In the first place, then, we find Schiller deeply perplexed by the narrowness, the essential limitation, of all human character, knowledge, and attainment. That we have desires and powers in themselves perfectly justifiable, and yet in the nature of things incapable of finding in the actual world adequate objects — this impresses Schiller as containing a great and intensely practical problem in itself. What are we to do with these powers and desires? Are they illusions, through which nature makes use of us for unknown purposes? And must we therefore learn to rise above them, to despise them, to become cynics? Or are they not rather indications of a high and supernatural vocation of man, whose full realization is for the present hindered by powers of evil which we cannot understand? If this be the case, then do not these powers and desires open up to us the means of forming to our minds the ideal of a perfected and victorious humanity, an ideal that we may never see attained, although our business must be to strive for it unceasingly? This is the query of all Schiller's

early poetry. As a poet he inclines to the latter solution. There is nothing cynical about his true nature. But how he shall arrive at such a solution he cannot see; and when he writes a confidential letter, or attempts an especially mournful or passionate love-song, he often tries to convince other people that he is a cynic after all, that he does not believe in the true or in the good very seriously, and that he should not wonder if the whole turned out to be only a figure in the great dance of atoms. He quickly recovers in all cases, at least sufficiently to demand a way out of his difficulties from some one, or to dream out one for himself; but nothing can prevent the conflict from beginning all over again.

This difficulty is a very real one for Schiller, and not a mere subject for poetic fervor. The circumstances of his life have impressed it upon him and given it a peculiar tinge. His youth was not one of freedom, but of bondage in a military school. Even his course of study for his profession was, with the profession itself, forced upon him. He had no choice. His culture had thus been neglected, notwithstanding that his education was in a sense quite broad, although not exactly liberal. Sympathy, too, was lacking. And thus in all directions he felt his freedom of movement walled in. To be a citizen of the world, to be free, to know no law but what a higher consciousness sets for itself—this is the wish that breathes everywhere from his early poetic efforts.

Often the wish is obscurely expressed; often it asks simply that indefinite fullness of consciousness, that unordered overflow of intense feeling, which every one at first is apt to conceive as the essential effect of the beautiful, and the essential content of higher life. But, unstable as this view of things is, the poet must pass through it on his way to better understanding of his task, and in passing he makes this personal problem a universal one, and finds unlimited food for thought in the continual strife in the world between the desire for independent activity on the part of the individuals and the iron necessity with which mother Nature surrounds all her children. As early as in his graduation essay (*Ueber den Zusammenh. d. thier. Nat. d. Mensch. mit seiner geistig.*) he had given a pro-

visional solution to the problem. In this essay the body of man is taken as a general representative of the necessity of nature, and the soul as the general representative of the desire for freedom. The soul is shut up in the body, he reasons, because otherwise it could not develop its powers. Hearing and seeing, moving and constructing—yes, even much of thinking—are all obviously determined by the body.

Suppose a newly-created soul set alone by itself, without any body. It cannot hear nor see, it cannot act, it will never find out how to think—in fact, it might as well not exist. In short, by this reasoning the young surgeon finds it so easy to prove the value of having a body that we are almost tempted to ask, What, on this basis, may be the use of having a soul? The essay is eminently proper, eminently tedious, perhaps not quite sincere, but at all events unmistakably materialistic in its consequences. Schiller was not conscious of this fact, and was, at all events, no materialist at any point of his career. The incompleteness and instability of the solution he here proposes merely serve to show how far Schiller was from the full attainment of his end—the end, in fact, he never attained till the day of his death. The necessity of nature, which is the unspiritual; the needs of the spirit, which seem in this world but accidental—these are the two members of Schiller's Antinomy; and Antinomy it always remained, through abstract thinking and poetical enthusiasm, down to the end of his career.

The essay we have just mentioned is the first extant prose work, if we except "The Robbers" (which, notwithstanding the form, must be reckoned as poetry), in the course of Schiller's life as an author. If in its somewhat dry way it attacks the poet's pet problems, we may accept the fact as a sign that when Schiller writes prose again he will not forget to discuss anew the same topics, and, if he can, in better form. And, accordingly, we find further on, in 1786, a series of philosophic letters, in which, in the form of a correspondence between two friends, the ethical problem is once more taken up and its solution sought in an attempt at a poetic scheme of the universe. Perhaps these letters may serve best to introduce

the few words we have to say of Schiller's ethical studies as influencing his poetry in this first general period; for the letters are themselves highly poetical in their form, and are more systematic than any one of the lyrics from near the same time. In fact, no better commentary on the "*Lied an die Freude*" could be found than just these letters.

The external motive for the writing of the letters was the friendship of Schiller and Körner, and the intercourse and correspondence that grew out of it. Körner, the father of the poet Theodor Körner, who died in the *Befreiungskrieg*, was himself a man of no small talent, but more a thinker than he was a writer. His place in Schiller's early development is that of a quiet and kindly opposition. When Schiller is in despair, Körner encourages him. When Schiller jumps at conclusions, Körner invites him to study philosophy, and trust more to his understanding. When Schiller plunges into hard study, Körner reminds him of his vocation as a poet. And so throughout — with a curious mingling of affection, criticism, reverence, advice — Körner gives his great friend just the stay the perplexed soul needed. The correspondence of the two has long been famous. It was natural that Schiller should discourse of his difficulties concerning the problems of life with his thoughtful friend. Körner seems to have been a Kantian from the first, and he was not slow in recommending Schiller to search for a solution of his difficulties in that philosophy. But only the theoretic part of the system had as yet appeared. It was hard reading; Schiller's philosophic preparation was imperfect, his interest in his art very great, his outward circumstances not entirely satisfying, and his future still doubtful. He felt only the need of appealing to some kind of philosophic doctrine to escape from the weight of his problems. His reading in this direction had been mainly confined to the popular philosophy of the *Aufklärungs-periode*. With wonderful intuition he had seized on just the points that were fitting for a general doctrine of nature such as he sought, and now he made use of this material as a basis on which he might build his own speculation. This is the way in which the "*Philosophische Briefe*" originated.

The "Letters" are, as said, supposed to pass between two friends. Julius and Raphael are the names — Julius representing Schiller himself; Raphael, Körner. In fact, Körner is in part the author of the letters of Raphael. The form is in itself significant. At this time Schiller hopes to find in friendship the concrete solution of the ethical problem. This problem was: How shall man, who aspires to something incomparably higher and nobler than nature, be able to exist and develop in a world where he is cramped everywhere by iron laws of necessity, laws that are totally indifferent to his aspirations? Schiller hopes to find this as the answer: Man must become happy by making himself a friend to a fellow-man — by loving and being loved; for in friendship there is combined utter surrender of self to a foreign power — utter abandonment of self to a need of nature — and yet at the same time the highest freedom, the completest self-consciousness.

Julius finds himself full of doubts as to the nature and government of the world just at the point where he most needs assurance. For he is likewise in doubt as to the vocation of man; and how shall his doubts be put away if he cannot tell whence man came, nor whither he goes? Reason were a glorious treasure, he says, if it only might reveal to us something. But this god is put into a world of worms. The body with its needs is there; nature with its rigid regularity hems in the aspiring spirit. The vasty deeps of space are open to the mind; immeasurable spheres of activity seem offered — only that the mind may not think two ideas at once, nor have any certainty as to present, past, or future at any time. This is the most terrible of imprisonments; and that soul seems happier that never attains the knowledge of its imperfection, but remains for all life in the stolid indifference of ignorance.

This is the dark side of the picture. But Julius sees one hope of escape. What if this iron necessity of nature be itself but an illusion, and the free aspiration of the spirit be the reality? If there must be illusions somewhere, why not on the side of the party of evil? Perhaps, then, if we give free rein to fancy and construct for ourselves the picture of the best possible world, we may in the end be able to show

that our real world does not differ so much from this picture after all.

Here is the starting-point for Julius as Natur-philosoph, or, as he seems to prefer to be called, Theosoph. We cannot follow him into details. Suffice it to indicate the direction his thought takes. A world wherein the ordering of nature is to be in radical union with the aspirations of the spirit must be a world of love. Only by this means can the desire for individual freedom be reconciled with the bowing before external power, viz., when the individual feels himself united to the whole by the bonds of all-embracing affection. The feeling that links heart to heart in sympathy must be the principle that moves all things; otherwise, nature is a dead mass to us. God must, therefore, be the highest expression of this principle of love, and all the world must have been created by Him simply for the sake of realizing in all its infinite modifications the one idea of love. And in this world our duty, our highest vocation, must be the intensifying and increasing of the human affections with which we are endowed. Towards all mankind, brotherly love; towards our friends, the most perfect self-sacrifice; towards the ideal of love, worship — such is the whole duty of man.

Julius finds it easy enough to postulate this theory. He is sadly at loss for means to prove it. He can at best say only that the world ought to be at least as good as the thought of one poor mortal like himself. And Raphael offers no better consolation than that Julius should wait for more light, and study up “the limits of human reason;” by which, of course, our prosaic friend Körner means nothing more or less than the “*Kritik d. reinen Vernunft*.”

Such is the main content of the “*Philosophische Briefe*,” which remain after all only a fragment, but which are very suggestive of the inner life of our poet. It is obvious what must be the consequence as to his poetic productions in general during this period. If his ethical ideas govern his poetry, you must find, these ideas being what they are, a double tendency, producing two classes of poems. Is the poet chiefly occupied with the nobility of the higher affections, is he thinking of the

worth of friendship and love for humanity — then the difficulties suggested by the dead mass of nature will be pushed into the background; the poet will see only the bright side; he will extol duty as the mere natural outburst of affection; he will vivify nature itself, and see love and harmony everywhere. Such a mood gives birth actually to the early lyric, “*Die Freundschaft*,” and later to the “*An die Freude*.” In the first occurs that famous apotheosis of friendship, which is, no doubt, the finest triumph of Schiller’s genius to be found in the “*Anthologie*,” or in the other productions of the same time. The second needs no special reference. Critics may, indeed, say that the “*An die Freude*” is not a perfect poem, and that the effect is a little disordered. That, however, does not touch the fact that it is a very great poem, and that the effect is incomparable.

But is the poet more vividly conscious of the oppression of the order of nature, more attentive to the limits of consciousness, then the ethical tragedy, in which Schiller from first to last excelled, comes into the foreground — the world becomes a prison, nature a mysterious and cruel divinity, duty an external and inimical power; while love, the one saving feature of the whole, sinks into an accidental subjective phenomenon, beautiful but powerless. Only the poet’s earnestness and manliness prevent him in these cases from becoming sentimental and tiring the reader with weak complaints. The examples of this style of poetry are, in this first period, common enough. In so far as the play of “*The Robbers*” has any plan at all, it rests on this idea. The original design of “*Don Carlos*” was the representation on the stage of poor, lonely love in a world of foes, rushing through life in an agony of passion, and finding destruction in the end — a sentimental design, indeed, and altered to answer the needs of the poet himself, who was in reality made of much better stuff than would be indicated by such a picture. The lyric “*Resignation*” is another variation of the same theme — the conscious spirit crushed before unconscious necessity, and only comforted by the thought that everybody else fares about as badly (“*Mit gleicher Liebe lieb’ ich meine Kinder*”). The original form of the “*Götter Griechen-*

lands'' contains a few especially fiery stanzas, wherein the poet expresses his opinion of the order of nature while pretending to believe that it was not always so bad, and praising a mythical antiquity. The most outspoken of these stanzas were afterwards omitted.

Here, then, is an inner contradiction — a stubborn, insoluble residuum, as it were—in all Schiller's early thinking and constructing. If his ethical postulates are to be satisfied, he must be permitted to idealize the doctrine of nature. But if nature is stubborn, if she refuses to reveal to him anything but eyeless law — necessity that swerves from its course for the sake of no aspiration or demand or need of the individual—then the ethical postulates remain unsatisfied, the moral law is a heavy load, poetic idealism is but idle fancy.

From this stand-point there remain for Schiller but two provinces free to a greater or less degree from the burden of this perplexity. The one province is that of simple action. Man may work with ideal purpose so long as he lives; this, at least, the iron necessity of nature permits. And so long as one is hard at work, he is excused from answering abstruse questions. This spirit, the *sobriatur ambulando* of modern thought and life in general, is characteristic of Schiller's own laborious effort through his whole career. The other province where a partial reconciliation of necessity and freedom may be sought is that of political development. Man makes the State, thinks Schiller; therefore the State is, as a free construction, to a certain extent removed from the interference of dead nature. Here may be room for ideal energy, and here the ethical vocation of man may be in part realized. Schiller's thoughts on this subject are put into the mouth of the Marquis Posa, a character who is indeed, with all his nobility, a kind of filibuster, and whose advent in Schiller's brain during the composition of "Don Carlos" was the cause of a general revolution in the ordering of that drama—quite as great as the revolution caused in King Philip's court when the marquis appears on the scene. But he is an honest character, although fantastic; and his political idealism is the true expression of the attempt Schiller made to solve his ethical problem by consid-

ering the greater man of Plato's Republic, the State. It was the Schiller of the time we are now describing who hailed with hope the commencement of the French Revolution, just as it was Schiller the Kantian who lived to lament the bitter disappointment of these hopes.

The substance of all the foregoing is that the Schiller of the first period is not a nature-poet, and must not be judged as one. His sympathy with nature is, in fact, not developed; and if it were, he would not know what to do with it. He sees in nature a great display of forces, but does not pause much over the beauty or the significance of single features. He is too deeply troubled by unrest to be contemplative, too much in doubt to be submissive; and the reflective nature-poet could in modern times hardly succeed without one of these qualities. The Schiller of the "*Spaziergang*" is still far away, and years of progress come between. And yet, as we shall see, the Schiller of the "*Spaziergang*" himself was only half a nature-poet. The problems of this first period remained always in part unsolved.

The study of the antique classical models from 1788 on — a study which did so much to perfect Schiller's style — did not assist him in his ethical difficulties. The study of history only made the material of facts, on which his doubts were founded, greater. He appealed to the reigning philosophy for aid, and in 1791 commenced the study of Kant.

What Kant was to that age it is difficult for us fully to appreciate. His friends and foes came together into parties each of which combined many very heterogeneous elements. We find it thus very hard to say just what the early Kantians were in tendency — what they consciously meant as a body. Somewhat similar was this critical movement in its external character to that originating under the stimulus of Darwin's *Origin of Species* to-day — a similar combination, that is, of the most devotedly scientific and the most unfeignedly popular features of the thought of the time. But such a comparison is necessarily imperfect. Suffice it for our purpose that the "*Critique of Pure Reason*" was then read or read of by everybody who made any pretensions to keeping pace with the

thought of the age, that every one had an opinion of its merits, that many were confident of great revolutions of thought to spring from it. Schiller had long heard of the book, had long been advised to read it, had often been frightened from it, and now determined to approach it. He approached it, however, carefully, by first reading the "*Kritik d. Urtheilskraft*," Kant's systematic treatise on æsthetics and connected subjects. A poet could not have chosen a better means of becoming acquainted with Kant, for the "*Kritik d. Urtheilskraft*" is truly as entertaining a book as the sage of Königsberg was capable of writing. Schiller followed this up by reading Kant's principal ethical treatises and essays, in so far as they had yet appeared. The results of his study in this province will interest us here.

Kant's philosophy is a glorification, not of self, but of Consciousness. In Consciousness is all knowledge rooted; through Consciousness is all truth known. This is the starting-point. To conceive of the universe in part, or as a whole, is an act of Consciousness. To judge the truth or falsity of your conception is to judge Consciousness. But this consciousness is not the mere disordered mass of sensation—it is the result of formally-ordered sensation, of organized experience; and this, in its completest phase, is called science. The rules by which experience is ordered are the special property of Consciousness; without them it would not be consciousness. The Experience is the raw material that is to be organized. This is, in a word, the Kantian Theory of Knowledge. His Ethical Theory has a like basis. Nothing can be a rule of conduct that does not commend itself as such to Consciousness. If such a rule does commend itself to Consciousness as the one right one, then it ought to be followed, and the *Ought* remains eternally binding, no matter whether the rule actually ever is followed or not. Kant's deduction of the principles of conduct does not here concern us. Our business is only with the application of this foundation-maxim to the doctrine of the Ideal and Real as subjects of practical interest.

Suppose the demands of your moral consciousness are not

realized in the world. Suppose the *Ought* of your ethical postulate finds no actual fact to correspond with it. What refuge have you from endless perplexity at the course of events? You have, says the unshaken advocate of the rights of consciousness, you have even the Ethical Idea itself. Consciousness, as represented in the Practical Reason, is the support for this Idea, which is for that very reason judged better than the actual world in which it fails to find its realization. Accept this Idea for its true worth; be free from the bondage that depends on the sense, instead of on the moral consciousness, for the fulfillment of the latter's demands; be an ethical, and not a sensual, being.

In this direction these seek for the solution of the problem of Ideal and Real. The Ideal is that which is in conformity with your highest moral demands. Does it lie within your own power to make this Ideal an actual fact—then work for this end. But, is the realization beyond your power, and is the Real of Nature opposed to your Ideal, then your duty lies in independence. The reason in that case judges, postulates, examines, but never departs from its confidence in its own fixed principles. In these it finds a satisfaction that is greater than the disappointment; for it recognizes its own incomparable superiority amid the confusion about it.

The interest that all this must have had for Schiller's problems is evident. Especially, however, must he have been struck by one feature of Kant's theory. The rights of the moral Reason are asserted as against the simply arbitrary play of fancy, as well as against the extravagant discontent of the disappointed senses. Not merely must you find a higher satisfaction in the possession of the ethical ideas, whether or not they be found realized in the actual world, but you must also not try to substitute for this higher satisfaction any mere appeal to the fancy to solve the world-problem by imagining a world behind the one we see, like it in being a world of sense, but unlike it in being a perfectly good and happy world. In other words, all such attempts as Schiller's own undertaking in the "*Philosophische Briefe*," to make the world more tolerable to a poet by fancying that it is all an illusion, covering up a

goodly, poetic, fair, and free world behind the scenes, are, according to Kant, unsatisfactory. The poet's constructions are judged on æsthetic grounds; but the philosopher must be condemned if he have not held to reality, however unwelcome it be. The Reason needs no such support. It needs only confidence in itself. It does not ask to make a world out of mist, to correct this one that is made out of rock. No! The Reason is destined for a higher object. It is destined as the judge of all things.

The vocation of man is, therefore, the strictest obedience to the moral law, without regard to any hope he may have or not have of seeing all its precepts ideally realized. And the true equilibrium of life is attained when the Reason that supports the moral law has come fully to realize its own complete self-sufficiency, and to cease despairing of its own worth if it finds that it is not able to govern the course of outer Nature. So much, then, in general, for the inner contradictions of life which had so long oppressed Schiller's mind. If this treatment of them did not remove them, it at least opened a way towards rising above them. But, in particular, as to the content of these contradictions: Schiller had looked upon the iron necessity of nature as a power opposed to the desires and aspirations of the individual, and had found in this the ground of all the perplexities of life. What is the sense of Kant on this point? It is this: Instead of calling Nature, where it seems to oppose the realization of the moral needs of man, a non-ethical and inimical power, it were better to call it an obstacle, to all intents and purposes accidental in relation to the Reason. Reason does not see in Nature an enemy, but simply an unformed material that needs a transforming hand. That Nature does not produce ready-made statues does not arise from the opposition in Nature to the realization of the beautiful. It is simply the result of the fact that any agreement of Nature's rock-forms with the demands of the sculptor is a pure accident for the sculptor himself. His duty is, not to go statue-hunting through the mountains, but to take suitable material and make statues. The vocation of man is not to be found in the world merely, but it is to be realized by labor.

Such is the character of the Kantian Ethical doctrines in so far as we here have to deal with them. Schiller could not fail to be deeply influenced by them. They transformed him, in fact, from the hesitating, uncertain, despondent poet of the first period to the great Idealist of the classical time. They did not ever entirely conquer his former difficulties, but they brought him to the stage at which difficulties become incentives to earnest labor — not insurmountable barriers that terrify. They never entirely reconciled him with Nature, but they caused him to come nearer to her, and learn more from her. They did not make him contented with life, but they rendered his discontent a healthy, and not a morbid, one.

To determine how much external influences had to do with this change in Schiller, to follow the interaction between the philosophical and the literary elements in the life of a man who was studying Kant and the antique at the same time, to calculate the effect of the historical studies on the author of the “Netherlands” and of the “Thirty Years’ War” — all this, in itself an interesting task indeed, must be excluded from the present discussion. We can only, in conclusion, mention a few of the most prominent of the results of the study of the Kantian Ethics as these appear in Schiller’s works themselves.

The conception of Nature and of its relation to the poet — this, we have said, is changed for Schiller from this time on. How changed? In the three principle æsthetic essays you find a view of Nature in many respects peculiar. This view is foreshadowed as early as 1789, in “*Die Künstler*.” It is most fully expressed later, in the “*Spaziergang*.” Its development belongs to the era of the Kant-studies. This view is briefly expressed thus: Nature is the idyllic state of *naïve* perfection from which man starts. It is the ideal state of conscious perfection to which man must finally return. The object of culture is to make man in the full exercise of free choice become that which nature in the simple necessity of her own methods originally produces. What has this view in common with the previous one — the view that found nature an iron necessity that oppresses man? How comes one from the other? In answer to this question we must of course not hope to go too far beyond

the fact itself of the change. The simple truth is that, be it because of happier circumstances, or because of the gradual growth of the intimacy with Goethe, or by means of the study of the Greek poets — be it from any or all of these causes, Schiller had come to appreciate and enjoy nature-beauty more. This we must accept as truth, and question no further as to means. But the ethical studies now united themselves with this change of mood. The restless fantasy had previously complained of nature as an enemy, where she did not satisfy poetic needs. The more carefully trained judgment now is willing to let nature pass wherever she does not agree with the moral demands, to avoid her instead of reproaching her. But where she does conform to the ethical postulates, where in her simplicity and necessity she finds time also for excellence, here the ripened receptivity, the newly-developed submissiveness of the poet, is now ready to accept and to rejoice; and in these particulars is nature set up as a model for man, that she may shame his bungling intelligence with her unconscious skill.

Had Schiller been able to rest here, he would have become a nature-poet, like Goethe; but he would have suffered by the comparison. He had not been at school under the great teacher very long — while Goethe was her well-beloved child. But the ethical earnestness does not suffer our poet to rest at this point. The worth of Nature is now understood; but the problem as to Man — what form shall he give that? Old questions are aroused afresh here, and the awakening love of nature is disturbed by elements that forever keep it from becoming entirely pure or completely independent. The old opposition between the conscious effort and the unconscious power that limits effort is transferred to the sphere of consciousness itself, under the Kantian influence; and now we hear of the strife between the ethical tendency, which seeks harmony of spiritual life under the moral law, and the tendency of the senses, which introduces distraction continually. The presence of this strife, which the poet never succeeds in stilling or in reconciling with higher demands, casts a melancholy shadow over the whole of the classical period, and is the

feature in it that corresponds to the discontented murmuring of the first period.

Something of the influence of Fichte, with whom Schiller was for some time in companionship, is seen in the "*Briefe über die ästhetische Erziehung*," in which this matter is for the first time discussed at length. There is the same sharp contrast between the person and its rights and the distracting influence of the senses and desires, the same demand for a self-assertion which shall bring unity into the infinite diversity of life, the same despair of any final attainment of the harmony desired, the same heroic determination to enter the conflict, to work for the goal, though complete victory be infinitely removed, which are found in the works of the author of the "*Vorlesungen über die Bestimmung d. Gelehrten*" and of the "*Wissenschaftslehre*." But, as Schiller was a poet, and not always in the heroic mood, the joy of the warrior in the conflict is not always to be found in what he writes, and simple progress without hope of completion is often a wearisome enough prospect to his mind.

In one of the well-known lyrics he describes himself as a pilgrim who has been seeking for the place where "The earthly shall become heavenly, eternal;" long he has wandered from his father's house, night and day he has not stood still, but yet heaven ever remains far above—never touches earth; death is coming fast; he is past the age where he can hope for great changes; the stream bears him away; his Ideal can never be found—*das Dort ist niemals hier*. In the "*Ideale*," written as early as 1795, he even represents himself as deserted by his enthusiasm for a better life, deserted by everything but memory and friendship and the power to work. And again and again you find the same complaint, all through the classical period. The individual limits are recognized as inherent in the individual life. Nature is not blamed for them as she once was; but none the less are they limits.

The enthusiastic spirit often returns. The hand that wrote the "*An die Freude*" in 1785, can in 1795 pen "*Das Reich*

der Schatten,” or, as we know it now, “*Das Ideal und das Leben.*” Here the soul is to become a conquering Hercules ; to forget its limits, and so to destroy them for consciousness ; to rise in contempt above the incomplete actuality ; to storm heaven, and find — what? Oh! the nectar of Jove, the Truth, the timeless and spaceless Eternal, and what not — in short, the Indescribable. Here the poet’s strong inspiration fails ; one moment of sublime enthusiasm, one glimpse of a most excellent glory, and he is on earth again ; he has tried to transcend the limits inherent in all individual life, and he has attained something too much like death to be an object on which our thoughts can long dwell without a chill. The first breath of the night-wind of Romanticism has touched the classic fields, and the Hymns to the Night, the Fate-Tragedies, the Epilogue in Heaven of the Second Part of Faust must all follow in their due course. The Classical spirit might have endured longer could it have but answered its own questions as to the vocation of man.

But the field of actual striving life — here is hope for something, is there not? Yes, but not for any complete satisfaction. In the “*Spaziergang*” you have the whole story told in brief form. The best that man has done is worse than the fair nature he has departed from in doing it. Culture has given birth to luxury, to fraud, to anarchy. Against your will you must recognize the superiority of Nature, and look in her for the accidental realization of the good you so long to see freely realized in man. Human history seems like a bad dream, and the poet can only comfort himself by looking up to the rocky hills, untouched by builder’s hand, and thinking : Here is, still, material. There is hope yet, for all is not behind us ; something remains to be done. The same mingling of earnestness in labor and melancholy in reflection pervades the whole of the “*Song of the Bell.*” Political life is, indeed, not a subject for hope, thinks our poet, in so far as relates to the near future. There is no Marquis Posa for the French Revolution. But in the community, in the life among small bodies of men, there is interest and hope. For the great

people, you must look far ahead. Let Reformation begin at home.

We have followed our poet as far as we proposed to do at the outset. And here we must take leave of him. To sum up in briefest form the results, we have found Schiller busied in his first period with the problem of the relation of man to nature; in the second, with the relation of the actual man to the ideal man. Both problems are ethical; both, in reality, but different aspects of the same problem — that of the vocation of man. All our author's poetic productions are more or less tinged with the ethical element — all, therefore, more or less conditioned by the understanding he may have of his problem. In the first period Schiller doubts the possibility of a reconciliation with nature; in the second, the possibility of attaining the harmony of life. The first doubt lost its significance when the poet became a follower of Kant; the second remained with him till death. The first was the stepping-stone to his classical poetry; the second gave the signal for the commencement of the romantic school in literature. "The Robbers," in which the first tendency received its expression, was the last great work of the *Sturm und Drang* period. "*Die Brunt von Messina*," wherein the second tendency dominates all, wherein it becomes the foundation for a vague terror in view of all life and all action, and seeks refuge in mysticism, is the first of the *Schicksals-tragödien*. With any general judgment of an æsthetic nature on Schiller's whole career we have not here to do, and it would be useless to discuss what time has already settled. But one cannot help expressing a genuine admiration for the equipoise, the personal power, of the man who could so deeply feel the force of the problematic side of human life, and yet never give way to *Weltschmerz*; who could endure so many conflicts, and yet win for himself the honors of a classical poet. All is not conquest in the great idealist's life-history; all is not repose and perfection in his view of life. But is this so sad a failing? If it is, let him for whom life has no problems yet unsolved sound the first complaint.

JACOBI, AND THE PHILOSOPHY OF FAITH.

BY ROBERT H. WORTHINGTON.

The result of Kant's "Critique of Pure Reason" was the critical annihilation of dogmatism. The three ideas of Reason — the immortality of the soul, the freedom of the will, and the existence of God as a Supreme Being — were shown to be insufficient, incapable of proof, and apt to lead to the most glaring paralogisms and sophisms. As applied to our cognitions, these ideas are purely *regulative*, but are not *constitutive*, principles; they do not really advance our knowledge, being merely intellectual spurs which stimulate the mind ever to seek a higher unity and the unconditioned. This is the negative side of the Kantian philosophy; the corresponding positive is to be found in the "Critique of Practical Reason." If speculative Reason were powerless to prove theoretically the existence of God and of the soul, as postulates of practical reason these ideas must be retained, since they are so closely interwoven with our moral nature as to have become an essential part of it.

Henceforth the course of German philosophy, so far as regards the theory of knowledge, was towards Rationalism, or Intellectualism, which has always been a favorite philosophy with the Germans. On the principles of this doctrine it is in reason alone that truth and reality are to be found. "Experience affords only the occasions on which intelligence reveals to us the necessary and universal notions of which it is the complement; and these notions constitute the foundations of all reasoning, and the guaranty of our whole knowledge of reality." While the theorizing mind in Germany was busily engaged in forging links in the chain of Rationalistic thought, the religious sentiment, dissatisfied with the negative results of such a system, clung all the more firmly to its positive beliefs. A few great intellects, rightly interpreting the results of all previous metaphysics, sought refuge in the traditions and institutions of the past, and struggled to utter what tens

of thousands *felt*, but could not express, inculcating a reverence for that higher authority which transcends the human, and professing a mystic recognition of the “unseen agencies which direct the course of nature and history.” Speculative thought in Germany, after Kant, owed much to the ancient philosophy, and many of the leading doctrines of the early Greek schools were again brought to light and life. The immense influence of these ancient systems upon modern thought goes to prove that the mind is necessitated to think in certain definite ways, and shows the irresistible tendency of philosophy to repeat itself. As the great Pascal remarks: “Nature confounds the Pyrrhonists, and Reason the Dogmatists. Our inability to prove anything is such as no Dogmatism can overcome, and we have an idea of the truth which no Pyrrhonism can overcome.”

As we have said, according to Kant, the three ideas of Reason, as mere practical suppositions, afford no theoretic certainty — but, rather, remain open to serious doubt. It was in order to do away with this uncertainty, this despair of rational knowledge, that Jacobi, the philosopher of faith, sought to establish the principle of direct or intuitive knowledge, of natural and direct faith, in antithesis to the position of theoretic, system-making thought. This was but a natural and logical development of Kant's own notions of an intuitive understanding. Certainly, says Jacobi, the highest ideas of Reason — those that partake of the divine — are not to be attained by demonstration, which would be no more than making finite that which is infinite; but this impossibility of proof and certain comprehension is the very nature of the divine. In feeling, then, in direct intuitive cognition, Jacobi found that certainty which Kant had demonstrated not to be in theoretic Reason. What lies beyond our discursive understanding, those judgments which transcend Reason, whose truth or probability we cannot discover by sensation and reflection, are the objects of faith.

Friedrich Heinrich Jacobi was a Christian philosopher in the highest sense of those words. He was a man of pure, elevated, noble character, of deep piety, and of a truly poetic

temperament. With the single exception of Kant, he was the most original thinker of his times. His writings are elegant, and show forth a profound and harmoniously-developed mind. This elegance and profundity of his philosophical works have gained for him the name of the German Plato, and certainly he has succeeded in reviving much of the spirit of that "cheerful domain of ancient thinking." His writings are not composed systematically, but "rhapsodically — as the grasshopper jumps." "It was never my intention," he says, "to set up a system for the school; my writings sprang from my innermost life, following a certain historical order; in a certain way, I was not the author of them — certainly not of my own will so, but drawn on by a higher power which I could not resist."

In its negative, polemical aspect, the leading principle of the philosophy of Jacobi is the positive affirmation that a speculative philosophy, when fully and consistently developed, must necessarily lead to Spinozism; and Spinozism, he says, is combined fatalism and atheism. The man whose spirit is satisfied with Spinozism cannot, by any force of "pitiless logic," be persuaded into an opposite belief; his premises are certain, and his reasoning logically consistent. But such a one, says Jacobi, gives up the noblest elements of spiritual life. This, then, is the conclusion which Jacobi draws from the "drama of the history of philosophy:" "There is no philosophy but that of Spinoza. Whoever can suppose that all the works and ways of men are due to the mechanism of nature, and that intelligence has no function but, as an attendant consciousness, to look on — him we need no longer oppose; him we cannot help; him we must leave go. Philosophical justice has no longer a hold on him; for what he denies cannot be philosophically proved, nor what he asserts, philosophically refuted." What resource is there left? "Understanding, isolated, is materialistic and irrational; it denies mind, and it denies God. Reason, isolated, is idealistic and illogical; it denies nature, and makes itself God." How, then, do we cognize the supersensual? Jacobi answers, through *feeling*, *faith*, reason. The flight by which we raise ourselves above

the sphere to which, he says, the understanding is confined, is through faith in God and divine things. This is the *salto mortale* of human reason. As Ueberweg well interprets this deep-seated faith of Jacobi: "There lives in us a spirit which comes immediately from God, and constitutes man's most intimate essence. As this spirit is present to man in his highest, deepest, and most personal consciousness, so the Giver of this spirit, God Himself, is present to man through the heart, as nature is present to him through the external senses. No sensible object can so move the spirit, or so demonstrate itself to it as a true object, as do those absolute objects—the true, good, beautiful, and sublime—which can be seen with the eye of the mind. We may even hazard the bold assertion that we believe in God because we see Him, although He cannot be seen with the eyes of this body. It is a jewel in the crown of our race, the distinguishing mark of humanity, that these objects reveal themselves to the rational soul. With holy awe man turns his gaze toward those spheres, from which alone light falls in upon the darkness of earth." This abstract separation of thought and feeling, Jacobi was hardly able to bring into agreement, and he himself confesses: "There is light in my heart, but when I seek to bring it into the understanding, it is extinguished. Which illumination is the true one—that of the understanding, which discloses, indeed, well-defined and fixed shapes, but behind them only a bottomless abyss; or that of the heart, which, while it sends its rays of promise upwards, is unable to supply the want of definite knowledge? Is it possible for the human mind to attain to truth unless through union of both elements into a single light? And is such a union attainable without the intervention of a miracle?" Jacobi failed to effect a reconciliation of this difference of the heart and the understanding, and calls himself "a heathen with the understanding, but a Christian with the spirit."

There is a slight tinge of mysticism in Jacobi, but this seems rather to heighten the beauty of his thoughts than to detract from their force or value. Perhaps, too, it was this very mysticism that preserved him from falling into that all-absorb-

ing spirit of Rationalism which then reigned in Germany. The positive elements of his philosophy coincide very nearly with the doctrines of the Scottish school. His doctrine of the immediate knowledge of the external world, especially, is identical with that of Reid; and his doctrine of reason, or faith, is nearly convertible with the common-sense doctrines of Reid, Stewart, and Sir W. Hamilton. Jacobi carefully distinguishes, in the first place, between his faith and faith on authority. Blind belief is irrational, and is merely supported on the authority of others. This is far from being the nature of his belief, which is founded rather on the strongest, deepest subjective convictions. Then, again, belief is not purely passive, and, therefore, is not a mere receptivity of the soul; it is reason, and must be opposed to the understanding, which is concerned only with finite and conditioned knowledge—in other words, with the products of demonstration. Now, demonstration is but a continuous repetition of the art of drawing conclusions from certain premises, through a middle term, which links together the terms of the conclusion, though it does not itself appear in the conclusions. But the ultimate principles, the axioms necessary to all reasoning, and from which demonstration begins, must be known without a middle term; they must be self-evident—*immediately* known. Moreover, they must be known more accurately than the conclusions deduced from them, and they must be more knowable, *absolutely* and *by nature*. The most general principles, then, are not susceptible of demonstration, because all direct demonstration presupposes as its basis or premise something higher and more general than that which is to be proved; something, also, which must be at least as certain and obvious as the thing to be proved. The more general truths, then, must be immediately certain. This deduction of a thing from its proximate causes Jacobi calls comprehension—we comprehend only what we can explain. The ultimate truths, then, must be absolutely incomprehensible; but there is an organ of the truth which apprehends them, and this private organ of the truth, in which consists the superiority of man over the brute, is the belief of Reason.

Jacobi affirms that all ultimate and absolutely simple facts are facts of Consciousness, and in the veracity of Consciousness he has an implicit faith. To him the great fact of the Duality of Consciousness was clear and manifest. He declares that we are immediately conscious in perception of an *Ego* and a *non-Ego*, known together, and known in contrast to each other. As Hamilton says — and in this he but gives clearer utterance to what was the belief of Jacobi — “In this act I am conscious of myself as the perceiving subject, and of an external reality as the object perceived; and I am conscious of both existences in the same indivisible moment of intuition. The knowledge of the subject does not precede, nor follow, the knowledge of the object; neither determines, neither is determined by, the other.” It is the universal judgment of mankind that there is an external world, existing entirely independent of us. But any attempt of speculative philosophy to deduce the knowledge of it from our understanding must prove vain and useless — a mere empty logomachy. — The duality of spirit and nature cannot be explained by the supposition of some higher principle above the antithesis, in which both the terms meet. Such a supposition is not an explanation, and only advances the problem one step further. The reconciliation must, therefore, if attempted at all, be accomplished in the opposing sides themselves; and this is possible in one of two ways: either from the position of the material side to explain the ideal, as in Spinoza’s materialism; or from the ideal side to explain the material, as in Schelling’s idealism. Consciousness, to Jacobi, declared our knowledge of material qualities to be intuitive or immediate, not representative or mediate. And thus it is that we find the peculiar and appropriate sphere of Reason in immediate contact with the great realities of existence — God, liberty, immortality, the true, good, and beautiful. “In this highest sphere, especially, it appears how Reason is the *life* of the mind. It alone can reveal to us the objects which form the food of that life. And it is only in proportion as we are in harmony with these that the revelations can be made.”

Jacobi spurns the proof of the existence of God which is derived from the evidence of design in the universe. “Is it

unreasonable to confess," he says, "that we believe in God, not by reason of the nature which conceals Him, but by reason of the supernatural in man, which alone reveals and proves Him to exist? *Nature conceals God*; for through her whole domain Nature reveals only fate, only an indissoluble chain of mere efficient causes without beginning and without end, excluding, with equal necessity, both providence and chance. An independent agency—a free original commencement within her sphere, and proceeding from her powers—is absolutely impossible. Working without will, she takes counsel neither of the good nor of the beautiful; creating nothing, she casts up from her dark abyss only eternal transformations of herself, unconsciously and without an end; furthering, with the same ceaseless industry, decline and increase, death and life; never producing what alone is of God—and what supposes liberty—the virtuous, the immortal. *Man reveals God*; for man, by his intelligence, rises above nature, and, in virtue of this intelligence, is conscious of himself as a power not only independent of, but opposed to, nature, and capable of resisting, conquering, and controlling her. As man has a living faith in this power, superior to nature, which dwells in him, so he has a belief in God, a feeling, an experience of His existence. As he does not believe in this power, so does he not believe in God; he sees, he experiences naught in existence but nature, necessity, fate." In other words, "We must recognize a God in our own minds before we can detect a God in the Universe of nature."

We have now seen how Jacobi traced back all our knowledge to a primitive revelation made by Reason—pure objective feeling—of the realities independent of thought. He mainly occupied himself in vindicating the authority of this primitive revelation, and failed to give any complete systematic exposition of its contents. With him, philosophy began and ended in mystery—the primitive revealer itself is mysterious and inexplicable; and the omnipresence of that great Something—which passes human comprehension, which the most unsparing criticism leaves unquestionable—is a transcendent mystery. The belief in these mysteries has nothing to fear from the most inexorable logic; nay, rather, such a belief

the most inexorable logic shows, according to Herbert Spencer, to be more profoundly true than any religion supposes. In the words of a reviewer cited by Chalibæus, "Jacobi is like a solitary thinker, who, at the dawn of day, has found some ancient riddle hewn in an eternal rock. He believes in the riddle, but in vain endeavors to solve it. He carries it about with him the whole day, coaxes out of it some important meaning, coins it into doctrines and images, which delight the hearers and animate them with noble wishes and presentiments; but the solution fails, and he lays himself down to rest, at eventide, in the hope that some divine dream, on the morrow, will give to his longing the true interpretation in which he has so firmly believed."

Such was, in outline, the philosophy of a very great intellect, and it did not go unheeded. Hamann, the "Magus of the North," Herder, and Jacob Fries took up the thread where it had been dropped, and, by a blending of Jacobian conceptions with the philosophy of Kant, developed more fully the doctrine of Faith. For consistent Christians, the doctrines of these great thinkers must be the only reconciliation of the opposite poles of philosophy, the only true end of metaphysics. The very innermost soul of the process of development in modern philosophy, as a high authority justly says, has not been a mere immanent dialectic of principles, but, rather, a long struggle between traditional religious hopes and beliefs, deeply rooted in the modern mind and heart, and the purely scientific results of modern investigations in the fields of mind and nature, together with the attempt at satisfactory conciliation. Theoretically, there is not possible any such conciliation; pure, logically-working reason is powerless to bring together the two antithetical poles. In the end, the instincts of the heart, the *intuitive* perceptions of reason, must form for the Christian philosopher the only true *criteria* of truth and reality. To adopt the language of Mr. Wallace, "The very terms in which Lord Bacon scornfully depreciated one great result of philosophy must be accepted in their literal truth. Like a nun, a virgin consecrated to God, she produces no offspring; she bears no fruit." The end of metaphysics, the foundation of Religion, and the beginning of Science is inscrutable mystery.

Three centuries of transcendent speculation have failed to reduce to logical unity the conflicting differences of Spirit and Nature. On the other hand, Science has not succeeded in explaining one single fact of being or becoming in the world of phenomena. As Herbert Spencer justly remarks: "Every deeper and more general power arrived at as a cause of phenomena has been at once less comprehensible than the special ones it succeeded, in the sense of being less definitely representable in thought; while it has been more comprehensible in the sense that its actions have been more completely predictable. The progress has thus been as much towards the establishment of a positively unknown as towards the establishment of a positively known. Though as knowledge approaches its culmination every unaccountable and seemingly supernatural fact is brought into the category of facts that are accountable or natural, yet at the same time all accountable or natural facts are proved to be in their ultimate genesis unaccountable and supernatural. And so there arise two antithetical states of mind, answering to the opposite sides of that existence about which we think. While our consciousness of nature under the one aspect constitutes Science, our consciousness of it under the other aspect constitutes Religion." So long as this process of differentiation is incomplete, more or less of antagonistic spirit must continue; but when by critical examination of the human intellect, in its original state, all its powers and processes have been completely mapped out, and the utmost limits of possible cognition are established, the causes of conflict will diminish. "And a permanent peace will be reached when Science becomes fully convinced that its explanations are proximate and relative; while Religion becomes fully convinced that the mystery it contemplates is ultimate and absolute."

There are those who say that there is too much idealism in Metaphysics; that the nature of man's spirit demands something more realistic. They claim that Science will satisfy these wants; that the whole history of philosophy has been that of a long period of preparation; and that a new era dawns with the transformation of Science into Philosophy. To this

there is but one reply — it is becoming every day more certain that Metaphysics is the sea towards which all Physics naturally drift us. Mark the gradual blending of modern scientific speculation into Berkeleianism! But Metaphysics is out of court; Science rules the day. Positive Science, leaving out of view the debts it owes to Metaphysics in the way of its very first principles, can only gratify man's curiosity; can enlarge the bounds of his information, if you will, but does not satisfy his inner spiritual wants. But certain it is that this is an age of critical analysis, scientific conquest, skeptical unrest. To many minds, the primitive conceptions have been lost in the elaborations of the temples, and so, long-accepted theologies easily give way to scientific iconoclasm. The spirit of investigation produces an artificial and insincere indifference to all that concerns man's most intimate essence. "Criticism is endured, and even courted; and the vulnerable point of an inherited faith is surely found. Earnest minds sadly but manfully give up their ancestral traditions, and refuse to seek repose in any creed that cannot undergo the extreme test." But the vulnerable points are not the essential points; these, a logical criticism, however, pitiless and unsparing, leaves unquestionable. Even touching material phenomena, men no longer accept, unless in a limited way for its beauty, the language of myth and tradition; they *know* better. "The glory may remain, but verily the dream has passed away." Yet where can a justification be found? The ultimate truths which metaphysics arrives at are not more mysterious and inexplicable than those which are the end of Science. In Science, the deepest truths we can ever reach are simply statements of the widest uniformities in an experience of the relations of matter, motion, and Force; and these latter are but symbols of the great Unknown Reality. Science does nothing more than systematize an experience, reaching even a higher and higher uniformity, but unable to attach to such uniformity anything more than a relative necessity. Religion and Science are thus in the final analysis, when reduced to their fundamental ideas, reconciled; they both end in inscrutable mystery. Restless, unsatisfactory Skepticism, or reverential Faith, follows.

HEGEL ON ROMANTIC ART.

[TRANSLATED FROM THE SECOND GERMAN EDITION OF THE SECOND PART OF HEGEL'S
ÆSTHETICS.]

BY WM. M. BRYANT.

PART III.

INTRODUCTION.¹

Of the Romantic in General.

1. Principle of inner Subjectivity. —2. Of the Ideas and Forms which constitute the Basis of Romantic Art. —3. Of its Special Mode of Representation.

As in the preceding parts of our investigation, so now in Romantic Art, the form is determined by the inner idea of the content or substance which this art is called upon to represent. We must, therefore, in the next place, attempt to make clear the characteristic principle of the new content which, in this new epoch of the development of human thought, is revealed to consciousness as the absolute essence of truth, and which now appears in its appropriate form of art.

At the very origin of art there existed the tendency of the imagination to struggle upward out of nature into spirituality. But, as yet, the struggle consisted in nothing more than a yearning of the spirit, and, in so far as this failed to furnish a precise content for art, art could really be of service only

¹ This introductory chapter of the section on Romantic Art is so profoundly suggestive, respecting not only the relations between modern art and the fundamental doctrines of Christianity, but also respecting the significance of those doctrines themselves, as to render it one of the most important and interesting parts of the whole work. It belongs, however, to that portion (the more strictly speculative) of the *Æsthetics* which M. Bénard has thought it best to abridge. His version, therefore, cannot be expected, as indeed it does not profess, to present in full the thought of this and other similar parts. I have, therefore, translated this chapter directly from the German, and have endeavored, at the same time, to secure as nearly as possible that clearness which is so much more easily attainable in translating from the French.

in providing external forms for mere natural significations, or impersonal abstractions of the substantial inner principle which constitutes the central point of the world.

In Classic Art, however, we find quite the contrary. Here spirituality, though it is now for the first time able to struggle into conscious existence through the cancellation or setting aside of mere natural significations, is nevertheless the basis and principle of the content; it is a natural phenomenon inseparable from the corporeal and sensuous. It is an external form. This form, however, does not, as in the first epoch, remain superficial, indefinite, unpervaded by spirit. On the contrary, the perfection of art is here reached in the very fact that the spiritual completely pervades its outer manifestation, that it idealizes the natural in this beautiful union with it, and rises to the measure of the reality of spirit in its substantial individuality. It is thus that Classic Art constituted the absolutely perfect representation of the ideal, the final completion of the realm of Beauty. There neither is nor can there ever be anything more beautiful.

But there exists something still more elevated than the simply beautiful manifestation of spirit in its immediate sensuous form, even though this form be fashioned by spirit as adequate to itself. For this very union of matter and form, which is thus accomplished in the element of the external, and which thus lifts sensuous reality to an adequate existence, none the less contradicts the true conception of spirit which is thus forced out of its reconciliation with the corporeal, back upon itself, and compelled to find its own true reconciliation within itself. The simple, pure totality of the ideal [as found in the classic] dissolves and falls asunder into the double totality of self-existent subjective substance on the one side, and external manifestation on the other, in order that, through this separation, spirit may arrive at a deeper reconciliation in its own element of the inner or purely spiritual. The very essence of spirit is conformity with itself [self-identity], the oneness of its idea with the realization of the same. It is, then, only in its own world, the spiritual or inner world of the soul, that spirit can find a reality (*Daseyn*) which corresponds to spirit. It is,

thus, in consciousness that spirit comes to possess its other, its *existence*, as spirit, with and in itself, and so for the first time to enjoy its infinitude and its freedom.

I. Spirit thus rises to itself or attains to self-consciousness, and by this means finds within itself its own objectivity, which it was previously compelled to seek in the outer and sensuous forms of material existence. Henceforth it perceives and knows itself in this its unity with itself; and it is precisely this clear self-consciousness of spirit that constitutes the fundamental principle of Romantic Art. But the necessary consequence is that in this last stage of the development of art the beauty of the Classic Ideal, which is beauty under its most perfect form and in its purest essence, can no longer be deemed a finality; for spirit now knows that its true nature is not to be brought into a corporeal form. It comprehends that it belongs to its essence to abandon this external reality in order to return upon itself, and it expressly posits or assumes outer reality to be an existence incapable of fully representing spirit. But if this new content proposes to render itself beautiful, still it is evident that beauty, in the sense in which we have thus far considered it, remains for this content something inferior and subordinate, and develops into the *spiritual* beauty of the essentially internal — into the beauty of that spiritual subjectivity or personality which is in itself (*i. e.*, potentially) infinite.

But in order that spirit may thus realize its infinite nature it is so much the more necessary that it should rise above merely formal and *finite* personality in order to reach the height of the *Absolute*. In other terms, the human soul must bring itself into actual existence as a person (*Subjekt*) possessing self-consciousness and rational will; and this it accomplishes through becoming itself pervaded with the absolutely substantial. On the other hand, the substantial, the true, must not be understood as located outside of humanity, nor must the anthropomorphism of Greek thought be swept away. Rather the human as actual subjectivity or personality must become the principle, and thus, as we have already seen, anthropomorphism for the first time attains to its ultimate fullness and perfection.

II. From the particular elements which are involved in this fundamental principle we have now in general to develop the circle of objects, as well as the form, whose changed aspect is conditioned by the new content of Romantic Art.

The true content of Romantic thought, then, is absolute internality, the adequate and appropriate form of which is spiritual subjectivity, or conscious personality, as comprehension of its own independence and freedom. Now, that which is in itself infinite and wholly universal is the absolute negativity of all that is finite and particular. It is the simple unity with self which has destroyed all mutually exclusive objects, all processes of nature, with their circle of genesis, decay, and renewal—which, in short, has put an end to all limitation of spiritual existence, and dissolved all particular divinities into pure, infinite identity with itself. In this pantheon all the gods are dethroned. The flame of subjectivity has consumed them. In place of plastic polytheism, art now knows but *one* God, *one* Spirit, one absolute independence, which, as absolute knowing and determining, abides in free unity with itself, and no longer falls asunder into those special characters and functions whose sole bond of unity was the constraint of a mysterious necessity. Absolute subjectivity, or personality as such, however, would escape from art and be accessible only to abstract thought, if, in order to be an actual subjectivity commensurate with its idea, it did not pass into external existence, and again collect itself out of this reality into itself. Now, this element of actuality belongs to the Absolute, for the product of the activity of the Absolute as infinite negativity is the Absolute itself, as simple self-unity of knowing, and, therefore, as *immediacy*. Yet, as regards this immediate existence, which is grounded in the Absolute itself, it does not manifest itself as the one jealous God who dissolves the natural, together with finite human existence, without bringing itself into manifestation as actual divine personality, but the true Absolute reveals itself (*schliesst sich auf*), and thus presents a phase which art is able to comprehend and represent.

But the external existence (*Daseyn*) of God is not the natural and sensuous, as such, but the sensuous elevated to the supersensuous, to spiritual subjectivity, to personality, which,

instead of losing the certainty of itself in its outer manifestation, truly for the first time attains to the present actual certainty of itself through its own reality. God in His truth is, therefore, no mere ideal created by the imagination. Rather, He places Himself in the midst of the finitude and outer accidentality of immediate existence, and yet knows Himself in all this as the divine principle (*Subjekt*) which in itself remains infinite and creates for itself this infinitude. Since, therefore, actual subject or person is the manifestation of God, art now acquires the higher right of employing the human form, together with the modes and conditions of externality generally, for the expression of the Absolute. Nevertheless, the new problem for art can consist only in this: that in this form the inner shall not be submerged in outer corporeal existence, but shall, on the contrary, return into itself in order to bring into view the spiritual consciousness of God in the individual (*Subjekt*). The various moments or elements brought to light by the totality of this view of the world as totality of the truth itself, therefore, now find their manifestation in man. And this, in the sense that neither nature as such — as the sun, the sky, the stars, etc. — gives the content and the form, nor does the circle of the divinities of the Greek world of beauty, nor the heroes, nor external deeds in the province of the morality of the family and of political life, attain to infinite value. Rather it is the actual, individual subject or person who acquires this value, since it is in him alone that the eternal moments or elements of absolute truth, which exist actually only as spirit, are multifariously individualized and at the same time reduced to a consistent and abiding unity.

If now we compare these characteristics of Romantic Art with the task of Classic Art in its perfect fulfillment in Greek Sculpture, we see that the plastic forms of the gods do not express the movement and activity of spirit which has gone out of its corporeal reality into itself, and has become pervaded by internal independent-being (*Fürsichseyn*). The changeable and accidental phases of empirical individuality are indeed effaced in those lofty images of the gods, but what is lacking in them is the actuality of self-existent personality, the essential

characteristic of which is self-knowledge and independent will. Externally this defect betrays itself in the fact that in the representations of sculpture the expression of the soul simply as soul — namely, the light of the eye — is wanting. The sublimest works of sculptured art are sightless. Their subtle inner being does not beam forth from them, as a self-knowing internality, in that spiritual concentration of which the eye gives intelligence. The ray of the spirit comes from beyond and meets nothing which gives it a response ; it belongs alone to the spectator, who cannot contemplate the forms, so to speak, soul in soul, eye in eye. The God of Romantic Art, on the contrary, makes his appearance as a God who sees, who knows himself, who seizes himself in his own inner personality, and who opens the recesses of his nature to the contemplation of the conscious spirit of man. For infinite negativity, the self-return of the spiritual into itself, cancels this outflow into the corporeal. Subjectivity is spiritual light which shines into itself, into its hitherto dark realm ; and while natural light can only shine upon an object, this spiritual light is itself its own ground and object on which it shines, and which it recognizes as being one and the same with itself. But since now the absolute inner or spiritual manifests itself, in its actual outer existence, under the human form, and since the human stands in relation to the entire world, there is thus inseparably joined to this manifestation of the Absolute a vast multiplicity of objects belonging not only to the spiritual and subjective world, but also to the corporeal and objective, and to which the spirit bears relation as to its own.

The thus constituted actuality of absolute subjectivity can have the following forms of content and of manifestation :

1. Our first point of departure we must take from the Absolute itself, which, as actual spirit, gives itself an outer existence (*Daseyn*), knows itself and is self-active. Here the human form is so represented that it is recognized at once as having the divine within itself. Man appears, not as man in mere human character, in the constraint of passion, in finite aims and achievements, nor as in the mere consciousness of God, but as the self-knowing one and universal God Himself,

in whose life and suffering, birth, death, and resurrection, is now made manifest, also, for the finite consciousness, what spirit, what the eternal and infinite, is in truth. This content Romantic Art sets forth in the history of Christ, of His mother, of His disciples, and even in the history of all those in whom the Holy Spirit is actual, in whom the entire divine nature is present. For, in so far as it is God, who, though in Himself universal, still appears in human form, this reality is, nevertheless, not limited to particular immediate existence in the form of Christ, but unfolds itself in all humanity in which the Divine Spirit becomes ever present, and in this actuality remains one with itself. The spreading abroad [in humanity] of this self-contemplation, of this independent and self-sufficing existence (*In-sich-und-Bei-sich-seyn*) of the spirit, is the peace, the reconciliation of the spirit with itself in its objectivity. It constitutes a divine world — a kingdom of God — in which the Divine, from the center outward, possesses the reconciliation of its reality with its idea, completes itself in this reconciliation, and thus attains to independent existence.

2. But however fully this identification may seem to be grounded in the essence of the Absolute itself, still, as spiritual freedom and infinitude, it is by no means a reconciliation which is immediate and ready at hand, from the center outward, in mundane, natural, and spiritual actuality. On the contrary, it attains to completeness only as the elevation of the spirit out of the finitude of its immediate or unrealized existence to its truth, its realized existence. As a consequence of this, the spirit, in order to secure its totality and freedom, separates itself from itself — that is, it establishes the distinction between itself, as, on the one hand, a being belonging in part to the realm of nature, in part to that of spirit, but limited in both; and as, on the other hand, a being which is in itself (*i. e.*, potentially) infinite. But with this separation, again, is closely joined the necessity of escaping out of the estrangement from self — in which the finite and natural, the immediacy of existence, the natural heart, is characterized as the negative, the evil, the base — and of entering into the kingdom of truth and contentment by the sole means of subjugating this nugatori-

ness. Thus, spiritual reconciliation is to be conceived and represented only as an activity, a movement of the spirit — as a process in the course of which there arises a struggle, a conflict; and the pain, the death, the agony of nothingness, the torment of the spirit and of materiality (*Leiblichkeit*) make their appearance as essential moments or elements. For as, in the next place, God separates or distinguishes (*ausscheidet*) finite actuality from Himself, so also finite man, who begins with himself as outside the divine kingdom, assumes the task of elevating himself to God, of freeing himself from the finite, of doing away with negatoriness, and of becoming, through this sacrifice (*Ertödtten*) of his immediate actuality, that which God, in His appearance as man, has made objective as true actuality. The infinite pain attendant upon this sacrifice of the individual's own subjectivity or personality, the suffering and death which were more or less excluded from the representations of Classic Art — or, rather, which appeared there only as natural suffering — attain to the rank of real necessity for the first time in Romantic Art.

It cannot be said that among the Greeks death was comprehended in its essential significance. Neither the natural, as such, nor the immediacy of the spirit in its unity with materiality, appeared to them as anything in itself negative, and to them, therefore, death was only an abstract transition, inspiring neither terror nor fear. It was a cessation with which there were associated no further and immeasurable consequences for the dying. But when personality (*Subjektivität*) in its spiritual self-centered being comes to be of infinite importance, then the negation which death bears within itself is a negation of this so significant and valuable self, and hence becomes fearful. It is a death of the soul, which thus, as itself utterly and completely negative, is excluded forever from all happiness, is absolutely miserable, and may find itself given up to eternal damnation. Greek individuality, on the contrary, did not ascribe to itself this value considered as spiritual personality, and hence ventured to surround death with bright images; for man fears only for that which is to him of great worth. But life has this infinite value for

consciousness only when the person, as spiritual and self-conscious, is the sole actuality, and must now, in well-grounded fear, conceive himself as rendered (*gesetzt*) negative through death. On the other hand, however, death does not acquire for Classic Art that *affirmative* signification to which it attains in Romantic Art. That which we call immortality did not attain to the dignity of a serious conception with the Greeks. It is for the later reflection of the subjective consciousness, with Socrates, that immortality for the first time acquires a deeper meaning and satisfies a more advanced requirement. For example (Odyss. XI., v. 482–491), Ulysses in the under world congratulated Achilles as being happier than all others before or after him, because he had formerly been honored as the gods, and now was a ruler among the dead. Achilles, as we know, railed at this happiness, and answered that Ulysses should not utter a word of consolation respecting the dead. Rather would he be a servant of the fields, and, poor himself, serve a poor man for a pittance, than lord it here over all the vanished dead. On the contrary, in Romantic Art death is only an extinction of the natural soul and of the finite personality; an extinction which operates as negative only against what is in itself negative; which cancels the nugatory, and thus not only brings about the deliverance of the spirit from its finitude and state of inner division, but also secures the spiritual reconciliation of the actual person (*des Subjekts*) with the absolute or ideal Person. For the Greeks, that life alone was affirmative which was united with natural, outer, material existence; and death, therefore, was the mere negation, the dissolution, of immediate actuality. But in the Romantic conception of the world it has the significance of *absolute* negativity — that is, the negation of the negative; and, therefore, as the rising of the spirit out of its mere naturalness and inadequate finitude, turns out to be just as much affirmative as negative. The pain and death of expiring personality (*Subjektivität*) is reversed into a return to self; into contentment and happiness; into that reconciled affirmative existence which the spirit can with difficulty secure only through the destruction of its negative existence, in which, so long as it

remains, it is separated from its own truth and vitality. This fundamental characteristic, therefore, not only relates to that form of death which approaches man from the natural side, but it is also a *process* which the spirit, in order that it may truly live, must complete within itself independent of this external negation.

3. The third side of this absolute world of the spirit has its representative in man, in so far as he neither immediately, in himself, brings the absolute and divine, *as divine*, into manifestation, nor represents the process of elevation to God, and reconciliation with God, but remains within the limits of his own human circle. Here, too, the finite, as such, constitutes the content, as well from the side of spiritual aims, worldly interests, passions, collisions, sorrows and joys, hopes and gratifications, as from the side of the external affairs of nature and its realm, together with the most restricted phenomena belonging thereto. For the mode of apprehending this content a twofold attitude presents itself. On the one hand, spirit — because it has acquired affirmation with itself — announces itself upon this ground as a self-justified and satisfying element, from which it only puts forth (*herauskehrt*) this positive character and permits itself in its affirmative satisfaction and internality to reflect itself therefrom. On the other hand, this content is reduced to mere accidentality, which can lay claim to no independent validity. For in it spirit does not find its own true being, and therefore can arrive at unity no otherwise than with itself, since for itself it dissolves as finite and negative this finite character of spirit and of nature.

III. We have now, finally, to consider somewhat more at length the significance of the relation of this entire content to the mode of its representation.

1. The material of Romantic Art, at least with reference to the divine, is extremely limited. For, in the first place, as we have already pointed out, nature is deprived of its divine attributes; sea, mountain, and valley, streams, springs, time, and night, as well as the universal process of nature, have all lost their value with respect to the representation and content

of the Absolute. The images of nature are no longer set forth symbolically. They are stripped of the characteristic which rendered their forms and activities appropriate as traits of a divinity. For all the great questions concerning the origin of the world — concerning the whence, the whither, the wherefore of created nature and humanity, together with all the symbolic and plastic attempts to solve and to represent these problems — have vanished in consequence of the revelation of God in the spirit; and even the gay, thousand-hued earth, with all its classically-figured characters, deeds, and events, is swallowed up in spirit, condensed in the single luminous point of the Absolute and its eternal process of Redemption (*Erlösungsgeschichte*). The entire content, therefore, is thus concentrated upon the internality of the spirit — upon the perception, the imagination, the soul — which strives after unity with the truth, and seeks and struggles to produce and to retain the divine in the individual (*Subjekt*). Thus, though the soul is still destined to pass through the world, it no longer pursues merely worldly aims and undertakings. Rather, it has for its essential purpose and endeavor the inner struggle of man within himself, and his reconciliation with God, and brings into representation only personality and its conservation, together with appliances for the accomplishment of this end. The heroism which can here make its appearance is by no means a heroism which makes its own law, establishes regulations, creates and transforms conditions, but a heroism of submission, for which everything is settled and determined beforehand, and to which there thenceforth remains only the task of regulating temporal affairs according to it, of applying to the existing world that higher principle which has validity in and for itself, and, finally, of rendering it practically valuable in the affairs of every-day life. But since now this absolute content appears to be concentrated in the spaceless, subjective soul, and thus each and every process comes to be transferred to the inner life of man, the circle of this content is thus again infinitely *extended*. It develops into so much the more unrestrained manifoldness. For though the objective process (of history) to which we have

referred does not itself include the substantial character of the soul, still the individual, as subject, penetrates that process from every side, brings to light every point therein, or presents itself in ever newly-developed human inclinations, and is, besides, still able to absorb into itself the whole extent of nature, as mere environment and locality of the spirit, and to assign to it an important purpose. Thus, the life (*Geschichte*) of the soul comes to be infinitely rich, and can adapt itself in the most manifold ways to ever-changing circumstances and situations. And if now, for the first time, man steps out of this absolute circle and mingles in worldly affairs, by so much the more immeasurable will be the sphere (*Umfang*) of interests, aims, and inclinations; as the spirit, in accordance with this principle, has become more profound, and has, therefore, unfolded itself in its development to its infinitely enhanced fullness of inner and outer collisions, distractions, progressive stages of passion, and to the most varied degrees of satisfaction. Though the Absolute is in itself completely universal, still, as it makes itself known in mankind especially, it constitutes the inner content of Romantic Art, and thus, indeed, all humanity, with its entire development, forms the immeasurable and legitimate material of that art.

2. It may be, indeed, that Romantic Art, *as art*, does not bring this content into prominence, as was done in great measure in the Symbolic, and, above all, in the Classic, form of Art, with its ideal gods. As we have already seen, this art is not, *as art*, the revealed teaching (*Belehren*) which produces the content of truth directly only in the form of art for the imagination, but the content is already at hand for itself outside the region of art in imagination and sensuous perception. Here, religion, as the universal consciousness of truth in a wholly other sphere (*Grade*), constitutes the essential point of departure for art. It lies quite outside the external modes of manifestation for the actual consciousness, and makes its appearance in sensuous reality as prosaic events belonging to the present. Since, indeed, the content of revelation to the spirit is the eternal, absolute nature of *spirit*, which separates itself from the natural as such and debases it, manifestation in the

immediate thus holds such rank (*Stellung*) that this outer, in so far as it subsists and has actual-being (*Daseyn*), remains only an incidental world out of which the Absolute takes itself up into the spiritual and inner, and thus for the first time really arrives at the truth. At this stage the outer is looked upon as an indifferent element to which the spirit can no longer give credence, and in which it no longer has an abode. The less worthy the spirit esteems this outer actuality, by so much the less is it possible for the spirit ever to seek its satisfaction therein, or to find itself reconciled through union with the external as with itself.

3. In Romantic Art, therefore, on the side of external manifestation, the mode of actual representation in accordance with this principle does not go essentially beyond specific, ordinary actuality, and in nowise fears to take up into itself this real outer existence (*Daseyn*) in its finite incompleteness and particularity. Here, again, has vanished that ideal beauty which repudiates the external view of temporality and the traces of transitoriness in order to replace its hitherto imperfect development by the blooming beauty of existence. Romantic Art no longer has for its aim this free vitality of actual existence, in its infinite calmness and submergence of the soul in the corporeal, nor even this *life*, as such, in its most precise significance, but turns its back upon this highest phase of beauty. Indeed, it interweaves its inner being with the accidentality of external organization, and allows unrestricted play room to the marked characteristics of the ugly.

In the Romantic, therefore, we have two worlds. The one is the spiritual realm, which is complete in itself—the soul, which finds its reconciliation within itself, and which now for the first time bends round the otherwise rectilinear repetition of genesis, destruction and renewal, to the true circle, to return-into-self, to the genuine Phoenix-life of the spirit. The other is the realm of the external, as such, which, shut out from a firmly cohering unity with the spirit, now becomes a wholly empirical actuality, respecting whose form the soul is unconcerned. In Classic Art, spirit controlled empirical manifestation and pervaded it completely, because it was that form

itself in which spirit was to gain its perfect reality. Now, however, the inner or spiritual is indifferent respecting the mode of manifestation of the immediate or sensuous world, because immediacy is unworthy of the happiness of the soul in itself. The external and phenomenal is no longer able to express internality; and since, indeed, it is no longer called upon to do this, it thus retains the task of proving that the external or sensuous is an incomplete existence, and must refer back to the internal or spiritual, to intellect (*Gemüth*) and sensibility, as to the essential element. But for this very reason Romantic Art allows externality to again appear on its own account, and in this respect permits each and every matter to enter unhindered into the representation. Even flowers, trees, and the most ordinary household furniture are admitted, and this, too, in the natural accidentality of mere present existence. This content, however, bears with it at the same time the characteristic that as mere external matter it is insignificant and low; that it only attains to its true value when it is pervaded by human interest; and that it must express not merely the inner or subjective, but even *internality* or subjectivity itself, which, instead of blending or fusing itself with the outer or material, appears reconciled only in and with itself. Thus driven to extremity, the inner at this point becomes manifestation destitute of externality. It is, as it were, invisible, and comprehended only by itself; a tone, as such without objectivity or form; a wave upon water; a resounding through a world, which in and upon its heterogeneous phenomena can only take up and send back a reflected ray of this independent-being (*Insichseyns*) of the soul.

We may now comprise in a single word this relation between content and form as it appears in the Romantic — for here it is that this relation attains to its complete characterization. It is this: just because the ever-increasing universality and restless working depth of the soul constitute the fundamental principle of the Romantic, the key-note thereof is *musical*, and, in connection with the particularized content of the imagination, *lyrical*. For Romantic Art the lyrical is, as it were, the elementary characteristic — a tone which the epic and

the drama also strike, and which breathes about the works of the arts of visible representation themselves like a universal, fragrant odor of the soul; for here spirit and soul will speak to spirit and soul through all their images.

DIVISION: We come now to the division necessary to be established for the further and more precisely developing investigation of this third great realm of art. The fundamental idea of the Romantic in its internal unfolding lies in the following three separate moments or elements:

1. The Religious, as such, constitutes the first circle, of which the central point is given in the history of redemption — in the life, death, and resurrection of Christ. Introversion (*Umkehr*) here assumes importance as the chief characteristic. The spirit assumes an attitude of hostility toward, and overcomes, its own immediacy and finitude, and through thus rendering itself free it attains to its infinity, and absolute independence in its own sphere.

2. Secondly, this independence passes out of the abstract divine of the spirit, and also leaves aside the elevation of finite man to God, and passes into the affairs of the secular world. Here at once it is the individual (*Subjekt*), as such, that has become affirmative for itself, and has for the substance of its consciousness, as also for the interest of its existence, the virtues of this affirmative individuality, namely, honor, love, fidelity, and valor — that is, the aims and duties which belong to Romantic Knighthood.

3. The content and form of the third division may be summed up, in general, as *Formal Independence of Character*. If, indeed, personality is so far developed that spiritual independence has come to be its essential interest, then there comes, also, to be a special content, with which personality identifies itself as with its own, and shares with it the same independence, which, however, can only be of a formal type, since it does not consist in the substantiality of its life, as is the case in the circle of religious truth, properly speaking. But, on the other hand, the form of outer circumstances and situations, and of the development of events, is indeed that of freedom, the result of which is a reckless abandonment to a life

of capricious adventures. We thus find the termination of the Romantic, in general, to consist in the accidentality both of the external and of the internal, and with this termination the two elements fall asunder. With this we emerge from the sphere of art altogether. It thus appears that the necessity which urges consciousness on to the attainment of a complete comprehension of the truth demands higher forms than Art is able in anywise to produce.

STATEMENT AND REDUCTION OF SYLLOGISM.

BY GEORGE BRUCE HALSTED.

At the basis of Logic stands the conception of class, the formation of general notions, the use of a word to denote the objects possessing a common attribute — *e. g.*, Geometer.

This assumes our ability to contemplate these objects apart from any or all others.

From this group we may select again those of them which belong to some other defined class, and so on.

We will represent classes by letters of the alphabet. Suppose x represents "men," and z , "geometers." Then xz would naturally be read "men geometers," and will mean such individuals of the class men as belong also to the class geometers. By an easy extension we take in all adjectives.

Suppose y means French, or the class French things; then xyz will mean all Frenchmen who are geometers.

We see that the order in which we select the classes is indifferent, in the sense that it gives the same result whatever order is taken.

In our example, if we first select geometers, then men, then French, we see that our final result, xyy , geometers who are Frenchmen, or yzx , French geometers who are men, should give the same final class of individuals. In ordinary language we use the position of words sometimes as a help toward expressing our meaning, but in this notation for Logic such help

is not needed. If we represent by x and z any two classes, known or unknown, we may generalize this law of the combination of classes, and express it by writing $xz=zx$.

We use the sign of equality to express, in the most general way, identity of individuals, coexistence of qualities, or equality of numbers.

The above equation, then, expresses the fact that logical multiplication is Commutative.

In using the word multiplication, and, further on, other terms of the common algebra of number, it is not even necessary to claim the slightest analogy between numerical multiplication and our process of logical combination. We are completely justified simply because their symbolic expressions are the same and subject to the same formal law.

But suppose we take as a class "all things," or the universe, or, much better, "the universe of discourse," and combine this with any other class, as x . We see that this does not change x in value; that $ux=xu=x$, whatever x may be. Have we in the common algebra of number a symbol possessing *formally* this property? This leads us to represent the universe of discourse by unity, by the simple arithmetical figure 1.

Again, it is indifferent whether from a group of objects considered as a whole we select the class x , or whether we divide the group into two parts, select the x 's from them separately, and then connect the results in one aggregate conception. That is, $x(y+z)=xy+xz=(y+z)x$, or logical multiplication is doubly distributive with reference to addition.

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. In logic, by not- x or non- x we mean all the universe except x . The negative is a remainder, gained by the subtraction of the positive from the universe; x and non- x are the opposites under a given universe. So the term "not-gold" will apply to everything in the universe *except* what is truly gold. Representing "except" by the minus sign, we have, for example, non-gold=everything except gold= $I-g$, and so with any class.

Suppose, now, we combine any class with its negative, what result do we obtain? If b is taken to mean birds, what does $b(I-b)$ mean?

Every one immediately recognizes that it is impossible for any being at the same time to possess a quality and not to possess it. One or the other must be true; both cannot be true at the same time. So, whatever quality really defines the class "birds," there cannot be in the universe a single individual which at the same time really possesses it and does not possess it. There is nothing which is at the same time a bird and not a bird. To represent "nothing" we have the very convenient symbol O , nought. So we are driven to the conclusion that $b(I-b) = O$, and so of any class.

We proceed to the consideration of logical addition and subtraction. To express the aggregate conception of a group of objects consisting of partial groups, we use the conjunctions "and," "or," etc. — *e. g.*, "ladies and gentlemen," "men or women." In popular language these terms, "and," "or," etc., are often ambiguous. As ordinarily used, we cannot always tell whether they are meant to connect terms mutually exclusive or not. If we say a thing is either x or z , this mere statement does not explicitly inform any one whether we mean "if the one, then not the other," or only "if not the one, then the other;" whether we mean " x or z , but not both," or only " x or z , or, it may be, both." In our symbolic language we are able to avoid this vagueness perfectly. We supply the place of these words by the sign $+$, plus, which shall always mean that the classes which it connects are quite separate, entirely distinct, so that no member of one is found in another. Thus, "either a or b " in the first or exclusive sense is represented by $a(I-b) + b(I-a)$, and in the second or non-exclusive sense by $a + b(I-a)$. Here, again, as in the case of logical combination or multiplication, we see that we obtain the same aggregate group in whatever order the terms are taken — *e. g.*, if " a " represents chickens and " b " stands for ducks, then $a + b = b + a$, with the implication that no chickens are ducks.

The inverse operation to logical addition, or collecting parts

into a whole, is logical subtraction, or separating a part from a whole. This, as we have seen, is expressed in common language by the word "except," which we represent by the minus sign ($-$). Here, again, it is indifferent whether we express the excepted case first or last, or in what order we write any series of terms, some of which are affected by the minus sign — *e. g.*, "all plane figures, except triangles," means the same as, "excepting triangles, all plane figures." That is, $x-z = -z+x$. Moreover, if we make a selection by combining the adjective equilateral with the class "plane figures, excepting triangles," we reach the same result as if we combined it first with the class "plane figures," then with the class "triangles," and then took their difference. That is, $y(x-z) = yx-yz$; which shows that multiplication is distributive as well for a difference as for a sum. Applying the foregoing results to logical equations, we arrive immediately at the three general axioms (in which we use the word "equal" in its broadest sense, as signifying identity of individuals, coexistence of qualities, or equality of numbers):

1. If equal things are added to equal things, the wholes are equal.
2. If equal things are taken from equal things, the remainders are equal.
3. If equal things are multiplied by equivalents, the results are equal.

Hence we may add, subtract, or multiply logical equations, and transpose terms exactly as in the common algebra of number.

We are now ready to return to the equation given when we combine any class with its contrary or negative. In every such case we get $x(I-x) = 0$, because it is impossible for anything to possess a quality and not to possess it at the same time. But from $x(I-x) = 0$, since multiplication in logic is always distributive, we get, inevitably, $x-x^2 = 0$; and transposing, $x = x^2$. As x was entirely unrestricted, this law must hold for every logical term; and here, at last, we have something without a parallel in ordinary algebra. Instead of every number fulfilling this requirement, it is true for only two, namely, 1 and 0 .

This peculiar law interferes essentially with *division*¹ in our notational algebra, which, as a logical operation, is identical with what is commonly called Abstraction.

But to return. If we always have $x = x^2$ xx , what is its interpretation in this form? Simply that if we combine a logical class with itself, or from a class select those members which it has in common with itself, the result is the class itself unchanged.

In passing from terms and their combination to the expression of propositions, we premise that if a proposition is negative we attach the negative particle to the predicate, and we denote "Some" by the indefinite symbol v . It will be convenient to apply the epithets of logical quantity, "universal" and "particular," and of logical quality, "affirmative" and "negative," to the *terms* of propositions, and not to the propositions themselves. There are, then, four classes of terms, namely: the universal-affirmative, "all x 's:" the particular-affirmative, "some x 's," or " x 's;" the universal-negative, "all non- x 's;" the particular-negative, "some non- x 's."

The expression "no x 's" is not properly a *term* of a proposition, for the meaning of the proposition "no x 's are y 's" is "all x 's are non- y 's." The subject of that proposition is, therefore, universal affirmative; the predicate, particular-negative.

By the various combinations of the four classes of terms, each with all, retaining the distinction always made in ordinary logics between subject and predicate, sixteen propositions will result. For it will be seen that we have four possible distinct subjects, in treating apart the term and its negative or complementary, x and $1-x$, which latter, for the sake of exhibiting symmetry, we will represent by \bar{x} .

Our four distinct subjects, then, are $x, \bar{x}, vx, v\bar{x}$; and we have as many distinct predicates, namely, $y, \bar{y}, vy, v\bar{y}$. Com-

¹ The extraordinary difficulties connected with a rigid and general exposition of algorithmic division, its limitations here, and the true reasons for them, can only be appreciated by one who has worked on that subject. It will require a separate paper, to which this may be taken as introductory.

binning these as above indicated, the sixteen propositions which result are as follows :

1. $x = vy$. All x 's are y 's.
2. $x = v\bar{y}$. No x 's are y 's.
3. $vx = vy$. Some x 's are y 's.
4. $vx = v\bar{y}$. Some x 's are non- y 's.
5. $\bar{x} = vy$. All non- x 's are y 's.
6. $\bar{x} = v\bar{y}$. No non- x 's are y 's.
7. $v\bar{x} = v\bar{y}$. Some non- x 's are non- y 's.
8. $v\bar{x} = ry$. Some non- x 's are y 's.
9. $vx = y$. Some x 's are all the y 's.
10. $vx = \bar{y}$. Some x 's are all the non- y 's.
11. $v\bar{x} = y$. Some non- x 's are all the y 's.
12. $v\bar{x} = \bar{y}$. Some non- x 's are all the non- y 's.
13. $\bar{x} = y$. All non- x 's are all the y 's.
14. $x = \bar{y}$. All x 's are all the non- y 's.
15. $x = y$. All x 's are all the y 's.
16. $\bar{x} = \bar{y}$. All non- x 's are all the non- y 's.

Ordinary Syllogism is inference from two propositions called the premises, having a common term called the middle term.

By the various combinations of the sixteen propositions, each with all, 256 pairs of premises will result. For brevity, these are not given, but, if needed, can be written out from the sixteen propositions already enumerated.¹

Now, as a first exercise for our Algorithmic Logic, as so far developed, let us apply it to the reduction or solution of these 256 Categorical Syllogisms.

In some sense, it was the perception of some parts of this problem of Syllogism, and of the need for solution, explanation, or reduction, which probably called logic into being. As Professor Bain says in *Mind*, January, 1878: "The meaning of Syllogism, then, is the *formal relation* between

¹ The 256 are given in tabular form, though in a somewhat different notation, on page 89 of Volume VIII of this journal, in a short article "On Logic," to which our attention was kindly called by the Editor. On page 90, also, are well stated, empirically, some conclusions which here we will apodeictically demonstrate.

the premises and the conclusion, whatever the matter be. If all syllogisms — all cases of argument or inference — were of the type Barbara, I doubt whether Syllogism would ever have been invented. Not that in Barbara there is not an element of form; but that being so easy, we need not even be conscious of it. But the inventor of the Syllogism was awakened to the fact that in many kinds of reasoning, not unfrequent in their occurrence, the formal relation of premises to conclusion was puzzling and uncertain, not to say misleading." Aristotle saw the need and value of a solution, and actually solved a considerable part accurately.

The general form in which we have stated the problem, in which every possible case is taken account of, gives us 256 pairs of premise-propositions; which would seem to make the complete discussion of Categorical Syllogism a matter of dreadful complication. In truth, without the application of mathematical ideas, it must have remained annoyingly intricate. But the result of an analytic solution, however tedious, may often be given synthetically in a very compendious form, and such is the nature of the Reduction of Syllogism which we now present.

Naturally we take it first in its elements — the propositions.

Now, by the simple consideration that as perfectly expressed in our notation every proposition is convertible — may be read backwards as truly as forwards — we see that six of the sixteen propositions (8–13) disappear, since in them no new relation between classes is given.

Against the last three propositions, against any universal substitutive judgment, it has been often and strongly urged that such are not logically simple propositions. The latest and best brief statement on this point is given in the January number of *Mind*, by the editor, in a short criticism of Professor Jevons. For those who still consider 14, 15, 16 as simple propositions, we can finish with them in a word.

In any pair of premises one of which is a universal substitutive, since this declares that one class or letter is exactly another, neither more nor less, read this other in place of the middle term and you have the conclusion.

We now have left only the seven simple logical propositions

or relations. Noting the symmetry, using the complementary classes, and observing that, whether we have x , or \bar{x} , the symmetry of relation is not altered, we say that all seven propositions can be brought under the two forms $XY=0$, $XY>0$; where the first expresses a relation of total exclusion, the second a relation of partial inclusion, between two classes. The relation $XY=0$, if both classes are taken positively, becomes $xy=0$, and may be read in any of the forms. No x 's are y 's; no y 's are x 's; all x 's are not- y 's; all y 's are not- x 's.

Similarly the relation $xy>0$ may be read in either of the forms: some x 's are y 's; some y 's are x 's. In each of the forms $XY=0$, $XY>0$, X may be taken to represent x or \bar{x} , and Y to represent y or \bar{y} . These two, then, are the only kinds of simple relations; it being understood that \bar{x} may be substituted for X , or \bar{y} for Y ; so that the example $\bar{x}y=0$ (all y 's are x 's) is the same kind of relation as $xy=0$; and $\bar{x}y>0$ (some y 's are not- x 's) is the same kind of relation as $xy>0$.

All propositions which have either the subject or predicate unaffected by the symbol v , "some," can be brought under the first form; the remaining propositions fall under the second form.

Now, the premises of every categorical syllogism are two propositions having a common term. Taking X and Z for the extremes, and Y for the middle term, the only combinations of premises are:

1. $XY=0$, $ZY=0$.
2. $XY=0$, $ZY>0 \therefore \bar{X}Z>0$.
3. $XY>0$, $ZY>0$.
4. $X\bar{y}=0$, $Z\bar{y}=0 \therefore XZ=0$.
5. $X\bar{y}=0$, $Z\bar{y}>0$.
6. $X\bar{y}>0$, $Z\bar{y}>0$.

And of these there are only two which give rise to a conclusion or relation between the extreme terms.

As regards the negative cases, this is at once seen to be so; thus, $xy=0$, $zy=0$ (no x 's are y 's, no z 's are y 's), leads to no conclusion in regard to the positive terms, x , z .

As regards the positive cases the conclusions may be easily proved to be valid by general symbolical reasoning. Thus, whatever Y may be, we know $Y = Yx + Y\bar{x}$; but in case 2, since $XY = 0 \therefore Y = Y\bar{x}$. But also we are given $ZY > 0$, therefore substituting, we have $ZY\bar{x} > 0 \therefore Z\bar{x} > 0$.

Again, $XZ = XZ\bar{y} + XZy$ always; but in 4 a factor of XZy , namely, Xy , is equal to nought, and a factor of $XZ\bar{y}$, namely, $Z\bar{y}$, is equal to nought; therefore, $XZ = 0 + 0 = 0$.

The logical signification of each step is obvious.

Still further, these two forms, the only forms which give a conclusion, differ only in the quantity of Z , which does not affect the reasoning, formally considered, in the slightest, since one of the original terms, say Z or vZ , may be allowed to enter unchanged into the conclusion. The seeming difference of form where in the second premise the y 's seem to be of different quality, as do the x 's in the conclusion, is produced by the fact that in translating $ZY > 0$ into an equation, the quality of Y is unchanged, for it gives "some Z 's are Y 's, $vZ = vY$; while in translating $Z\bar{y} = 0$ into like form, the quality of \bar{y} is changed, since it gives "all Z 's are y 's," $Z = vy$. This is a particular case used as a diagram in the general demonstration, enabling us to see that if Δ is used to represent z and vZ , the general form to which we have apodeictically reduced all categorical Syllogism may be written,

$$X = v\bar{Y}; \quad \Delta = vY; \therefore \Delta = v\bar{X}.$$

Thus we have demonstrated that a conclusion can be reached in every instance where two or more of the four terms contained in the two premises 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.

NOTES AND DISCUSSIONS.

THE MORAL PURPOSE OF TOURGUÉNEFF.

The nineteenth century is peculiarly an age of philosophy, using the word in its widest sense as embracing both empirical and speculative science. Such expressions as "the philosophy of George Eliot," "the social views of Dickens," "Goethe's theory of culture," are current phrases. The novel reflects this phase of modern life as it does others.

Tourguéneff has the largest audience of any foreign writer; the question of the moral attitude of his art is, therefore, one of some interest. That most of the Russian novelist's books have for their central idea a moral question is apparent on the first glance. The "Journal of a Sportsman" is a tremendous picture of the degradation of the serfs reacting on the masters; "Smoke" etches the corrupting tendencies of a false civilization; "Dimitri Roudine" draws in deep lines the uselessness of a philosophy which does not solidify its aspirations into deeds; "Fathers and Sons" lays bare the weakness of the old Russian culture and the barbarism of the new; while his latest work, "Virgin Soil," still further develops the suicidal madness of Nihilism. But though these are moral questions, they are treated in so purely an artistic manner that the reader feels the moral more a deduction of his own than an intention of the author, and thus Tourguéneff is usually regarded rather as an artist than a moralist. Is he? Does he select his themes simply because they are effective, or does he show the evils which he draws in order that men, seeing their danger, may avoid it?

To answer this question one must consider his work as a whole. The first impression it makes is that of somber breadth. The atmosphere has the still intensity which precedes a thunder-storm; the figures start out of the shadows. They seem at first mere outlines, landscape figures; but as we look longer the details appear in preraphaelite distinctness — the landscape is only a background. Tourguéneff has been called a realist, but he has nothing of

that passion for the sordid which distinguishes the French realistic school. From underrating the object and importance of the mean, the French school has rushed into the other extreme of worshipping it. To Flaubert, Zola, and the rest, a base soul is an acceptable study. They follow it through all its devious windings; with actual zest they analyze its moral squalor, its ignoble hopes, its repulsive pleasures, its degrading ambitions. Disease, say this school, is as real as health; we paint the real—we take disease. They take it exclusively; they paint it with the minute fidelity of Van Ostade, and they show a genuine delight in their work. Now, Tourguéneff has not a hint of any such feeling. When it comes to him to picture crime or misery, the crime or misery is pictured frankly; but the author shows no pleasure in his work. These things are facts which have their bearing on other facts, therefore they must be shown—not for themselves. Baseness is never the main motive of Tourguéneff. He draws his heroes on a large scale. They are often weak, but seldom contracted or mean. And this is even more noticeable with regard to his women. Tourguéneff's good women have a broad magnanimity of nature which puts to shame the conventional type of the novelists—the woman who sacrifices herself, like an angel, for her lover, and is spitefully unjust to her rival. Tourguéneff's best women are tender, faithful, and strong. Liza and Tania have a sense of justice which includes the women who have wronged them, as well as the men they love. Pure Realism has never achieved anything like these two characters. Indeed, their fundamental principle is deliberate preference of the good before the evil; not because it will bring happiness, even though it brings suffering—simply because it is the good. This seems to these clever Frenchmen an idea impossible to recognize, much more to apprehend. This breadth of scope and grandeur of motive is visible in all Tourguéneff's plots. They deal with those great principles of human action which underlie all our civilization and all our life. Here, perhaps, may be traced his German training. As a young man, Tourguéneff spent three years in Berlin, studying the Hegelian philosophy. He says himself, modestly, that he has no philosophical mind; "I see, and I describe what I see." Yet every artist has, of necessity, some theory of the aims and processes of art, whether he formulate it or not.

Hegel taught that the object of art was "to reveal truth under sensuous forms." This theory is equally opposed to the servile imitation of the realists, which, by showing only a part, is false to the whole, and the cramping of art into a moral mold of the moralists.

An artist is at liberty to have a moral purpose if he choose, but he must use it as an artist and not as a moralist. "I see, and I describe what I see." The man who, no matter for what noble purpose he may work, illustrates his moral by improbable goodness and impossible vice, betrays art. He has it on his conscience if he omit or add a shade. Tourguéneff has adopted Hegel's philosophical method. He assumes as true everything asserted of his subject, and then by its self-contradictions evolves the truth. He has also adopted Hegel's prescription of grand motives and a national atmosphere. There is a manifest probability that he has the German's theory of the object of Art, as well as the processes.

But as we examine more closely our first impression, we notice the atmosphere of gloom which settles down on every grand motive or noble character. This it is which makes the critics style Tourguéneff a disciple rather of Schopenhauer than of Hegel. The author's entire "aloofness" (to use a phrase of Coleridge) deepens the feeling. Hegel prescribes complete repose in art, and, since a novel must be founded on collision, the sense of repose is only to be attained by the unity of the work, and the author's freedom from those stormy emotions which he describes.

Such a passionless style gives to literature a touch of the eternal calm of sculpture. Possibly, to obtain this calm, something of color and life is sacrificed. In cases where the current of the story bears the frail beings who live in it to destruction, the spectacle of the author impassively surveying them from the bank gives a certain sensation of coldness.

Tourguéneff never pities, and he never preaches. His "Journal of a Sportsman" deals with the same subject as that of "Uncle Tom's Cabin," but it is impossible to imagine a stronger contrast to the moral gush of that excellent book. He is so impartial that he seems indifferent. He does not choose pleasant themes, nor does he ever shrink from following them "to the bitter end."

This indifference shows sometimes like actual cruelty. He seems to excite the reader's interest merely that he may the better lacerate his feelings. It is something like persuading a boy to take off his jacket so as to thrash him with more effect.

Tourguéneff draws a fine nature—young, generous, ardent—and then, by a series of temptations, deliberately pulls it down and leaves it writhing in the dust, despising itself and perforce despised by the reader. He flings a great passion on a proud spirit and crushes it. He pits an honest man against an egotist with as small manners as

principle, and the egotist has the best of the argument every time. Though he is kinder to his women than to his men, he makes Natalie pour the freshness of her heart on so weak and cold a man as Roundine; Tania almost breaks her heart, and must have forever lost her confidence in Litvinoff; Marianne loses her happiness, and the magazine-writers have been quarreling ever since over the question whether or not her honor was wrecked with the rest; and Liza, the noblest soul of all, goes into a convent, with a harrowing hint for the reader's future reflections at the close.

Can a man who pictures a world like this be a believer in Hegel's theory? He seems, rather, of the opinion of that melancholy poet who has the gods make man

Of fire and the falling of tears
And a measure of sliding sand
From under the feet of the years.

* * * * *

He weaves, and is clothed with derision;
He sows, and he shall not reap;
His life is a watch or a vision
Between a sleep and a sleep.

Yet this is a superficial view of the question. Hegel's theory demands only that an artist tell the truth. It is impossible to deny that continually in this world we see the wicked flourishing; and a good many of us have a wider experience than David, insomuch that we have seen the righteous forsaken and his seed begging bread, while on every hand we look on men who behold the good, and in their hearts love it, yet nevertheless follow the evil.

As much as we can see in the darkness is a certain indestructibility of the Right, hinting at a final triumph.

Any writer who shows this hope cannot justly be called a pessimist. Tourguéneff shows the perplexity and sadness of life, but he shows something more.

His heroes are a feeble folk, generally. They are well-meaning young men, but the first solid temptation bowls down their principles like a row of nine-pins. Irene may be said to make a ten-strike with Litvinoff. So does that uncommonly disagreeable young woman in *Spring Floods* with the slightly tedious young man. In fact, so do most of the women of Tourguéneff with most of the men. Yet, weak and faulty and vacillating as these young persons are, they agree in one redeeming trait — they always have the grace to be ashamed of

themselves. In most cases, also, they work themselves back to a steadfast loyalty to the state and the family. The wages of sin Tourguéneff gives always as death, mental and moral. Absolutely without sentiment, never making any moral comments, he lifts the curtain on successful guilt alone, and shows its nothingness.

Take, for instance, the case of Bazaroff, in "Fathers and Sons." Here is the typical Nihilist. He believes in nothing, not even the profession he has adopted.

His parents are a silly and pious old woman, one of the lesser nobility, and a garrulous old army surgeon, secretly superstitious, but affecting skepticism to please his son, and quoting the mild infidel lights of his youth, who, having stopped short of an absolute destruction of property and family, seem mere milk and water to the Nihilist.

These old people sacrifice everything for their son, and he repays them with contemptuous indifference.

He has for a friend a young land-owner, naturally a good fellow, whose father is devoted to him. Kirsanoff the elder lives with his brother on his estate. Bazaroff comes with his friend. The two young men and the two "old ones," as Bazaroff calls them, discuss philosophy and life together.

Bazaroff does not disguise his scorn of the two "old ones'" antiquated belief. With his brutal logic he cuts to pieces every faith they hold sacred, and laughs when Paul Kirsanoff loses his temper. In the evenings the two brothers vainly try to show there is anything in the world which a strong man ought to respect, while Bazaroff, aided by his disciple, young Kirsanoff, dismisses their weak arguments with a sneer. There is something pathetic in the picture of the two old men, after one of these futile battles, walking together across the lonely fields towards the setting sun. Wounded both in their pride and their affection, they try to console each other; bewildered, they struggle to find the clue out of the novel perplexities Bazaroff reveals. They repeat to each other the useless arguments they mean to try next evening; with a simplicity which has something touching, they praise each other's words; and all the while they feel pressing down on them the sense of a strange force of which the philosophy of their youth gives no account. It is the tragedy of the surrender of the old to the new. In this case very often Paul Kirsanoff is in the right, and Bazaroff is willfully wrong. The inevitable conclusion of his premises is the destruction of society, and he has the courage of his opinions. The professional moralist who has the tale adorn the moral would have

vindicated his opinions and made Kirsanoff triumph, or he would have introduced some logical champion worthy of Bazaroff's steel, and massacred Nihilism on the spot. But Kirsanoff is a soldier, while Bazaroff has been trained in dialectics, and in real life the logical champions are conspicuous by their absence. From first to last Bazaroff has the best of the argument, as a bully with a keen wit is apt to have. Yet, for all this, he is not to be envied. His creed has its own punishment tied to it. He meets a handsome widow, Anna Varovna. To Bazaroff, women are simply a man's amusement. He tries to amuse himself with Anna Varovna. His idle fancy turns into a passion which is too strong for him. Anna Varovna enjoys his *bizarre* speeches, but she hasn't the least intention of marrying him. Of his feeling for her, the least said the better; its very ignoble character sharpens his pain. *He* to be conquered by a thing he despises! He rages at himself; he half hates her; he insults poor young Kirsanoff, also in love with her, but content to adore and be wretched. He has stripped himself of the beliefs, the aspirations, the affections, the very ambitions, of other men; and when his pride in his own strength falls there is no refuge left. That hardening of the heart and narrowing of the life which egotism brings reveals itself, and is its own worst retribution. Bazaroff has nothing left but the home which he has neglected. He goes back, practices his profession (in which, of course, he has not a glimmer of faith), catches a typhus fever by his recklessness, and dies, finally, with the stubborn courage of a wild beast brought to bay. The last gleam of light on his life's utter failure is thrown in his consenting to submit to the rites of supreme unction, provided he has to say nothing. He cares so little for his principles that, rather than have a discussion with his father, he makes his death a bitter sarcasm on his life. And the best thing we know about him is a death-bed lie! Irony can go no further.

This same deliberate intention of letting facts speak for themselves, which is apparent in "Fathers and Sons," shows in all Tourguéneff's work. Let evil only talk long enough, and it will always cut the throat of its own defense. Never does he picture vice in alluring colors. He may have but a gloomy view of life, but he everywhere shows a faith in virtue. His belief in the family and the state is firm, if not exultant. Whether he believes in anything more personal than Arnold's "power, not ourselves, which works for righteousness," I do not venture to guess. His belief in such a power seems to me plain.

But to pass from first impressions of his work to what, with many, must immediately follow — the recognition of the intense nationality of the writer. Tourguéneff, pessimist or optimist, is Russian to the last drop of his blood. He draws Russian life always. His heroes, however mistaken, are patriotic. Excepting only that class which he has etched in lines most deeply bitter, the foreign imitators among the aristocracy, every man with any manly fiber in him loves his country. Even poor, weak, cold Dimitri says, humbly, "Yet I meant to serve Russia." Litvinoff, Lavretsky, and the rest of those susceptible young men bind up their broken hearts with "work for Russia." Fancy a Boston or Chicago man gravely proposing to his sweetheart that they should "live for the United States." When an American strikes a high moral key, he wishes to live "for the world." Yet a speech of this kind is the most natural of speeches for one of Tourguéneff's Russians to make.

As is usual, however, with our author, we can but guess at his beliefs from his disbeliefs. Two classes in Russia he has analyzed mercilessly — the nihilists who would openly destroy the State, and that class among the nobility of which the mild-mannered husband of Irene in "Smoke" — with his tragic background of two peasants flogged to death — may serve as a type, the class which is content to cover the Tartar barbarism with a lacquer of Western polish, whose proudest boast is that they are never recognized as Russians.

All his novels, and many of his short stories, like "A Priest's Son" and "Mumu," deal with some peril menacing Russia.

"The Journal of a Sportsman" shows the volcano resting beneath society in the shape of a degraded serf caste. "Dimitri Roudine" pictures the danger which comes from encouraging mere speculation.

In this latter book, and in "Liza," is indicated a hope for Russia, the existence of a class answering partially to the gentry of England, men with education and land, anxious to develop the resources of their country. A still better hope is the family life, which such women as Liza and Tania (and I confess to a private weakness for Alexandra Paulovna) make possible.

"Fathers and Sons" and "Virgin Soil" ("Nov" is the much more suggestive Russian title) both deal with the deadly peril with which communism menaces society. In "Smoke" we have the other peril which threatens, that springing from the fatal indifference and corruption of the aristocracy.

A writer in *The Nation*, some weeks since, called attention very clearly to the injustice done Tourguéneff by the French translations

of this novel. Cutting out the descriptive portions of the book has blurred its meaning. Tourguéneff's work is like an etching — something is meant by every line, and not one can be omitted.

Irene is a figure in the middle distance; she stands in the shadow, mysterious, alluring, terrible. These translations drag her into the full light; they make her the central personage. She is, in reality, the natural result of the influences she has known. Seen without the explanation of her accessories, she seems incomplete and unsatisfactory. The book reads then like nothing but the victory of a bad woman over a weak man.

In the shorter stories — “On the Eve,” “The Anchar” (the gloomiest of Tourguéneff's stories), “The Lear of the Steppe,” where the few touches of humor serve merely, like the white lights of a picture, to make the shadows blacker, “The Priest's Son,” “Mumu,” “The Nobleman of the Steppe,” “The Living Mummy,” and the others — this same concentrated, though undemonstrative, earnestness is apparent. Reading his works as a whole, it is easy to see that Tourguéneff has in them all one purpose — his country! He may take too dark a view of the future, he may exaggerate dangers; but he tells the truth as he sees the truth. He lifts the torch of his wonderful art, and reveals to Russia the abyss before her feet.

And since,

Whether conscious or unconscious, yet Humanity's vast frame,
Through its ocean-sundered fibers feels the gush of joy or shame;
In the gain or loss of one race, all the rest have equal claim,

We, too, gazing on Russia's danger, may learn our own.

And the spirit of the nineteenth century which has embodied itself in George Eliot, Goethe, and George Sand would lack something of expression without the open gloom and hidden hope of Tourguéneff.

OCTAVE THAXET.

DANTE'S PURGATORIO.

In the July number of *The Catholic World*, Dr. T. W. Parsons continues his translation of the “Purgatorio” of Dante, this time rendering the Seventeenth Canto. Dr. Parsons translates and expounds the famous passage on Love, thus:

“Never Creator”¹ (he began), “my son,
Was without love; nor anything create;
Either love natural, or that nobler one
Born of the mind; thou knowest the truth I state.

¹ In this passage Virgil explains to Dante the nature of love according to the mediæval philosophy, viz.: God is love — “*Deus caritas est*” — and so are all

Natural love ne'er takes erroneous course;
 Through ill-directed aim the other may,
 Or from excess, or from a want of force.
 While o'er its bent the Primal Good hath sway,
 It cannot be the source of wrong delight.
 But when it swerves to ill, or if it should
 Seek good with more or less zeal than is right,
 Against the maker doth his work rebel.
 Whence may'st thou² comprehend how love in you
 Must of all virtue be the seed, as well
 As of each action to which pain is due.
 Now, since love must look ever towards its own
 Subjects' well-being, things are from self-hate
 Saved; and since naught can be supposed alone
 To exist, from the First Being separate,
 Hated of Him is also spared to man."³

created beings as derived from Him. Love in man is natural or rational—that is, of the mind. Natural love, towards all things necessary to one's preservation, cannot err. Rational love can err in three ways: first, when directed to a bad aim—that is, to evil; secondly, when directed excessively to earthly pleasures; thirdly, when directed feebly to those things truly worthy of love—the celestial. As long as love turns to the Primal Good—the celestial—or seeks, with due check, the inferior or terrestrial, it cannot be the source of wrong or sin. “But when it swerves to ill,” etc.

² Love is the source of good works, as of bad ones; thus, according to St. Augustine, “*Boni aut mali mores sunt boni aut mali amores.*”

³ Love cannot turn against its subjects (viz., men cannot hate themselves); and as these subjects cannot exist separate from their First Being, they cannot, therefore, hate God. (Men may deny or blaspheme, but not hate, God.) It follows, therefore, as no *bad* love can be directed against one's self, or against God, that it can only be against one's neighbor, and this can be in three forms, viz.: by Pride, or the love of good to ourselves, and of evil to others; by Envy, or the love of evil to others, without cause of good or evil to us; by Anger, or the love of evil to others on account of real or imaginary evil to us.

BOOK NOTICES.

A VOCABULARY OF THE PHILOSOPHICAL SCIENCES. (Including the Vocabulary of Philosophy — Mental, Moral, and Metaphysical — by William Fleming, D. D., Professor of Moral Philosophy in the University of Glasgow, from the second edition, 1860; and the third, 1876, edited by Henry Calderwood, LL. D.) By Charles P. Krauth, S. T. D., LL. D., Vice-provost of the University of Pennsylvania. New York: Sheldon & Company. 1878.

In 1860 Dr. Krauth had edited an American reprint of Fleming's Vocabulary of Philosophy, and, by his own additions, had made a useful book much more useful and valuable. In 1873 he contributed a very important work to Lippincott's Library of Philosophical Classics, by editing "Berkeley's Treatise Concerning the Principles of Human Knowledge." The treatise itself occupied less than one-fourth of the 420 pages of the book, the rest being an industrious and scholarly collation of matter in regard to Berkeley and his doctrines, constituting, as it were, a sort of general treatise on Idealism.

Philosophical students who had felt the want of a more complete book than Fleming's hoped for a new work from Dr. Krauth, which would supplement its deficiencies in the manner of the "Prolegomena" of Berkeley. The present work, in a measure, supplies the want. The additions to the Fleming's Vocabulary consist in "A Vocabulary of Philosophical Sciences," containing nearly as much matter as the former, and more systematically arranged. Definitions are given, and the citations are more pertinent, and from authorities of far greater weight. Fleming seems to have little acquaintance with German philosophy, and it is the technical terms of German thinkers that furnish most occasion for a "Vocabulary" to explain them. Dr. Krauth has collected illustrations, not only of German Philosophy, but also of Scholastic Philosophy and Greek and Latin Philosophy. He has added historical material everywhere. The "Chronological Table of the History and Literature of the Philosophical Sciences, from 1860 to 1867," is excellent. He has prefixed to it Tennemann's Chronological Table, commencing with the birth of Thales, 640 B. C. A Biographical Index of Authors and of proper names follows. It gives dates and chief works of each author, also the subjects upon which he wrote, thus:

ABELARD, PETER (1079-1142).

1. *Opera* (Paris, 1616). *Cousin* (1849).

2. *Recently Discovered Works*. (*Sic et Non*.) (1831, Rheinwald; 1836, *Cousin*; 1851, Hanke and Lindenkohl.)

Belief. Scholastic Philosophy.

This index occupies over seventy pages in fine print.

A Synthetical Table of the Philosophical Sciences completes the book. Its "Part First" treats of "*Theory and Definitions*," showing the technical terms used in treating each subject. Its "Part Second" is *historical and critical*, giving the names of the several systems of Philosophy that have prevailed in the world, and then classifying them historically under each country.

The useful "Index of Terms," which is found in the original Fleming's Vocabulary, and also in Dr. Krauth's editions of 1860 and 1873, is omitted from this edition, because, we presume, the "Vocabulary of the Philosophical Sciences" renders it unnecessary by reason of its full cross-references to Fleming.

This is a work that every student of philosophy should possess.

"BURNS IN DRAMA," TOGETHER WITH "SAVED LEAVES." Edited by James Hutchison Stirling. Edinburgh: Edmonston & Co. 1878.

This small volume, from the distinguished author of "The Secret of Hegel," will prove of unusual interest to those who have read his philosophical writings. His intense, fiery style, his profound absorption in his theme, his amazing gifts at description of subtle psychological processes, rendered his book on Hegel what the Germans call an "epoch-making" one. He seizes the reader's attention from the start, and holds it by his power to throw the interest of personal adventure into his portrayal of the struggles and disappointments incident to discovering the thought of a great philosopher. We cannot but find healthful stimulus in the book, which shows us indomitable energy in the pursuit of an understanding or comprehension of a system of philosophy, however often baffled and defeated in hope by the prodigious difficulties which *technique* and vast syntheses create for one. The novitiate is always a thinker from the stand-point of *sense* or of *reflection*, and, consequently, his ability to make combinations—to think syntheses—is quite limited. He finds that his mincing steps are utterly inadequate to span the Olympian strides of the world-historical thinkers. The biography of the thinker during his process of education into true insight is part tragedy, part comedy; but its portrayal is of genuine interest to all rationally disposed men and women. Dr. Stirling is certainly the most successful of philosophers in his literary presentation of the steps of philosophic experience. This has been realized by a multitude of old and of young who have read his books. These persons will welcome the "Saved Leaves" as a desired completion to the biography of a true man, who has labored, with no mean success, to become MAN—the generic type; to realize his race. We are all, potentially, MAN. We are what Aristotle calls "first *entelechie*;" by education, by study of the great thinkers, seers, sayers, and doers, we realize in each of us the type of MAN, and become "second *entelechie*." Human life has this great object before it: to make the individual who is at first only a particular, special existence, also a universal, generic existence.

It is all-important, for the sake of stimulating the courage of the novitiate philosopher, that the biography of the giant shall commence with the dwarf-period. This man, who can comprehend Hegel and unravel the tangled web of mystery which enshrouds the "Logie"—was he ever of childish stature? The greatest of obstacles to the progress of thought is the self-distrust which says, at the very first page of genuine philosophy: "Ah! I can never understand this. I never was born with the head to grasp it. Plato and Aristotle and Hegel had special gifts for such thinking." Such is the fatalism which utterly misreads human nature and its own destiny. For, surely, we are all born with limits, and no one of us but has the power to grow out of such limits as he may have at a particular time, by earnest effort. The capacity to grow is worth more than all "gifts," "natural talents," "genius," or "innate faculties." The highest human achievement in character is below the ideal possibility of the humblest man.

Stirling's character and capacity when a young man is clearly defined in the "Saved Leaves," prose and verse, wherein he gives his views of "The Novelist

and the Milliner," "The Novel Blowers, or Hot-pressed Heroes," of "The Foreign Country at Home," "A Peep into a Welsh Iron Valley," "Social Condition of South Wales," or utters his deepest sentiments and insights in more or less poetic verses: "The Ballad of Merla," "Belshazzar's Feast," "Venetian Madeline," "The Blacksmith's Hame," "The Enchanted Isles," and so on through the eighteen "saved leaves" of poetry and the ten similar of prose. We may readily enough discern the "stuff" of the man, but it is a "first *entelechy*." And it is a generous thought of the author to show us these firstlings. He says of them: "The 'Saved Leaves' are as they name themselves—saved leaves. There is a literary flush in most impressionable young students, from sixteen to twenty-three or so; of such flush these leaves are saved specimens. The judicious reader will probably perceive that some part of the 'saving' element was consideration of the variety of tastes." "It is different with 'Burns in Drama,' which, nevertheless, was itself planned, begun, and in large part written, in 1855. It is scarcely necessary to remark that, by this piece, no drama of plot or incident is intended, but only a study of character. With this object in view, the matter of concluding (partial) monologues was found unfit for the form of dialogue."

"Burns in Drama" is divided into five acts, and subdivided into scenes, after the manner of a drama. Most of the scenes of the first three acts would make a lively impression on the stage. The fourth and fifth acts follow the life of Burns into richer, nobler developments, but which cannot be presented with adequate stage effects because of their internality. The unity of the piece is solely that of subject; its time extends from the advanced youth of Burns to his death, a period of some twenty years; the place changes from Mauchline, and thereabouts, to Edinburgh, and then to Dumfries.

The contents of the several acts are given thus: "Act I. The Natural Jet—Awaking Youth. Act II. Opening Manhood—Young Blood, Young Feelings, Young Bitterness. Act III. Life, Love, and Horror of Eclipse. Act IV. Edinburgh, and After—The Blaze and Ashes. Act V. Dumfries, and the End." A note is appended, relating to the character of Burns. The characters are portrayed in a few masterly strokes, showing the very essence of their humanity. The father and mother, the cruel factor, the Laird of Coilsfield, the corrupt Rankine and his evil companions, the charming Jean Armour, the brethren of the masonic lodge, pass before us in the first three acts. The tragic scene at night, in which Jean communicates to Robert the grief and wrath of her father when their *liaison* became known, ends with oaths of fidelity and—separation.

Burns.—No, indeed, *puir lassie*! it wasna your faut—I've been a bad fellow, Jean—can you forgie me?

Jean.—I'm no' blamin' ye—there's naething to forgie—I liked you owre weel; that was a'.

Burns.—And dinna I like you, Jean?

Jean.—But you're gaun awa—you're ginny lea' me—you're ginny lea' me.

Burns.—I hae na siller.

Then the lonely night upon the moor, when Burns, hunted by outraged respectability, is on the eve of taking passage to the West Indies, to become overseer of the slaves of a plantation, shows us his deepest despair, so well depicted in the poem written on this occasion:

"The gloomy night is gath'ring fast,
Loud roars the wild, inconstant blast;
Yon murky cloud is foul with rain,
I see it driving o'er the plain;

The hunter now has left the moor,
The scatter'd coveys meet secure,
While here I wander, prest with care,
Along the lonely banks of Ayr."

But hearing that the volume of poems which he had printed on the occasion of his departure was received with enthusiasm at Edinburgh, he changes his mind and goes to that metropolis. Here we find him, at the opening of the fourth act, in a blaze of glory. Dr. Blair and Professor Dugald Stewart are introduced to us as the representatives of his society there. But he returns to Mauchline (with the £500 received from the new edition of his poems) in the second scene of this act, vents his splenetic reflections upon the shortness of the season in which a literary lion is permitted to engross the attention of society. He stocks a farm at Ellisland, marries Jean, receives a visit from his old tried friend, Ainslee, and flings away ambition. In Act V, on his death-bed, he passes verdict upon his own life, speaking to Jean: "The hope of fame, of fame for ages, is to almost all—to altogether all, in the end—an unsubstantial dream." "It is of no use—there is nothing in it. Nature is beautiful, and God's world is divine—but man is a *lâche*, his world a hell. Draw the curtain, Jean—I'll sleep." The "professor and minister" pass judgment upon his character in the closing scene. No essay on Burns, or biography of him, gives us such vivid pictures of the man as does this "drama."

RELIGIONS PHILOSOPHIE AUF GESCHICHTLICHER GRUNDLAGE. Von Professor Dr. Otto Pfeleiderer, in Berlin. Verlag von G. Reimer, in Berlin.

The first part of this work treats the history of the philosophy of religion from the time of Lessing and Kant to the present. In the first three sections the author traces the development of the philosophy of religion through the steps of Kant's Criticism, of the mystical, intuitive faith-philosophy of Hamann, Herder, and Jacobi, and of the speculative school of Fichte, Schelling, Schleiermacher, Hegel, etc. In the representation of each system the general connection of ideas is properly set forth, and the truth, as well as the limits of the various stand-points, are pointed out. The last section sketches the labors of the present day on the field of the philosophy of religion, and discusses, in that connection, among other matters, those writings that have attained celebrity by means of the religious-philosophical controversies to which they have given rise—as, for instance, the "Philosophy of Materialism," by A. Lange; the "Philosophy of the Unconscious," and the "Self-dissolution of Christianity," by Edward von Hartmann; and "The Old and the New Faith," by Strauss. In every instance the standard of an objective, scientific criticism is applied, and the relative right even of opponents fairly acknowledged: but the ground of their one-sided results is also unsparingly exposed.

The second part of the book contains a "genetic speculative philosophy of religion," the method of which proceeds in the main from historical deduction in opposition to the *a-priori* association of ideas of Hegel's dialectic. But, on the other hand, in opposition to empiricism, it gathers together the results of the genetic development of that historical induction into speculative comprehension, and traces them back to their final grounds.

The first section treats of the religious *subject*, and describes the nature of religious consciousness according to its psychological factors, especially with regard to its relation to morality and cognition. The second section, which forms the

central point of the whole work, describes the object of religious consciousness, the matters of faith, in seven chapters: 1. God; 2. Angel and Devil; 3. Creation; 4. Theodicy; 5. Revelation and Miracle; 6. Redemption and Mediator; 7. Eternity. The mode of treatment here is as follows: After pointing out the psychological motives of the various faiths, the author takes the mythology of natural religion as his starting-point. Then follow the speculations of the most ancient philosophies in regard to the subjects mentioned, especially the speculations of the Hindoos and Greeks. Next comes the historical development of the dogma (1) amongst the Hebrews, (2) in primitive Christianity, (3) in the Christian Church; to which is added, in conclusion, a review of the theories on those subjects held by modern philosophers. Having thus brought the genetic development of the religious and philosophical mode of thought on every field to a close, each chapter ends with a critical speculative *résumé*, in which the points of view previously ascertained in the historically inductive part are balanced against each other, the relative right or wrong of each stand-point established, and their union in purified conceptions and formulas sought to be achieved. The author considers this the only truly objective method, excluding, as it does, all subjective arbitrariness (which to him appears utterly reprehensible) in the surest manner. Since history itself in its actual development is made to show up the moments of truth, which the philosopher need only to gather up and combine. At the same time, this mode of treatment has the advantage of offering a vast and varied historical material from almost all regions of the history of religion and philosophy in a grouping comparatively easy of review. Hence, even such readers as cannot agree altogether, or at all, with the author in his judgments and views on other matters will be able to gather many valuable additions to their historical knowledge from this work. At any rate, all readers, no matter what stand-point they occupy, must feel themselves incited to further reflections and investigations by the discussions and critical expositions of the author.

The third and last section treats of the religious communities. Here the discussion starts from the rise of objective religion and suggests its origin. This is followed by a sketch of the *cultus* in its main forms — prayer, sacrifice, and mysteries; and here again the historical development of the ceremonies is traced through the main divisions of religion. The origin, development, and religious as well as social position of the priesthood in the various religions concludes this chapter, and forms the transition to the last, which has for its object the Church in its manifold relations to civil society. Church-States and State-Churches are brought to view in their various historical forms, and the results derived are utilized for practical application to the present condition of the churches, especially in Germany. Although these concluding remarks are of immediate interest only to German readers, they cannot fail also to be interesting to those of other countries, in so far as the ecclesiastical condition of Germany will enable them clearly to recognize the apprehensions and desires of the free-thinking men of that country, and the obstacles which they have to combat. It is evident that the author favors a free relation of the Church and State, such as is more characteristic of American than of German life.

The above will suffice to show that this *Philosophy of Religion* is not an abstract philosophical book, but gathers most of its material from the historical life of mankind in ancient and modern times, and thus connects, also, throughout all its pages, with the practical interests of the life of the present.

P.

COMPARATIVE PSYCHOLOGY; OR, THE GROWTH AND GRADES OF INTELLIGENCE
By John Bascom. New York: G. P. Putnam's Sons. 1878.

The author (president of the University of Wisconsin) discusses the questions of Mind and Matter; Physical Forces as Related to Vital Forces; Vegetable Life; the Nervous System; Animal Life as organic, instinctive, and associative; Rational Life; The Supreme Reason. These topics are treated in nine chapters. The array of curious information marshaled to support the acute reasoning of the author renders the book unusually interesting to the non-metaphysical reader.

GESCHICHTE UND KRITIK DER GRUNDBEGRIFFE DER GEGENWART. Von Rudolf Eucken, Professor in Jena. Leipzig: Veit & Co.

Kant somewhere says that one of the prominent philosophical *desiderata* of his time was an analysis of the then prevailing philosophical concepts. A very pressing philosophical need of our time is a critical history of the genesis of our concepts—of their origin and of the transformation they have experienced in the course of metaphysical and scientific discussion. In Professor Eucken's valuable work this need is, to a great extent, supplied. It traces the history of certain concepts which for some time have been, and now are, the watch-words of modern philosophy and science, from their origin to the present day. What these concepts are is seen at once from the table of contents: Subjective—Objective; Experience; A priori—innate; Immanent (Cosmic); Monism; Dualism; Law; Evolution; Causal Concepts; Mechanical—Organic; Teleology; Culture; Individuality; Humanity; Realism—Idealism; Optimism—Pessimism. S.

A PHILOSOPHY OF RELIGION; OR, THE RATIONAL GROUNDS OF RELIGIOUS BELIEF.
By John Bascom. New York: G. P. Putnam's Sons. 1876.

In this work the author sets out in an Introduction with the excellent maxim that although Science may progress without a sound philosophy, yet Religion cannot. "The very facts on whose existence religion depends—the objects towards which it is directed—turn for their proof of being on the joint intuitive and reflective processes of the Soul; and till these are defined and accepted, those cannot be established." "The seat of religion is in the soul itself, not in the senses, nor in the physical world; and there must its sure foundations be explored."

He proceeds to investigate the Mental powers—the limits of causation and intuition—proving that the knowledge of Matter and of Mind is not direct; the Being of God showing that the proof of this Being depends on liberty, which is made possible by the moral nature and discriminating force, from spontaneity; "Force is definite in quantity, is local, is always in one way or another in exercise, however obscure and latent the form assumed, and hence is realized once for all, and equally at all times." "A necessary action—all physical action—is one fixed in time, place, kind, and degree by forces already in existence. A spontaneous action is one which springs from power disclosed anew in it; power that had no previous existence in any known product; power not actual, but potential; power not transferred in strict correlation from product to product, but springing up afresh in each. All purely intellectual activities are of this sort."

With the concept of Spontaneity, as underlying that of liberty, he canvasses the proofs of the Being of God—the cosmological, the teleological, and the ethico-logical proof; for he slights the ontological proof as being "unsatisfactory," and "lightly held." "It infers the actual being and eternity of God from the ideal

necessity of eternal being to the conception of infinite attributes. It thus accepts a connection of ideas as a proof of facts." This sounds as if one would say: "The law of falling bodies may be true; but how do falling bodies act?" "No doubt that the shortest distance between two points is a straight line — these ideas are connected — but how is it with straightness and shortest distance as facts?" Our author is in spirit a realist, and the whole tendency of his excellent book is realism; but now and then he allows validity to nominalistic arguments, and, as in this case, confuses mental images, fortuitously brought together in phantasy, with universal and necessary ideas and their relations. To see a necessary relation between ideas is precisely to see an objectively valid necessity — a logical condition which determines the very existence of things. When we cognize, *a priori*, the nature of space, we cognize at the same time certain necessary laws of matter as it actually exists; because matter cannot transcend its logical condition. Just so the ontological proof of God proceeds from the idea of Being itself, and its necessary logical conditions, to find that all finite or dependent being has its logical condition in an infinite, independent being. The thought of a finite or dependent being is the thought of a being conditioned in another being — derived from it, supported by it, furnished with energy from it — that is to say, the finite being loses its individuality in its dependence. But the supporting energy, no matter how many other dependent beings are linked between the first dependent being and that on which it depends, is itself independent and self-determined — a free Individual, God. The mind merely makes clear to itself all of the implications of its thought of Being, and there emerges at once the ontological proof of God as the underlying presupposition of all thought. It is the strongest proof, for the reason that it is the kernel or nucleus of all the other proofs. It is the primary speculative insight — this insight into the fact that the highest principle of the Universe is a Living Person, and can be no other. Upon it, of course, rest (as our author very clearly sees and definitely states) the freedom and immortality of man. If the highest principle of the universe is not a person, but an unconscious force, then, certainly, our personality is only a phenomenal one, and sure to vanish through the activity of that primal unconscious Energy. The Absolute Energy of the World gives rise to all characteristics that appertain to finite things. It is eternally in the act of manifesting its nature upon them. If their characteristics are not in its form, in its image, it will stamp them out and imprint on them a more adequate impression of itself. Hence, if the Absolute is unconscious, it will everywhere show no quarter to conscious intelligence. If, on the contrary, the Absolute is free, conscious being, it will everywhere cancel unconscious being, and produce everywhere in the universe a current of progress towards consciousness; the mineral will tend to the chemical synthesis which forms crystals and salts, and thence ascends to the synthesis of vegetable life, which again mounts to animal life, and this last finally reaches thought and becomes free, responsible, and immortal — an image of the Eternal. Hence, progress is the law wherever the highest principle is Personality.

Were the highest principle blind force, the existence of its opposite — of intelligent beings — would be utterly inexplicable, because Consciousness is not found among the constituent elements of Unconsciousness; so that, had blind force a self-analytic or self-dirempting power, it could, perhaps, "posit" or create its opposite as a chaos upon which to manifest itself by rising from it step by step, developing its constituents and uniting them, until at last it produced its image. In fact, a world of development, even of *change* or *process*, could not be, were the

ultimate principle a simple one, like force, and not, rather, a highest complexity of synthesis, like the principle of personality. For personality *does* contain constituent elements, each of which, when isolated, is unconscious; and, moreover, it possesses the power of self-analysis or diremption, and hence can manifest itself to itself through a series of *stadia*, beginning with its utter opposite and rising through successive syntheses continually to more and more adequate adumbrations (and at last to *images*) of itself.

Our author (p. 72) ventures the opinion that these three proofs of God are pantheistic. This attracts our attention to his definition of Pantheism: "The world is the substance of which God is the life, the pervasive, controlling force." For the reason that they have the form simply of inferring a cause for the effects which compose the world, it is impossible to rise to an absolute. All that one can infer is a cause adequate to produce the effects that one can see. But the ontological proof derived from the necessary nature of being transcends the three proofs mentioned (Cosmological, Teleological, and Ethico-logical), and rises to the Absolute.

Pantheism must not be made to include the doctrine (1) which conceives God as transcending the world, and not merely immanent in it, or (2) which conceives God as consciously producing the world as His manifestation or revelation, (3) or which conceives creation as an act of free will, instead of an act of blind necessity. The ontological proof arrives at these three results: a God transcending the world, inasmuch as He energizes, not only as a creator of finite forms, but also as their destroyer, through more adequate manifestations; a conscious creator, whose thinking activity creates, and whose creation is the very focus of consciousness; a free will, not constrained by any other existence, nor impelled by any efficient cause. The only causes that operate in free intelligence are final causes. He acts to produce His manifestation, revelation (His Glory), as a spectacle to Himself, not merely a spectacle to the Alone, for He makes the creation a spectacle to itself, by having it evolve beings capable of seeing and enjoying it, and of comprehending the revelation of nature and themselves. Thinking and Will are one in the Absolute; whenever they are distinct, we have "finite intelligence," so called. Those who refuse to admit that the thought of God is creative — fearing thus to fall into pantheism by making Creation the necessary result of the rational nature and energy of God — simply impose finite limitations on Him, and conceive Him as thinking in the form of imagination, instead of *sub-specie æternitatis*.

The succeeding chapters of the book treat of the attributes of God, of Nature, of Man, Immortality, Revelation, Miracles, Inspiration, Interpretation, etc.

AMERICAN JOURNAL OF MATHEMATICS PURE AND APPLIED. Editor-in-Chief, J. J. Sylvester, LL. D., F. R. S.; Associate Editor in Charge, Wm. E. Story, Ph. D.; with the cooperation of Benjamin Pierce, LL. D., F. R. S., Simon Newcomb, LL. D., F. R. S., H. A. Rowland, C. E. Published under the auspices of the Johns Hopkins University. Vol. I, No. 3. Baltimore: 1878.

The present number contains an article by George Bruce Halsted, Ph. D., tutor in Princeton College, New Jersey, on the "Bibliography of Hyper-Space and Non-Euclidean Geometry." Other articles treat of "The Elastic Arch," by Henry T. Eddy; "Researches in the Lunar Theory," by G. W. Hill; "On Professor Sylvester's Paper as to the Atomic Theory," by Professor J. W. Mallet; "*Théorie des Fonctions Numériques Simplement Périodiques*," par Edouard Lucas; and notes on mathematical subjects.

13080

P
Philos.
Journal of Speculative Philosophy.
Vol. 12, 1878.

**University of Toronto
Library**

**DO NOT
REMOVE
THE
CARD
FROM
THIS
POCKET**

Acme Library Card Pocket
LOWE-MARTIN CO. LIMITED

