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THE
PHILOSOPHICAL REVIEW

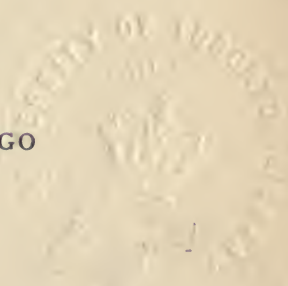
EDITED BY
J. G. SCHURMAN AND J. E. CREIGHTON

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THE
PHILOSOPHICAL REVIEW.

TRUTH AND THE TESTS OF TRUTH.

I.

HOWEVER at variance logicians may be on other points, there are certain fundamental tenets on which, for the most part, they tacitly at least agree. Whether they announce their subject as the Organon of Discovery, or as the Grammar of Assent, they are at one in the belief that it may be of service at some stage in the ascertainment of truth. To whatever extent they may carry their absorption in grammatical detail, however prone they may be to imply that truth is a bright emanation from the parts of speech, and was materially affected at the Tower of Babel by the Confusion of Tongues,¹ they admit (when they are put to it) that it is justness of representation—precision in the correspondence between a state of mind and the original of which it is a forecast or a copy.² For

¹ Sigwart, for instance, finds a material difference in the same thought expressed in different idioms, e.g., between 'I am hungry' and 'Mich hungert.' See *Logik*, vol. I, p. 76.

² See Bradley's *Principles of Logic*, book I, ch. ii, sect. 1 *et seq.* Aquinas (*Contra Gentiles*, lib. I, c. 59) says: "Veritas intellectus est adaequatio intellectus et rei, secundum quod intellectus dicit esse, quod est, vel non esse, quod non est." Hamilton quotes this definition (*Lectures on Logic*, vol. II, p. 63), and claims it for the Schoolmen. He must refer to a certain neatness in the wording simply; in substance it differs not at all from statements made by Aristotle, as is evident from the following quotations: τὸ μὲν γὰρ λέγειν τὸ ὄν μὴ εἶναι ἢ τὸ μὴ ὄν εἶναι ψεῦδος, τὸ δὲ τὸ ὄν εἶναι καὶ τὸ μὴ ὄν μὴ εἶναι ἀληθές (*Metaφh.* III, 7, 1011 b, 26 *seq.*). οὐ γὰρ διὰ τὸ ἡμᾶς οἰεσθαι ἀληθῶς σε λευκὸν εἶναι, εἰ σὺ λευκός· ἀλλὰ διὰ τὸ σὲ εἶναι, λευκὸν ἡμεῖς οἱ φάντες τοῦτο ἀληθεύομεν (*Id.* VIII, 10, 1051 b, 6 *seq.*). οὐ γὰρ ἔστι τὸ ψεῦδος καὶ τὸ ἀληθές ἐν τοῖς πράγμασιν, . . . ἀλλ' ἐν διανοίᾳ (*Id.* V, 4, 1027 b, 25).

securing this correspondence they know, generally speaking, of but one device — the obtainment of principles at once universal and true, and the showing that a given case is but a fresh instance of one of them — and in the hands of one or other of its masters Logic has undertaken to provide for both these exigencies.

So far as the first is concerned, it cannot be said to have been successful, though the attempt was guided by Aristotle himself, and subsequently by John Mill. They both of them argued (Aristotle more naïvely than Mill, but in all essentials to the same effect) that what is found to be the fact in a number of instances, and is found not to be the fact in none, may fairly be concluded to be the fact in all.¹ This, however, it has been pointed out (Sigwart has, perhaps, done it best), overlooks the prime distinction between the causes of belief and the grounds of belief. It is quite true that an Induction by Simple Enumeration may produce a belief, but it cannot justify one. If one examine an A , and find that it is an AB , and an A' , and find that it is an $A'B'$, and so on, one will come to the point (probably very soon) of believing that the next A , say A''' , is $A'''B'''$ before one has examined it. One will begin to believe of any and every A that it goes with a corresponding B — one will believe, as it is said (most inaccurately), that all A is B . All universal beliefs are of this character,² and many of them at least are held on this ground. It is because Empiricism

¹ Aristotle regards this as so plain, that he thinks it is mere perversity (*δυσκολία*) to dispute it (*Toric.* VIII. 8). For his account of how we come by first principles (*τὰ πρῶτα*) with its conclusion, *δηλον δὲ ὅτι ἡμῖν τὰ πρῶτα ἐπαγωγῇ γνωρίζειν ἀναγκαῖον· καὶ γὰρ καὶ αἰσθησις οὕτω τὸ καθόλου ἐμποιεῖ*, see *Analyt. Post.* II, 19.

² Their universality consists not in anything that appears in the beliefs themselves, but in a certain habit of the mind — a tendency to fill out every particular instance that comes up of such and such a description by the addition of such and such qualities. The proper expression of it, as is indicated in the text, is not 'All A is B ' but 'Any A is B ,' or 'Every A is B .' At least (modern psychology has taught one diffidence on the head of general assertions about the human mind) that is the only thing I can find in my own "stream of thought" that at all answers to a universal proposition. I regret that the point cannot be gone into here, but it is too considerable for a note — an at all adequate treatment of it would make the tail too heavy for the kite.

maintains that all of them are so held, that as a theory of knowledge it is so open to assault. For how true soever one's belief in the case of each additional *A* may upon examination prove to be, there was nothing in the way that it was reached,

And here, perhaps, I had best declare myself on the nature of judgment in general. I shall find no place in the text to do so — the argument will nowhere exclusively depend (I think) on any one theory of Belief — but I hardly dare hope to avoid forms of speech that will point to one rather than to any other, and they may be obscure if the general question be not brought forward. I do not know that I can do so more briefly than by borrowing a word from Sigwart. He speaks somewhere of “*das Ideal eines vollständigen Weltbildes.*” Now, the notion I want to bring out is, that one's *Weltbild* at any moment constitutes a belief, or rather a manifold of beliefs, just in so far as it arises before the mind spontaneously — without one's predetermining or choosing what its details shall be, and that every detail that is added or altered by the will is held to be imaginary, or constitutes rather by that very fact a product of the imagination. I should say that a belief is a spontaneous association or grouping of ideas, and that an image of the fancy is a grouping of ideas brought about by the will — were I not afraid of being understood to mean that each idea is a hard, distinct and separate, repellent little individual, maintaining his identity from one appearance to another, eternally gliding on or off the stage of consciousness, according to the cues given him by his fellows, and taking his place from time to time in a sort of inconstant, shifting tableau.

Mr. Bradley, in criticising Association Theories of Belief, says very justly that the mere “togetherness in the mind” of a lot of ideas cannot constitute a belief; *that* exists also in an image of the imagination. But the two togethernesses are distinguished by the presence or absence of an actively interfering volition. Mr. Bradley also means that a lot of distinct and separate ideas bunched together would possess no unity, and here, as I have indicated, I agree with him; but there is no more question here of the bunching together of distinct and separate ideas than in Mr. Bradley's own account of the “redintegration” of a mental image. Mr. Bradley adds that a mental image must have “meaning” — conscious reference to something beyond itself — to constitute it a belief. Here I join issue with him on a question of fact. To suppose that the mental image of the pen with which one is writing refers to something else, is an example of the “Psychologist's Fallacy.” So long as one keeps one's eyes and fingers on the pen, one cannot conceive (except by an effort of the will, and then it is a case of imagination) that one is not looking at and handling the ‘real’ thing — the only thing that is there. To give one's mental image in this case a “reference” one must let one's eyes deflect from the pen, and one's fingers relax — one must have the pen before one in idea, not in sensation — *i.e.*, one must change the image. But to attribute even to the idea a “reference” is to describe it, “not as it knows itself, but as the psychologist knows it.” In one's thoughts of the past, or the future, or the distant, one is never conscious, except by a distinct and separate and (I must add) a rare act of reflection, that one is not dealing directly with the things thought of, and that act of reflection itself consists simply in substituting for such ideas, when once they have acquired a “reference,” another set of ideas exactly like the first

nothing in the form of the process or its relation to the evidence which led to it, to guarantee its truth. Ninety-nine *A*'s may be *B*, and the hundredth not — there is no impossibility, no contradiction; nor can a multiplication of the instances remedy the matter. It will add firmness and certainty, indeed, to one's feeling about it, but that is a psychological assurance, not a logical one.¹

Supposing the general principles, however, to have been obtained, Logic has been more successful, it has been thought, in providing a means for passing from them to an instance (or class of instances) which they include. To do them justice, logicians generally have been shy of Induction, but on the Syllogism they have felt that they could rely. If all men are mortal, and if philosophers are men, it seems to follow with the necessity which was wanting in Induction, that philosophers are mortal. And all this is so plain that one hesitates to go contrary to it. One is inclined rather to accuse the Syllogism of begging the question than of not making out a case. I believe, however, that it carries with it no greater guaranty — that it is *formally* no more cogent — than the Induction by Simple Enumeration. Cogency I admit, of course, that it has, but my contention is that, as in the case of Induction, the hold it has on the mind is psychological, not

before it acquired that appendage. (See this important point argued at length in a paper on "The Meaning of Truth and Error" in the PHILOSOPHICAL REVIEW for July, 1893.) For completeness, I should add that when this act of reflection takes place, instead of constituting the belief — instead of supplying it with an essential that it lacked before — it invariably shatters it. (I do not mean permanently, of course.) Mr. Bradley implies that until one's ideas have acquired this reference, one can have no judgment.

¹ It is by no means certain that Aristotle was unaware of this distinction. Alexander at least credits him with it, intimating, as Grote says (in his unfinished work on Aristotle, vol. I, p. 277), that Aristotle enunciated "necessary sequence" as a part of his definition of the syllogism for the express purpose of distinguishing it from induction. τὸ δ' ἐξ ἀνάγκης προσκείμενον ἐν τῷ ὄρω, τῆς ἐπαγωγῆς χωρίζει τὸν συλλογισμόν· ἔστι μὲν γὰρ καὶ ἐπαγωγή λόγος ἐν ᾧ τεθέντων τινῶν ἕτερόν τι τῶν κειμένων συμβαίνει, ἀλλ' οὐκ ἐξ ἀνάγκης (Schol. ad. *Top.*, p. 253, a. 19, Br.). Mill, of course, was aware of it, but sought to avoid it on the ground that we have none but psychological evidence for anything (intuitions excepted), and that one who rejects induction as uncertain must reject all knowledge but that of the present self.

logical. To make this out in detail, I must be allowed to take a turn in Psychology.

The nature of the process of Inference has been already hinted at in speaking of the growth of an universal belief. It will be brought out more fully by the analysis of an actual case — that of the discovery that the diamond is combustible. Newton had observed in a number of instances, that transparent bodies made up of combustible matter refracted light to a high degree. Now it struck him that another transparent body, the diamond, refracted light highly; and he inferred immediately that the diamond was combustible; and experiment bore out his inference. But, aside from the truth of the inference, what was the process? It is on the surface. He observed a similarity in certain respects, he believed a similarity in all other respects, except where experience had taught him otherwise. If he had already tried to burn the diamond and failed, its resemblance to other transparent, highly-refracting combustibles, would not have led him to attribute combustibility to it. But experience being silent on the point, the inference was made. To symbolize the process, let the other refracting bodies be represented by *T*, transparency, *C*, combustibility, *R*, refraction, and *M*, miscellaneous qualities in which they and the diamond differ. The diamond has qualities corresponding to all these, except to *C*, which is represented by a blank. Newton contemplated the objects — *TCRM* and *T'R'M'*, and he doubted not but that under appropriate circumstances *C'* would show itself, in the second combination, to correspond with *C* in the first. Any one who will recall Newton's inference of the application of gravitation to the heavenly bodies and the apple story (which, of course, is apocryphal, but none the less appropriate for an illustration), will perceive that the process is the same. As indeed it is in all acts of inference. In short, it is the principle of discursive intelligence, that when things are observed to be similar in some respects, there is a tendency to believe them similar in all; this tendency being counteracted only by direct experience to the contrary or by like and

stronger tendencies to ascribe to the object incompatible attributes.¹

Now, words not less than ideas being mental phenomena, the analogy observed between two things may lie in their names as well as in their other attributes; a similarity of name not less than similarity in any other item may be the ground on which is inferred similarity in all other respects. One says: "There is a man in the hall." We have not seen him, and all we know, by observation, of the person, or rather of the *ens*, is that it is called by the name 'man.' But in this attribute of being called 'man' it resembles and recalls by resemblance other entities, with attributes of animality, sensibility, rationality, the human form, and the rest. These qualities accordingly, it is immediately inferred, characterize the being in the hall; or rather qualities similar to these; the connecting link being similarity in name. It may be objected that all these qualities are *connoted* by the word 'man,' and that to attribute them to the being affirmed to be a man is but an interpretation of the word used. Call it interpretation if you like; it is still a process of inference indistinguishable in any respect from any inference that can be given. We believe something not yet intuited by us, because of something that we have intuited; our belief that there is a being in the hall

¹ The predominance of one analogy over another depends above all else on the closeness of the analogy — in especial on that extreme closeness which is commonly called identity. Subordinate to this, interest, recency, and number of instances (improperly called 'repetition'), play their part in something like the order named, but with numerous exceptions and insertions.

In affirming all inference to be of the form given in the text, I do not mean absolutely to deny that in familiar matters one passes sometimes immediately (so far at least as one can recollect) from the subject of the conclusion to the predicate. In all instances that favor observation, the form above given represents, I believe, the process; whether in more rapid cases some steps are eliminated, or whether instances which seem to be elliptical, are simply extreme examples of the way that 'transitive' states elude the memory I find myself in no position to decide.

I ought to add that I have given above the formulas for affirmative inferences only. Negative inferences need no additional formula, except that the negation must occur in the second and third steps, not in the first. If no analogy be perceived, instead of there resulting a negative inference, there is simply not an inference.

possessing certain attributes, is an inference from certain sounds heard, similar sounds in the past having been associated with the existence of beings distinguished by the attributes of humanity. The interpretation is, in short, a known likeness in one respect and a resulting inference of likeness in others. What others? Those others that experience has shown to be certified by the attribute of being called by the name 'man,' the other attributes that things named 'man' have usually been found to possess. The similarity in one respect leads us to infer similarity in all other respects except those in which experience has shown us that similarity cannot truthfully be inferred.

The preceding is an instance in which the ground of the inference is a similarity in names, in verbal or conventional attributes, and in which the conclusion is that there is a similarity in real or unconventional attributes. There are, however, instances in which the conclusion, equally with the grounds of it, relates only to conventional attributes. If an object be denominated 'man,' we may infer not only that it possesses the quality of mortality; we may infer also that it may be called by the name 'mortal.' Nor does this inference necessarily take place only because we have already inferred that the object displays the qualities connoted by 'mortal.' We are told that A is B , and that John is A ; immediately we infer that what is called John, resembling certain things called B in being called A , may be called B ; and this though as yet we know neither denotation of any one of the terms used. It may be, nay often is, that it is only after the inference is reached that John is B , that we know the connotation of B ; we have substituted conventional qualities or signs for real or unconventional qualities or signs, and lost sight of the meaning of the arbitrary symbols until we are done working with them, when we substitute their meaning for them again. One habitually uses arithmetical signs in this way, in utter oblivion of their signification. The signs, $5 \times 5 =$, remind one of like signs in the past, $5 \times 5 = 25$; and immediately the similarity in the first terms of these equations leads one to believe that

there should be a similarity between the terms that follow; if $5 \times 5 = 25$ was coupled with 25 then, so should it be now, and one writes it down, $5 \times 5 = 25$. Indeed one not only does use arithmetical signs in this way (I have chosen to dwell on arithmetic, rather than on algebra, as being in appearance, at least, less favorable to my position), but one can use them in no other way when the numbers become at all large.

This sort of substitution carries with it, however, certain dangers as well as certain advantages. Signs, whether written or spoken, are things with qualities of their own (their having a meaning is an arbitrary accident in their history), and bear toward each other relations, which must either correspond to the relations subsisting between the things signified — the similarity between the sounds Light and Light, for instance, must either be matched by a similarity in their significations — or must be neglected in ratiocination, on pain of absurdities like the following:

Light is contrary to darkness.

Feathers are light.

Feathers are contrary to darkness.

Now, against every form of this liability to error, one who purposes to reason with signs at all (and who does not?), requires to be put on one's guard. It may be done in two ways. One may be put in possession of the principle of the error and be left to apply it at one's discretion, as one may be put in the possession of the principle of incorrect speech as the departure from good usage. Or the several errors to which this principle leads may be noted and classified, and one may be given a system of precepts — a grammar in effect — for the avoidance of them. Now the Syllogistic Logic (and this is the point I have been so long beating up to) consists of a set of just such precepts; it is the Grammar, not indeed of Assent, but of reasoning in signs, and coming to the same results as if the reasoning were in ideas. Rule 1: In every syllogism there must be three terms and only three. That is to say, none of the terms must be ambiguous; one must not, from a similarity of words, conclude similarity of qualities, unless the similar

words possess like meanings; one whose attention was fixed on the things signified would not do so — would be in no danger, for instance, of inferring that feathers are contrary to darkness, on the ground that they are light. Rule 2: In every syllogism there must be three propositions and only three. That is, there are three steps in the reasoning process, one set out in each proposition. One is aware of a certain object or class of objects of a certain description — ‘Men are mortal.’ One perceives another object that resembles them in its known qualities — ‘Socrates is a man.’ One (quite involuntarily) fills out the percept of that object, by the addition of such attributes as the familiar objects to which it has been assimilated are known to possess, and as it is not known not to possess — ‘Socrates is mortal.’ For stating a bit of reasoning in words this rule is important (we shall have something to say of the Syllogistic Logic as a Grammar of Statement by and by), but for actual reasoning in words it is rather descriptive than mandatory. If one reasons in words, one does it in three propositions or not at all.¹ Rule 3: The middle term must be distributed at least once in the premises. For it is only when one can affirm mortality of all men in respect to whom one has been in a position to judge — only, that is, when one is prepared to affirm (as was explained some pages back in speaking of Induction by Simple Enumeration and the nature of universal beliefs) that all men are mortal — that one is certain to attribute mortality to the next object one may assimilate to men already known. If one’s experience on the subject has been divided, if some men have been found to be mortal and some not, one’s decision may go either way in a new instance, or may remain in suspense. When, therefore, one can affirm only that in some instances one has known men to be mortal and in some not, one has no assurance that any reasoning one may do in words will represent the reasoning one would do in that case, if one kept to one’s ideas; one must turn from the words to the ideas or to the facts themselves (if they be of a nature to admit of it), and this the rule

¹ See this qualified in note to p. 6.

about a distributed middle bids one do. And so on; one might go through the Syllogistic Logic, point by point, with the same result.¹

But if so, the supposed cogency of the Syllogism is an illusion. The process of reasoning is an inference from particulars to particulars; ² if it is illegitimate when it is performed with ideas, or with the objects themselves directly before the mind (and we found in treating of Induction that it was), it is no less illegitimate — no less inconclusive *in form* — when it is performed in words or symbols of ideas, or (if you will) of the things of which ideas are supposed to be facsimiles. A copy can possess no greater authority than its original. If in this case it appears to do so, the reason is that the original frankly confesses that it contains four terms — that its middle terms are never identical but only similar — while the copy does not; but the four terms exist in the one not less than in the other. It has been insisted with much justice (Associationists, as I have noticed in a note to a former page, gave occasion to their adversaries to make much of the distinction) that no mental state or bit of consciousness can be repeated; when an idea or a sensation has once passed away it is gone forever. A similar idea or sensation may be experienced, but never twice the same idea or sensation. But the meaning of a word is a mental phenomenon, and as such subject to this distinction. So is the word itself. It will be plain, therefore (in especial to those who find themselves adverse to Associationism), that one can never “use the same word twice,” nor “use the same word, or two different words, in the same sense.”; the utmost one can do is to use like words in like senses. So that it is over-no firm-built principle, such as the *Dictum de Omni*, that one passes from the premises, ‘All men are mortal’ and ‘All philosophers are men,’ to the conclusion ‘All philosophers are mortal’;

¹ I mean to include in this such ‘improvements’ in the Logic of modern times as Hamilton’s Quantification of the Predicate, for instance, Sigwart’s subtle remarks on the Equipollency of Propositions, and the Symbolic Logic that has grown up since Boole.

² Those who deny this do not commonly contest the fact, but the conclusiveness, of such inference.

the 'men' in the two cases are not the same — there is no chance for such a principle to be applied. The 'men' are only similar, not the same, and the principle involved is not a logical principle at all, but a psychological one — an exorbitant doctrine of Analogy, which we know at a glance is not reliable, but are powerless to discard. It is built into the framework of the mind. The certainty of the Syllogism is in the statement simply, not in the thing stated. One may admit the premises and deny the conclusion without committing a contradiction in thought; one commits it in words only. One contradicts oneself psychologically, goes counter to one's belief; but does not contradict oneself logically, does not go counter to one's grounds of belief.

II.

This does not mean, of course, that the Syllogism and Induction by Simple Enumeration are useless — that logicians, from Aristotle on, have labored in vain. It would take a quarto to fill an order of that size, even if it could be filled at all, and (I have already indicated a subordinate use of the Syllogism) I do not think it could. It means simply that they have labored other than they knew — that they have failed in the comparatively easy task of giving a good account of themselves. To supply, in a measure, their deficiency in this item we must begin some way back.

Truth, it was said, is justness of representation, precision in the correspondence between a mental copy, or forecast, and its original. And so far as memories and inferences are concerned, this is sufficiently intelligible. They at least do represent something, or are supposed to do so — may, perhaps, do so. In them the *διάνοιαι* and the *πράγματα* are at least distinct and separate. But intuitions also are true, and that more certainly than memories or inferences, but surely not in the sense of precisely representing anything. They represent nothing, they are, by definition, presentative, not representative — in them the *διάνοια* and the *πρᾶγμα* are one. In what sense, then, are

they true? They can hardly be left out of account. A list of things true that should contain no mention of intuitions would be like a catalogue of nobles that omitted princes, or a theory of vegetation that took no cognizance of roots.

The fact is, that clearly as we mean justness of representation by the word 'truth,' it is almost never because we perceive that quality in our thoughts that we judge them true. Except in a restricted class of instances, to be presently mentioned, we never can perceive it. To do so would require us to compare the copies in our mind with their originals, and observe to what extent they agree. But the originals of our memories (unless, indeed, the whole affair of the past is an illusion — we should find it hard enough to prove that it is not !) were certain fleeting sensations, and other modes of consciousness, which are not now in existence, or at least are not accessible. The originals of our inferences are certain fleeting sensations, and other modes of consciousness, that are not in existence yet, and perhaps never were, nor will be. In the smallest number of cases we can wait until they come about, and can then assure ourselves that our forecast was what it should have been (provided that our memory does not deceive us, and we really made such a forecast), but this is commonly not possible, even when the inference relates to the actual future, and not infrequently it relates not to what will happen but to what might happen, or might have happened *if* so-and-so, and is avowedly an attempt to strike off a facsimile of what never was nor will be.

We do, however, constantly discriminate true memories from false ; though we never suppose that we can take down the back volumes of our life, like the back numbers of a magazine, and turn to the required page, we are constantly feeling that this recollection is being confirmed, and that one proven mistaken. And if one were to ask "How?" we should reply, no doubt, "By their correspondence, or lack of correspondence with the facts." We remember, for example, burning yesterday a bundle of letters. We find charred fragments of them this morning in the grate — our memory has been, not proven, perhaps, but at least substantiated. Or we find the bundle intact

on the mantel-piece — our memory has been disproved. And this is, no doubt, the true account of the matter as far as it goes ; but note in what the substantiation or the disproof consists. It is not in a simple conformity or non-conformity to facts — it is not a case of the thing remembered arising from the past and confronting its ideal double. The letters we saw yesterday, and see unharmed or in ashes to-day, are, if you choose, the same letters (I am not disposed to thrust Berkleian Idealism down one's throat, however palatable I may find it myself), but the fact we remember is certain sensations and perceptions, and the fact we experience to-day is certain other sensations and perceptions, in themselves distinct and separate from any that we were ever subject to before. (Associationists may be supposed to have learned at last that a mental state which once disappears never comes again — not that I think they were ever entirely unaware of it.) The case is, that from our memory of having burned the letters we inferred that we should never have again sensations and perceptions of just the kind we are subject to on taking the bundle off the mantel and examining the handwriting. This inference being at fault, we hold the memory disproved. Or we inferred that we might have the sensations and perceptions we do have in looking over the charred fragments, and this inference proving correct, we hold the memory confirmed. The principle seems to be that the memory which leads to true inferences is an accurate transcript of the past, and that the memory which leads to inferences of the opposite kind is false.

How frankly superior to evidence this principle is, we need scarcely stay to remark. Direct evidence there can, of course, be none — it would necessitate access to the past for the purpose of collating it with the memories that lead to true and false inferences respectively ; and as for indirect evidence, it is conceivable that all our memories should be false and all our inferences from them true. If it were so, I do not know how we should ever find it out. Suppose a being created at this instant exactly like myself — but exactly like, nervous system and all (if indeed that be the organ of mind and the picture-

gallery of the past). He would have the same memories as I have, and the same reason to regard them as true ; yet every one of them would be false, even to the fact of there having been a past time — at least for him. It may seem indeed that we can get some comfort out of the doctrine of the Uniformity of Nature ; it may be argued that if the course of Nature be uniform — if the future be connected with the past in certain uniform ways — an accurate forecast of the future along those lines indicates a reliable clue to the past. But this is begging the question ; any showing that there is order in the world must presuppose the trustworthiness of memory. Without *that*, even a Kantian can only prove that we are under a subjective necessity of conceiving the world as orderly, whether it is so or not, just as we are under a subjective necessity of conceiving a time prior to the present, whether it existed or not, and prior to the existence of any Empirical Ego. While a Humean has not the benefit of even this poor shift. He can only recognize in this another imperfection in the instrument that he is obliged to work with — another halt in a limp already unlovely. And the worst of it is the fatality of the thing, the irremediableness. The principle is not one that we have picked up and can lay down (we would discard it on the instant, if it were) ; it is in the make and bones of the mind. Just as we must infer that things which are like in certain respects are alike in all others in which they are not known not to be so, so we must regard memories which lead to false inferences as untrue, though in the one case as in the other we are perfectly aware that the proceeding is unjustifiable.

But we decide also (which seems to be the point on which all turns) on the truth and falsity of inferences, and that not by the brutal expedient, so seldom possible or desirable, of awaiting the fact, but by reflection ; and the question is : “ By reflection on what ? ” And here again, as in the case of memory, I conceive the natural answer to be : “ By reflection on the facts.” One rejects an inference that it is possible for a given man to do thus and so — it is inconsistent with all that one has ever seen or heard of human capabilities. If this

were an accurate account of the matter, or rather a complete account (for it is accurate), we should have reached the delightful conclusion that our memories are tested by inferences and our inferences by memories ; but the case is not so desperate as that. The inconsistency does not lie between a present (actual or possible) inference and certain remembered facts — the inference does not relate to the remembered facts, to the men that one has known or heard of before — it lies simply between an inference from those facts and the present inference. From something that one knows of the given man, one infers that he can do thus and so ; from something else that one knows of him, his similarity to other men, one infers that he cannot. These two inferences are incompatible — it is an observed fact that one cannot entertain them both at the same time. Whichever gives place, whichever has to run in debt to the will to maintain itself in the struggle, ceases to be held true, ceases to constitute an inference, a belief. The principle is that the persistent inference is the true inference, that justness of representation always coexists with the ability of self-maintenance to the exclusion of all inconsistent hypotheses.

That this principle is not meant to bear inspection, is tolerably obvious. Presentative cognitions (intuitions) possess *par excellence* the ability of self-maintenance to the exclusion of all inconsistent hypotheses ; but justness of representation, as has been already noticed, cannot be attributed to them. Or if it be objected that it is only in respect to inferences that the coexistence and companionship of these two qualities need be maintained, the reply is that one a dozen times a day finds that they do not coexist. If it be still objected that they have been found to coexist on the whole, the reply is threefold. (1) This appeal to experience is an appeal to memory, and the reliability of the memory is the very thing (among others) that is here in question. (2) Even if it could be established that the principle on which we depend in judging inferences had been trustworthy in the past, it does not follow that it will be so in the future. Conditions may be preparing that tomorrow

will evolve a universe wherein everything will be strange to us. If it be so, I do not apprehend that our present memories and inferences would be at all different from what they are. (3) This is not a principle that is held on evidence; it is not itself an inference, it is logically prior to all inferences; it is not a product of the mind, but a part of the mind, and a very undesirable part.¹

All of which (actually to cross the threshold of the obvious — we have been hovering about it for some time) is but avowing explicitly what every one is ready to let pass with approval so long as one does not raise one's voice. Every one admits that some of one's memories must be inaccurate, and some of one's inferences; while that the attribute by which they ultimately come to be recognized as such is their failure to maintain themselves, their failure in persistency, in predominance, is implied in common speech. If one consider what beliefs one calls true (meaning by beliefs one's intuitions, memories, and inferences, the whole *extent* in effect of the term 'true'), one finds that they differ from all other rival or possible beliefs in this, that one believes them. Doctrines one does not accept, one says are not true, or that it is doubtful if they be true — *i.e.*, one is oneself in doubt about them. If one can say one believes a thing, one gives no additional information by adding that one believes it to be true. When, as often happens, some belief that one holds is shown to be inconsistent with another belief to which one adheres still more strongly, the instant that the former ceases to be believed one ceases to denominate it true, and begins to denominate it false. Nor can it be claimed that I am here committing the fallacy of *ὑστερον πρότερον*, that one ceases to believe because one has first recognized an absence of truth, a failure justly to represent — for we have

¹ It may be objected to this that I am using reasoning to stultify the reason. If so, no better proof of the imperfection of that faculty could be given than that its consistent use defeats itself — results in its own stultification. My own account of the matter would, however, be something different. Our cognitions are of three kinds — Intuitions, Memories, and Inferences. Of these the Intuitions are of most unblemished authority, and they discredit, in a measure, the other two.

seen that one ceases to believe in the great majority of cases under circumstances in which no such failure is perceived, or can be perceived. The beliefs of a person of wide experience one regards as more trustworthy, other things equal, than those of a person of narrow experience — they have persisted in the face of more ‘evidence’ — it is more probable, or rather more credible (I don’t want to get snarled with the Theory of Probabilities) that the wide experience of such a person will have made the conflict apparent, if any there be, between his existing beliefs and any rival ones that might displace them — he is not so ‘likely’ to find himself obliged to change his mind. So one allows more readily that the beliefs of a reflective person are true than those of an unreflective person. Reflection weeds out inconsistencies in one’s beliefs, brings out the latent antagonism between beliefs one has held at different times and “never brought into comparison before.” Weeding out inconsistencies is merely a process of finding out which of a group of incompatible inferences is the predominant one, and, as a process of guaranteeing the validity of the beliefs left over, it assumes that persistence in a belief is the mark of its truth.

Here, then, is the somewhat anomalous conclusion. Truth and falsity are clearly defined in one meaning, and (almost) always used in another. ‘True’ connotes justness of representation, and should be applied only to beliefs displaying that quality. But, so far as we can tell at any given moment, there are no such beliefs. At the instant an inference is ‘verified,’ in the cases in which that happens, the belief becomes presentative, and the moment afterwards it becomes but one element in a memory. Whether our memories and inferences do possess the attribute or not of justly representing the past and future, and I must add the conditional past and future, it is certain that they keep it a close secret ; if they have it, we can never discover its presence ; if they have it not, we are equally unable to discover its absence. Our application of the word ‘true,’ therefore, we do not regulate by whether or not a given belief possess the quality connoted by that word, but by whether it possess another and a very different and an entirely discon-

nected quality — persistence in the face of inconsistent beliefs. Unable to secure an agreement between the copies and the originals, we set about diligently to secure an agreement among the copies themselves. Taking the meaning of the word, not from the official, formal definition, but from the very stamp and die of the mind, the true belief is the one that will continue to be held under all possible turns of reflection and experience ; and Truth, in the most absolute sense in which we can profitably propose it as an ideal of human endeavor, is synonymous with the sort of predominance that would be displayed by the beliefs of one who at any given instant had digested all his ‘knowledge’ into a body of doctrine in which there lurked no latent inconsistencies¹ — a predominance not to be disturbed, that is, by further reflection, by thinking, simply. Disturbance by further experience is not to be guarded against.

III.

For assisting one to the attainment of this ideal of consistency, or say to an approximation to it, it is reasonably plain that Induction by Simple Enumeration and the Syllogistic Logic are instruments especially adapted — I had almost said especially designed. The former bids one set out quite explicitly all the ‘facts’ one ‘knows,’ that are relevant to the inference to be tested (*πάντα τὰ ὑπάρχοντα*). No better or other method could be devised for bringing to light, where it exists, an inference incompatible with the present, and more predominant than it (we have already seen that the incompatibility lies not directly between the present inference and the remembered ‘facts,’ but between it and the inferences from those facts); all other methods, with a doubtful exception, are in essence this. But a relevant instance is a somewhat elusive phenomenon, in especial when it takes the shape of an irrelevant relevant instance — the memory must be prodded to

¹ τῷ μὲν γὰρ ἀληθεῖ πάντα συνᾶδει τὰ ὑπάρχοντα, τῷ δὲ ψευδεὶ ταχὺ διαφωνεῖ τὰ ἀληθῆς (*Eth. Nicom.*, A. 8, 1098 b, 10). “All things sing in chorus with the truth.” Say rather, ‘all things singing in chorus’ is the truth.

do its work with anything like completeness. Mere intensity of attention and repeated efforts are capable, no doubt, of securing this end so far as it is attainable, and in any event they are necessary; but putting one's reasonings into words (it is the merest commonplace) serves the same purpose more expeditiously, and with a less expenditure of power, with a smaller mental strain. Now, the Syllogistic Logic supplies one with a system of rules for making this statement complete, and for guarding against certain dangers that are incidental to so doing (it was remarked some way back that the Syllogism would presently be spoken of as the Logic of Statement); and in making it complete, makes it more efficacious in several ways. It bids one define every word, and make sure of the truth of every proposition — it makes, that is, not only one's conclusion, as Inductive Logic does, but every step in one's reasoning and every element in those steps, a fresh starting-point for rummaging the memory; and, presenting the things to be done in a systematic way, it minimizes the danger of thinking one has exhausted all one's clues before one really has done so. But this is not obscure, and I hasten on to matter more in need of commentary. In an effort to set a subject as an entirety in a certain light, the discussion of details must be kept within limits, or the parts will show up bigger than the whole. The relation of Induction by Simple Enumeration and of the Syllogism to the ideal of predominance, or relative stability, is direct, immediate; but there are three other tests of truth of which the opposite is the case.

(1) It has been explained on a former page in what one's belief in a general or universal proposition consists — that properly speaking it is not a belief in a single proposition at all, but a disposition to believe an infinity of particular propositions of a certain kind — and it was symbolized as the mental habit, that grows up when a number of *A*'s have been found to be *B*, of filling out the mental image of the next *A* that occurs by the addition in idea of an appropriate *B*. Now it is tolerably plain in what the testing of the truth of such a universal proposition should consist; in the ascertainment, namely, of

whether any such habit exists. This can be done thoroughly by nothing less than reviewing all the *A*'s 'known' to one, in the manner Induction by Simple Enumeration suggests, and seeing if they all point one way, or at least if they point so predominantly to *B*, that there is not much doubt that in any future case the exceptions in the past will be neglected. And supposing this review to have been made and the habit of connecting *A* and *B* established, it is also plain that a further review need not be made in the case of the next *A*, nor of the next, nor of the next. Virtually, it has been made already — made beforehand. If the review in the case of *A* tenth was exhaustive, one is certain what the result of a repetition of that review for the benefit of *A* eleventh would bring forth. Not logically certain of course (logical certainty attaches to intuitions only — it will hardly be thought dogmatic to affirm it by this time), but psychologically certain, and often enough most mistakenly so, as it turns out; one remembers making the review with more care and completeness than one has perhaps either time or opportunity to do now, and one remembers nothing that has happened since to change the result. This is the *rationale* of the mental satisfaction, such as it is, that one feels in recognizing a strange case as but a fresh instance of an 'established principle' — one has already tested it, and that with the last degree perhaps of thoroughness; it comes to one stamped with authority.

But the analogy between a fresh case and the instances included under the general principle may not be of an obvious kind. The qualities by virtue of which the *A*'s already known have been classed together may not be of the sort that are open to inspection, and it may require indeed a proceeding of some complication and delicacy to lay them open. If so, and the principle is at all important, the proceeding (or proceedings, if the qualities in question may be approached from more than one side) should be fitly described and recorded. And if the principle be of supreme importance and of constant use, those preliminary directions may not unjustly be included and discussed in a treatise on Logic — the general arsenal of the

weapons the collective intelligence has devised for its aid in its contest with error. Now the Law of Causation is such a principle, and the so-called Canons of Induction (it must be evident at once that I think the title a misnomer) were supposed by the logician who first treated of them as a branch of his subject to be just such preliminary directions. They are at present undergoing their baptism by fire — it will not be expected that we should enter into the merits of the controversy here. It is enough that so long as the relation of cause and effect continues to be one that does not lie open to inspection, the Inductive Canons, or something corresponding to them (if indeed anything corresponding to them can be devised that will stand criticism) may fitly occupy a place in Logic, and that that place has here been correctly assigned. If so much may be supposed to have been done, the limit of my present undertaking in respect to them has been touched.

(2) There are alleged to be certain principles (among them the Law of Universal Causation, which I have taken the liberty to treat of under another head), the opposites of which are inconceivable. This means (we shall at least take it here to mean) that the mental images of the particular instances included under those principles cannot, so far as the qualities concerned in the principles are involved, be altered by any effort of the will. I should not like to say that there are such principles, but if there be, I would urge that a collection of them might not unfitly be given a place in Logic, whether one believes them to be logically prior to experience (or at any rate logically independent of it), or logically subsequent to experience. To the Humean, they are principles which he cannot feel it to be likely that any review of the past will shake — and that is all a Humean can say for any principle; to the follower of Reid or of Kant, they are principles that no review of the past can shake. Such lights should not be hidden under a bushel — the inquirer who wishes to furnish his mind with all available Tests of Truth should not be left to discover these for himself. If it is the business of Logic to present one with the Tests of Truth, it should present one with these. It

should be understood, however, in what their efficacy consists. As warrants of stability, they can make out some sort of a case. The Humean complains, indeed, that he has at times been deceived by them — that that of which he took the opposite to be inconceivable, turned out upon a narrower review to be unable to maintain itself — but the fact that they sometimes lead one astray is no sufficient ground for dismissing them altogether. What could the Humean bring forward in their place that had not led one astray? But as warrants for anything beyond mere stability, and that of the limited kind we are here speaking of, they cannot make out a case. The follower of Reid may be indulged to the height of his bent in his showing that they are imbedded in the mind; that much more formidable personage, the follower of Kant, may be indulged to the height of his bent in his showing that they are conditions prior to experience; but without putting a naïve faith in memory, neither of them can show that before the present moment one had a mind or an experience; nor, without putting an equally naïve faith in inference, that one will have a mind or an experience at any period hereafter, or that if one does, it will not be of a totally different nature or subject to totally different conditions.

(3) Up to this point it has been assumed that every one does his own thinking — that each mind is a distinct and separate standard of the truth. And (unless Truth is to be regarded as a social convention, and subject in the last resort to decision by the ballot) so each mind is; but it is notorious that some one else may set our mental stores in order for us — usually much better than we can do ourselves. Publicity and discussion is, in essence, this, and we feel very justly a diffidence about any doctrine that has not yet submitted to this ordeal. We have crossed the threshold of the obvious again; it will scarcely be retracing our steps to add, that this vicarious reflection reduced to a method is the Platonic dialectic.

Here, then, is the upshot of the matter — the salient features of the view of logic, we have been trying not indeed to sketch in, but to outline. For ascribing Truth, in the sense of just-

ness of representation, to our beliefs, we can find no warrant either in Induction, or Deduction, or Intuition, or Memory, or Inference. Truth, so far as we may suppose it to be attainable more or less completely by reflection, resolves itself into a certain sort of stability, or predominance. As 'aids to reflection' in this pursuit, the collective intelligence has thrown off the following devices: (1) Induction by Simple Enumeration, which (with a doubtful exception) is the foundation of all the rest, and the least elaborated, unless Locke's little book *On the Conduct of the Human Understanding* be taken as an essay in it; (2) The Syllogistic Logic, whose utility it is hard to over-estimate — though its professors have century after century shown themselves competent to that feat; (3) Indirect Induction, or proof by reference to a previously established principle; and incidental to this the so-called Canons of Induction; (4) The Inconceivability of the Opposite, which is the doubtful exception referred to above; (5) Discussion, and Dialectic as its most searching form.

ALFRED HODDER.

THE RELATION OF SHAFTESBURY AND HUTCHESON TO UTILITARIANISM.

WHILE we are certainly bound to recognize in Cumberland's *De legibus naturae*, published in 1672, the first statement by an English writer of the Utilitarian principle, hardly any one would now claim that the system of the Bishop of Peterborough is free from ambiguity, or even internal contradictions. Indeed, throughout the treatise 'perfection' (in the sense of highest development of the powers of mind and body) is regarded as a principle parallel to that of 'the greatest happiness of all.' It is only by noting the greater emphasis laid upon the Utilitarian principle, the greater actual use made of it in rationalizing morality, that we are able confidently to place Cumberland, where he belongs, at the head of the distinguished list of English Utilitarian moralists.

We shall now attempt to trace the further development of the 'greatest happiness' principle. The first step might seem to be an obvious one; for Locke, — whose *Essay*, it will be remembered, was first published in 1689–90, — is popularly regarded not only as a Utilitarian, but as the founder of English Utilitarianism. One can hardly understand the prevalence of this mistaken view, particularly as no recognized authority on the history of English Ethics seems really to have committed himself to such an interpretation of Locke.¹

The fact is that Locke, while he devoted the first book of the *Essay* to controverting the doctrine of 'innate ideas' (as he understood it), is by no means opposed to Intuitional Ethics in

¹ To be sure, Whewell's treatment of Locke's system, at once careless and somewhat partisan, would be almost sure to mislead the ordinary reader. He takes no pains to distinguish between the supposed tendency of the system of thought as a whole and what Locke actually set forth as his own views on ethical subjects. At the same time, he does mention, toward the end of his exposition, certain features of the ethical system proper which ought to keep one from regarding it as standing for the 'greatest happiness' principle. (See *Hist. of Mor. Phil. in Eng.*, Lect. v.)

its more moderate form. To be sure, he holds that "good and evil . . . are nothing but pleasure or pain, or that which occasions or procures pleasure or pain to us."¹ If he had actually worked out his ethical theory on this basis, we should, of course, find him standing for acknowledged Hedonism, either Egoistic or Universalistic, presumably the latter. But this he did not do. It is always to be remembered that Locke never wrote a formal treatise on Ethics. One has to gather his views on the subject from works devoted to other matters, mainly from the *Essay* and the *Reasonableness of Christianity*. If the result is not altogether satisfactory, one must be particularly careful not to read into the philosopher's views on Ethics a consistency not to be found there. On the one hand, he was not a little influenced by the then almost universal conception of Laws of Nature; and, on the other, he seems to hold the contradictory theses (1) that human reason is not able to arrive at proper notions of morality, apart from revelation;² and (2) that moral, like mathematical, truths are capable of rigorous and complete demonstration.³ Often, indeed, Locke is concerned to show that, and how, the practice of virtue is conducive to happiness; but this, in itself, proves nothing. Nearly all his contemporaries, of whatever ethical school, did the same. It is wholly characteristic, when he speaks of Divine Law as "the eternal, immutable standard of right."⁴ In fact, apart from certain more or less doubtful corollaries from his metaphysical system,⁵ his ethical speculations were mainly on the theological plane. In so far as this was true, he did not, of course, definitely commit himself to any particular ethical theory. It would thus hardly be too much to say that Locke had no ethical *system* at all, in the strict sense of the word. This implies nothing whatever in disparagement of the philosopher, but simply that he never gave to Ethics a sufficient

¹ *Essay*, Bk. ii, ch. xxviii, § 5.

² See, e.g., *Reas. of Chr.*, Works, vol. vii, p. 141.

³ See, e.g., *Essay*, Bk. iii, ch. xi, § 16.

⁴ *Reas. of Chr.*, p. 133.

⁵ Like his position that the truths of Ethics are capable of quasi-mathematical demonstration.

amount of consecutive attention to develop a coherent system of his own. It is evident that our present object does not require that we delay longer for an examination of the ethical position of the author of the *Essay concerning Human Understanding*.

The case of two other important English writers, whose interests were preëminently ethical, presents much more difficulty. I refer to Shaftesbury and Hutcheson. While it is quite unusual, and, as it seems to me, equally unjustifiable, to class them as Utilitarians,¹ their systems do stand in a relation to Utilitarianism sufficiently close to require careful examination. And, unfortunately, it is quite impossible adequately to treat this matter without devoting to it more space than the present paper, — or, indeed, any brief sketch of the history of English Utilitarianism, — would permit. To do so, would mean to exhibit in detail all sides of these complex systems, and then to show the subordinate importance of their Utilitarian aspect. Here one must confine oneself, therefore, to a brief, if not somewhat dogmatic presentation of what, in itself considered, is worthy of much more elaborate treatment.

Two questions, in particular, occupied the ethical writers of the period which we are considering: (1) What is the [objective] 'end' of moral action? (2) What is the nature of man, and in what relation does this stand to the 'end'? But it might very well happen, — did constantly happen, in fact, — that different writers would give a very different emphasis to these two questions, fundamentally related as they are. Now Shaftesbury² was so concerned with the question regarding the nature of man, and with his idea that virtue is 'natural,' and consists in a proper 'balance' of the affections, that he practically failed to give the first question, that regarding the 'end' of moral action, explicit treatment. As a result, while we find in his system by far the best refutation of Hobbes which had appeared

¹ The relation of Hutcheson to Utilitarianism is much closer than that of Shaftesbury, as we shall presently see.

² The first edition of the *Characteristics of Men, Manners, Opinions, Times*, was published in three volumes, in 1711. The following references are to the second edition, published in 1714.

up to his time, it is particularly hard to say exactly how he would have defined the Good.

And first, with regard to the nature of man. Nothing is more absurdly fictitious, according to Shaftesbury's view, than Hobbes' 'state of nature.' In the first place, we can find no true starting-point for Ethics in the individual. Try as we may, we still find him forming part of a system.¹ But, keeping to the individual for the sake of the argument, "the creature must have endured many changes; and each change, whilst he was thus growing up, was as *natural*, one as another. So that either there must be reckoned a hundred different states of nature; or, if one, it can be only that in which nature was perfect, and her growth complete."² Again, nothing is so natural as that which conduces to preservation, whether the creature in question be man or animal. Then, "if eating and drinking be natural, herding is so too. If any appetite or sense be natural, the sense of fellowship is the same."³

We are now prepared to see that the popular antithesis between egoism and altruism, — upon which any theory of absolute egoism, like that of Hobbes, must be based, — is largely artificial. We may very well distinguish the 'natural' [social, benevolent] affections from the 'self' affections [love of life, bodily appetites, etc.], and both of these from the 'unnatural' affections [malevolence, etc.];⁴ but only the last are really bad. 'Self' affections are not only permissible, but necessary, while the 'natural' affections may exist in excess, and thus defeat themselves. Virtue, then, consists not so much in a triumph of the one set of impulses over the other as in a proper 'balance' between the two. As we have seen, man finds himself part of a system from the very first. Since he is originally a social being, he derives his greatest happiness from that which makes for the existence of society and the common weal. Hence the good of all tends to become realized

¹ *Inquiry concerning Virtue*, "Characteristics," vol. ii, p. 16 *et seq.*

² *The Moralists*, vol. ii, p. 316.

³ *Freedom of Wit and Humour*, vol. i, p. 110.

⁴ *Inquiry*, vol. ii, p. 86 *et seq.*

through the enlightened endeavors of each to attain his own *true* happiness ; for vice, according to Shaftesbury, ultimately springs from ignorance. Therefore "the question would not be, Who loved himself, or Who not ? but, Who loved or served himself the rightest, and after the truest manner ?" ¹

Virtue, then, consists in the harmony of the first two classes of affections. But the necessary concomitant of virtue is happiness, just as pleasure attends the right state of the organism. The good man is his own best friend, the bad man his own worst enemy ; for every good act tends to harmonize the affections, every bad act to derange them.² Whether happiness itself be the Good, we shall have to ask almost immediately. Here we are only concerned with its relation to virtue, as the necessary concomitant of the latter.

Before leaving Shaftesbury's treatment of the nature of man, it will be necessary to consider his doctrine of a 'moral sense.' The importance of this doctrine for the system is, of course, variously estimated ;³ but certainly it cannot by any means be ignored. As the name would imply, the 'moral sense' is original. It is analogous to the faculty by virtue of which, as Shaftesbury assumes, we are able in some measure to appreciate the beautiful from the very first. But it is to be noted that both these faculties require cultivation. Thus the 'moral sense' is hardly the infallible thing which Butler thought he found in Conscience. It also differs from the latter in that it seems to belong almost wholly to the affective side of our nature. But though it acts, in a way, independently of reason, it is never in contradiction with the latter. On the contrary, its deliverances may be vindicated by reference to reason and experience. When it is perverted, this is through habitual wrong action (which deranges the affections), or through superstition.

Turning now to the author's account of the [objective] 'end'

¹ *Freedom of Wit and Humour*, vol. i, p. 121.

² *Inquiry*, vol. ii, p. 85.

³ Professor Sidgwick very justly says : "This doctrine, though characteristic and important, is not exactly necessary to his main argument ; it is the crown rather than the keystone of his ethical structure" (*Hist. of Ethics*, p. 187).

of moral action, we are prepared for some ambiguity. Of course the good of *all* must be the end, or must be implied by the end,¹ since the author begins with the conception of man as a social being. But what is the Good? Shaftesbury's frequent use of the word 'happiness' is not in itself decisive. Happiness, as we have just seen, is the necessary concomitant of the right state of the being in question. This latter seems at first to be regarded as the thing most important ;² at the same time, it is impossible to deny that the author's interpretation of the Good often seems clearly enough to be hedonistic.³ In Cumberland we found 'happiness' and 'perfection' as distinct, but parallel principles. In Shaftesbury we do not, as it seems to me, find them thus in mechanical juxtaposition, but wrought together, so that they appear as different aspects of the same fact of moral health or harmony. If this be so, we have here a system more difficult than that of Cumberland to place under one of the conventional modern rubrics. The good of society is the test, indeed, but what this good is, Shaftesbury nowhere quite clearly states. To me the system seems to bear at least a closer relation to the modern doctrine of 'self-realization' than to Utilitarianism, and this, in spite of the author's habitual emphasis of the affective side of our nature, at the expense of the cognitive and volitional sides.⁴ It will be remembered that he constantly insists upon the importance of an harmonious development of the truly human nature, even where he is concerned to show that the practice of virtue is conducive to the agent's own happiness, and seldom, if ever, suggests definite hedonistic calculations as determining the morality of a given action or class of actions. In what has just been said, the complication arising from Shaftesbury's doctrine of a 'moral sense' has been purposely neglected. For many this would at once determine the non-Utilitarian

¹ See, e.g., *Inquiry*, vol. ii, p. 77.

² See, e.g., *ibid.*, p. 14, *et seq.* Cf. Sidgwick, *Hist. of Ethics*, p. 184, note.

³ See, e.g., *Inquiry*, vol. ii, p. 99 *et seq.*

⁴ This one-sidedness of Shaftesbury's system doubtless arose in part from the fact that he was contending explicitly against Hobbes and implicitly against the Intellectualists.

character of the system; but I should not regard the point as decisive, apart from other considerations. Moreover, it must be remembered that, if the system be regarded as really Utilitarian, its relation is to the later, not to the earlier Utilitarianism (excluding Cumberland), for Gay, Tucker, Paley, and Bentham regard the motive of the individual in moral action as ultimately egoistic.

It is customary to regard Hutcheson's system¹ as the logical development of Shaftesbury's; but, while true in a sense, this view requires important modification. Though we have already found in Shaftesbury's system practically all the elements that enter into Hutcheson's, the different emphasis which is given to two of these in the latter system should be carefully noted. Shaftesbury, in his explicit opposition to Hobbes and his implicit opposition to the Intellectualists, had tended to identify virtue with benevolence. At the same time, his fundamental thought seems to have been that virtue consists in the harmony of the 'natural' and 'self' affections. With Hutcheson, on the other hand, benevolence becomes much more prominent, and is practically regarded as the beginning and the end of virtue. Again, Shaftesbury had assumed the existence of a 'moral sense,' but his system is quite intelligible without it. On the other hand, it would hardly be too much to say that Hutcheson's main object was to prove the existence of a 'moral sense,' distinct from self-interest.

Let us consider the 'moral sense' first. This is defined as "that determination to be pleased with the contemplation of those affections, actions, or characters of rational agents, which we call virtuous." It is universal in distribution, immediate in action, and original in character. We are obliged to assume such a faculty, mainly because it is impossible to reduce our moral judgments to considerations of self-interest. This doctrine of a 'moral sense' is not to be confused with that of

¹ The *Inquiry concerning Beauty, Order, Harmony, Design* and the *Inquiry concerning Moral Good and Evil* appeared in 1725; the *Essay on the Nature and Conduct of the Passions and Affections*, and *Illustrations upon the Moral Sense*, in 1728. The *System of Moral Philosophy* was published posthumously in 1755.

‘innate ideas,’ to which it bears “no relation.”¹ The ‘moral sense’ requires education and development, like our other faculties. In respect of importance, it appears to be designed for regulating and controlling all our powers.² It is to be observed that this faculty approves always, and *only*, of benevolence in the moral agent;³ also that “it gives us more pleasure and pain than all our other faculties.”⁴

As we have just seen, benevolence, in this system, is the very essence of virtue; and (as with Shaftesbury) it is in the truest sense ‘natural,’ not a subtle refinement of egoism. Indeed, Hutcheson’s extreme insistence on benevolence results in a one-sidedness which cannot be overlooked. Yet the author admits that the want of some degree of self-love would be “universally pernicious,”⁵ and even holds that one may treat oneself as one would a third person “who was a competitor of equal merit.”⁶ He attempts to avoid the difficulty, — a real one for a system identifying virtue with benevolence, — by showing that we may moralize our naïve tendency to pursue our own happiness by remembering always that a due regard for it is necessary for the good of all. Again, he does not claim, of course, that the benevolence in which virtue practically consists is felt equally for all men; but rather likens it to gravitation, which “increases as the distance is diminished.”⁷

The relation between benevolence and the ‘moral sense’ in the system is now tolerably plain. The fact that we approve benevolence, and nothing but benevolence, as virtuous, proves the existence of the ‘moral sense.’ If we had no such faculty, we should approve only what was advantageous to ourselves. On the other hand, it is our ‘moral sense’ that proves the essence of virtue to consist in benevolence. We must avoid confusion on one point, however: benevolence, as an impulse to virtue, is quite distinct from the ‘moral sense,’ as a disposi-

¹ *Inquiry into the Original of our Ideas of Beauty and Virtue*, second edn., p. xvi. Of course this is only Hutcheson’s view of the matter.

² *System of Moral Philosophy*, vol. i, p. 61.

³ *Inquiry*, p. 196 *et seq.*

⁴ *Ibid.*, p. 242.

⁵ *Ibid.*, p. 172.

⁶ *Ibid.*, p. 174.

⁷ *Ibid.*, p. 220.

tion to receive pleasure from the contemplation of virtue. We do not act benevolently for the pleasure which we may thus obtain. That would be a contradiction in terms.¹

So much, then, for benevolence and the moral sense, as the two most important aspects of man's moral nature. Taken alone, however, they are not sufficient. Our natural benevolence is a merely general tendency impelling us to conduct for the good of our fellows, particularly those standing to us in the closest relations of life. As such, it needs guidance. And again, the 'moral sense,'—so far, at least, as we have yet seen,—simply approves of actions performed from benevolent motives. Thus it approves of what is 'formally' good,² the good intention. But when we are electing what course of action we shall pursue, we are to aim at that which is 'materially' good. Here it is still, perhaps, the 'moral sense' that gives us the clue, but for practical guidance we must depend largely upon our cognitive powers, as employed with reference to an external criterion.

It will be best to let the author give his own account of this very important matter. "In comparing the moral qualities of actions, in order to regulate our election among various actions proposed, or to find which of them has the greatest moral excellency, we are led by our moral sense of virtue to judge thus: that in equal degrees of happiness, expected to proceed from the action, the virtue is in proportion to the number of persons to whom the happiness shall extend; (and here the *dignity or moral importance* of persons may compensate numbers) and, in equal numbers, the virtue is as the quantity of the happiness or natural good; or that the virtue is in a compound ratio of the quantity of good and number of enjoyers. In the same manner, the moral evil, or vice, is as the degree of misery, and number of sufferers; so that, that action is best which procures the greatest happiness for the greatest numbers, and that worst which, in like manner, occasions misery."³

¹ *Inquiry*, p. 116.

² The distinction is made by Hutcheson himself. See *System*, vol. i, p. 252.

³ *Inquiry*, p. 177.

This looks at first like Utilitarianism pure and simple ; but Hutcheson is mainly interested in that which is *formally* good, the benevolent intention, and he develops a calculus, the object of which is to show the degree of morality of a given action in terms of the *net* benevolence of the agent, *i.e.*, excess of benevolence over self-interest. He begins with five 'axioms.' For example: Let M = moment of good; B = benevolence; and A = ability. Then $M = B \times A$.¹ These apparently simple 'axioms' lend themselves to decidedly elaborate computations, the ultimate object of which, in each case, is to ascertain the value of B . It must always be remembered, however, that M (the amount of happiness produced by the action) is assumed in these computations as a known quantity. Now M must be learned from experience, and the 'hedonistic calculus' of the Utilitarian must be employed to find it. Thus the calculus referred to supplements, but does not supplant, the 'hedonistic calculus.' In spite of the 'moral sense,' the actual content of the moral laws would have to be largely determined by Utilitarian methods.²

It may still seem as if the system were Utilitarianism in disguise, — and Hutcheson does actually stand in a much closer relation to the 'greatest happiness' theory than does Shaftesbury, — but the matter is not quite so simple as would at first appear. That which makes for happiness is the 'materially' Good, to be sure; but we have seen that "the dignity or moral importance of persons may compensate numbers." Moreover, as might be expected, when the happiness of only one person is under consideration, the qualitative distinction between pleasures is regarded as absolute. The author says: "We have an immediate sense of a dignity, a perfection, or beatific quality in some kinds, which no intenseness of the lower kinds can equal, were they also as lasting as we could wish."³ And this feeling of human dignity, we are told, is something which we have quite independently of the 'moral sense.'⁴

¹ *Inquiry*, pp. 183-188.

² Such is actually Hutcheson's procedure in many of his deductions.

³ *System*, vol. i, p. 117.

⁴ *Ibid.*, p. 27.

Again, Hutcheson, like Shaftesbury, insisted upon the disinterested motive of the truly moral agent. This, as we saw in the case of the latter author, would remove the system from Utilitarianism in its original (complete) form, as represented by Gay, Tucker, Paley, and Bentham. It is further to be noted that, while Hutcheson comes a good deal nearer than Shaftesbury to stating the Utilitarian principle (and was actually the first English writer, so far as I am aware, to hit upon the exact Utilitarian formula), he also emphasized the doctrine of a 'moral sense' much more strongly than Shaftesbury had done. This results in a very considerable complication. The 'moral sense' is by hypothesis ultimate. Now, not only is it, according to Hutcheson, the touchstone of virtue; but from it, either directly or indirectly, are derived the major part of our pleasures and pains. Obviously this has an important bearing upon the 'hedonistic calculus,' which we found to be logically implied by the system. In computing the 'material' goodness of an action, we must take into account, not merely the natural effects of the action, but these complicated with the much more important effects of the 'moral sense' itself. The result is that the 'hedonistic calculus,' as ordinarily understood, is pushed into the background. Indeed, as we have had occasion to notice, when Hutcheson actually develops a 'calculus,' it is to ascertain the amount of benevolence implied by a given action, not the amount of happiness which may be expected to result from it, this latter, curiously enough, being assumed as a known quantity.

From what has been said, it will be seen that the system which we have been examining is not properly Utilitarian. Of course, if the author had been as predominantly interested in the 'materially' good as he actually was in the 'formally' good, and had avoided certain minor inconsistencies, his system would have closely resembled that of J. S. Mill; but, on the one hand, we are not at liberty to neglect the emphasis which he actually gave to the different sides of his system, and, on the other, it would hardly be held now that J. S. Mill was a consistent exponent of Utilitarianism. In short,

Hutcheson is the 'moral sense' philosopher *par excellence*. To lose sight of this, is to misinterpret his system. The general drift of his argument is plain. If we approve or disapprove of actions, we must do so from motives of self-interest or from motives independent of self-interest. The author's first step is to prove the disinterestedness of our moral judgments. This, he thinks, shows conclusively the existence of a 'moral sense,' and so vindicates his characteristic position.

It hardly need be said that the two very suggestive systems which we have been principally occupied with examining necessarily appear at a disadvantage in being compared with a type of ethical theory to which they do not properly belong. Most certainly they are not to be criticised merely for teaching more than can be comprehended within the bounds of the Utilitarian formula. Subsequent ethical theory for a long time represented an increasing degree of differentiation, which could only end in one-sidedness all round. In our own generation, there is a marked tendency to return to that more comprehensive view of man which Shaftesbury and Hutcheson did so much to work out, and to attempt a synthesis which shall do justice to our human nature as a whole.

ERNEST ALBEE.

THE CONCEPTION OF MORALITY IN JURISPRUDENCE.

EVER since the revival of the scientific study of jurisprudence the connection of law and morality has been much discussed, but the question is not yet, and perhaps never will be, settled. Every variety of opinion has been entertained, from the extreme doctrine held by Austin that, for the purposes of the jurist, law is absolutely independent of morality, almost to the opposite position, held by every Oriental *cadi*, that morality and law are one. The question is an important one, and upon the answer which is given to it depends much more than merely theoretical consequences. The problem is an intensely practical one.

The popular conception of the connection between law and morality is that in some way the law exists to promote morality, to preserve those conditions which make the moral life possible, and thus to enable men to lead sober and industrious lives. The average man regards law as justice systematized, and justice itself as a somewhat chaotic mass of moral principles. On this view, the positive law is conceived of as a code of rules, corresponding to the code of moral laws, deriving its authority from the obligatory character of those moral laws, and being just or unjust according as it agrees with, or differs from them. This, like all other popular conceptions, is inadequate for scientific purposes, and the jurist, so far at least as he is also a scientist, is compelled to abandon it. For it is contradicted by the facts. Positive laws do not rest upon moral laws, and common notions of justice furnish no court of appeal from the decrees of the State. The average man confounds law and morality, and identifies the rules of law with the principles of abstract justice. The jurist has to differentiate these, to show how law differs from morality, and wherein it is independent of it. In doing this he has rushed to the opposite extreme, and

has claimed for law a complete independence in theory, an independence which admittedly does not exist in reality. It is always dangerous to elaborate theories without reference to the actually existent, and it is not surprising, therefore, that scientific jurisprudence has not prospered, but has steadily pursued a downward course. It is the purpose of this article to show briefly that jurisprudence has thus retrograded, because it is founded on a false view of life and an inadequate conception of morality.

Austin's theory of jurisprudence is the product of a fiction. It rests upon an analysis of the law as it is, and at the very foundation lies the conception of sovereignty which he received from Hobbes through Bentham. Like his great masters, Austin regards the sovereign power in a State as absolute, possessed of unlimited authority, and not subject to any law. This power he treats as an existing fact, an ultimate datum, beyond which the jurist is not required to pursue his investigations. In the exercise of that power, and not in any decree of the Deity, or any law of nature, is the origin of positive law. Law is a general command imposed upon the subject by the unlimited sovereign authority of the State, and this command is enforced by sanctions. In law there are thus four elements: (1) The general element (law in its aspect of uniformity); (2) the element of command (law as force); (3) that of absolute obligation; (4) that of legal sanction, without which sanction there is no law. Law is differentiated from morality, by external marks, in that it is expressed and enforced by the power of the State. It is not founded upon morality, for it springs directly from the supreme sovereign political authority, which is above all limitations. Its obligation is absolute, and there is no court of appeal, either in current moral ideals of justice, or in a theory of natural equity, to which the subject can turn for relief from its mandates. The principle which guides the legislator is that of utility; he seeks the greatest good of the body politic; and that is, in Austin's estimation, also the fundamental principle of morality. But there is no direct connection between morality and law. Though they

may coöperate to serve the same ends, they are entirely separate and distinct.

The work of Maine, in the department of the history of law, showed at once how imperfect this theory of law is, and how false is the conception of sovereignty on which it rests. Viewed in the light of history, every proposition laid down by Austin is seen to be either absolutely false, or but partially true. His definition of law can hold good only for one aspect of the law, in one part of the world, and for only a brief period in the development of that part. Maine's investigations revealed political societies in which it is impossible to discover any determinate political authority to which the bulk of the people yielded habitual obedience; disclosed laws which can by no stretch of the English language be termed commands; showed laws possessed of no legal sanction; and above all made manifest how intimate is the connection between law and morality. In morality the law had its origin. In the law moral principles are embodied; upon those principles its force depends; and they hedge around and control the sovereign authority as truly as they control the actions of the humblest subject. Austin regarded the sovereign power as absolute and unlimited. Maine pointed out that this is true only for the lawyer, who is engaged in ascertaining what is the positive law of the land, and who rests content when he can base the proposition which he desires to establish on statutory decree or judicial decision. Beyond this juridical phase of sovereignty is its political and social side. Socially and politically considered, the supreme authority rests upon, and is limited by, morality, and only as its decrees coincide with the moral sentiments of the community are they possessed of force. "Law would not be really imperative, we know, unless behind the sword of the magistrate, the bulk of mankind felt the weight of social obligation, the irresistible burden of custom, of immemorial tradition, and the like, a social, and even a religious sanctity."¹ "It is its history, the entire mass of its historical antecedents, which, in each community, determines how the

¹ Harrison, "English School of Jurisprudence." *Fort. Rev.*, vol. XXX, p. 488.

sovereign shall exercise, or forbear from exercising, his irresistible coercive power. All that constitutes this — the whole enormous aggregate of opinions, sentiments, beliefs, superstitions and prejudices, of ideas of all kinds, hereditary and acquired, some produced by institutions, and some by the constitution of human nature — is rejected by the analytical jurists.”¹

Maine, however, does not regard the conception of law held by the analytical school as entirely false. He suggests that it is true within certain bounds. Law, as the bare decree of an unlimited sovereign power, does not exist in any society. Socially considered such an assumption is totally untrue, but when viewed from within the law itself, as an abstraction necessary for the purposes of a purely formal science, it possesses at once a certain utility and a qualified validity. To the servant of the law, what the law decrees must come with an absolute obligation, which requires no reason to justify it, but which rests its right to exact obedience on the *ipse dixit* alone. When we have regard to the different sides from which the subject may be approached, we readily see that the science of law may be divided into two branches. On the one hand we may have a theory of legislation, dealing with the social and political side, treating of the functions performed by law in society, ascertaining inductively that system of law which is best for the State, and the most in conformity with the moral ideals of its people ; while, on the other hand, we have a theory of jurisprudence which, from the standpoint of the law itself, should determine, not what ought to be, but what actually is, or has been, positive law. Upon the basis of this division, Maine suggested that the Austinian conception of law is perfectly valid for a theory of jurisprudence, and may possess a certain utility for pedagogical purposes.

But the division of the science of law into a theory of legislation and a theory of jurisprudence is philosophically unsound. What ought to be and what is, cannot be separated. A sound theory of legislation demands for its foundation a sound system

¹ Maine, *Early History of Institutions*. Lect. XII, p. 360.

of jurisprudence, and a system of jurisprudence requires for its completion a theory of legislation. The two theories are one ; they cannot be kept apart ; they cannot even be logically divided. A theory of what is law, built up upon a careful investigation of the history of the law, its origin and development, an analysis of its various conceptions, an examination of the part which it plays in society, the ends which it serves, the forces which have produced it and the forces which are continually modifying it, in short, a really comprehensive and accurate science of what is law, contains in itself at once the theory of what ought to be law. A science, to be worthy of the name, must rise to a higher level than the mere analysis and tabulation of leading legal conceptions for pedagogical purposes. It must honestly endeavor to discover what is the real nature of the law, the living product of an organic society, and so it must take into account the whole connection of law and morality.

The scientific jurists, however, have accepted the division, and, upon the basis of that division, jurisprudence becomes a purely abstract science. The conception of sovereignty on which it rests, is not a conception of sovereignty as it actually is, but of sovereignty with all its attributes save force eliminated. Founded upon the notion of sovereignty as force alone, the science is abstract and largely deductive. It is not *the* science of law, and does not help us to a knowledge of the real nature of the law. This knowledge must be sought for in a theory of legislation, for jurisprudence only gives a partial analysis of leading legal conceptions, and is only useful as an instrument in the training of legal practitioners. It is not even founded upon observation. Harrison, accepting Sir Henry Maine's suggestion, says: "The Austinian analysis of sovereignty is a perfectly sound conception when read in the light of the assumptions by which it is qualified and limited to the sphere to which it belongs. It belongs strictly to law, and the assumptions or hypotheses on which it depends, are: (1) that the lawyer is considering sovereignty only on the side of force ; (2) that for his purposes

he assumes the force it exerts to be unlimited ; (3) and that he is considering force only as it is applied by the tribunals of settled modern societies. With these assumptions the proposition as to sovereignty is strictly unassailable." ¹ That is to say, it is true for one phase of one part of the subject, when considered upon the basis of an assumption absolutely untrue as to fact. Can such a treatment of a subject be properly termed scientific? Considering law simply as force, the jurist yet refuses to examine that force and the laws which govern its operation. Law is not a lifeless mass of rules, but is the living product of a living and organic society. Can any department of knowledge be entitled to the name of science which ignores the vital forces which have produced, and are constantly modifying, the facts which it is supposed to be investigating? Certainly it is far from being such a science as Austin fondly imagined himself to be establishing. If anything is clear, it is that Austin thought he was placing the study of positive law on a strictly scientific basis, founding an inductive science on the observation and analysis of legal conceptions as they actually are ; and that, once for all, he was removing law from the region of assumptions on which his predecessors had founded it, and with which they had obscured it. Had Austin succeeded in founding an inductive science of the law, on the basis of observation, and free from assumptions, his work would have been of immense service to the world. But the science, as it is, is of doubtful value. Maine certainly does not underestimate it when he says: "The procedure of the Analytical Jurists is closely followed in mathematics and political economy. It is strictly philosophical, but the practical value of all sciences founded on abstractions depends on the relative importance of the elements rejected and the elements retained in the process of abstraction. Tried by this test, mathematical science is of greatly more value than political economy, and both of them than jurisprudence as conceived by the writers I am criticising." ²

¹ Harrison, "English School of Jurisprudence." *Fort. Rev.*, vol. XXX, p. 409.

² Maine, *Early History of Institutions*. Lect. XII, p. 360.

The legal mind instinctively recoils from admitting that there is any standard outside the law by which the law may be judged. To acknowledge that there is any criterion known to individuals, by which they can determine whether any edict of the state is just and so binding on them, would be to weaken the entire fabric of the law, and, by destroying the instinctive respect which men entertain for it, to undermine the very foundation on which it rests. The jurist can never safely acknowledge that the individual is ever justified in regarding a law as not obligatory upon him. Whatever rights the individual conscience may possess, it can never be superior to society, and the formal decrees of the State must be held to be paramount. So the jurist has a reasonable, though mistaken, horror of the 'ought to be,' and insists upon confining himself to what is, or has been, clothed with the character of positive law. Jurisprudence for the scientific jurist, is now a purely formal science as logic is a formal science, dealing with the essential form of the law as it has appeared in the different systems of legislation known to history. The form, and not the matter of the law, is the subject of jurisprudence, and the science, as represented by Holland for example, does not seek to introduce improvements in the matter of the law, to adapt the positive law to the condition of society, or to formulate rules of legislation, though it may advance the positive law by removing misconceptions or solving difficulties. Jurisprudence, thus regarded, does not aim at the discovery of any principles for the direct improvement of the law. The ideal here involved is undoubtedly lower than that implied in Bentham's conception of the science of law, as the instrument by which great reforms may be introduced. Nor is it the ideal advanced by Heron when he says: "Discussing Positive Laws upon the inductive method, examining the different legislative systems of different nations, and their results upon the happiness of mankind — comparing slavery with freedom, ignorance with knowledge, accordingly as these have been checked or developed by the great forces which have swayed human destinies — we, by the observation of facts and the use of reason, selecting the good,

eloigning the bad, may gradually arrive at that system of law which is most in conformity with natural justice.”¹ Jurisprudence has no place for the improvement of substantive law. The scientific jurists have mapped out the field, have reserved for themselves the work of investigating the nature of what is law, and have left the task of improving the law to a theory of legislation which unfortunately does not exist.

Scientific jurisprudence has steadily pursued a downward course. For Bentham, its ideal was the improvement of the substantive law, and on this view it was an instrument of reform. Austin, abandoning all attempt to determine what ought to be in law, confined the science to the observation and analysis of what is law, with the intention of freeing the study from all assumptions, and placing it on a purely inductive basis. Unfortunately his analysis was based upon the greatest of all assumptions, namely, that law is the command of an unlimited sovereign power. Scientific jurisprudence now rests consciously upon that assumption. It no longer treats of law as it is, but only of law in its character of bare force. It no longer adds to our knowledge of the matter of the law, and is purely a formal science, useful only for pedagogical purposes. And all this decadence is due to the refusal of the scientific jurists to admit in theory that connection between law and morality which undoubtedly exists in fact, a refusal which results ultimately from their inadequate conception of morality.

The jurist always confuses morality and moral law. Morality is for him a system of law, a species of internal legislation. So Holland contrasts ethics and jurisprudence, in that the first deals with laws for which external legislation and external enforcement are impossible, while the second deals only with the laws which are the creation of external legislation and which are enforced by the paramount human authority in a political state.² So, too, Lightwood, for whom law is a rule explanatory of a rule of morality, never rises to any higher view of morality.

¹ Heron, *Jurisprudence and the Social Sciences*, p. 52.

² Holland, *Jurisprudence*, chap. iii.

He states the relation of law to morality as follows : "There are certain classes of actions which affect directly and obviously the welfare of the individual and the community. These are governed by a few simple rules which every man may know. These are the rules of morality. Owing, however, to the complications which arise from the collection of individuals in large societies, it often becomes impossible to know how to act in accordance with these rules ; hence we require a large number of subsidiary rules to be laid down. These are the rules of law. There are other actions whose effect upon the community has not yet been decided, either because it is impossible to classify them, or because opinion is divided upon the effect of any given class. These, therefore, are left outside the domain of rule entirely ; they are governed solely by the discretion of the individual."¹ The rules of morality and of law cannot be thus distinguished, and no class of actions lies wholly beyond the range of morality. The rules of law apply to the simple as well as to the complex relations of life. The law is not explanatory of morality. In the great majority of cases it assumes that the duty is known, and the chief object of the legislator's concern is, not that the duty should be rendered more explicit, but that the penalty, by which that duty is to be enforced, should be determined.

I have given this quotation from Lightwood at length, not for its view of the relation of law to morality, but because it contains explicitly that conception of morality which seems to be held implicitly by every jurist, and which is the real stumbling-block in their path. The jurist inevitably gravitates towards the view of morality as a code of rules of conduct, either established directly by divine legislation, or revealed by reason. For him all the significance of morality is contained in the moral law, and is summed up in a series of comprehensive 'Thou-shalt-nots.' According to popular opinion positive law is complementary to moral law, existing as it does to preserve the conditions of morality, and to make the moral life a possibility. It adds to the moral code needed regulation, and

¹ Lightwood, *Nature of Positive Law*, p. 382.

lends it the power of the State that the obedience of individuals may be secured. Over against each rule of the legal code stands a rule of the moral code, to which the former owes its authority. The laws of the State as to murder are subsidiary to the divine mandate "Thou shalt not kill," the laws for the protection of property to the command "Thou shalt not steal"; and the law of the land is just, or unjust, according as it corresponds to, or differs from, the moral right expressed in the divine legislation or natural law. Laws unjust in this sense are regarded as imposing no binding obligation upon the individual. The jurist accepts this popular conception of morality as a code of rules, but he differs from the average man in that he will not, indeed cannot, admit that the positive law rests upon moral law for its authority. Earlier decisions seemed to imply the principle that laws contrary to 'natural equity' or 'common right' are void, but this dictum has not been adhered to. Mr. Justice Willes expressed the only possible attitude for the judiciary when he said: "We sit here as the servants of the Queen and the legislature. Are we to act as regents over what is done by parliament with the consent of the Queen, lords, and commons? I deny that any such authority exists. If an Act of Parliament has been obtained improperly, it is for the legislature to correct it by repealing it: but, so long as it exists as law, the Courts are bound to obey it. The proceedings here are judicial, not autocratic, which they would be if we could make laws instead of administering them."¹

In a legal sense 'moral' always refers to some definite rule of the moral law. Thus a contract *contra bonos mores* is void, but it is not every kind of immoral intention which will render it illegal. It is not void merely because, in the opinion of the judges, it tends to produce wrong or is detrimental to the moral welfare of the community. It must violate a rule of morality recognized as such by the law; it must be more than immoral; its immorality must amount to illegality. The rule of the moral law must be one which amounts to a rule of the

¹ Lee v. Bude and Torrington Junction Ry. Co.; L. R. 6 C. P., p. 582.

common law. In the case of contracts void as being contrary to the public good or public policy, there is some doubt, and a wider view of morality might prevail. In *Egerton v. Earl Brownlow* (4 H. L. C., pp. 150, 237) Chief Baron Pollock and Lord St. Leonards both used language which would imply that it is the duty of the judges always to consider the public welfare, and that they are entitled to regard a condition in a will as void whenever it is their opinion that the condition in question would work a mischief to the community at large. That decision would open a wide gap through which judges might introduce their moral ideas and notions of public expediency into the consideration of all manner of questions. The majority of the judges, however, in *Egerton v. Earl Brownlow* were not prepared to adopt so wide a view of public policy. In the opinion of Baron Parke (p. 123) a condition or a contract is void as against public policy, not when in the view of the judge it may work harm to the community, but when it can be shown to be contrary to the policy, spirit, or principle of a particular law; and Baron Alderson, pointing out that the judges had on questions of public policy always used the policy of a particular law as a key to its construction, added (p. 109), "an active imagination may find a bad tendency arising out of every transaction between imperfect mortals; and to use this as a criterion for determination would make every case depend on the arbitrary caprice of an acute judge."

Morality enters into the law only as a series of rules of conduct, rules which derive their authority in the courts, not from their obligatory moral character, but from the legal character with which they are clothed through recognition by the common law. Moral laws are not, as the naïve consciousness imagines, *leges legum*, and no court of appeal from the positive law is to be found in popular moral ideas. To admit such a conception, even for a moment, would be a standing invitation to men to disregard the law, and would substitute chaos for order. The positive law can never correspond exactly with the moral law. It must always be below the standards of the best part of the community, and above those

of the worst. There is an opposition between the moral and positive laws, such that the force of the one varies with the force of the other in almost an inverse ratio. Wherever the rule of law is weak, the rules of custom, of tradition, and of morality chiefly govern the lives of men; but when the positive law is strong, and is regularly and impartially enforced, these customary rules tend to sink into the background, and men regulate their lives more and more by the positive law alone. Particular laws do not rest upon moral laws for their authority, and a moral duty, even when of perfect obligation and easily enforced, does not of necessity give rise to a legal duty. Thus the duty of a son to support an aged and infirm parent is recognized as absolute by all civilized peoples, and under the civil law, as in Scotland, that duty is enforced; but the common law recognizes no legal obligation, apart from contract, as resulting from the natural obligation arising *ex pietate*.

The naïve conception of the positive law as the complement of the moral law, is inadequate; but the jurist, while rejecting it, accepts the naïve conception of morality, and never seems to dream that that too may be equally inadequate for scientific purposes. By so doing, the jurist is compelled to separate the moral and positive laws, and to divide the allegiance of men by setting up two entirely independent rules of conduct, both absolutely binding upon the conscience of the individual. It is difficult to maintain such a position either in practice or in theory. A consistent theory of life can never be reached on such a basis.

It is natural for men who concentrate their attention on the notion of duty, to conceive of all life as only obedience to rules, and this tendency is doubly strong in the case of students of law. For them the positive and the moral laws sum up the entire significance of life. The average man bases the positive law upon the moral law; the jurist rests it upon itself; both found law upon law, view law as ultimate and regard obedience to it as an end in itself. But such a view of life is inadequate. Life is more than conformity to law. Such a conception is mechanical, but life whether in the physical, psysical, or moral sphere is more than mechanism; it is

organic growth. The moral life is a continuous evolution, a progress to higher and higher things, an advance, the principles of which are fixed and constant, but which is not itself to be found in any stereotyped form or mechanical arrangement. Ethics has a higher task than that of merely formulating moral rules. "The task of the moral philosopher is not to construct a system of rules for the conduct of life — we do not live by rule — but to lay bare the nerve of the moral life, the very essence of which is spontaneity and growth away from any fixed form or type."¹ Further, all law is negative. A system of moral rules is as much a limitation and restriction as is the legal code of the land. No code of moral laws can adequately express the moral life, for that life is something positive and consists in a fulfilment, not a restriction, of the life of the individual. The moral life cannot be summed up in a series of imperatives ; it is spiritual and consists in a growth towards an ideal. Its end is not action in accordance with rule, but the development of the ideal man and the realization of the perfect character. Obedience to law is not the end of life; it is merely a means towards an end, which is the realization of the true nature of man. The positive law does not rest upon the moral law for its authority, and neither law is absolute ; both, not as particular maxims or enactments but as a whole, rest alike upon reason.

The jurist's erroneous conception of life involves him of necessity in further errors. He treats law as something fixed and static, the artificial creation of governments. The mistake made is in regarding law as identical with a body of laws. Law is more than a mass of rules ; it is fuller and broader than any code ever devised by the wisest legislator ; it is the living product of the State, the highest organic form of the moral life. Legislatures are not all-powerful. They may enact any statutes they please, but the content and significance of these are, for the most part, supplied through the medium of judicial interpretation by the social self-consciousness of the nation. The rise of joint-stock companies, differing both from partnerships and corporations, yet possessing many of the legal characteris-

¹ James Seth, *Study of Ethical Principles*, p. 14.

tics of both, is an example of a change within the law, opposed to the policy of the government, yet produced by the irresistible movement of life. The law is never stationary; it is a developing entity, the significance of which is ever growing wider and deeper with the increasing complexity of social life. The Statute of Uses and the Statute of Frauds, for example, now serve ends little dreamed of by the governments of Henry VIII and Charles II.

The legislator is ever busy, striving to adapt the form of the law to the changing conditions of society, but the form is of but slight importance as compared with the content. A law may remain on the statute book, a mere edict of government, devoid of that force which is the essential characteristic of law. For nearly three hundred years after the lists were last prepared for a trial by combat, the appeal to arms remained part of the law of England, but was wholly inoperative because the moral sentiment of the nation had outgrown it. In the same way, from the first, duelling when fatal was punishable under the common law as murder, but the law was powerless because the age was not sufficiently advanced. That laws become inoperative when they no longer correspond to the moral requirements of the times, is a fact with which a true theory of jurisprudence must reckon. In cases to which such laws apply, juries refuse to convict, and judges break away from the law, find flimsy excuses for ignoring precedents and establishing a new departure more in accordance with the spirit of the age. The history of the English law in regard to wagers is a good example of this movement. The judges, while recognizing wagers as legal contracts, became, in the words of Baron Parke, "astute, even to the extent of bordering on the ridiculous, to find reasons for refusing to enforce them." The one true science of the law, whether it is called jurisprudence or the theory of legislation, must take a comprehensive view of the subject, must endeavor to determine the exact nature of law, and of the forces which have produced it, the forces which are tending to its preservation and permanence, and the forces which are constantly modifying it.

Law is more than a command, more than an artificial and arbitrary product of governing power. The position of the jurists was assumed out of respect for the law, from an unwillingness to weaken its authority, or to admit anything that would deprive it of its absolutely obligatory character. Unfortunately the direct effect of their efforts has been in the direction of weakening the respect for law. It is not without significance, that the modern period with its constant demands for liberty, its hostility to law and state interference with the individual, is also the period of this artificial conception of law, the conception of every scientific jurist from the sixteenth century to the present day. Herbert Spencer criticises Hobbes and Austin on account of the absolutism which is a necessary part of their theory of law, yet he himself always treats the law in the same manner as the arbitrary command of government, and "the sins of legislators" and "the mistakes of government" are his favorite topics. Anarchy and nihilism are the logical results of extreme individualism.

The law is the necessary product of social life, and as such is bound up with and inseparable from morality. The unity of life is absolute. We cannot separate morality and law on the ground that the one applies to the 'inner,' the other to the 'outward,' life, for the implied division of the individual life is itself impossible. Equally impossible is it to regard law as "a demand made by God on humanity as a whole," and morality as "the demand made on the individual man," for the individual life and the social life are one. Society has no existence apart from individuals, and no individual exists beyond the organization of society and the reach of law. Life is an undivided whole with many aspects.

The jurist's conception of the law as absolute, and the naïve conception of morality as a code of rules, may be sufficient for the judge, the servant of the law. The scientific jurist, however, is in a different position, and before he can attain to a theory of jurisprudence, either approximately true or useful, he must rise to a wider view of life, and base his investigations upon a sounder system of Ethics.

T. W. TAYLOR, JR.

REFUTATIONS OF IDEALISM IN THE *LOSE* *BLÄTTER*.

THE *Lose Blätter* contain several more or less extended "Refutations of Idealism," varying in date from (apparently) early in the eighties to 1793. These have a twofold interest. First, they elaborate several steps of the "Refutation" in the *Critique*, and put into definite form as distinct proofs what is merely suggested there; secondly, they give striking testimony to the ambiguities which Vaihinger has already pointed out, and show that Kant *did* and *did not* consider himself to be proving the existence of things-in-themselves.

It will be remembered (to refer only to some of the literature where the points at issue have been sharply defined) that in *Mind*, IV, pp. 111, 408, 557, Caird and Sidgwick discussed the meaning of the *Ding ausser mir* as contrasted with the *Vorstellung eines Dinges ausser mir*; Sidgwick holding that the "thing" is here identical with the transcendental object, although Kant may have elsewhere distinguished them; Caird holding that here, at least, there is no hint of the thing-in-itself, although it is elsewhere presupposed as corresponding to the receptivity of our sensibility. Adamson (*Philosophy of Kant*) takes the same view as Caird, though in emphasizing that the substance of the theory is "that a *given*, not self-produced element of sensation is involved in external perception," he has suggested the difficulty, *viz.*, "given by what?" Mahaffy and Bernard give a lucid comparison of nearly all the passages from the same point of view. But Vaihinger, in the *Strassb. Abh.*, and again in his *Com.* II, pointed out the contradictory character of Kant's expressions, not only between passages of the two editions but in passages of the same edition, showing that Berkeley is indirectly involved, and that the note to the Preface of the second edition contained probably a reference to things-in-

themselves. Finally, Caird (*Crit. Philos. of Kant*, I, pp. 634, 636 ff.) admits that "there is a sense in which a reference to things-in-themselves as at the basis of external experience is involved in the 'Refutation,'" and says that while the primary question is the relation of two aspects of experience, "the dualism in experience is ultimately connected with the opposition between the ego-in-itself and the thing-in-itself; for the latter is 'the ground' to which the materials of experience are attributed, just in so far as these materials are passive affections, given to the mind in sense and not supplied by its own spontaneity." I will first outline some of the more important "proofs," or "studies for proofs," given in the *Lose Blätter*,¹ and then point out some of the most important bearings on the difficulties in the *Critique*.

I. *Kant distinguishes six different ways of refuting idealism.* Four of these are named in D 8; the others are found in various other fragments. They are as follows:

(1) Inner experience as a consciousness of the empirically determined existence of myself in time requires the existence of outer things. (How these "outer things" are designated will be shown below.) This is the proof given in the "Refutation," and is frequently referred to (Heft I, pp. 201, 203; Heft II, p. 295, etc.).

(2) The very consciousness of succession or time requires space. This is distinguished on p. 204 from (1), but on p. 189 it is brought into close connection with it, and elaborated in an interesting way, as follows. (a) We can represent to ourselves a number only by counting successively in time, and then taking together this plurality into the unity of a number. (b) But this can be done only by setting our units side by side in space, for they must be thought as given *simultaneously* (*zugleich*), *i.e.*, as taken together into one representation. (c) This simultaneity, or coexistence, can be cognized only as I can (not merely think but) *apprehend* the given plurality both forward and backward. (d) Therefore, an intuition in which

¹ The passages are in Heft I, pp. 101-104, 189, 200-202, 203-205, 209-216, 229, 263; in Heft II, pp. 36 ff., 254, 285, 294 ff., 367.

the manifold is given *ausser einander* and *neben einander*, *i.e.*, the intuition which makes the idea of space possible, must be given in perception. Point (c), above, is further worked out on p. 204. "We cannot be conscious of the simultaneity (or coexistence) of *A* and *B* without a permanent. For all apprehending is successive. But in so far as the succession can proceed not merely forwards from *A* to *B*, but, as often as I please, backward from *B* to *A*, it is necessary that *A* persist. The presentations of the senses, *A* and *B*, must, therefore, have another ground than that in inner sense," etc. The dependence of time on space is frequently referred to in the *Critique*, but it is not, so far as I am aware, worked out so fully, or utilized in just this manner (*cf.* I, p. 214).

(3) The *material* or *content* of our presentations in space requires as its source an "outer sense." "For the imagination can create an idea of the external only as it affects the outer sense (within the organ of the latter), and there would be no material for external representations, or ideas of the outer, unless there were an outer sense." This argument is found in full only in I, p. 203, but is embodied in condensed form in II, p. 254, and in the note to *Rem.* I, following the "Refutation" (B 276). It is also somewhat similar to the following, though not the same.

(4) The question at issue is whether sense-perception can be distinguished from imagination of outer objects, and Kant asserts that the *mere form* of outer sense-perception, *i.e.*, its spatial character, is an immediate, sure, and self-evident criterion, for while all outer objects have three dimensions, time has but one. If, then, we had only imagination, *i.e.*, only the inner sense, "in order that our perception should have three dimensions such as space has, we should have to think this our *inner Vorstellung as without us*, which is self-contradictory" (I, p. 101 ff.). The counterpart of this appears on p. 104. "The question arises whether that perception (*Anschauung*) which has the form of the outer sense, *viz.*, imagination, is so like that which has also an *object* of the outer sense that the two cannot be distinguished." In exceptional cases (fever, etc.)

this may not be possible, but in general "the answer is: consciousness can accompany all ideas, therefore those of imagination, which, with its play, is itself an object of the inner sense. It must, then, be possible to be conscious of the imagination as such, because we actually distinguish its products, as inner presentations and so as existing in time, from the perception of the senses" (*cf.* p. 212 ff.). This argument, also, is hinted at in the note to *Rem.* I, but as it is found in a sheet marked by Kant "*zu Bogen C,*" Reicke conjectured that it was intended for part of a larger treatise of some sort. As it occurs also in a fragment (p. 201; *cf.* also p. 216, and II, p. 36) written after 1788, it probably was thought out after the second edition of the *Critique*.

(5) If there were no outer objects of our senses, and so no outer sense but only imagination, we should at least be conscious of the activity of the latter as a *spontaneity*, whereas we are conscious of a presentation of the senses as a merely *passive determination* (I, pp. 201, 212 ff.). This is also suggested in the note cited. It is to be observed that neither (3), (4), nor (5) has any reference to the determination of the inner experience, and so they may fairly be regarded as independent arguments.

(6) Similar to (1), perhaps, in thought, but not in form, is the short argument in I, p. 205. "If the soul itself is only a phenomenon, and its empirical perception only the form in which its own subject is affected in apprehending the manifold of a given perception, it follows that this latter perception must be something other than inner, *viz.*, outer, and thus that this latter is alone immediate."

II. *In the first four arguments the outer objects are not things-in-themselves, but phenomena, things in space.* This is self-evident in the case of (4), and is explicitly declared in the case of the first three (I, p. 204). "If our knowledge of outer objects had to be a knowledge of them and of space as things-in-themselves, we could never from our sense-presentation of them as without us prove their actuality. For only presentations are given us; the cause of them may be either within us or without

us, and on this point the sense decides nothing. If, however, the presentations both of the inner and of the outer sense are merely presentations of things in phenomenal appearance." . . . The last sentence is incomplete, but the meaning is clear. The passage was probably written after 1787, but the language is precisely like that of the first edition, in which the thought is that inner and outer are equally real, and equally immediate, since both are mere *Vorstellungen*. It is worthy of notice, also, that the phrase *Vorstellung des Sinnes* is several times used in contrast with the phrase *Vorstellung der Einbildungskraft*. This offers a slightly different reconciliation of the verbal contradiction between the passages contrasted by Vaihinger (*Str. Ab.*, p. 131): (1) "All outer objects are merely phenomena, accordingly nothing but a class of my *presentations* (A, p. 370); (2) "A *thing* without me, and not merely the *presentation* of a thing without me" (B, p. 275). If in this last passage we substitute for 'presentation,' 'presentation by imagination,' and for the first 'thing without me,' 'presentation of sense,' we have an equivalent which is verbally in accord with the first passage, although the real difficulty is not removed.

III. *In argument (5) there is involved a twofold reference, (a) to the transcendental object, and (b) to this object as determined in space.* The general basis of (a) is Kant's fundamental view of the sensibility as passive, and of things-in-themselves as the correlate of this, *i.e.*, as the source of sensations; but there are special points of interest in the fragment D II. (1) "The possibility of representing in my perception things in space is grounded upon the consciousness of a determination by other things, and this means nothing else than my original passivity" (p. 213). The "other things" which correspond to my original passivity can hardly be anything but the things-in-themselves, since this is precisely the function of the latter. But (2) *these "other things" are also spoken of as "things without me."* "The consciousness of other things without me, a consciousness which also as intellectual [belonging to the transcendental consciousness alluded to in what precedes] must be presupposed, and which in so far is not a presentation of these

things in space, but may be called intellectual perception" (p. 211). Here, then, we have a "consciousness of things without me," which is not a "*Vorstellung* of them in space." Hence, 'without me' does not necessarily mean 'in space' (cf. *Proleg.* § 13, *Rem.* II). But, on the other hand, it must be noted (3) that this consciousness of things without me gives me "no *knowledge* of things." "I can become conscious ['conscious' must here be used of empirical consciousness, not as in the preceding passage of the transcendental] of the *permanent without me* only in so far as it is given me empirically, *i.e.*, in space" (p. 212). "It is through space that the idea of an *object without me* first gains reality." Note in these three cases the twofold use of "without me," (a) as indicating objects, or things, or a "permanent," of which we may have an "idea" or a "consciousness," and (b) as indicating these things schematized in space.

IV. *This twofold reference is not limited to the "outer things" of argument (5), but is involved in (1) as well.* In fact, the passage just quoted from p. 211 is a part of a statement of (1); and Kant's general doctrine is that things in space are appearances to us of things-in-themselves, otherwise there would be appearance where nothing appears. Further, space and time themselves have objective grounds in things-in-themselves (*Werke*, Hart., VI, p. 23). If we bear this in mind, and also the ambiguity just proved in the use of the phrase 'without me,' we may understand the possibility of the next passage to be cited, which at first appears to be in striking opposition to the usage of the *Critique*, and even to the very essence of the transcendental method.

V. *In 1793 Kant claims an immediate consciousness of something without me which exists as thing-in-itself.* The passage is found on p. 295 of Heft II, and reads as follows: "The impossibility of determining our existence in the succession of time by the succession of presentations in us, and yet the actuality of this determination of our existence is an immediate consciousness of something without me which corresponds to these presentations, and which exists not merely in my presen-

tation, but as thing-in-itself, because otherwise from this presentation itself no determination in time of my existence would be possible." The part of the passage beginning with "and which exists" was inserted after the original sentence was written. As first written it ran, "something without me which corresponds to these presentations, and this perception cannot be illusion (*Schein*)." It cannot be *Schein*, but why not *Erscheinung*? Is the only alternative that between illusion and thing-in-itself? Why not phenomenon? Apparently because a phenomenon that were not an appearance of a real thing-in-itself would be an illusion. But this "something without me which corresponds to my presentations," is it in space? If not, how can it be of any use for determining my existence in time? If it *is* in space it is no longer *Ding-an-sich*. This dilemma is to be met, I think, only by the ambiguity noted in the preceding paragraph. 'Without me' means primarily 'other than me'; secondarily, 'external in space,' the schematized form of 'otherness.' In addition to the citations in the last paragraph I quote one more from the same fragment there cited (I, p. 216). "That we can be conscious of an outer relation, and yet never be able to know the object itself, but only the form of the relation of ourself to the presence of the object, — this makes no difficulty." Whether it "makes no difficulty" may be a question, but the distinction is the clue to Kant's varying utterances.

VI. *The twofold meaning of 'without' corresponds to the twofold consciousness.* 'Without,' meaning 'in space,' is correlative to the empirical consciousness; 'without,' meaning 'other than,' is correlative to the transcendental consciousness. The object in space is apprehended through the outer senses, and known through the categories; the consciousness of other things without me is an "intellectual perception" which gives no knowledge of things (I, p. 211; cf. I, p. 124; II, p. 36 ff.; I, p. 205). In this last passage a threefold consciousness is distinguished. The main conclusions of Vaihinger and Caird (in his *Crit. Phil. of Kant*) are thus confirmed by Kant's latest utterances. At the same time the criticism of Sidgwick, while

not justified in the particular passage, has its truth when applied to Kant's other expressions, and in one passage, at least, Kant not merely assumes but attempts to prove the existence of a thing-in-itself. Finally, we not only have 'realism' in the first edition, as Vaihinger showed, but 'idealism' later (probably) than the second edition, although the latest passage of all is the most 'realistic.'

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DISCUSSION.

MR. BALFOUR'S CRITICISM OF TRANSCENDENTAL IDEALISM.

IN the numerous reviews of Mr. Balfour's *Foundations of Belief* there occurs, so far as I have observed, no criticism of what seems to me his mistaken portrayal of one of the fundamental tenets of Transcendental Idealism. This misleading presentation of the idealist position occurs in Part II of the *Foundations of Belief*, in the chapter entitled "Idealism ; after some recent English writings." It is perhaps hazardous to enter upon the criticism of a chapter from which the author at the start warns off the philosophical amateur, and one can undertake the task only at the risk of incurring the odium which follows when fools rush in where angels may fear to tread. Perhaps I may be allowed to explain that my exception to Mr. Balfour's remarks in this connection is not the consequence of any opposition to the main tenor of his argument, which I admire and to which I largely assent. Nor yet is this objection offered in the interest of Idealism. I should be loath to defend a cause of which I know so little. An outsider may, however, occasionally be permitted by philosophers to hold a brief for Logic, the *commune vinculum* of all the Sciences. Mr. Balfour asserts, in a footnote affixed to the first page of the chapter cited above, that he has written this chapter "with reference chiefly to the writings of the late Mr. T. H. Green." Hence it is a fair assumption, I think, that in the criticism of Idealism which follows, the strictures, unless otherwise specified, are directed against Green's presentation of that type of Metaphysics. In the course of the first dozen pages of this chapter (pp. 137-148 in my copy) Mr. Balfour attacks Idealism for postulating the "causal or *quasi-causal* activity" of the thinking Self or Subject which in creative fashion flings its network of categories upon the 'manifold' of experience and reduces it to unity. He asks : "Are the transcendental idealists, then, bound by their own most essential principles, in opposition both to their own arguments against Kant's 'thing-in-itself' and to the ordinary beliefs of mankind, to invest the thinking 'self' with this attribute of causal or *quasi-causal* activity? It certainly appears to me that they are *not*." And, again, a few lines farther on he adds : "Thus, though the

presence of a self-conscious principle may be necessary to constitute that universe, it cannot be considered as the creator of the universe, etc."

Our contention is that in this place and in these terms Mr. Balfour specifically imputes to the Green type of Transcendental Idealism a belief in the creative function of the understanding which Green expressly repudiated. In support of this allegation, I would cite, first, the evidence of Mr. A. C. Bradley's *Analytical Table of Contents* prefixed to Green's *Prolegomena to Ethics*, sections 33 to 36 inclusive, as follows :—

33. "Thus the uniform order of nature and our knowledge of that order have a common source in a spiritual principle ;
34. and, in this sense, the dualism of nature and knowledge must disappear.
35. Not that our intelligence is to be regarded as a result of nature (for this were to treat as a result of nature that which makes nature possible),
36. or nature as a result of our intelligence ; but they are to be regarded as having a common source and as being communicated to us in inseparable correlation."

How accurately Mr. Bradley's analysis covers the specified portion of the text of the *Prolegomena* can best be determined by an examination of that work itself. It may, however, suffice to cite in conclusion a brief quotation from the text in question (section 36). Green here indicates his acceptance up to a certain point (specified in section 38) of the Kantian explanation of the dualism of nature and knowledge, and proceeds to say : "It is not that first there is nature, and that then there comes to be an experience and knowledge of it. Intelligence, experience, knowledge, are no more a result of nature than nature of them. If it is true that there would be no intelligence without nature, it is equally true that there would be no nature without intelligence. Nature is the system of related appearances, and related appearances are impossible apart from the action of an intelligence. They are not, indeed, the same as intelligence ; it is not reducible to them nor they to it, any more than one of us is reducible to the series of his actions or that series to him ; but without it they would not be, nor except in the activity which constitutes them has it any real existence. Does this then imply the absurdity that nature comes into existence in the process by which this person or that begins to think ? Not at all, unless it is

necessary to suppose that intelligence first comes into existence when this person or that begins to understand — a supposition not only not necessary, but which on examination will be found to involve impossibilities analogous to those which prevent us from supposing that nature so comes into existence.”

This furnishes the briefest possible abstract of the argument in behalf of our contention that Mr. Balfour has mistakenly imputed to transcendental idealists of the Green type a tenet, which they not only do not hold, but which they explicitly reject.

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REVIEWS OF BOOKS.

Hedonistic Theories from Aristippus to Spencer. By JOHN WATSON, LL.D., Professor of Moral Philosophy in the University of Queen's College, Kingston, Canada. London and New York, Macmillan & Co., 1895. — pp. xvi, 248.

Professor Watson says in the preface that his attempt has been "to give, in familiar and untechnical language, a critical account of Hedonistic Theories in their historical succession." He adds: "I hope that even those who cannot accept my criticisms may find my expositions fairly satisfactory." The little book is written in the clear and vigorous style, and with the firm grasp of the subject in hand, that one has learned to expect from the author. Moreover, these essays are calculated to appeal to rather a wider circle of readers than any of his other works, as they are wholly free from technicalities, except, occasionally, those of his own system.

But it is a matter of considerable difficulty to combine adequate exposition with destructive criticism. Professor Watson has not altogether succeeded in this. While one is never tempted to call in question either the accuracy of his historical knowledge or his perfect good faith, one is constantly reminded of his controversial attitude. He fails, — quite unconsciously, no doubt, — to do complete justice to the plausibility of the various types of Hedonism which he examines.

The first three chapters, "Influence of the Sophists on Greek Thought," "Aristippus the Cyrenaic," and "Epicurus," seem to me, on the whole, the best in the book. While the author makes no pretence to originality of interpretation here, his treatment, — more objective than in the later chapters, — is fresh and distinctly interesting. Moreover, the development of the principles involved is brought out far more clearly in these early chapters than elsewhere. Taken together, they form a really admirable brief introduction to the problems of modern Hedonism.

The next three chapters, on Hobbes, Locke, and Hume, are much less satisfactory. Rather less than one-fifth of the chapter on Hobbes is devoted to exposition of the system, the rest consisting either of introductory remarks or of adverse criticisms. These

latter are, in the main, eminently just ; but they are also somewhat obvious. The student will certainly be puzzled to understand why Hobbes was taken so seriously by his early critics. No mention is made of Cumberland, who was at once the most effective early opponent of Hobbes and the first English writer to state the principle of Universalistic Hedonism. Locke is treated as representing the earlier Utilitarian position. It is to be regretted that Professor Watson does not take pains to distinguish between the undeniable tendency of Locke's mode of thought and his actual treatment of the problems of Ethics.

In the case of Locke and Hume, both exposition and criticism are practically based on the given philosopher's theory of the will. Professor Watson seems to forget that, though his own doctrine of the will practically determines his ethics, the same thing is not necessarily true of the corresponding doctrine in the systems which he is examining. Roughly speaking, Locke and Hume were merely psychological determinists, and, from the vantage-ground of this comparatively non-committal (if also philosophically unsatisfactory) position, they were at liberty to develop almost any one of the ethical principles with which we may fairly assume that they were familiar.

In the criticism of Hume's doctrine, which Professor Watson regards as the culmination of self-consistent Hedonism, he gives what is perhaps his most fundamental criticism of Hedonism in general ; but, for once, he seems to forget the limitations of the uninstructed reader. Indeed, from any point of view, he does injustice to his own ethical position, when he allows himself to write : " Will, in other words, is just reason in that form in which it implies self-identification with an end presented by reason to itself " (p. 131) ; or " sympathy is not really a feeling of pleasure in the pleasure of others ; it is, properly understood, just reason itself " (p. 135). By all means let the bewildered general reader stop short at this point and, before finishing the book, read the author's excellent section on " Moral Philosophy " in his recently published work on *Comte, Mill, and Spencer* (pp. 195-281).

The remainder of the book is devoted to Bentham, Mill, and Spencer. This part is much better than that which immediately precedes, and is, in its way, quite comparable with the chapters on Greek Hedonism, though more controversial and, in that respect, less helpful. Bentham is treated more adequately, though not at greater length, than the preceding modern hedonists. But why is

Paley wholly neglected? Certainly he was as important in his own way as Bentham; and, whatever their conscious obligations may have been, both authors developed — each from his own point of view — an ethical position which had been worked out before their time by Gay and Tucker, neither of whom are mentioned. It is pleasant to note that, while the author holds the accepted view that Mill departs in various ways from the consistent hedonistic position, he does justice to the moral elevation of the latter's famous essay, which he describes as embodying a conception of life "of the highest and noblest character."

The treatment of Spencer is much more elaborate than anything which precedes. In fact, more than a quarter of the book is given to this author. One appreciates Professor Watson's desire to do justice to what he regards as the last important form of Hedonism; but this seems rather out of proportion, particularly as he holds, very properly, that one's acceptance of evolution does not necessarily determine the character of one's ethical theory. At the same time, one hardly feels like pressing this objection, since the work is so thoroughly and well done.

In short, despite certain defects and limitations, this little volume goes far to supply a real need. Its greatest fault lies in a manifest lack of connection between the essays of which it is composed. No serious attempt is made to trace the actual historical development of modern Hedonism. What Professor Watson has tried to do, however, he has accomplished with a large degree of success. The book will certainly be welcomed by the many teachers of Ethics who, however they may differ as to metaphysical creed, find much to sympathize with in the author's fundamental ethical position.

ERNEST ALBEE.

Lose Blätter aus Kant's Nachlass. Mitgetheilt von RUDOLPH REICKE. Zweites Heft. Königsberg in Pr., F. Beyer, 1895. — pp. 375.

Kant-Studien. Von DR. ERICH ADICKES. Kiel and Leipzig, Lipsius & Tischer, 1895. — pp. 185.

The material in this second volume of the *Lose Blätter* belongs almost wholly to Kant's practical philosophy, and especially to his *Rechtslehre*, although there are occasional references to metaphysics, idealism, and history of philosophy, also one item of personal

interest, which informs us that Kant tried his luck in a lottery. The dates of most of the fragments lie between 1790 and 1800, so that this volume throws less light on Kant's development than the previous one.

The problem which seems to have worried Kant most (to judge from the number of attempts here recorded) was that of the right of property, the distinction of *meum* and *tuum*. This is attacked in something like a score of more or less extended studies, among which we have five statements of the antinomy afterwards printed at the close of § 7 of the *Rechtslehre*. It is noteworthy that any one of the five is far more extended than the printed form. The *Ehrenpunkt*, also, which involves the duty of the state in the cases of 'affairs of honor' and of infanticide, is treated frequently and at greater length than in the published work. In connection with the discussion of property we have an interesting glimpse of Kant's struggles to make every subject conform to the table of the categories. On pp. 18, 46, and 160 are three attempts to determine the categories of legal possession, all differing more or less from each other and from the result published (at the close of § 10). It is further interesting, as an illustration of how the "refutation of idealism" continued to haunt his mind even on into the nineties, to see that in addition to several direct allusions to the problem he finds an "analogy between the difficulty of regarding something external as mine, *i.e.*, juridical idealism, and that of regarding the presentations of my inner consciousness as a consciousness of external things, *i.e.*, transcendental idealism."

Of fragments on other subjects, those on the possibility of a philosophical history of philosophy anticipate the principles which Hegel later employed, though naturally the specific development is quite different. Such a history "is not the history of the opinions which make their appearance by accident here and there. It is the history of reason as it develops out of, or by means of, conceptions (*der sich aus Begriffen entwickelnden Vernunft*)." "Can a scheme for the history of philosophy be projected *a priori* with which the epochs [of thought and] the opinions of philosophers will coincide as if the various philosophers had had this scheme themselves in view?" "Yes! if the idea of a metaphysics inevitably occurs to the human reason and the latter feels a need to develop it, and thus this science lies quite within the soul, though only outlined, as it were in embryonic form."¹

¹ P. 286, *cf.* 277 ff., 285, and *Werke* (Hart.), VIII, 524.

On topics belonging to the *K. d. r. V.* may be mentioned: (1) fragment E 65 (pp. 228–231) which gives a clearer statement of the critical solution of the mathematical antinomy than is found in the *Critique*; (2) the remark as to the mutual interdependence of space and time (p. 34)—“to construct time we require a line whose parts are yet simultaneous, and to construct a line a time whose parts are successive”; (3) the notably clear definition of what an object is in the Kantian sense (p. 233)—“since the objects of our senses are not things *per se* but only phenomena, *i.e.*, presentations (*Vorstellungen*) whose objective reality consists only in the constancy and unity of the coherence of their manifold”; (4) the striking remark as to idealism (p. 295) which calls for more extended notice.

Fragments F 8 and F 12, when taken in connection with the final copy of *Perpetual Peace*, give another interesting example of how Kant interpolated and revised his manuscripts, and strengthen the general position of Adickes with regard to the composition of the *Critique of Pure Reason*.

Under the second title given above, Dr. Adickes presents two studies. The second, *Ueber die Abfassungszeit der K. d. r. V.*, controverts Arnoldt's hypothesis that the *Critique* was written out early in 1779, and urges, chiefly on the ground of the fragment B 12 in Reicke's first volume, that the first draft of the *Critique* was made early in 1780. For this fragment seems to have been a preliminary study for certain parts of the transcendental deduction, and it was written on a letter dated January 20, 1780. The first study, *Beiträge zur Entwicklungsgeschichte der Kantischen Erkenntnisstheorie*, is more important. It may be characterized in general as an amplification and defence of the view of Kant's development presented in Paulsen's *Versuch*, although there are occasional differences in details. But it would be quite erroneous to regard the present work as a servile copy of Paulsen's luminous sketch. Dr. Adickes has the good sense to inform the reader when he has nothing new to add, and to refrain accordingly. He brings forward several new theses, makes a most vigorous criticism on Erdmann's theory as to the date of Hume's influence, and utilizes more fully than has been done before the *Reflexionen* in attempting to trace the evolution of the Critical point of view.

In order to gain a more definite conception of Kant's *Nova Delucidatio* of 1755, a preliminary study of fifty pages is given to Leibnitz, Wolff, and Crusius. In this connection attention is devoted to the 'principle of sufficient reason' as it appears in Leibnitz. An analy-

sis of fourteen important passages yields no less than six different meanings, sometimes distinct, sometimes blended; and these ambiguities were fruitful sources of difficulty and confusion for followers and critics. (One wonders why there has been as yet no thorough utilization of the full edition of Leibnitz for a comprehensive study of his theory of knowledge.) Kant, in particular, confuses *ratio veritatis* with *ratio cognoscendi*.

With reference to the more interesting period of the sixties the first point maintained is that in the years 1762-63 Kant's rationalistic background is still wholly the same as in 1755. This thesis is based on a new view of the source to be assigned to the *Begriffe* (analysis of which is declared in the *Prize Essay* to be the business of metaphysics) and to the "simple and irreducible conceptions" of the essay on *Negative Quantities*. It has been generally assumed that these concepts are held to be given by experience, that in the latter essay especially it is maintained that the antithesis between laws of thought and laws of things—logical and real opposition—requires us to fall back on experience for the causal relation which pure thought cannot explain. But Adickes urges that a passage in this very essay forbids such an interpretation, at least in any sense which would make experience mean at all what it would mean to the English empiricists. For Kant says: "All kinds of concepts rest on the internal activity as their sole ground. External things may contain the condition for their varying emergence, but not the force to produce them. The thinking power of the soul must contain the real cause of them all."¹ In view of this passage, why should we assume a source in experience for the concept of cause any more than for any other? True, it is not to be understood by the principle of identity, but Kant does not limit the originating powers of the mind to this principle, but in 1755 had expressed, in language quite similar to that of 1763, the Leibnitzian view of a gradual clearing up and development of the mind's content. I think that the point is well taken.

It is then not until the *Dreams of a Ghostseer* appeared that we find the empirical attitude definitely asserted. To the development from this time on to 1770 the remaining seventy pages are given. The author defends strenuously Paulsen's date (1769) for the influence of Hume, and endeavors to trace the successive stages of the development by means of the *Reflexionen*. This, of course, involves giving to many of them an earlier date than that assigned by

¹ *Werke*, Hart. ed., II, 101.

Erdmann; and the general outcome is that the change from empiricism to the rationalism of 1770 "was much more gradual, and with many more intermediate stages than has hitherto been assumed." The concepts of the understanding are at first regarded as having only a logical use; the *usus realis* of 1770 was a later thought. Space and time are at first pure concepts, then gradually pure intuitions, and the distinction between sensibility and understanding changes gradually from a difference in degree to one in kind.

The revolution of 1769, — the year which "gave me great light," — was, according to Adickes, due to two causes: (1) the problem of the antinomies which was the chief factor in bringing about the change in Kant's view of space and time; (2) the question suggested by Hume as to the source of universality and necessity. Both problems find their solution through the distinction between the matter and the form of thought. In finding this solution Kant was probably influenced as to the second problem, but not as to the first, by Leibnitz' *Nouveaux Essais*. The most formidable alternative date to 1769 for Hume's influence is that urged by Erdmann, *viz.*, a time near 1773-74. To this hypothesis a vigorous criticism is given. Erdmann and Vaihinger have regarded as the main result of Hume's influence the limitation of knowledge to experience. If this were true, the date 1773-74 would fit very well. But in this case Kant would regard himself as a follower of, or at least as in agreement with, Hume. On the contrary, Kant expressly states in the classic passage in the *Prolegomena* that he was "far from following Hume in respect to his conclusions." [Mahaffy and Bernard insert an 'all' before 'his,' but this is not in the German.] It was a *problem*, not a *solution*, which Kant regarded as his debt to Hume. The question is not, "May we find an analogy between the results of the two thinkers?" but, "What did *Kant himself* consider to be the immediate effect of Hume's influence?"

Kant distinguishes four stages in his procedure after the "awakening": (1) the generalization of Hume's problem; (2) the attempt to determine the number of the pure concepts; (3) the transcendental deduction from a single principle; (4) the complete determination of the pure reason in its limits and content. Adickes agrees with Erdmann in placing the third and fourth stages after 1772, but maintains that the first and second fall before that date. He thinks that the first was already passed before 1770, while the second, as we may infer from the number of attempts in the *Reflexionen*, occupied a long time.

To my mind the arguments against 1773 are much more convincing than the arguments for 1769. The author proves, I think, that it is impossible to make Erdmann's date harmonize with Kant's utterances without resorting to forced interpretations. The separation between the concepts of the sensibility and those of the understanding (*Proleg.* § 119) certainly seems to have been made in 1770. But, on the other hand, if the standpoint of 1770 was due even partially to Hume's influence, it is very strange that more prominence is not given, not to Hume's *name*, but to Hume's *problem*. This objection is not fully met by the admission of the antinomy-problem as another focus, nor, by regarding the *Dissertation* as merely a *gelegenheitsschrift*, in which no attempt was made to give a complete theory of knowledge. The concept of cause is mentioned only incidentally, and when we reach the sections on the principles of the intelligible world we find that Kant does not use his method at all for the discussion of Hume's problem, but proceeds to discuss the relation of substances, and then shows how the subjectivity of space and time will be of value in avoiding metaphysical difficulties. Not merely the particular doctrines but the general tone of this latter part show the influence of Leibnitz, and give no evidence of a reaction against Hume. The whole discussion shows how difficult it is to harmonize Kant's statements as to his development with the writings of which we know the date. No date yet proposed is free from serious, if not fatal, objections, but it is to be said in behalf of the Paulsen-Adickes theory that the objections to it are chiefly negative, while those to Erdmann's are positive. No student of the development of Kant can afford to neglect Dr. Adickes' valuable study.

JAMES H. TUFTS.

History of Religion. By ALLAN MENZIES, D.D., Professor of Biblical Criticism in the University of St. Andrews. New York, Charles Scribner's Sons, 1895. — pp. xiii, 438.

Religions of India. By EDWARD W. HOPKINS, Ph.D., Professor of Sanskrit and Comparative Philology in Bryn Mawr College. Boston and London, Ginn & Co., 1895. — pp. xiii, 612.

Were one to judge by the number of books published on the subject, the application of the law of Development to Religion would seem to meet now with general acceptance. But there is still a large mass not only of ignorant, but of intelligent, opposition to the truth of the Immanence of Divine Power in the cosmos and in history.

The books, whose titles are given above, are judicious compendia of historic research, pervaded with the philosophic spirit, and will do much to hasten the arrival of a more intelligent conception of the nature and history of religion.

Dr. Menzies finds the key to the progress of religion in the successive emergence in human experience of needs and ideals, ever rising to greater clearness, and involving higher conceptions of moral and spiritual worth. Three types of religion correspond to three stages of human life. The lowest ideal which man has sought to realize is that of material safety and comfort. The next stage is that in which the warfare for physical existence is no longer all-absorbing, and man aspires to national unity and progress. At the third stage the individual has gained a knowledge of his own worth apart from society or the state. So we find that the earliest religion of the family, clan, and tribe, develops into the higher religion of the nation with its priesthoods and stately ceremonials. This in turn is superseded when the individual revolts from the national worship, having arrived at the personal ideals which force him at first to appear as a skeptic in his serious effort to gain coherent intellectual views of life and duty. Thus religions of magic, or of naturism, give place, first, to the religion of public ceremonial, and then to the still higher religion of the individual who seeks in meditation and prayer to adjust his relations to the Divine Being. All religion, Dr. Menzies contends, is one, and its development continuous, and the Science of Religion "seeks to grasp the religions of the world as the manifestations of the religion of the world."

To formulate a definition of religion is not an easy matter. Dr. Menzies sets out with the usual definition, conceiving the essence of religion to be "the worship of higher powers from a sense of need." "This conception can only be verified after religion has accomplished its growth and has fully unfolded its nature." The word 'verified' is, perhaps, a saving word, and marks the difference between our author's view and that of Professor Edward Caird in *The Evolution of Religion*. The latter affirms that the search for a common element in all religions is misleading. "We are not to look for a common element in all religions." We have, then, a pallid definition from which the essence of religion seems to escape, a definition "which will express an idea which is fully realized only in the final form of religion." And Professor Caird gives us a principle which has for the most part a logical validity only. He looks merely for a "principle which is inherent in man's nature and mani-

feats itself in all stages of his development." Dr. Menzies in his definition seems to start with something more than this abstraction, and, although he speaks of its verification in the full development, he does not vaporize the essence of religion. We may ask: What is the "principle" of Professor Caird but a common element? This common element must be an essential and continuous element, a living and not a logical process. It would be a hardship surely if we were compelled to await the end of all religious development in a future stage of being, before we could determine what the essence of religion is. It is true that the purest and highest realizations of religion do not appear in the first stages of development, but are implicit in them. But the progress of rational, ethical, and spiritual ideals reveals ever more clearly what the essential element of religion is. If this is intended by Dr. Menzies in his use of the word 'verification,' his view is not that of Professor Caird.

If, as Professor Caird claims, we are to wait for the full growth of religion, to grasp its essence, we cannot trust the nineteenth century with any more reason than we can trust the earliest century to reveal it; nor can we know that religion or a principle of religion existed in the primitive consciousness. The identity of the subject, however, is not lost in its changes. Religion exists from the first as a consciousness of relation to a Higher Power, and its definition can be given in terms of primitive psychology without waiting until the conception of the most advanced psychology is reached. All that can be required for such definition is that the conceptions which arrive in the progress of knowledge be implicit in the formula based upon primitive data.

Dr. Menzies accepts the view that the worship of nature is the root of all religion, and declines to adopt that of Tylor who founds even nature-worship upon belief in Spirits. This is obviously right, for the act of discriminating spirit from the nature element presupposes a highly developed intelligence, and the subsequent worship of natural phenomena would be a step backwards and not an advance. Dr. Menzies follows the usual order in dealing with the various religions. His style is not technical or academic, but simple and flowing, and, with severe brevity, he gives the results of wide and careful study.

Religions of India is a volume of 600 pages well arranged for popular reading and for students. The inquirer is enabled, by the lucid sequence of facts, dates, and principles, to make his way

through the almost bewildering jungle of materials accumulated by scholars. Students are frequently disheartened to find in the works of Indologists the materials in such chaotic state that it is difficult for them to get a clue and come to a clear understanding. Professor Hopkins deserves thanks for the intelligent method with which he has treated the mass of information which the student of Indic literature has now at his command.

In the first chapter he considers the sources, dates, and methods of interpretation. In the second he writes concerning the "People and the Land." Among the political groups of the Vedic Aryans in the Punjab are already to be found indications of caste not yet, however, fixed in a definite system. This is also noted by Dr. Menzies. Facts are referred to which indicate a closer relation of Vedic Aryans to Iranians than has been usually assumed. The theatre of activity of the Rig Veda people is surmised to have been in the Punjab, and a little to the west and the east of it. But the literature of the Brahmanic period is that of Aryans who have passed out of the Punjab towards the south. Professor Hopkins adopts the usual division of the subject: the two Vedic collections, the Rig Veda and Atharvan Veda, are regarded as representing the first stage of Hindu Religion, and Brahmanism the second. The two chief heresies, Jainism and Buddhism, are reviewed, and then Hinduism in its wider import, comprehending the view of the religions in the great Epic. The modern sects and religions form a "logical as well as historical continuation" of the great Hindu sectarian schisms.

The vast literature of India is thought by the writer to extend from an indefinite antiquity to the sixteenth century of the Christian Era. The discussion of Vedic data is brief, but account is taken of the views of Schröder, Whitney, Müller, and Benfey; also of the latest writers on the subject, Brunnhofer, Tilak, and Jacobi. Professor Hopkins does not discuss the question of the primitive or secondary character of Vedic Religion. That, in the Veda, there is both a nature and an ancestor religion is not questioned, but while approaching they do not unite. The question is: Are Professor Max Müller and Dr. Muir right in holding that in the Vedas we have the naïve beliefs and worship of primitive man? The 'naïve' school of older scholars and of Roth and Grassman, as Professor Hopkins points out, discern in the Rig Veda "ingenuous expression of primitive ideas." But Pischel and Geldner claim that the poets of the Rig Veda are not childlike and naïve, that they live in a cultured age, in a time when thought is philosophical and skeptical.

Bloomfield thinks that the Vedic period really is a Brahmanic age, and is "saturated with Brahmanic ideas and Buddhistic formalism." On the other hand, the contention of Brunnhofer that the Rig Veda was a product of Aryan thought on the shores of the Caspian before the descent into India, is rightly pronounced 'extravagant' by Hopkins. Both Dr. Menzies and Professor Hopkins leave the battle to be fought out by others, and the question whether there was a pre-Vedic religion in which the Manes were worshipped is still not settled, and perhaps will never be. Professor Hopkins concerns himself only with the history of Hindu religions beginning with the Rig Veda; and in the Vedic age the worship of Manes and that of natural phenomena were certainly distinct. And he finds no evidence in the Rig Veda that nature worship was developed out of ancestor worship.

The discussion will probably continue concerning the primitive or secondary character of the religion of the Rig Veda. When, however, we consider the vast antiquity of man lying behind the Aryan peoples, even before their descent into the Punjab, it would seem that the Vedic religion was an advance upon primitive conceptions, although for purposes of their own the intelligent poets of the Vedic age set forth a simple nature worship. It seems difficult to abide by the view of Müller, Muir, and others — eminent scholars as they are — that the poets of the Rig Veda represent a childlike and primitive age, and that the hymns, although expressing the worship of natural phenomena, were not written by an advanced school of poets. It seems an impropriety to press the hymns of the Vedic age into service to prove that nature worship was the root of religion. Without doubt it was the first form of primitive worship, but the evidence for it should be sought elsewhere than in the Rig Veda.

Professor Hopkins' book, the first of a series of manuals upon the history of Religion, will be consulted by students with profit. The bibliography appended is as copious as the index is meagre.

CHARLES MELLEN TYLER.

Biological Lectures, delivered at the Marine Biological Laboratory of Wood's Holl in the Summer Session of 1894. Boston, Ginn & Co., 1895. — pp. vii, 287.

This handsome volume consists of twelve lectures on the burning questions of current biological science by distinguished American

biologists, together with a translation of the introductory article (by Professor Roux) of a new German biological "Archiv."

The central problem which nearly all the essays attack is the mystery of the propagation of life, itself regarded as the avenue leading to the understanding of the nature of life generally, and the perennial interest which that problem possesses for every thinking mind must excuse a notice of such highly technical work in the technical journal of another science. A philosopher will not, of course, presume to criticize the work of the experts who instruct him, but he may profitably mark their methods, estimate the purport of their results and enrich his own conception of the world by the material which their industry has brought to light. And from the present volume the philosopher may learn much.

Not that all the essays in it lend themselves equally to philosophic reflection, but that they are all fascinating as illustrations of the working methods of a science. For the reader is, as it were, taken away from the polished periods of the popular lecture, and led into the laboratory where persistent ingenuity is grappling with the puzzling profusion of Nature's material, and made to realize how difficult and how great is the work of extorting an answer from Proteus. And so we are spared all the shallow pretensions to infallibility which are so apt to disfigure the statements of the mere popularizer. The authors are not afraid to exhibit the 'ragged edge' of their science, to point out the difficulties and uncertainty of theories and the inadequacy of the recorded facts, and by taking their reader into their confidence, they have adopted the surest means of exciting his sympathy.

That is one impression which, I believe, every unbiassed reader of this volume will carry away. Another is that American biologists are fully aware that in science the chief value of a theory lies in its verification, and that the true scientist is not merely tireless in seeking out the facts that test his theories, but always ready to consider what theory best accords with the facts.

And it is especially refreshing to record Professor Osborn's frank protest (p. 79 f.) against the vast amount of abstract reasoning from assumed data, paraded on both sides of the current controversy about the inheritance of acquired characteristics. This practice has recently gone so far that one view has actually been pressed upon us as the only thinkable view, and that we have been bidden to infer that Natural Selection is the *only* cause of Evolution *because* it has been admitted to be a *vera causa*. Professor Osborn's lucid article

on *The Hereditary Mechanism and the Search for the Unknown Factors of Evolution* is admirably calculated to clear up such confusions of thought. This and the fact that its subject has the greatest general interest mark it out for special notice.

Professor Osborn considers that the destructive criticism and reductions *ad absurdum* which have abounded in the Spencer-Weismann controversy would open "a retrograde chapter in the history of science," if they should lead to the acceptance of laws resting so largely on negative reasoning. Hence the most important outcome of the discussion has been the negative conviction that neither the Lamarckian nor the Weismannian theory has been established by direct evidence, and that such evidence is greatly needed. Consequently there is arising among biologists a feeling that they are still on the threshold of their problem and a readiness to consider all relevant working theories. These Professor Osborn classifies as (1) Darwin's Survival of the Fittest, which alone may be regarded as "absolutely demonstrated as a real factor, without committing ourselves as to the origin of fitness"; (2) Buffon's factor of the direct influence of the environment; (3) Lamarck's of the active and adaptive response of the organism to the environment; (4) St. Hilaire's evolution *per saltum*; (5) Nägeli's assumption of a definite and continuous direction of the course of Evolution. In the observed results all these factors may coöperate, and the question is how to analyze those results and to determine the part possibly played by each. With Bateson, Professor Osborn thinks that a study of the facts of Variation is most needed.

But the facts must be analyzed before they are studied. Some variations may be *ontogenic*, due to circumstances in the life of the individual, others may be *phylogenic*, and affect the life of the race. Again, they may be, with respect to the time-series, retrogressive, progressive, or neutral (*i.e.*, mere individual anomalies). Each of the former classes must be subdivided according as they exhibit (a) repetition of parental type, reversion from parental to present race type, or reversion to present race type, and (b) individual variation from parental type, from race type, or racial variation from race type. The neglect of such distinctions has led to inclusion in the evidence of many merely individual 'sports,' which have no real bearing on the origin of species, and have unduly supported Darwin's assumption of merely Fortuitous Variation, and Bateson's of Discontinuous Variation, while swamping the evidence for Nägeli's factor. Similarly the evidence for Buffon's factor has been overvalued: it has

so far been shown capable of producing only reversion to ancient types, or (under novel conditions) individual variations. But such novel conditions acting in the early history of the individual may very likely produce evolution *per saltum*.

On the other hand the evidence for *gradual phylogenic* variation is very strong in palaeontology. "The palaeontological series exhibit no evidences of fortuity in the main line of evolution. New structures arise by infinitesimal beginnings at definite points. In their first stages they have no 'utilitarian' or 'survival' value. . . ." "The main trend of evolution is direct and definite throughout, according to certain unknown laws and not according to fortuity" (p. 96). This "does not positively demonstrate Lamarck's factor, because it leaves open the possible working of some factor at present unknown," but it does set aside the "all-sufficiency of Natural Selection." Thus while Buffon's and Lamarck's factors yield no theory of Heredity, Neo-Darwinism offers an inadequate explanation of Evolution. "If acquired variations are transmitted, there must be some unknown principle in Heredity; if they are not transmitted, there must be some unknown factor in Evolution" (pp. 98, 99).

And so Professor Osborn concludes a very suggestive paper with the "last word" that "we are entering the threshold of the Evolution-problem instead of standing within the portals," and this remark the present reviewer cannot but cordially assent to and welcome. For it shows that scientists are at length awakening to a fact which he has for some time urged [*cf.*, *e.g.*, PHILOSOPHICAL REVIEW, II, 587, 588; IV, 203], *viz.*, that the current scientific theories of Evolution do *not* account for the fact of Evolution. That is, they contain no reason why a world which exhibits the tendencies they recognize should be progressively evolving or changing as a whole. Darwinism regards Natural Selection as the cause of Evolution; but Natural Selection is just as active where there is no change in species proceeding. Lamarckism supposes that the organism adapts itself to its environment; but why should these efforts result in a progressively graded series of beings? Mr. Spencer enumerates a variety of factors tending to greater differentiation: but he omits to state why they should prevail over the contrary tendencies. And so with the rest: they all take the *empirical progressiveness* of Evolution for granted as a fact which the theory need not explain.

The only theory that could, to any extent, explain the fact would seem to be Nägeli's, and it is a hopeful sign to find Professor Osborn regarding it with so much favor. There is, of course, still a

considerable gap between the recognition of a definite "line" of Evolution and its interpretation as due to intelligent direction, but scientific thought is evidently travelling upon lines which may eventually surprise those who hastily assumed that teleological principles were disposed of forever. And so far from its being unthinkable and unknowable, as Weismann will have it, it seems possible that by the time Science really knows the facts of Variation and Development it may be able to give a fairly complete account of the character and limits of the teleological factor in Evolution. Even hitherto, teleology seems to have been ruled out chiefly because it was supposed to involve an appeal to an infinite and inscrutable power. But Kant's proof of the impossibility of a teleological argument conducting to an infinite, ought to have liberated the scientist from this fear; and so it is conceivable that he may after all come to recognize a long-lost brother in the philosopher who, taking his stand on the *ἄνθρωπος μέτρον*, all along maintained that a world which was commensurable with the human reason at all could not but exhibit the inmost characteristic of that reason, and prove accessible to the conception of a purposive intelligence.

F. C. S. SCHILLER.

SUMMARIES OF ARTICLES.

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

LOGICAL.

Analytisch und Synthetisch. E. KÜHNEMANN. *Ar. f. sys. Ph.*,
I, 2, pp. 165-203.

This article is mainly a summary of Kant's doctrine of analytic and synthetic judgments. Incidentally, however, the author gives his views on the questions of *a priori* knowledge and the thing-in-itself. — Kant's demand for apodictic knowledge should be understood, not metaphysically, but scientifically, merely in the sense of a demand for inner authenticity. Knowledge is based upon concepts, which are products of the understanding. But the emphasis laid upon pure concepts means simply that we must not rely upon judgments of mere chance experience. Scientific activity, working upon scattered experiences, is based upon certain ultimate concepts which we call *a priori*. Kant's attempt to find *a priori* knowledge, and to criticise the understanding and reason, results from simple scientific reflection. — Much controversy would have been avoided if Kant's doctrine of the thing-in-itself had been better understood. It is simply an attempt to show how the object of knowledge must be thought in the scientific consciousness. The scientific consciousness is not satisfied with regarding it merely as a sum of relations. What it means by the thing in abstraction from these relations is the thing-in-itself.

ELLEN B. TALBOT.

PSYCHOLOGICAL.

The Psychology of Pain. C. A. STRONG. Psych. Rev., II, 4, pp. 329-347.

The author takes up the theory of pleasure and pain recently advocated by Mr. Marshall in *Pain, Pleasure, and Aesthetics*, and for a long time upheld by many prominent psychologists, namely, "that pleasure and pain are not independent mental contents capable of existing in consciousness alone, but a side or aspect of other content—a sort of modification or coloring of sensations or ideas," and inquires whether this theory, which he calls the "aspect theory," accounts for the facts of physical pain. He examines cutaneous pain, first, from the neurological, then from the introspective point of view, and concludes that the "aspect theory" does not explain fully the facts of analgesia or anaesthesia, but that these may be explained by assuming that the "senses" of touch and pain are independent of each other, that the sense of temperature is independent of both, and that the temperature sense may be divided into a sense of heat and a sense of cold. Rejecting the doctrine of the "aspect" theorists, that the fourth sense required for the explanation of partial anaesthesia is not a pain sense at all, but a sense whose normal product is a cutting-pricking sensation, he quotes a number of neurological facts and theories from Goldscheider, Foster, Starr, Skinner, Stern, Burr, and Wundt, and gives as the bearing of these upon the psychology of pain the conclusions: first, that pain impulses are exaggerations of tactile heat and cold impulses, and are conducted inward by the same nerve fibres; second, that the analgesic condition is one of indifference, so far as the remaining cutaneous sensations are concerned.—Examining cutaneous pain from the introspective standpoint, the author asserts that a sensation is thinkable without any feeling-tone. Rejecting the Wundtian doctrine that all sensations have a feeling-tone, but that the feeling may be either zero, or so strong as to overpower the sensation, and passing over as incapable of proof or disproof the doctrine of other "aspect" theorists that all sensations have at least a minimal feeling-tone, he refuses to classify what they call a "feeling-tone" with intensity, and makes it a quality, concluding that pain is a distinct content of certain cutaneous sensations, just as blue is of visual ones.—In reply to the objection that pain may be an independent mental content, yet not a sensation, Strong asserts that, originally and in them-

selves, feelings of pain and ordinary sensations are of the same nature. They are both called forth by nerve currents from without, and both are substantive mental contents, capable of existing in consciousness alone. He thinks that pleasure and pain are distinctly localized, and that images of pleasure and pain may exist. He holds, in conclusion, that physical pain is not a compound of an indifferent sensation with a feeling of displeasure, but is itself a sensation which calls forth displeasure.

C. S. PARRISH.

Essai sur la psychologie du musicien. L. DAURIAC. Rev. Ph., XX, 1, pp. 31-56; 3, pp. 258-284.

'Musical intelligence' is the best term by which we can refer to that which is essential for the true appreciation of music. Such appreciation does not come from any musical 'sense,' for a person may be well able to distinguish all the notes of a scale, and yet be thoroughly unmusical. What is wanting in such a case is not a sensation, but the power to give to sensations the unity of a perception. Musical intelligence has for its function the synthesis of a melodic series. It comes into existence only in connection with certain mathematical relations. It may be wholly unconscious of these relations, and yet it acts rationally, *i.e.*, in accordance with laws that justify to the reason the spontaneous enjoyment of musical compositions. Musical pleasure is really dependent upon an intellectual function which itself escapes observation, and of which this pleasure itself is the chief and perhaps the only sign. From such an investigation of the power to appreciate music, several inferences may be drawn. This form of intelligence, like any other, may be cultivated. It is by no means the only factor in what is popularly known as musical enjoyment. Such popular enjoyment is often due to the association of music with words and with movement, as in songs, or in martial and dance music. Pure musical appreciation, however, is best secured among the uncultivated, when the melody is simple and distinct, with a clearly marked rhythm. And, as a rule, the music is more quickly understood, when it is given by some favorite instrument. So long as music is regarded as a mere diversion, musical intelligence will not pass far beyond these almost primitive characteristics.

To explain what is meant by a musical phrase, we must presuppose a musical intelligence. But before claiming that either term can be legitimately used, there must be some settlement of the old questions

in regard to musical expression. Does music express emotions or ideas? Can one go so far as to say that it expresses anything? If a musical phrase possessed any meaning of its own, it could not be set to words. Yet often with a single air very different words may appropriately be sung. A musical phrase is a unity, as a column is a unity. The intellectual work of a composer is not the expression of a thought, but the creation of an organic synthesis of sounds in accordance with certain aesthetic laws. Music does not even express definite emotions. But there are frequent correspondences and associations between certain series of sounds and certain psychic states. The most direct connection of the two is found in rhythm. Consciousness is rhythmic, and changes of rhythm are accompanied by noticeable changes in the emotions. It is more accurate, then, to speak of music as *suggestive* rather than as *expressive*. Moreover a composition may be without suggestiveness, and yet be truly musical. It is true that emotional images alone give birth to music, for feeling and sensation are so closely connected, that either may suggest the other. But neither this association nor the original feeling lies within the province of the musical *intelligence*. That term must refer exclusively to the process of synthesizing sounds, or to that of perceiving coherent tonal series.

A. J. HAMLIN.

La classificazione dei sentimenti nella storia della filosofia.

L. AMBROSI. R. I. d. Fil., IX, Sept.-Oct., pp. 129-165.

The author first gives a *résumé*, by author and school, of the different classifications of the emotions in the history of philosophy. As a result of this investigation, he finds three main groups of classifications. The first, which includes nearly all attempts before the time of Kant, together with some of more modern authors, is marked by a careful distinction between simple pleasure and pain and the more complex emotions, desires, and passions which develop from them. The second, in which we find, among others, the systems of Kant and Hamilton, makes a classification based upon the accompanying phenomena, and gives such divisions as pleasures 'of sense' and 'of intellect.' The members of the third carefully distinguish simple pleasure-pain from the other forms of mentality, but instead of seeking a classification in terms of the accompanying states of mind, turn their attention to a careful observation of the differences presented by the affective constituents themselves. Only in this way, recently advocated by Bouiller and Dumont, and adopted with par-

particular success by Grote, may we expect to obtain an accurate scientific classification of the emotions. W. B. PILLSBURY.

La mémoire musicale. L. DAURIAC. Rev. Ph., XX, 4, pp. 400-422.

This article treats of the importance of memory for the musician. Memory is the source of musical inspiration. It breaks up the original whole, and thus renders new combinations possible. No sharp distinction, therefore, can be drawn between memory and creative imagination. Men of genius are such, mainly, if not exclusively, by reason of the specific memory with which they are endowed. Musical memory may be a matter of Ear or of Intelligence. The memory for rhythm involves a difficulty. In the case of simple rhythms, it is dependent on Ear; otherwise it is an affair of Intellect. The memory for rhythms is specifically different from that for melody. The two may be dissociated, and function apart from each other.

J. A. MACVANNEL.

L'idea nel bello musicale. G. M. FERRARI. R. I. d. Fil., VIII, Nov.-Dec., pp. 348-360.

On one side, music may be termed with Leibnitz an unconscious arithmetic; it follows mathematical laws in the construction of its harmonies. But as architecture is not geometry merely, so music is something more than arithmetic. It appeals immediately to the heart and is not concerned with intellectual distinctions. It grows out of the primitive expression of the heart's emotions, but just as the painter and sculptor express more than the dead outlines of their subject, so the musician idealizes the emotions he portrays. Music can imitate the innumerable sounds of nature with great effect, and it is to man that it appeals with the greatest force. It is the art which most strongly affects the human soul. Hence it is the most universal art, and that most suited to the democratic tendencies of our times.

W. B. PILLSBURY.

ETHICAL.

Sur la méthode de la sociologie. MARCEL BERNÈS. Rev. Ph., XX, 3, pp. 233-257; 4, pp. 372-399.

The author proposes to examine especially M. Durkheim's statement that "in order to render sociology independent, exact, and truly

practical, it is necessary to make of it a purely objective science." He wishes to show: (1) that pure objectivism is inapplicable to social facts; (2) that the practical character of those facts allows us partially to determine them in another manner, and that from the impossibility of an objective sociology we should not infer the impossibility of social science. The objectivity of facts is not a character inherent in things, but an interpretative hypothesis, an hypothesis approximately exact in natural science, but not in sociology. In order to answer the question, 'What is a sociological fact?' he considers (1) the objective definition of the sociological fact, (2) the nature and practical import of the social fact, (3) the condition and general characteristics of practical knowledge. Lastly, he attempts to show that his doctrine not only allows us to retain everything good in Durkheim's theory of crime, but that it escapes the great difficulties raised by this theory. (1) M. Durkheim's definition of a social fact—a way of acting susceptible of exerting an external constraint upon the individual—is too broad, as it would include every instinctive and habitual act, acts to which we do not attribute social value. It is also too narrow and would exclude acknowledged social facts, *e.g.*, rules of morality, the restraint in this case being wholly internal. Again, it destroys the preponderance very justly attributed by Durkheim himself to the dynamic over the static in sociology. (2) Social facts are not, properly speaking, certain facts or all the facts which occur in society, but rather the numerous aspects which the very complicated thing called the social group presents at each moment. We study from interest or convenience these different aspects—the political life, the laws, the morals. Since a knowledge of this class of facts is knowledge of a practical kind, the person best prepared to understand society is not the one who puts himself outside of it and examines it as one does a physical fact, but the one who, while observing and reflecting, sees the most constantly and fully the social life of his time and country. (3) Compared with the more abstract objects of other sciences, the practical fact *par excellence*, the social fact, is a *thing*, and admits of an objective determination, in that it is always necessary to take account, not only of the physical medium in which society exists and which limits its development, which accelerates or retards social changes and gives them their external form, but also of the social past partly crystallized in present institutions and customs. But the social fact is also a subjective fact. It is a reality which grows, the promise of the future, the outline of to-morrow in to-day.

It is action, then, which forms the bond between the two opposite and complementary conceptions (subjective and objective), which analysis can and should apply to the study of social life. Action is the keystone of all internal life; every state of mind is already an action in outline. But action is not contained wholly in the idea of an internal principle of activity; it exists only by a group of objective conditions which gives it body and form. Action sums up all practical and social reality; it is determined both from within and without. It is the bond of objective and subjective, of the real and the ideal. Sociology is the science of that which is most essential, most living in life itself. (4) M. Durkheim must, according to the principles which he sets forth, define crime by some objective fact; and naturally this fact is *punishment*. Crime, therefore, is every punishable act. This is in strong contrast with Garofalo's equally erroneous doctrine that "crime is that which has always been judged such." Limiting himself to objective science, Durkheim has not been able to find any other mark of the normality of a fact than its generality; normal facts are the common ones, abnormal the uncommon. History and statistics, Durkheim thinks, prove the value of these definitions. These sciences show that the number of crimes, and so the criminality, increases with civilization. If crime is a pathological fact, this statement is alarming; how can we call those societies superior whose weal becomes more and more precarious? But there is a double error involved here, says Durkheim, (1) in forgetting that the crimes furnished by statistics are the acts punished, and that they differ widely in kind according to the society which we observe; (2) in regarding crime as a malady and abnormal. Bernès replies (1) that crime is not merely a punishable act, but an act punishable as abnormal; (2) that statistics do not prove a constant parallelism between the increase in the number of crimes and social progress; (3) that the antinomy itself is only imaginary, and is easily explained if one remembers that one of the marks of social progress is the progress of the collective conscience, and so of the social ideal; the public conscience becomes more sensitive and brands as crimes many acts which formerly were winked at. One cannot conclude from an increase of crime to social decadence, nor from a diminution to social progress.—M. Bernès then discusses (1) the rules of sociological observation; (2) the distinction of normal and pathological; (3) the classification of social types; (4) the conditions of the explanation of social facts; (5) the rules of proof in sociology.

D. R. MAJOR.

The Sanction for Morality in Nature and Evolution. JAMES T. BIXBY. New World, No. 15, pp. 444-458.

At the present day, it is often inferred that Evolution is a process where merciless competition and cruelty are the rule, that Nature is a field where every creature must struggle for himself alone, and where might only is right. Thus Huxley, in his latest volume of essays, concludes that "the cosmos works through the lower nature of man, not for righteousness, but against it, . . . and that the cosmic progress has no sort of relation to moral ends." Against such a pessimistic theory, the author contends that this view turns away from the end and consummation of the process of evolution, and then condemns the whole because of its own partial observation. The process of evolution should be judged, not by what appears in its lower rudimentary forms and crude beginnings, but by its whole sweep and final outcome. Animal evolution culminates in human evolution, and human evolution in the upbuilding of the spiritual nature. As the outcome is indisputably moral, how shall we declare that the process and the law are devoid of ethical import? Secondly, those parts and actions in nature which are most criticised are never ends in themselves, but means and intermediate steps to the ultimate goal of good. And further, even in the lower stages of life, there is an altruism conjoined with the struggle for self, which constantly restrains selfishness, and is often dominant over it. And it is just these altruistic or moral impulses which have enabled species to maintain themselves in the struggle for life, and to progress to a higher plane of existence. If it be denied that the examples usually given of sympathy and devotion in the animal world can be taken as illustrations of conscious altruism, still stronger is the proof that there is an innate tendency, rooted in the constitution of nature and of all social beings, that irresistibly expresses itself in sympathetic and self-sacrificing impulses.

J. E. C.

Die Ethik des deutschen Idealismus. EUGEN KÜHNEMANN. Z. f. Ph., CVI, 2, pp. 161-174.

By the Ethics of German Idealism is meant that view of the moral life that is grounded for the most part on Kant. Kant sought an answer to the question, whether, in order to understand human life, it becomes necessary to posit a special principle different from the laws of nature. In the sphere of nature everything is conditioned, law reigns supreme. But ethical principles, he found, are grounded

in the unconditioned. Man receives the moral law from himself alone. He is an end in himself, and lives in a community of free personalities. At this point two questions arise: (1) What does the ethical view of Idealism do for the understanding of human life? (2) What kind of a moral-shaping energy does it bear? Idealism enjoins upon us the unity of all the phenomena of human life. The idea of personality becomes for human life the same that the law of nature is for the phenomena of nature, *viz.*, that which we presuppose in order to explain the phenomena. And as we presuppose personality to explain the individual life, so we posit humanity as ultimate end to explain the life of the race. Moral action is a simple self-intelligible requirement of personality. A hedonistic theory does not lead to the understanding of human existence, and it contains no specific moral energy. Further, Idealism has shown that moral judgments are essentially different from judgments of cognition. The latter concern facts only. "But when we judge acts, men, and circumstances morally, our judgment contains already the projection of the ideal which we hold as the task for men." Finally, Idealism teaches us to understand art as a phenomenon of freedom. For the real artist, art is not the beautiful, but the self-intelligible.

J. F. BROWN.

Notes on the Theory of Value. J. S. MACKENZIE. *Mind*, No. 16, pp. 425-449.

In view of the growing importance of the conception of Value for the sciences of ethics, economics, and education, this paper calls attention to the recent examinations of the subject by the two Austrian writers, Alexius Meinong and Christian Ehrenfels, both of whom have been influenced by the work of Brentano and the Austrian economists. The views of Ehrenfels were expressed in five articles in the *Vierteljahrsschrift für wissenschaftliche Philosophie* (1893-1894), under the title, *Werththeorie und Ethik*. In these articles the points of chief interest are: (1) the distinctions between Intrinsic and Instrumental Values (*Eigenwerthe* and *Wirkungswerthe*), and between Utility and Value (*Nutzen* and *Frommen*); (2) the discussion of the relation of Value to feeling and desire; (3) a treatment of the relation of feeling and desire; (4) a consideration of the possibility of error in attaching Value to objects; (5) a discussion of negative Values. The interest of the work is mainly psychological, and although it is "a singularly original, subtle, and

carefully worked out contribution to an important subject," it is marred throughout by a strong subjective tendency. — The views of Meinong are to be found in the treatise, *Psychologisch-ethische Untersuchungen zur Werththeorie*. The work is more elaborate than that of Ehrenfels, and seems to go more deeply into the subject. A most important point is the doctrine that all appreciation of Value involves an element of judgment, and takes the form of a judicial feeling (*Urtheilsgefühl*). Meinong is successful in correcting the subjectivity of Ehrenfels, but the limitation of his own position is evident in the setting up of a kind of 'impartial spectator' as the standard of judgments upon human character. The strength of his work lies in its thoroughness; its weakness results from the too close adherence to the empirical standpoint. In conclusion, two observations may be added: (1) the importance of a treatment of ethics from the point of view of Value is considerable; (2) Ehrenfels' distinction between *Eigenwerthe* and *Wirkungswerthe* deserves more careful consideration than it has hitherto received.

ALEX. MEIKLEJOHN.

METAPHYSICAL.

Time and the Succession of Events. J. L. McINTYRE. *Mind*,
No. 15, pp. 334-349.

Time is no longer regarded by any school of Philosophy as an ultimate reality subsisting for itself, but is looked upon as a relation or series of relations between events. The modern problem refers to the validity of the time-relations in their application to the ultimately real. If the time-succession is unreal, then change, activity, development, and morality are equally unreal, and the ultimate reality is unknowable. If, on the other hand, time-relations are predicable of ultimate reality, then it seems to follow that there is an endless process, inconsistent with the supposed perfection of the Absolute. Without hoping to clear these difficulties away, we shall try to prove that it is possible to form a rational conception of the relation of time-succession to the Absolute, which, in spite of its difficulties, does not involve us in the admission that reality is unknowable. — That there should be a real succession of events is an assumption necessary to explain our experience; and time, as the sum of the relations (of succession) between these events, is valid of the real.

There can, however, be no relations between independent realities. Lotze has shown that the interaction of two objects must ultimately be explained by the act of a universal subject present in both. Further, where events are related to each other as successive, they must be referred ultimately to one subject, so that the succession of events is reducible to the succession of acts of the Absolute. Do the distinctions of 'past,' 'present,' and 'future' exist then for the Absolute as for us? The answer lies in the distinction between the existence of 'thing' or 'subject,' and that of 'events' or 'acts.' Only the latter are in time, are successive. We have two inseparable aspects under which the universe is to be regarded — on the one hand, the Absolute, above all time-process, eternal and unchangeable, the unity and harmony of things, absolutely unknowable as 'in himself'; on the other hand, the world of changing finite things where also no fixed knowledge seems possible. Only by uniting the two aspects is knowledge possible — by regarding the succession of events as the succession of acts of the Absolute. By this means the empty unity receives filling, the Absolute becomes a living being, the Unknowable becomes knowable through his acts. If we apply this view to the question of the reality of past and future as compared with the present, it is obvious that the Absolute in himself is throughout all time equally real. Our 'present' is regulated by and dependent on the acts of the Absolute. The present act is the true reality. Time as a whole, therefore, has no existence except as an abstraction from the relations of events in the mind of the subject; the past has no existence except in memory or as a moment in the present, the future none except in foresight or inference, or, again, as a moment involved in the present. The Absolute is the permanently existing real Subject, the present act the momentarily existing real event. The Absolute, as in itself, gives the continuity, as in its acts, the discreteness of Time.

DAVID IRONS.

Knowledge. WALTER SMITH. *Mind*. No. 16, pp. 489–505.

Knowledge consists in thoughts which agree with reality; it is the reproduction in the mind of the object. How is such knowledge to be attained? Do the data of sense constitute it; or is it furnished by the so-called categories of science; or, if both these fail, has consciousness other resources? (1) The data of sense are not properly cognitions, for they do not resemble things, and their object must be created by thought. (2) The concepts, categories, or laws

of science do not constitute knowledge. The category of quantity gives no information as to the inner nature of the reality which it measures; so, too, causality and even self-consciousness are mere abstractions. Science deals with universals, but these are static, and can only serve as signs and symbols which are useful in practical and intellectual life. (3) Through sympathy and imitation, as found in objective Art, the human mind may come to know its object. Thus in the drama the characters of history become living persons whose emotions we can experience within ourselves; so, too, as in the poetry of Wordsworth, we can, by sympathy, catch the spirit of Nature and live its life. Science, then, is not sufficient for knowledge; what we need is a new Poetry and a new Art, which will seek to know by sympathy and imitation. Such an attempt involves many difficulties, but it offers a possible means of attaining to knowledge of reality.

ALEX. MEIKLEJOHN.

HISTORICAL.

The 'Poetics' of Aristotle. R. P. HARDIE. *Mind*, No. 15, pp. 350-364.

According to Aristotle the use of *κίνησις* as a medium differentiates *ποιητική* from other kinds of imitation (*μίμησις*), *κίνησις* being taken to mean sensations of sight or hearing that are successive in time. The great advance made by Aristotle on Plato is the introduction of the conception of medium (*ὕλη*, in his metaphysical terminology). This conception modifies in an important way the meaning of *μίμησις*. If the special function of *ὕλη* is not recognized, the imitation of a thing will be regarded as an imitation *in pari materiâ*. Hence from this point of view, which is Plato's, the copy of a thing must be either a mere repetition of the thing, or must differ from it as the unreal or illusory differs from reality. But when it is recognized that two things having the same *εἶδος* may differ in respect of *ὕλη*, there is no longer any reason why the copy should be regarded as an attempt to rival reality. The 'imitation' is simply the solution of an artistic problem: — Given xy where x is *εἶδος* and y *ὕλη*, to express x in terms of a new medium y' . The relation of xy' to xy is naturally expressed by 'imitation' or *μίμησις* in its ordinary meaning. We may call the other relation, that of xy' to x (or xy

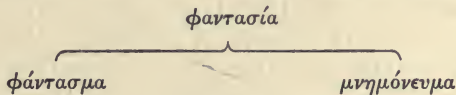
to x), 'expression.' Aristotle uses the term *μίμησις* to indicate the latter relation as well as the former. We must therefore suppose that for him *μίμησις* had a wider meaning than ordinarily attaches to the word. — From Plato's standpoint, the artist must be regarded as copying the appearance only, precisely as the photographic camera reproduces an object. On Aristotle's view, however, we may say there is first the concrete object, then the *εἶδος* in the mind of the artist, then its expression by him. We may even dismiss as unnecessary the given concrete reality, and start with the *εἶδος* in the mind of the artist. Aristotle's real view, in short, is that fine art is the expression of the universal, and plainly for a true theory of art expression is the essential operation, not imitation in the ordinary meaning of the term. — The origin of poetry is referred by Aristotle to two 'psychological conditions' (*αἰτίαι φυσικαί*). These are not the tendency to imitation and the tendency to delight in imitation, as is commonly supposed; nor are they the tendency to imitate and rejoice in imitations, and the tendency towards knowledge, as Bosanquet thinks. In each of these cases the two conditions are not independent. The truth seems to be that the instinct for imitation and the instinct for harmony and rhythm are the conditions referred to by Aristotle. On this view, poetry would be regarded as having gradually developed out of instinctive mimicry, which had throughout for its aim the expression of order and beauty. — Although in preceding divisions Aristotle has clearly distinguished tragedy from epic, at the end of the fifth chapter a fresh differentiation is given, the ground of division being the length (*μῆκος*) of the dramatic *μίμησις*. This passage is important, partly because it is the first explicit appearance of a consideration of *value*, and partly because it is used in the definition of tragedy.

DAVID IRONS.

Gedächtniss-theoretische Untersuchungen. BERGEMANN. Ar. f. G. d. Ph., VIII, iii, pp. 336–353.

Plato distinguishes between *ἀνάμνησις* and *μνήμη*. The former is recollection through association by similarity or contiguity (*Phaedo* 73 B ff.). It is an *active* voluntary process of reproducing what was once in the mind. On the other hand *μνήμη* is memory or the *passive* continuance of a sense-impression. It is psychophysical (*Philebus* 34 B). *Ἀνάμνησις* without any coöperation of the body revives what was once in the mind. It is the revival of a fragment of knowledge which the soul had in a preëxistent state (*Phaedo* 76 C).

Μνήμη (*Theact.* 191 C ff.) is the capability of a soul in union with a body to retain impressions of sense. This capability differs in different individuals owing to differences in corporeal character and the relative intimacy of the union of the corporeal with the psychical. The more intimate the union is, the worse is *μνήμη*. In a close union of these two natures, the impressions of sense are impure and indistinct. Memory is, therefore, improved by a purification of the soul through asceticism.—Aristotle (*περὶ μνήμης καὶ ἀναμνήσεως*) says that after a sensation is experienced there remains, owing to the action of *φαντασία*, as a more or less permanent possession of the soul, a memorial image (*μνημόνευμα*) of the thing sensed. This *μνημόνευμα* is a deposit, as it were, left in the soul by a presentative factor (*φαντασία*), and this *φαντασία*, looked at physiologically, is a stimulus whose nature is to further continue the movement set up by sensation. The blood or warm breath (*πνεῦμα*) is conductor of this movement, and when it has been carried to the heart, the *φαντασία* becomes a *φάντασμα*. The *φάντασμα* differs from the *μνημόνευμα* (whose mechanical correlate is also to be found in the heart) only in the fact that in the memorial image we are conscious of a former actual sense experience. This *φαντασία* as cause of a twofold deposit in the heart as central organ (the opinions of Alcmaeon, Democritus, and Plato on the function of the brain being displaced by this less correct view of Aristotle) gives the following schema :



Conscious and voluntary recollection in Aristotle's Psychology is *ἀνάμνησις*; conscious, but involuntary, memory is *μνήμη*. He uses, however, *μνήμη* also in a broad sense to include both voluntary recollection (*ἀνάμνησις*) and memory (*μνήμη*). Animals are capable of the latter; while man alone is capable of the former. *Ἀνάμνησις* is conditioned by antecedent association, which is grounded in three things: (1) Similarity, (2) Contrast, (3) Succession or Order.

W. A. H.

La philosophie de Charles Secrétan. ÉMILE BOUTROUX. Rev. de Mét., III, 3, pp. 253-268.

To the work of thinker and apostle to which he devoted his life, Secrétan brought a profound moral and religious nature. Duty, faith, responsibility, sin, salvation, were for him living realities. There

are three phases of his philosophy. First, there is an explanation and justification of the principles of Christianity — a formulation and discussion of the central problem of all his researches, *viz.*, How conceive the world as we know it as a creation of God? Is the first principle of things a free and holy personality? Can the world be explained by the action of such a principle? The fact of obligation assures us of the existence of a supreme Person, legislator and judge, to whom we are bound. The divine personality is a free, living substance acting in accordance with self-imposed law. The evil propensities of man are explained by the story of the fall. A second phase is begun in *Recherches de la méthode*, 1857, and finished in *Principes de la morale*, 1883. In these works we find an answer to the objections raised by skeptics; also an effort to find a concrete formula of duty. The next phase of his work is the propagation and defense of his doctrine. The same beliefs, he thought, which regenerate the individual would regenerate society. Secrétan's work is specially praiseworthy, because at a time when metaphysic was least esteemed, when positivism, skepticism, and materialism were rampant, he persisted in occupying himself with the problems of origin, purpose, and destiny. His general rule was to subordinate theory to practice, and to reject as false *a priori* any doctrine whose probable results would be bad for the individual or for society. Secrétan's distinction between liberty and free-will is important; also his generalization of the problem of freedom in attributing it not only to man, but to all that is or may be. It is improbable, he believed, that man should have a faculty so important as this, while all other beings are deprived of it.

D. R. MAJOR.

NOTICES OF NEW BOOKS.

Mind and Motion and Monism. By the late GEORGE JOHN ROMANES, LL.D., F.R.S. New York and London, Longmans, Green & Co., 1895. — pp. vii, 170.

The philosophic opinions of scientists must nowadays always be listened to with interest by philosophers, and that not merely because these modern prophets of humanity are pleased at times to add the philosophic mantle to their sacerdotal vestments. For there is on such occasions a refreshing uncertainty as to the conclusions, often startling and stimulating, to which the devious paths of dialectic conduct the scientist, which can hardly be felt in the case of a professed philosopher, whose course can be accurately predicted from a knowledge of his premisses, and who for the most part only arouses a languid curiosity as to the extent to which he will be outspoken or prefer to wrap himself in the obscurities of his terminology. When, however, the philosophizing scientist is as distinguished and candid as the late Romanes, our interest is heightened; and it reaches its culmination when we find him exhibiting progressive approximation to familiar philosophic standpoints. But in addition to this psychological interest there is also not a little intrinsic value in Romanes' treatment of philosophic problems.

His book is composed of essays of various dates, ranging from 1882 to 1890, and as the topics are the same it exhibits a certain amount of duplication. In all, however, materialism is rejected and "monism" accepted as affording the only intelligible account of the relations of mind and matter, although the inferences drawn from such acceptance seem gradually to take on a more religious coloring. What Romanes primarily understands by *Monism* is the 'double aspect' theory of mind and body, which regards the two series of physiological changes and of states of consciousness as the outer and inner view of one and the same reality. He clearly sees the impossibility of Materialism, which is logically bound to expect entire automatism, and fails utterly to account for the evolution of a mind supposed to be *of no use* for the preservation of the organic mechanism (pp. 24, 70, 121). He is contemptuous, in a manner justified perhaps rather by the defects of its elaboration than by its intrinsic value, of the idealist theory that the material order is wholly a product of the mental order (p. 43). And he declines to admit the explanation of Spiritualism, on the ground that it conflicts with the conservation of energy, and would upset the order of nature. Causation by volition would necessarily be supernatural and a miracle. This, however, seems a decided overstatement. The conservation of energy is doubtless a valuable prin-

principle in science, but it would remain so even if metaphysics refused to ratify its claim to absolute validity. And just because it is a methodological principle, its scientific usefulness would not be impaired by a proof of its relative validity. Nay, its methodological usefulness would not be destroyed if it were admitted to yield only an inexact formula even for the scientific facts. It is, *e.g.*, quite possible that the facts of the world's history may be found to indicate a universal increase or diminution of cosmic energy, and indeed it is probable that the necessity of choosing between Evolution and Conservation as ultimate metaphysical alternatives will soon come to be generally recognized. But for all that our calculations will continue to be based on the principle of conservation, and will not be falsified for short periods and restricted spheres of operation. It follows, then, that the scientific objection to the volitional theory of causation is not on the same plane with that *metaphysical* theory, and consequently not conclusive. Nor yet is it true that the admission of a 'mechanical equivalent of volition' would necessarily upset the order of nature. If, *e.g.*, the amount of energy generated and destroyed by volition were supposed to be approximately equal, the mechanical view would remain untouched; if the excess either of generation or of destruction were slight, the certainty of science would remain practically untouched. Romanes' picture of the ulterior changes which a very slight motion produced by volition may set going (pp. 52, 53), is as irrelevant as the fact that a small stone may start an avalanche. On the whole, therefore, we seem entitled to regard Romanes' prejudice against the volitional theory of causation as a pre-philosophic survival, and this is rendered plainer in the light of his subsequent concessions. He admits that volition is the primary source of our idea of causality (pp. 25, 50, and 54), and infers that, as the nature of causation must be interpreted by that of the will, all causes must ultimately be first causes and free causes. In pp. 152 f. he himself seems to supply a full refutation of his earlier objections to the spiritualist theory. It is true he urges these considerations in the supposed interests of "Monism," but it is one of the striking defects of his argument that he does not seem to be aware of the close affinities of his own "Monism" both with spiritualism and with idealism. If volition be the type of causation, then the spiritualist can only be ruled out on technicalities of procedure, and the idealist is surely justified in scouting the notion of a mindless universe. That Romanes does not notice this, is probably due to the ambiguity of his "Monism."

The same term has to do duty both for a *psychological* theory of the unity of mind and motion and for a *metaphysical* theory of a cosmic mentality, which is neither personal nor limited, and which (unlike W. K. Clifford) he would prefer to regard as super-conscious rather than as unconscious (pp. 107 f., 167 f.). Yet psychological monism is quite compatible with, and in fact rather suggests, metaphysical *monadism*, and it is evidently a large inference to pass from the doctrine that existences exhibit both consciousness and motion, to the doctrine that both these

aspects are summed up in an actually existent whole. The conception of a unity of the universe cannot be hypostasized so cheaply. And, indeed, even as applied to the single organism, monism is not free from difficulties Romanes does not mention. For instance, the parallelism of consciousness and motions is not easy to reconcile with the fact that the conscious series is *discontinuous*, whereas the physical series is, or must be conceived as being, *continuous*. Is the parallelism on such occasions suspended *pro hac vice*, or must we have recourse to unconscious states of consciousness?

Space does not admit of more than an allusion to Romanes' somewhat unsound reasoning as to the possibility of a social consciousness (p. 103), and to his ingenious theory of Free-will, but it is impossible to part from him without feeling that his premature demise has deprived both science and philosophy of a worker of rare acuteness, honesty, and earnestness.

F. C. S. S.

Introduction to Philosophy. By FRIEDRICH PAULSEN, Professor of Philosophy in the University of Berlin. Translated from the third German edition by FRANK THILLY, Professor of Philosophy in the University of Missouri. With a Preface by WILLIAM JAMES, Professor of Psychology in Harvard University. New York, Henry Holt & Co., 1895. — pp. xxiv, 437.

The general philosophical standpoint of this work was described and criticised by Professor Watson in the REVIEW on the appearance of the first German edition (vol. II, pp. 207 ff.). Professor James regards all the defects of the book "as minor matters compared with the one immense merit of the work, which is its perfect candor and frank abandonment of dogmatic pretence" (p. vi). Having used advance sheets of a large part of the book in his classes last year, he reports that the translator's task has been well performed, and that it is one of the very few text-books about which, in his experience as a teacher, he has heard no grumbling. It scarcely seems necessary to say anything more in calling attention to this work, but I may perhaps add that Professor Thilly's translation seems to me to preserve in a remarkable degree the vividness and directness which form the chief charm of Professor Paulsen's lectures and writings. English is not naturally nearly so vivid and forcible as German, but, in reading the translation before us, a former student still imagines himself listening to Paulsen's clear-cut and vigorous sentences in the crowded lecture-room at Berlin. In examining critically considerable portions of the book I have met with but one passage that is not perfectly clear. On p. 33 of the German edition we read: "Für diesen Inbegriff von Wissenschaften, die eigentlich noch keine sind, hat man nun einen einigenden Begriff gesucht, und so jene oben erwähnten Erklärungen zustande gebracht: Philosophie ist die Lehre von der Form des Erkennens— um den Inhalt auszuschliessen ;

oder Geisteswissenschaft — um wenigstens die Naturwissenschaften fern zu halten; oder Wissenschaft von den Prinzipien — um sich wegen des Einzelnen zu entschuldigen." This is translated: "A definition was sought that would embrace this collection of sciences, which are in reality no sciences at all. This led to the definitions mentioned above: Philosophy is the doctrine of the form of Knowledge — in order to exclude the content; or mental science — in order at least to ward off the natural sciences; or the science of principles — in order to find an excuse for not considering particular facts." (Translation, p. 33.) I venture to think that the meaning would be much plainer if one did not attempt to follow the German so closely. One might then translate: "It was sought to unite these sciences, which really do not deserve the name of sciences, by means of a definition. And this gave rise to the definitions we have already mentioned: Philosophy is concerned with the *form* of Knowing as opposed to its matter; or, Philosophy is a *mental* science as distinguished from the natural sciences; or, it is the science of principles, and so independent of the sciences which deal with particular facts." J. E. C.

Die metaphysischen Grundlagen der Ethik bei Aristoteles. Von Dr. LAMBERT FILKUKA. Wien, Carl Konegen, 1895. — pp. iv, 138.

According to Dr. Filkuka any defect in an ethical system will be found in the end to result from a metaphysical error. A true ethical system can only be based on a sound and adequate metaphysic. In a true system of morality the Good will have three characteristics. It will be a Perfection which is suited to the nature of human beings; it will have the character of Obligation; and it will be such that it will satisfy the legitimate desire of man for happiness. The only foundation for such a system is a theory of the world based on the notion of Immanent Teleology. On this view each individual being has its own special End, but the various particular Ends are subservient to the purpose of the whole. Each being, therefore, has an End adapted to its nature, and the attainment of this is consequently accompanied by pleasure. But as the special nature of each individual is one of the means by which the End of the whole is realized, and only exists for that purpose, the development of its own proper nature is necessarily regarded by the finite being as a duty. It may be added that this conception of Immanent Teleology leaves room for the part played by experience in the development of a system of morality. Since the true being of a thing is the law of its activity, to ascertain the law of human action it is only necessary to study empirically the nature of human beings. In this way the moral standard may be determined through experience. It must be kept in mind, therefore, that, though ethics is necessarily based on metaphysics, moral laws are not necessarily deduced from metaphysical principles.

The aim of the present work is to show that Aristotle reached the true conception of ethics, and that he was able to accomplish this because his

metaphysic was founded on the doctrine of Immanent Teleology. The author devotes 79 pages to a sketch of Aristotle's philosophy. He maintains that Aristotle only attacked Plato's theory of Ideas in so far as it was unable to account for the fact of Change, and that it was in order to remedy this defect that he modified the Platonic theory of Matter. But though for him change was so important, he regards Changeless Being as prior to it in time and higher in the scale of worth. Static Being is at once the efficient cause and End of change. Teleology is thus the prominent aspect of the Aristotelian theory. But though this teleology is an immanent one, in the sense that each particular being fulfills its own End or Purpose, all these particular Ends are subservient to the all-inclusive Purpose of the whole.

Having thus demonstrated that Aristotle had attained the true metaphysical conception, the author proceeds to show in detail how, by virtue of this, the Aristotelian ethical Good harmonized the notions of Perfection, Duty, and Happiness, and thus satisfied all the demands of an adequate system of morality.

Dr. Filkuka's interpretation of Aristotle is open to criticism at various points, and he seems to lay little, if any, stress on the later developments of Plato's metaphysic. In Chapter V he is at pains to give various reasons, of a practical sort, to account for the fact that Aristotle seems to make ethics independent of metaphysics. This apparently independent treatment of ethics should not have caused the author so much uneasiness, since he has shown very clearly that the doctrine of Immanent Teleology renders possible a determination of the content of morality on the basis of experience. The author is not deficient in acuteness, however, and the book has considerable merit. It is written in clear and vigorous fashion, and forms an organic whole.

DAVID IRONS.

Ueber das Grundprincip der Association. Von ARTHUR ALLIN.
Berlin, Mayer & Müller, 1895.—pp. 81.

This little work, a thesis presented for the doctorate at Berlin, gives a theory of perception based upon association by contiguity. In perception the new sensation is supplemented by elements previously associated with it. Every percept on its physiological side is composed of two elements, the activity of the central organ immediately excited by the sense organ, and the induced excitation of the parts of the cortex previously in activity with it. Perception is only distinguished from illusion by the fact that in the latter there is no external object which corresponds to the supplementary psychological elements. The psychological process is the same for both. The current theories of perception and assimilation, of association by similarity, and Helmholtz's doctrine of "unconscious conclusions," are analyzed and found inconsistent and unsatisfactory. All these processes are reduced to association by contiguity. Recognition is distinguished from perception mainly by the ease with which the image arises, and by the accompanying

feeling-tone. Attention is reduced to four elements: perception; interest, due to the affective tone, intensity, etc.; the motor sensations from the adaptation of the sense-organ; the psychological effect of the perception. The various doctrines of apperception are entirely rejected.

W. B. PILLSBURY.

Geschichte der Philosophie im Grundriss. Von Dr. RUDOLF EISLER. Berlin, S. Calvary & Co., 1895. — pp. viii, 328.

This book gives in outline the history of the development of philosophical thought, from the Greeks to the present time. One hundred and twenty-five pages are devoted to Ancient Philosophy, fifty-seven to Mediæval, while pages 179–316 are occupied by the exposition of Modern Systems. The last twelve pages contain an index of names and subjects. Although a very large subject is treated in this short space, the book (with the exception of the last chapter, which deals with the philosophy of the present time) is by no means a mere skeleton of names, titles, and dates. Dr. Eisler has succeeded in the difficult task of making the philosophical speculations of the Greeks really mean something to those hitherto unacquainted with them, much better than any other author I know who has treated the subject in anything like the same brief compass. He shows much penetration and excellent judgment in laying hold of what is really essential and characteristic in each system, and the exposition is uniformly clear and admirable. As the proportions of the book may perhaps indicate, however, the treatment of modern philosophy is scarcely as complete and satisfactory as that of the preceding periods. The account of English philosophy closes with Hume, if we except what is scarcely more than a list of names contained in the concluding chapter already referred to; and with the same exception, French speculation receives no further notice after the time of Descartes and Malebranche. The conviction that since the time of Leibniz philosophy has been confined to their own country seems, however, to be common to all German historians of the subject.

J. E. C.

Selections from Plato for English Readers. From the Translation by B. JOWETT, M.A., late Master of Balliol College. Edited with Introductions by M. J. KNIGHT. Oxford, Clarendon Press, 1895. — Two volumes: pp. xxxii, 242; vii, 245.

These two volumes of extracts from Jowett's translation of the *Dialogues* represent in the main the political and ethical doctrines of Plato, while the metaphysical doctrines are kept in the background. The abridgment is intended for that circle of readers, to whom the larger work owing to its cost is inaccessible, or whose interest is in the literary and practical aspect of the Platonic writings rather than in their purely speculative content. Most of the MS. had been submitted to Jowett, at whose wish the work

was undertaken, and many of the selections were made by him. The remaining selections have been made with excellent judgment by Mr. Knight, who for many years was secretary to the late Master of Balliol. The extracts in the first volume are taken mostly from the dialogues of the Socratic Period; the second volume is devoted to the *Republic*, the *Timæus*, the *Critias*, and the *Laws*. One is particularly glad to find so much space allotted to the *Laws*, a much neglected work. The brief introductions and analyses set as captions to the several chapters are admirable in their directness and clearness, and furnish just the information that is needed. Everybody who is interested in Philosophy or Greek literature will bespeak for this well-planned and well-executed work a cordial reception.

W. A. H.

Friedrich Eduard Beneke. An Introductory Study. By F. B. BRANDT, Ph.D. Columbia College Contributions. New York, Macmillan & Co., 1895.—pp. 167.

Twenty-three pages of this monograph are devoted to Beneke's biography; the remaining portion gives an exposition of the philosopher's system. The author says in his Introductory Note: "While the following work in form is in no sense deliberately polemic, it will be found in spirit to contain as its underlying thought the contention that, if German idealistic philosophy is to be regarded as a systematic development, the true development after Kant is to be found, not in Fichte, Schelling, and Hegel, but in the system of Friedrich Eduard Beneke. This is only to say in other words that in the philosophy of Beneke we have both in outcome and in method the profoundest metaphysical insight of our century." This is indeed a very "bold claim," and will be taken *cum grano salis* by those who are familiar with doctors' theses.

The expository chapters of Dr. Brandt's pamphlet give evidence of patient research and painstaking care. The biographical portion sounds more like a translation than an original piece of work. The sentences are awkward, cumbersome, and thoroughly un-English. Fortunately, however, the second part of the book shows a vast improvement over the first.

FRANK THILLY.

A Study of Ethical Principles. By JAMES SETH, M.A., Professor of Philosophy in Brown University. Second edition, revised. Edinburgh and London, William Blackwood & Sons; New York, Charles Scribner's Sons, 1895.—pp. xvi, 460.

The early exhaustion of the first edition has made impossible anything more than a rapid revision on the present occasion. The corrections will be found to be mainly verbal and of minor importance, though in one or two places I have tried to guard against misunderstanding by a slight

modification of the original form of statement. The critical sections of the chapter on Hedonism have been rearranged, in order to bring out more clearly the logical connection of the several points. (Author's Note to the second edition.)

Friedrich Nietzsche; ein Kämpfer gegen seine Zeit. Von Dr. RUDOLF STEINER. Weimar, Emil Felber, 1895.— pp. ix, 125.

This little pamphlet is the production of an enthusiastic follower of Nietzsche's, himself a contributor (*cf.* PHIL. REV., IV, 5, p. 573) to the "Dionysiac wisdom," he extols. We suppose it is intended as an appeal from Philip drunk to Philip sober, and written to persuade those who have been unable to extract any consistent view of life from Nietzsche's spasmodic flashes of maniacal insight. But it is, unfortunately, quite as incoherent as the original it professes to expound, and so deserves the serious attention only of students of the symptoms of mental 'degeneration' in Germany.

F. C. S. S.

La philosophie d'Ernest Renan. Par RAOUL ALLIER. Paris, Félix Alcan.— pp. 182.

This book — some chapters of which appeared last year in the *Revue Chrétienne* — contains six chapters: "L'Influence de Saint-Sulpice," "La Philosophie," "Vues Métaphysiques," "La Morale," "La Politique," and "La Religion." According to M. Allier, Renan's philosophy is very closely related to poetry and to history, and is a synthesis of elements contained in the systems of Kant, Hegel, Hamilton, and Comte. The author applies to Renan the same judgment that Renan applied to Cousin, *viz.*, that he may not hold a great place in the history of critical philosophy, but will occupy a most interesting position in the history of French thought. His conclusion is that Renan has not left behind him one of those systems which the progress of thought continues to develop, to refute, or to correct. What he has left is the trace of his personality. He possessed a very extraordinary power of suggestion, and he has stimulated thought more than he has spread precise ideas. "There will not be, perhaps, in the history of contemporary philosophy, a chapter devoted to the doctrine of Renan; but there will not be in that history a single doctrine that may not owe something, either by reaction or by influence, to Renanism."

W. B. ELKIN.

The following books have also been received:

The Conception of God. By JOSIAH ROYCE. Berkeley, Executive Council of the Philosophical Union of the University of California, 1895.— pp. 84.

The Individual and the State. An Essay on Justice. By Dr. T. W. TAYLOR, Jr. Boston and London, Ginn & Co., 1895.— pp. 90.

Darwin and After Darwin. By the late G. J. ROMANES. Chicago, Open Court Publishing Co., 1895. — pp. x, 344.

A Short Study of Ethics. By C. F. D'ARCY, B.D. London and New York, Macmillan & Co., 1895. — pp. xxvii, 278.

Anarchy or Government. By W. M. SALTER. New York and Boston, T. Y. Crowell & Co., 1895. — pp. viii, 176.

Histoire de la philosophie atomistique. Par LÉOPOLD MABILIEAU, Professeur de philosophie à la faculté des lettres de Caen. Paris, Alcan, 1895. — pp. vii, 560.

Théorie de l'âme humaine. Essai de psychologie métaphysique. Par J. E. ALAUX. Paris, Alcan, 1896. — pp. x, 557.

La femme devant la science contemporaine. Par J. LOURBET. Paris, Alcan, 1896. — pp. viii, 178.

De la contingence des lois de la nature. Par ÉMILE BOUTROUX. Deuxième édition. Paris, Alcan, 1895. — pp. 170.

Ippolito Taine. Da G. BARZELLOTTI. Roma, Ermanno Loescher & Co., 1895. — pp. xxi, 405.

Kant's Transcendentale Logik. Von G. ALBERT. Wien, Alfred Hölder, 1895. — pp. vi, 155.

Die moderne physiologische Psychologie in Deutschland. Von Dr. W. HEINRICH. Zürich, E. Speidel, 1895. — pp. iv, 235.

Spinozas erste Einwirkungen auf Deutschland. Von Dr. L. BÄCK. Berlin, Mayer & Müller, 1895. — pp. 91.

Der Geist der neuern Philosophie. Von R. SCHELLWIEN. Zweiter Theil. Leipzig, A. Janssen, 1896. — pp. 168.

Das Bewusstsein der Transcendenz oder der Wirklichkeit. Von Dr. E. KOCH. Halle, Max Niemeyer, 1895. — pp. vii, 127.

Thomas Morus und seine Utopia. Von G. LOUIS. Berlin, R. Gaertner, 1895. — pp. 30.

NOTES.

RECENT DISCUSSION OF EMOTION.

When Professor James first published his now famous theory that emotion is not the cause but the effect of its 'expression,' namely, the feeling of the bodily changes directly following the perception of the exciting fact,¹ he seemed to be advocating a paradox which, like most paradoxes, contained perhaps an element of truth, but which, in the sweeping form in which it was stated, suggested rather a good joke than a serious scientific hypothesis. It was thus, with "a certain feeling of amused resistance," that Edmund Gurney wrote of it in the first published criticism.² And although before the year was out a voice was heard on the other side also, Mr. Marshall announcing the outline of a theory of the origin of emotion in which he claimed to have independently arrived at the same general result as Professor James,³ the first impression of paradox continued and until quite recently led, on the part of most psychologists, to a resistance of the theory, not always, it must be confessed, with the genial urbanity of its first critic. Recently, however, since the publication of the chapter on emotion in the author's *Principles of Psychology* (1890), and particularly within the last year or two, the whole question has been prominently under discussion, and while, on the one hand, the theory has been acutely and vigorously attacked, it has also been ably defended and developed. As a result, not only is it now better understood, but there is the suggestion of something of real advance in this department of psychology. A brief review of the controversy should, therefore, not be without value.⁴

¹ W. James. "What is an Emotion?" *Mind*, IX, p. 188 (April, 1884). Lange's work came out the year following, the German translation in 1887.

² *Mind*, IX, p. 421. It is interesting to see how well Gurney anticipates the more frequent of the later objections. He admits that bodily sensations of skin, muscles, and viscera do probably constitute a large part of those emotions which, like fear and anger, are most intimately connected with bodily reaction, but against the general validity of the theory he urges that qualitatively different emotions have nearly the same bodily reactions, that lasting and pervading emotions may survive unchanged through many distinct variations of bodily state, and, especially, that aesthetic emotions may be ideally experienced. Replying to this last point James admits that pure aesthetic emotion is not due to the 'repercussion backwards' of other bodily sensations (*Pr. of Psy.*, II, pp. 468 ff.). How he deals with the other objections will appear immediately.

³ *Mind*, IX, p. 615.

⁴ The writings chiefly referred to, besides the article by James mentioned below, are the following:

W. L. WORCESTER. "Observations of some Points in James' Psychology." *Monist*, III, p. 285 (Jan., 1893).

Of first-rate importance and central in the whole discussion is the remarkable article of Professor James himself, in which he replies to his critics, and gives a new exposition of his theory.¹ A line of attack, followed with unanimity from Gurney down, and apparently fatal to the theory, consisted in urging the marked absence of uniformity in the relations of emotions to their expression. The emotion, it was said, could not be the effect of the expression, for, on the one hand, the same emotion may have very different expressions, and, on the other, different emotions may have practically the same expression. The answer is a challenge of the facts. May it not be that there is enough difference in the 'same' emotion, on the one hand, and enough sameness in the different expressions, on the other, especially when account is taken of the internal visceral changes as the more essential, to harmonize the facts with the theory? Dr. Irons had asked how any unity at all could be given by the theory to the conception of an emotion if its symptoms varied indefinitely. The reply is that the variations are within limits, and that they possess enough functional resemblance to allow us to call them by the same names.² Lehmann had contrasted the rapid changes in 'unmotived' (pathological) emotion, consequent on organic disturbance, with the relative constancy of emotion having a recognized mental cause. The answer is that exacter observation might show in 'motived' emotions also just the amount of inconstancy required. Worcester points out that all emotions when intense tend to express themselves in the same way. But do not, in such cases, the feelings themselves tend to become alike? Worcester further notices that certain symptoms — laughing, sobbing, shivering, etc., — may occur without any emotion. The reply is that in none of these cases is the reproduction of the emotional diffusive wave complete. In all this James seems fairly to hold

D. IRONS. "Professor James' Theory of Emotion." *Mind*, n.s., III, p. 77 (Jan., 1894).

"The Physical Basis of Emotion. A Reply." *Mind*, n.s., IV, p. 92 (Jan., 1895).

"Recent Developments in Theory of Emotion." *Psy. Rev.*, II, p. 279 (May, 1895).

J. M. BALDWIN. "The Origin of Emotional Expression." *Psy. Rev.*, I, p. 610 (Nov., 1894). Cf. *Mental Development*, chap. VIII, § 2 (1895).

J. DEWEY. "The Theory of Emotion." *Psy. Rev.*, I, p. 553; II, p. 13 (Nov., 1894, Jan., 1895).

G. M. STRATTON. "The Sensations are not Emotions." *Psy. Rev.*, II, p. 279 (May, 1895).

P. SOLLIER. "Recherches sur les rapports de la sensibilité et de l'émotion." *Rev. Phil.*, p. 241 (Mar., 1894).

¹ W. James. "The Physical Basis of Emotion." *Psy. Rev.*, I, p. 516 (Sept., 1894).

² It seems rather minute criticism when Dr. Irons finds this reply inconsistent with the original assertion (*Mind*, IV, p. 96). 'Indefinite' is not 'infinite.' No doubt, on the theory, the same emotion, so far as it is the same, must have the same bodily symptoms, and there is plausibility in the demand for a statement of the characteristic expressions of each emotion. Lange actually attempted this for certain emotions. But to go beyond *characteristic* and seek uniformly *identical* expressions as the core of the sameness — which is, apparently, what Irons desiderates — would be an altogether hopeless task. What sameness, for instance, is there in the fear of a man brought suddenly face to face with a dreadful death and that of one who politely 'fears' that he will not be able to accept an invitation to a dinner party?

his own. Indeed, on the ground traversed by these objections, the theory, it is easy to see, is impregnable. It is always possible, in the last resort, to fall back on the imperfections of introspection and on our ignorance of the complete bodily process, and, at the same time, to so distinguish theoretically between essential and non-essential elements, as well in the physical as in the psychical order, as to vindicate at least the conception of an exact correspondence between the two as a plausible hypothesis.

But while the proof of real variation in the symptoms with absolute sameness in the emotion would be fatal to the theory, the assumption or presumption that the two varied together would not necessarily establish it. Concomitant variation is a *conditio sine quâ non*, but it is not the theory. The theory asserts a special mode of production of the emotional expression and a special constitution of the subjective experience. And against these assertions there were strong and specific objections. It was objected, for instance, that to make the bodily changes the direct result of the perception of the object, fails to account for the fact that the bodily changes are different, if, with the same object, the mental motivation is different (all the critics); that to make the acts prompted the causes rather than the effects of the emotion, leads to absurdities (Worcester); that emotion is subjectively not identical with any amount of sensations of bodily reflexes, but a unique feeling-attitude-in-regard-to-object (Irons); and that in admitting the absence of such reflexes for pure aesthetic emotion, the theory breaks down (Irons). The chief interest in James' article is his manner of meeting these criticisms. He seeks to show that they rest, for the most part, on a complete misunderstanding of the theory. The result is that the theory now appears in quite a new light. (1) *We have the explicit recognition of association in constituting the stimulus.* The exciting fact on the perception of which the bodily causes of emotion were said to follow directly, is not the bare 'object' but the total 'situation.' With this recognition of the force of suggestions from association, James disposes at a stroke of the repeated objection that differences in the emotional result are directly due to differences in the mental motivation. The mental motivation, the 'perception,' is admitted to be different in different circumstances.¹ (2) *It is recognized that not all acts prompted are to be regarded as the cause of a given emotion.* This was supposed to be denied by such statements as "we are frightened because we run." The absurdity of this was made patent by Worcester's retort, that on this view we might be said to be afraid of getting wet because we buy an umbrella. All such state-

¹ The influence of association was not thus emphasized in the original statement of the theory, and this was misleading. It was not, however, entirely overlooked (see e.g., *Principles*, II, p. 454). Lange discusses it at length (*Gemüthsbewegungen*, pp. 66-74). What is new here is the assertion of peculiar value felt or perceived in certain elements in the situation (we react on "that one of its elements which strikes us, for the time being, as most vitally important"). Dewey objects to this as implying a feeling of emotional worth in the object prior to the reaction (*Psy. Rev.*, II, p. 19). James (and Dewey also) certainly owes us a clearer account of the constitution of the original stimulus.

ments are now characterized as "slap-dash," and we are assured that when it was said, "we are frightened because we run," the word 'run' was meant to stand for "many other" and, particularly, visceral movements. Actual running may give rise to exhilaration and not to fear. The important inference is suggested that room may now perhaps be found under the theory for considering some acts at least as prompted by emotion, or, what 'emotion' here "stands for," the whole emotional situation as implied in the language of common-sense.¹ (3) *There is an express limitation of the theory to a particular phase of the emotional experience.* The theory relates not to everything that may be called an emotion, not to the emotional experience as a whole, but solely to the feeling of "a general seizure of excitement" (p. 523) or "the rank feeling of excitement" (p. 525), briefly, to the 'affect.' This disarms not a little of the opposition. Most psychologists, probably, would admit that feelings due to bodily commotion must be added to whatever other feelings may be present, before there can be a "rank" sense of the emotional seizure. They might object to the statement that the special emotions are mere "names of special feelings of excitement" (p. 525), but so far as 'emotion' is limited to the 'affect' phase of the experience, the identification of that with the feeling of bodily disturbance gains immensely in plausibility. This, we are told, was all that was ever meant.² (4) *There is a restatement of the theory.* The theory, assuming psychophysical concomitance, simply defines the process of emotion in the nerve-centres "to consist of afferent currents." It does this on the sole ground of the introspective appearances. In the analysis of his emotional consciousness, James finds three factors, the "objective content," the agreeableness or disagreeableness coloring the content and "beaten up" with it, and the "seizure," consisting in additional localized organic sensations. These sensations being presumably due to incoming currents, the whole consciousness seems to be mediated by such currents. "This," he says, "is the length and breadth of my 'theory'" (p. 524).

Both Baldwin and Irons find this practically a new theory. Irons points out that whereas the original theory contained a definite account of the conditioning of the emotion and of the nature of the psychic fact, we are now told that nothing was ever intended but a statement as to the depend-

¹ It will not escape notice that the expression now condemned was not, as a matter of fact, used by Professor James. He did say that the order, 'we meet a bear, are frightened, and run,' is incorrect, but the alleged contradictory hypothesis is, we are "afraid because we tremble" (*Pr. of Psy.*, II, p. 450).

² As James actually uses the term, however, it seems to include both more and less than the feeling of somatic resonance: more, in that he accepts Irons' definition of emotion as "feeling-attitude"; less — and here certainly — in that he admits aesthetic emotion without such resonance. And though objecting to the identification of emotion with pleasure or pain, he, nevertheless, describes as pure aesthetic emotion the pleasure directly aroused by a beautiful object, the feelings derived from the somatic resonance being "secondary emotions" (*Pr. of Psy.*, II, pp. 468 f.). It is not easy, therefore, to understand his surprise that 'emotion' could mean anything but 'affect.' The term is notoriously ambiguous.

ence on incoming currents of the emotional seizure. The criticism is valid: the old and the new statements of the theory do not coincide. But putting all that is said above together, is it not clear that, so far as the 'affect' is concerned, the fundamental doctrine remains substantially what it was? Irons refuses to believe this. He says that now the intellectual regard is made the all-important thing in determining the emotional effect, whereas formerly it was the bare sensation, as is shown by the case cited from Lange of fright from a loud sound (*Mind*, IV, pp. 93 f.). Against this we have Baldwin's opinion that the force of association was previously recognized, though only by implication. But Baldwin, too, is struck by the new emphasis on association, as well as by the express recognition of the *Gefühlston*, and claims that James has "come over" to his view in regarding *Gefühlston*, together with associated content and the feelings due to reverberation, as 'elements' in emotion (*Psy. Rev.*, I, pp. 621 f.). But this appears to overlook the fact that James limits the emotion to the 'affect' phase of the experience, the rank feeling of excitement, which in his own case he finds completely accounted for by localizable organic sensations. He admits, however, that the *Gefühlston* may vary enormously in distinctness in individuals, and seems, though this is by no means certain, to regard it as a possible 'element' in emotion, and he further "hypothetically" allows that feelings in the 'subtler' emotions may be not of the localizable organic sort. It cannot be too clearly pointed out that it was not thus "hypothetically" that he spoke of the constitution of pure aesthetic emotion in the *Principles*, but with an *insistance* on the fact (II, p. 468), and that he can only now charge his critics (Irons especially) with an *ignoratio elenchi* in accusing him of giving away his case here by shifting ground and affirming that the theory meant nothing more than that the emotional seizure depended on incoming currents. The truth seems to be that there has been a translocation of emphasis, affecting the whole theory. Whereas formerly the emphasis was on the instinctiveness of the bodily response, and on the nature of emotion as the feeling of this response, it is now on the dependence of the emotional seizure on afferent processes. This is a much broader formula. Afferent processes are not confined to 'return waves' of excitement, and dependence may be of various sorts. In a general way the formula might be accepted by every theory of emotion. As Irons remarks, it *need* mean nothing more than that emotion is dependent on perception. With this relegation to the background of the original conception as to the nature of emotion, and with the bringing into notice of other elements of feeling besides the sensations of organic perturbation, it is easy to make the difference between the theory and the views of its critics appear insignificant. Evidently, however, the above formula does not express the whole "length and breadth" of Professor James' 'theory.' He still appears to regard the emotional expression as 'instinctive,' and the 'affect,' for his own part at least, as the feeling of this expression. 'Afferent process' here means, specifically, 'return wave of excitement.' But if this is so, then, "pure

aesthetic emotion," as it appears in the *Principles*, would not, properly speaking be emotion at all, and the theory is only expanded, on the one hand, in asserting that the whole of consciousness is dependent on incoming currents, to be contracted, on the other, in excluding from 'emotion' all feelings that are not sensations of the bodily perturbation. Only James is not quite sure of this, and so offers terms of agreement allowing for individual variations to all who adopt the general psychophysical standpoint.

Two main questions are thus forced on our consideration: What is the origin of the emotional expression? and, What is yielded by analysis of the emotional experience? James throws the burden of proof for his theory on the introspective analysis. But there is another method of arriving at results. The immediate appearances can be discussed in the light of genetic theory. It is from this point of view that the question is taken up by Baldwin and Dewey. Baldwin explains the origin of emotional expression by three principles: 'dynamogenesis,' habit, and accommodation. Since habit tends to loss of consciousness, the marked intensity of the consciousness accompanying the most instinctive reactions, as in anger and fear, cannot, it is argued, precede the reaction, but must be due to the 'return wave' of the excitement. All reactions of this class, therefore, are handed over to the 'effect' theory. But where the exciting content is partly new, dynamogenesis requires elements of expression over and above the reactions due to habit. Here the important question of accommodation comes in: How does the organism acquire new reactions? For answer we are referred to various physiological principles, but particularly to the teleological function of pleasure and pain, especially pain, as tones of feeling, given not merely after the movement but by and with the stimulus. All adapted movements and, therefore, all movements of inherited habits, are, in their *origin*, directly expressive of an hedonically toned state of consciousness. This serves for the analysis of emotion. We have: (1) an habitual element, due to a 'return wave' from various instinctive expressions; (2) a present 'accommodation' element of pleasure and pain due to the new processes of content; (3) a 'return wave' element from (2) and from muscular and organic processes connected with (1) and (2).

Although originally intended as a refutation of the James theory, there is clearly nothing in this argument which James, as he now explains himself, might not accept. Hence Baldwin's claim that James has "come over." On the other hand, both assumptions in the special argument for the 'effect' theory have been disputed. Nichols regards it as an illusion that habit tends to loss of consciousness (PHILOSOPHICAL REVIEW, IV, p. 521), and Irons asserts that the greater part of the movements in the cases referred to (anger, fear, etc.) are merely "mechanical outpourings through the easiest drainage-channels" and not instinctive at all (*Psy. Rev.*, II, p. 284). The force of these objections must be left to the judgment of the reader.¹

¹ Surely, however, the discharge is 'instinctive.' It is true that Dewey, to whom Irons appeals in challenging the fact, speaks of deflection of energy in the inhibition involved in coör-

Dewey's theory is less easy to deal with. He aims to explain the origin of the emotional 'expression' by adjusting Darwin's principles to the 'effect' or, as he prefers to call it, 'discharge'¹ theory of emotion, and then to use the result as a method for analysis and classification. Summarily stated, his conclusions are as follows: "All the so-called expressions of emotion are, in reality, the reduction of movements and stimulations, originally useful, into attitudes"; they are to be accounted for, not by reference to emotion, but as direct survivals or as disturbances of teleological coördinations. The various principles of 'serviceable associated habits,' of 'analogous-feeling stimuli,' of 'antithesis,' and of 'direct nervous discharge,' merely express certain typical differences in the form and nature of this reduction (*Psy. Rev.*, I, p. 569; II, p. 13). The primary thing in emotion is a mode of behavior, a disposition to act; the other phases of the experience, the idea or 'object' and the emotional seizure, exist within the coördination of activity as simultaneously constituted aspects of one and the same fact. "Emotion in its entirety is a mode of behavior which is purposive, or has an intellectual content, and which also reflects itself into feeling or Affects, as the subjective valuation of that which is objectively expressed in the idea or purpose" (*Psy. Rev.*, II, p. 15). "The idea or object which precedes and stimulates the bodily discharge is in no sense the idea or object . . . of the emotion itself." "Idea and emotional excitation represent the tension of stimulus and response within the coördination which makes up the mode of behavior." Dewey elaborates this conception of the unity of the experience at length with repeated warnings against the "psychologist's fallacy" (II, pp. 19 ff.). The emotional process as a whole, then, is a process of adjustment between the sensori- or ideo-motor activities, which translate themselves into what later reflection calls the 'object,' and the vegetative-motor activities, which a like reflection distinguishes as 'reaction' or 'response' (II, p. 25). The maximum of emotional seizure is connected with the period of adjustment. If the activities coördinate without friction or if one immediately displace the other, there is no seizure (II, p. 27). Connecting this with the theory of the origin of the emotional expression, we get the idea of emotion as the tension between the instinc-

inating the several phases of the emotional process, but it is of the very essence of his theory that the reaction as a whole is instinctive, even the 'incidental' reactions that seem to be but "mechanical outpourings through the easiest drainage-channels" being regarded by him as relative to acts that are purposeful. Irons, to be sure, disputes this latter interpretation. Dewey might rather, I think, be brought forward against the *emotional* character of the reaction, as Baldwin conceives it: "emotion as excitement disappears with definiteness of habit" (*Psy. Rev.*, II, p. 27). And it must be admitted that Baldwin's instance, the 'fear' of the chick at the presence of the hawk, appears a somewhat ambiguous phenomenon in the light of Dewey's remarks on p. 28.

¹ Why 'discharge' theory? Any theory that holds to psychophysical correlation must be a 'discharge' theory. James, apparently, wishes his theory known as the 'afferent' theory; but this, too, is objectionable, suggesting opposition to an 'efferent' theory, which is probably maintained by very few. As already pointed out, the James theory involves not one but several propositions.

tive 'response,' representing in the aborted form of 'attitudes' thousands and thousands of past acts, and the multitude of possible acts represented by the idea. Emotion is "the adjustment or tension of habit and ideal" (II, p. 30). On this basis we can classify emotions according as there is failure of adjustment or effort or success. And we have further a ground for distinguishing emotion as *Affect*, "the feeling of tension in action," from emotion as Interest, "the feeling of a complex of activity unified in a single channel of discharge," and as *Gefühlston*, representing the consolidation into organic habit of ends achieved (II, pp. 30 ff.).

This is certainly a far more elaborate theory than that originally propounded by Professor James. It agrees with the latter on the fundamental point of regarding the emotional seizure as the reflection into consciousness of bodily movements, but there are also important differences. James, for instance, admits reactions determined by analogous-feeling stimuli; Dewey only finds that activities feel alike "which involve in like fashion the same peripheral structures" (I, p. 554). James believes, apparently, that morbid emotion may be objectless, in the strict sense;¹ Dewey finds that morbid emotions are not objectless from their own standpoint, but subsume an object of their own as source or aim (II, p. 18). James, replying to an objection of Irons, sees no difficulty in supposing that visceral sensations, one perceptive process, can suffuse with emotional warmth the cold intellectuality of another (*Psy. Rev.*, I, p. 520); Dewey regards Irons' objection as absurdly assuming two distinct 'processes' (*Psy. Rev.*, II, p. 21). James seems to represent the order, (1) object (situation, stimulus), (2) instinctive reaction (attitude), (3) emotion (the feeling of the reaction), as serial; Dewey denies that there is any such seriality in the experience itself (II, p. 18). This is Dewey's strong point. James isolates the bodily sensations and describes the emotional seizure as though it consisted in them irrespective of their relation to the other phases of the experience, and Dewey rightly complains of this (II, p. 18). And, for his part, he can see nothing emotional in the mere addition to a non-emotional discharge of more discharges; such additional discharges only become emotional if they change the *quality* of the feeling by reporting to consciousness the *value* of past coordinations (I, p. 562). In fact, the James theory is here reconstructed. Three things in Dewey's account stand out with special clearness: (1) the explanation of the so-called 'expression' of emotion as the residua of teleologically conditioned movements; (2) the insistence on the unity of the emotional process, the disposition being the primary thing, the 'object' and the 'response' being constituted together as coordinated factors within the active mode of behavior; (3) the conception of the emotional

¹ His own words, to be sure, are only: "The intellect may be so little affected as to . . . note the absence of a real object for the emotion," but he quotes with approval a description of morbid fear in which it is said: "He is not afraid of anything; he is simply afraid" (*Pr. of Psy.*, II, pp. 460f.). Cf. the rejection of Irons' interpretation that the disagreeable sensations are the object (*Psy. Rev.*, I, p. 522).

seizure as, not a bare sum of bodily sensations, but the tension in the coördination of the instinctive vegetative-motor and the ideo-motor reactions.

But there are serious difficulties. Dr. Irons objects that the argument for regarding the 'expression' as teleologically determined and *therefore* not due to preëxisting emotion, rests on the assumption that no useful action is explicable by reference to emotion (*Psy. Rev.*, II, p. 279). In genetic reference the objection is well taken. Indeed, on a theory which holds emotion to be the tension of habit and 'ideal,' it seems practically necessary, in view of the varying circumstances under which habits are presumably acquired, to assume some such tension in the process of reducing acts to habits. It is only as we regard the acts as already 'reduced,' as already mere 'attitudes,' that the reference of them to an antecedent emotion in the individual seems out of place. This is apparently Dewey's point. And Irons himself so far agrees to this, with reference to the internal organic disturbance, as to admit that the phenomenon in question cannot be considered an effect of the emotion, and that Dewey has indicated the right principle by which its origin is to be understood (*Psy. Rev.*, II, p. 282).

Irons complains that in the treatment of emotional expressions voluntary acts are scarcely taken into the account at all. It is possible to go further and say that if "all the so-called expressions" are, as alleged, the reduction of acts to attitudes, voluntary acts are definitely excluded. And yet voluntary acts, or at least acts in which the voluntary and the reflex appear to coincide, acts in any case and not mere attitudes, *are* taken into the account when James' paradoxical statement that we do not feel angry "till we strike" is adopted and defended as verified, in principle, by every passing emotion (Dewey, *Psy. Rev.*, II, p. 17). Irons also distinguishes in the internal organic movements those that are purposively reflex and those that are purely mechanical outpourings of deflected energy, and regards the latter, with James, as accidentally determined by the state of the organism. The conclusions, that the same emotion may at different times have different physical accompaniments, and that in all states of equal intensity the organic changes are substantially the same, are not very obvious (*Psy. Rev.*, II, p. 282), but clearly there is a point here which needs clearing up. Dewey might perhaps say that such deflection of energy, so far as it results from the tension of habit and 'ideal,' belongs to that class of reactions which are not purposeful in themselves, but which, nevertheless, as incidents in a process of adjustment, are teleologically conditioned, even though, in their failure of adjustment to present needs, they represent the break-down of teleological coördination. But this scarcely explains the course taken by the deflected energy while the adjustment is going on.

Professor Dewey deserves the greatest praise for his attempt to relate the different phases of the emotional experience and to hold fast to its unity. This concrete handling of the facts makes one feel that here at least he is on solid ground. For just as certainly as subject and object are

correlated aspects in the one functional activity of cognitive consciousness, so certainly are object of emotion and emotion as the feeling of attitude towards the object correlated phases, neither of which is prior to or isolated from the other, in one emotional fact. Here there is no seriality. On the other hand, when we ask for the causal relations of this fact, we are bound to face the question of a serial order. And it is here that James' explanation is intelligible and Dewey's not. Something strikes us in the situation, says James; we see, *e.g.*, the bear coming, it looks savage, we are unarmed; and instinctively a bodily reaction takes place, trembling or running away, which we feel as an emotional seizure. Dewey does not accept this. It seems to him that if we are struck by the importance of any feature in the situation, we are emotionally excited already. But not only so. "The reaction," he says, "is not made on the basis of the apprehension of some quality in the object: it is made on the basis of an organized habit, of an organized coördination of activities, one of which instinctively stimulates the other" (*Psy. Rev.*, II, p. 20). One fails to see why it should not be made on the dual basis. One fails to see how it could be made on any basis apart from some quality in the sensation or perception which serves as the stimulus.

A consequence of the theory which makes the emotional seizure, not the feeling of the instinctive response as such, but of that in tension with the ideational reactions which it helps to constitute, would seem to be the exclusion from the class of emotions of those strong feelings suddenly aroused, as in the case of startled fright, where there is not only no consciousness of tension between instinct and perception, but no clear perception of any object for the feeling to attach itself to. This, perhaps, is not so very bad. The feeling would here be *merely* the feeling of the instinctive reaction. Only the difficulty would then arise as to how such instincts, positively harmful to the organism, come to be inherited. And if definiteness of habit means, as we are told, disappearance of emotional excitement, it is not easy to see how mere instinctive reactions should have such 'tremendous values' in consciousness.

We are brought back to the main question by Irons' very just remark that you cannot rightly assume emotion to be either the cause or the effect of the physical changes, since there is a third possibility, namely, that emotion is independent of the bodily changes. This is his own view, and he illustrates it by the case most favorable to the 'effect' theory, the case of fear, which he conceives as immediately consequent on the perception, while the bodily changes are regarded as simultaneous arousals of energy and actions or tendencies to action called forth by association (*Psy. Rev.*, II, pp. 282 f.). Here the discussion sharpens itself to a point, the question being, as James puts it, whether we must admit as an important element in emotion something that is distinct both from the intrinsic feeling-tone of the object and from that of the bodily reactions (*Psy. Rev.*, I, p. 526). To decide this question by something more objective than conflicting reports

from introspection, James appeals to Sollier's observations and experiments which go to show that blunting or removal of the bodily sensibility, affects, in a similar manner, the emotion. The observations have been criticised and the facts are not wholly unambiguous,¹ but so far as they go they certainly tend to show, what confirms the appearances of common experience, that unless we are able to feel the bodily commotion we are unable to feel the emotional seizure. This would certainly mean that the *Affect* is dependent, either in whole or in part, on the bodily reverberation. The evidence, then, so far as it goes, is against the hypothesis of Dr. Irons in this respect. On the other hand, neither Sollier's nor any of the other cases of anaesthesia that have been brought forward, tend even remotely to show that emotion merely consists in a lot of bodily sensations ; and the continual protest of Dr. Irons, that the bodily sensations in and for themselves are not emotional at all, is well sustained if the opposite doctrine is what the 'effect' theory teaches. The brief article of Mr. Stratton, no less than the elaborate analysis of Professor Dewey, enables us to clearly see where the fallacy of that conception lies. It lies in the isolation of elements that in the experience itself exist only as moments in a complete activity, and in the conversion into objects of what in actual process exists only as absorbed in the attitude of the subject. It is the psychologist's fallacy. Emotion is at any rate a peculiar *way* of feeling, and cannot be defined apart from reference to the object, nor separated, apparently, as *Affect*, from the feeling of bodily perturbation. It is no wonder, therefore, that Professor James can find no 'feelings,' no elements of content, either faint or vigorous, to stand for the experience beyond the products of the analysis, hedonically toned objective content and bodily sensations. There are none. The experience is murdered by its dissection. It is the old story of the parts in the hand and the absence of the spiritual bond which not only connects but transforms them.

H. N. GARDINER.

¹ See *Psy. Rev.*, I, p. 544; *cf. Mind*, n.s., IV, p. 96. Sollier's are the strongest cases, the others are even more ambiguous. The one cited by James in his original article (Brachet's) was patently unfavorable; its place in the *Principles* is taken by that of Strümpell's boy, from which the evidence is also not clear. The same is true of the cases referred to by Worcester on the other side.

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THE HUMIST DOCTRINE OF CAUSATION.

IN metaphysics every age seems to have its pet absurdity, which subsequent ages come to regard with mingled wonder and amusement. We can laugh at the mediaeval fancy of *substantiae secundae*, or at the Leibnitzian doctrine that if two things, say two drops of water, were so like each other that you could not tell the difference between them, they were not really two at all but only one. It is certain, however, that a succeeding age will laugh just as heartily at the doctrine, widely accepted in our age, that all the things which are for us the very type of reality, on which the very conception of reality itself is modelled, are not themselves real. While natural science makes a steady progress, it seems to be a law in the history of distinctively philosophical speculation that the paradoxes of one age become the orthodoxy of the next, to be looked on in turn by the next again, not only as paradoxes, but as absurdities. The reason of the difference between the two lies in this, that nothing has as yet been generally recognized as bearing in regard to the theories of the subject sciences the same relation that the test of comparison with fact bears to the theories of physics. I have endeavored¹ elsewhere to shew what it is that, as it seems to me, ought to be held to bear that relation to them; that any theory which does violence to the natural use of language may as well be rejected summarily and at once. If it is not, at any rate the Time Spirit will

¹ "Reality and Causation," *Mind*, n.s., vol. IV, no. 13.

assuredly see to it that it is rejected later on. The nearest approach that we can have to the test of fact in metaphysics, is the trial of every general statement by its application to some concrete individual instance. The great name of Kant can no more sanctify the absurdity that the continual citation of test instances is undesirable in philosophy, than the great name of Plato can sanctify the parallel absurdity that the study of individual facts will never lead to the true advancement of knowledge in physics.

Another world-famous paradox that has emanated from the same source as the idealist riddle, is the doctrine with regard to causation, now extensively accepted, that causation consists in nothing else than the constant conjunction of events. The fate of this doctrine has been, in some respects, very different from that of idealism. While idealism is neglected by the scientific world, as something with which it has no concern, something about which the metaphysicians may spin what cobwebs they please, but which the man of science will leave carefully alone, the reduction of causation to mere conjunction, which springs from the same root, and rests on the same grounds with it, has been taken up warmly by natural philosophers, in England at any rate; and has been proclaimed as the true and only doctrine, with a dogmatic confidence very different from the modest recognition of its paradoxical character with which its author introduced it.

The invariable conjunction of two facts is, we are told, the full content of the conception of causation. Not only is the connection of cause and effect nothing else but such invariable conjunction, but the very notion of it contains, in the last analysis, they say, nothing else but the thought of such invariable conjunction. If that were so, however, the question must surely arise at the very outset: How is it that scientific investigation consists in using the fact of the invariable conjunction between events in order to prove their causal connection? Do we use their invariable conjunction merely to prove their invariable conjunction? If that is all that we are doing, we might as well save ourselves the trouble. The fact of the

one being used to prove the other is, however, sufficient evidence that they are not the same. The question must also surely arise : How is it that, if the meaning of cause and effect is nothing but constant conjunction, we can use the words 'cause' and 'effect' intelligently long before we know anything about constant conjunctions? If a child is asked why he is crying, and answers that it is because his brother struck him, can anything be more absurd than to imagine that what is running in his mind is the constant conjunction between blows and tears : a conjunction which, as constant, does not exist ; and which he could know nothing about, if it did. We may take it as perfectly certain, *pace* Hume and Mill, that 'cause' does mean for us something more than constant conjunction, and the interesting fact to get at is, what that is in which this added meaning consists.

Let us suppose that the rotundity of the earth were still undiscovered, but that it had been observed by navigators that, in whatever part of the world they were, when they met an approaching vessel, the tops of the masts appeared first, and the hull last ; and that the converse happened when the vessel receded. We should then have a conjunction of the most rigid invariability, and we should probably in these circumstances find some Greek word that would express the idea 'uppermost part first appearing,' or the converse, and would call what that word expressed, provisionally, the cause of the phenomenon. This would be analogous to our calling the weight of bodies the cause of their falling, while it is really nothing more than an expression for the fact that, when left unsupported, they always do fall. When, however, we subsequently discovered that the earth was a sphere, we should then feel that we now, for the first time, understood the reason of the observed uniformity ; that we were at last in possession of the true cause. We have, then, in such a case as this, the distinction given us between the true cause and the invariable conjunction which, for want of any other cause, we often treat as a cause, though quite conscious that we are not using language altogether literally in doing so ; and it must strike any one at a

glance that there is between the two, between the subordinate law and the true cause, the relation that there is between the glimpse of a part and the perception of the whole.

Mill is so full of the conception of Induction as something that leads to wider generalizations, and wider generalizations only, that, when he comes across an induction that leads to the discovery of the cause itself, he does not know what to make of it. When Kepler discovered that the orbit of Mars was an ellipse, he discovered the cause of its successive apparent positions. Mill is of opinion that Kepler's process of thought in arriving at his great discovery is not to be reckoned as reasoning at all, but as some operation subsidiary to it.¹ He further thinks, that such a conclusion differs from an induction like Gravitation in that, while the latter must be true or false, it is a matter of indifference whether the former is a truth in itself or not, so long as it serves as a kind of mnemonic rhyme to hold the facts together.² Surely, however, it is quite beyond question that the two discoveries stand on precisely the same footing in this respect. Both must explain the facts and both must be either true or false in themselves.

Have we, then, in the conception of whole and part, and the relation between the two, something that will give us a clue to the relation between cause and effect? Before answering that question, let us glance at some other instances of causation. The instances that Hume cites are uniformly such instances as the connection between flame and heat, or between cold and ice, that is to say, between the sensations which an outward object gives rise to for one of our senses and those which it gives rise to for another. They are, it is true, instances of a causal connection, but they are surely not the only ones nor the most obvious ones. Why pass over such clearer and more familiar instances as the moving of a book, or the filling of a glass, or the doing of any of the innumerable acts of daily life that we express by means of a transitive verb followed by an

¹ Mill's *Logic*, 3d ed., bk. III, ch. II, "Of Induction Improperly so Called," § 3, p. 301.

² *Ibid.*, § 4, pp. 308 ff.

accusative case ; or why, again, pass over such other more obvious instances as the connection between the foot and the track, or between last night's rain and the pools of water in the streets to-day? There seems to be some principle in human nature which tends to make us overlook the obvious and familiar in favor of the unusual and remote. It has even, as we know, led some primitive races to overlook the part which the mother sustains in childbearing, and to put her husband to bed when there is an addition to the family.

If any one without a theory to support were asked what meaning he attached to the word 'cause,' he would be very likely to answer 'that which does something.' There is a shade of difference in meaning, however, between 'doing' and 'causing,' which is not to be neglected. The two words are naturally and continually applied to the selfsame fact, but in different circumstances, and from a different point of view. I move your ink-bottle while you are out of the room. That, from my point of view, is simply 'doing something.' You come back, and find it moved. On enquiry you ascertain that my moving it was the 'cause' of its change of place. The expression 'doing something' implies that the fact as a whole is regarded in itself, while the conception of 'cause' imports that there was a gap to be filled up ; that your first knowledge of it was fragmentary, but that now you can fill up the missing links. We are thus brought back to the conception, that the knowledge of the fact and its cause together is the knowledge of it as a whole, while the knowledge of the effect alone is the knowledge of a fragment only.

The problem of causation is often stated somewhat in this way: "Granted that we always conclude that everything that begins to exist must have a cause, what makes us do so? Is the belief intuitive, or is it a generalization from experience?" It seems to me, however, that what is here taken for granted, itself requires examination. In what sense is it true, or is it true at all, that we at once conclude that whatever begins to exist must have a cause? If by 'we' is meant the whole human race, it certainly is not true. Children and uneducated

people generally accept most of the facts of life and nature as they find them, and never think of enquiring as to their cause. Savages ordinarily regard such enquiries as why the sun rises and sets, or even whether it is the same sun that rises to-day as that which set yesterday, as entirely meaningless and nonsensical.¹ Yet there are some events which raise the thought of causation as quickly and as unfailingly in the mind of the savage as in the mind of the philosopher. A footprint on the sand would have made Friday, as certainly as Crusoe, conclude that it did not come there uncaused. If we enquire what such events are, as distinguished from other events, we will find that they are events which, by their very presentation, make manifest to him who observes them, their fragmentary character. Any child will recognize that a face which looks at him over a wall, or a hand which is stretched from behind a screen, are not self-subsistent things, but parts of some wider unity. When he sees the body they belong to, he is completely satisfied; he thinks he has the full cause before him. As knowledge advances, however, we come to learn that many of the things which we at first regarded as self-subsistent wholes are, in another sense, parts of some wider whole. We seek always to reconstruct the whole from what we know of its parts; and thus our goal, the ultimate cause of all that we perceive and know, continually recedes before us.

It must be observed, however, that our recognition of the fact that what we at first thought of as wholes are fragments of a wider unity, does not prevent us from continuing to distinguish between such wholes and the things that, relatively to them, are fragments. If any one could shew how, at a glance, we distinguish between a whole and a fragment, and how it is that the fragment often gives us a clue that enables us to reconstruct the whole, he would have gone far to solve the problem of causation. Wholes and fragments are infinitely various in kind. The first unity, on the model of which we frame all other unities, is the object that can be held in the

¹ Cp. Lubbock, *Origin of Civilization*, p. 251; also Park's *Travels*, vol. I, p. 265.

hand, characterized by homogeneity of substance. If it were not so characterized, and if there were no unity of purpose discernible in it, we should not think of it as one thing, but as two things conjoined. The parts of solid wholes of this sort, if broken, continue to fit each other; and this fact gives us the rudimentary conception of fitness, which plays such an important part afterwards in causation. Wholeness or unity, however, may consist, not in homogeneity of substance, but in regularity of form. If the form is such as that of the circle, the smallest part of the arc may enable us to reconstruct the whole. It may consist also in nothing but the unity of purpose manifested in a complex object such as a house or a bridge, and then it is only by suggesting the purpose of the whole, that the fragment can assist us. Besides the unity of the 'thing,' and even in a manner before it, there is the primitive unity of the 'fact,' that is, of the total of presentation at any moment. Caesar's assassination, for instance, is such a unity. The Senate House with the assembled Senate, the Dictator himself, the conspirators with their daggers, all for a moment form part of one whole; all, when they separate, still bear traces of having been fragments of it. To the widely pervasive fact that they do so, we owe it that it is often possible to trace out causes from their effects alone. As in the broken solid the parts continue to fit each other, so in the broken fact we have a parallel phenomenon. The foot continues to fit the track that it has made; the wound, perhaps, the instrument that caused it. In the case cited, the fact was one witnessed by many persons, and capable of being reconstituted for others by their narration of its circumstances. In many other such cases, however, there is no witness of such a fact, and it often becomes our task to endeavor to reconstitute it, as best we can, from the fragments in our possession.

Mill's Inductive Methods are supposed to be applicable to reasonings of every sort, whether scientific or practical. As a matter of fact, almost all his examples are drawn either from chemistry, or from those branches of physics in which the causation is, in his appropriate phrase, heteropathic, that is to

say, in which the change that takes place is a metamorphosis. If any one were to attempt to apply them to the explanation of the mental process that we use in piecing together circumstantial evidence, so as to bring home to the murderer (let us say) the guilt of his crime, he certainly would not know where to begin. The methods all take it for granted that the fact to be enquired into is repeatable, that you can have "two or more instances of the phenomenon" as a datum to begin with. You can have, of course, as many instances as you please of oxygen and hydrogen combining to form water, but you cannot have more than one instance of an individual murder. You cannot put the murderer and his victim together, and see whether he will kill him over again. The methods also take it for granted that you have, to begin with, two parts of the series that constitute a fact, say the administration of arsenic and the resulting death; and that the enquirer wants only to know how to fill up the missing links; but, in innumerable causal enquiries, we have not as our datum two parts of the series, but only one, — only, for instance, the footprint on the sand; and on the manner in which, from one such fact, we proceed to infer its cause, it is forever impossible that methods which postulate the conjunction of two things as their datum can throw any light whatever.

In spite indeed of their great, though mainly insular, success, it is quite certain that, even in regard to the branches of investigation to which they are more directly applicable, the celebrated methods have never been of the smallest use to any scientific investigator. The trouble is how to apply them. Mill sets them forth as if they were various instruments, one of which might be used in the investigation of one class of facts, and another in the investigation of another class. When we come to examples, however, we find that any conceivable judgment is an example into which the use of at least four out of the five methods enter, and generally the fifth also; and that it is a mere matter of the point of view, which method we are to regard it as exemplifying. He says, for example, 'Dogs bark' is an instance of the Method of Agreement, because it

means 'This dog, that dog, and the other dog bark' ; while 'Fire burns' is an instance of the Method of Difference, because what is compared is the state of things before fire was introduced on the scene and after it.¹ But in 'Dogs bark' the state of things before they bark and after it, is also compared ; and in 'Fire burns' our use of the words 'fire' and 'burns' implies general conceptions constituted by the perception of similarity between the present and other instances of fire, and the present and other instances of burning. The two examples are thus obviously examples of both methods at once, while the fact that they are so means that they are examples also of the method which he calls the Joint Method of Agreement and Difference. That all possible instances must be instances of all these methods, follows from the obvious and well worn truth, that we can make no affirmation with regard to any subject without making a corresponding negation. The statements that dogs bark and that fire burns, imply that dogs begin to bark, and that it begins to burn, and consequently that dogs were not barking, nor was it burning, before these processes respectively began.

There is thus no possibility of marking off any conceivable instance, as more properly falling under the head of an example of one of these methods rather than of any other. The Method of Difference is treated throughout as that which, where applicable, is a decisive criterion of truth, as compared with the Method of Agreement, to which it is said that a large amount of uncertainty attaches. This, however, is purely arbitrary, and depends entirely upon the point of view. In some of Mill's own examples we find, on the contrary, that the Method of Agreement is appealed to, to confirm the information given by the Method of Difference. -A bird, he instances, is taken from a cage and plunged in carbonic acid gas. It dies. That is an application of the Method of Difference.² The fact of its dying at once, it is contended, is sufficient proof that immersion in the gas was the cause of suffocation ;

¹ *Logic*, 3d ed., vol. I, p. 439, footnote.

² *Ibid.*, p. 399.

“at all events,” he goes on to say, “after one or two repetitions,” that is to say, after the Method of Difference has been supplemented by the Method of Agreement. In the example of the discovery of the cause of dew, he cites the case of the thermometer always registering a lower temperature when placed close to the bedewed object than when at some little distance from it, as an instance of the Method of Agreement.¹ We can regard it as such, if we put the emphasis on the word ‘always’ or some equivalent word. If we emphasize, on the contrary, the word ‘lower,’ it becomes an instance of the Method of Difference. Such a proof, at any rate, is as satisfactory a proof of the fact to be established as could be wished for; and has none of the uncertainty of the so-called Method of Agreement. The use of the adjective in the comparative degree is surely of itself enough to make it clear to the obtusest intellect, that it is an instance of the Method of Difference as well as of the Method of Agreement. It is, of course, an instance of the Joint Method also. If you use one thermometer and note the fall of the mercury, then it would come more properly under his conception of the Method of Difference. If you use two, and notice what they register respectively, then it would be more properly an instance of the Joint Method. There is clearly no genuine underlying principle of classification, in the distinctions between the various methods, which it is possible to follow out into individual instances. The charging of a Leyden jar is given as an instance of the Method of Agreement,² and the discharging as an example of the Method of Difference,³ but plainly such an example could be turned topsy-turvy without in any way damaging it. Of the law of refracted rays he says, that it “was ascertained by direct measurement, and therefore by the Method of Agreement.”⁴ The Method of Agreement may evidently mean anything, from the vaguest analogy to the most absolute verification of a theory by comparison with fact. Of what value, then, can its formula be, or what possibility can there be

¹ *Logic*, 3d ed., vol. I, p. 426.

³ *Ibid.*, p. 423.

² *Ibid.*, p. 422.

⁴ *Ibid.*, p. 440, footnote.

of applying it? According to its formula, we have to find two instances of a phenomenon which have only one circumstance in common. If we can find them, we may conclude that they are causally connected. No doubt we may; but such instances are never to be found; they do not exist. The formula, instead of being the formula of the preliminary imperfect method that he represents it as being, is the formula of the ideal of scientific investigation, always striven after, but never altogether attained.¹

The Method of Difference, too, plainly means one thing in one place, and another thing altogether in another place. Often, indeed ordinarily, it means absolute ocular demonstration of a fact, where, according to the current conception of inference, there is no room left for inference at all; and, for a writer who makes such fine-drawn distinctions between inference and observation that he must place Kepler's law in the latter category, it seems a strange confusion of thought thus to apply it. In reference to the proof of the first law of motion, Mill says the Method of Concomitant Variations had to be used, because "friction, the resistance of the air, etc." could not be got rid of altogether. If they could, "the case would have been amenable to the Method of Difference."² That is to say, if they could, we should have had the fact of uniform perpetual motion before our eyes, and there would have been nothing left to infer. The Method of Difference, however, is also used for the ground of an inference of this description: that because, in observed instances, ideas of a pleasurable or painful character form associations more easily and strongly than other ideas, therefore they will do so in all instances.³ The truth is that almost anything can be said in logic by means of algebraical symbols, ABC , abc , etc., and passed off as valid. Mill was certainly much more sparing in his use of such symbols than many subsequent writers, but when he has used them, they have not failed to mislead him.

¹ Cf. Lotze, *Logic* (Translation, Clarendon Press Series), 2d ed., vol. II, pp. 23 and 24.

² Mill, *Logic*, 3d ed., vol. I, p. 413.

³ *Ibid.*, p. 499.

The instances *ABC*, *abc*, *ADE*, *ade*, and so on, may stand for instances in which the agent and the thing acted on are the very same individual concrete subject and object, in the very same environment. Then the application of either method means that we have the fact inquired into before our eyes. Or they may stand for instances in which the agent and the patient are merely things belonging to the same class, — arsenic perhaps, but not the same arsenic; a man, but not the same man; or an animal, but perhaps not even one of the same species. The salient question, how far we may extend our analogies, concluding what we know to be true in one instance to be true in other instances; or, in other words, in how far, and in what circumstances, we may regard instances as being practically identical, is precisely what is left out of account in the methods altogether.

The Method of Concomitant Variations similarly means sometimes actual ocular evidence, sometimes inference by analogy.¹ The fact that bodies fall perpendicularly towards the earth, no matter how it rotates and travels, is cited as such an instance. It is plainly a matter of direct observation, combined with the deductive knowledge that the earth does rotate and travel. The commoner class of instances brought under this method are of a different sort altogether. They are such as the proof of the expansion of bodies by heat, which, of course, widely transcends the facts observed.

The Method of Residues is treated as if it were a method that we make use of in an alternative fashion with the other four, but what does it mean really? It means simply using such previous knowledge as we possess, to narrow the field of inquiry. It is the first thing that is done in every conceivable case of reasoning. There is no possible enquiry of any sort from which its application is absent. Let us take one of Mill's instances, the instance of Dr. Wells' discovery of the theory of dew, and see what the mental process employed really is. What we begin with is of course what Mill calls the Method of Residues, that is, the application of our pre-

¹ Mill, *Logic*, 3d ed., vol. I, p. 409.

vious well-established knowledge to narrowing down the matters of enquiry. We may, with Mill, leave out the strictly scientific generalizations with regard to the quantity of aqueous vapor that air, at a certain temperature, will hold, — though no one does, as a matter of fact, leave out in a real instance anything that he knows, and the mere supposition that he can do so is itself liable to be a source of illusion, — but, at any rate, we must not leave out of account the ordinary knowledge that every moderately educated European adult possesses. Such knowledge negatives at once a great variety of hypothetical explanations of the phenomenon, that might present themselves to a child or a savage. It negatives such hypotheses as that the dew sprang into existence out of nothing, that it reached the place where we see it without passing through the intermediate space, or that it exuded from the substance, say the glass plate, on which it appears. It negatives every hypothesis indeed, except the hypothesis that the dewdrops, immediately before they existed as water in its visible form on the bedewed object, existed somehow as water in its invisible form in contact with it. How that happens is the residual phenomenon, the sole matter left to be enquired into. It is well, however, to note what are the essential limits of such an enquiry. We cannot reconstitute for sense the actual fact that happens in the deposition of dew, as we conceivably might, if we had instruments immensely more powerful than any that we possess. What, then, can we do? At the most, no more than this: we can enquire what other phenomena there are in nature similar to the deposition of dew, and, if we know what goes on in the case of such phenomena, such knowledge may aid us in representing to ourselves what goes on in the case of the deposition of dew. Reason as a cognitive faculty is an extension of sense, but all that it can do for us in respect of facts that must forever remain hidden from sense, is to point out to us some fact with which we are familiar, and to say: “The fact that you are searching for is a fact of the same class as that, perhaps to all intents and purposes identical with it; and if you take the analogy of the

familiar fact as your guide, you will be able to explain much that would otherwise remain mysterious." Thus it can give us some conception of what happens when sound and light travel, by pointing to the familiar fact of wave motion in water, and telling us that their motion is wave motion also.

In the case of the dew, we have not far to seek for the familiar phenomenon. The conversion of vapor into water when we breathe on glass, or other similar facts, suggests the hypothesis that vapor is deposited from the air when the bedewed substance is colder than air. What do we do with the hypothesis? We proceed provisionally to treat it as an established truth and to deduce its consequences. When Mill comes to treat of Deduction, he tells us rightly that it separates itself into three stages, an Induction, a Ratiocination, and a Verification. The same thing is true of all reasoning. The first process is the induction, in other words, the hypothesis, the guess as to how the fact of which we have a fragment before us would, if we had it as a whole, really appear. Hitting on hypotheses that turn out right is the prerogative of genius. For the rest of the process, it is mainly care and industry that are required. In the present case, however, the application of previous knowledge left little choice but the hypothesis described. Having got our hypothesis, we next deduce from it some individual consequence (the ratiocination), and ascertain whether it accords with fact (the verification). The ratiocination in the present case would be, that some particular bedewed plate will be found to be colder than the air at a little distance from it. We try it. It comes out right. We find then that our theory has enabled us to explain a fact, or to make a prediction, as we choose to view it. The explanation of a fact is always, from another point of view, equivalent to the making of a prediction. If a theory enables us to make enough of such explanations and predictions as to eliminate chance, and if one never turns out wrong, then we say that it is a true theory. We have indeed in numberless instances no other criterion of its truth but this. We cannot submit such facts as the deposition of dew, or the wave motion of sound

and light, to the direct evidence of sense ; nor, unless we had an angel from heaven to converse with, to the evidence of testimony. We can only submit some of the consequences of such theories to sense, and test them. The account of reasoning which Mill gives in his chapter on Deduction is, in the main, true of all reasoning. The doctrine of the Inductive Methods is, I think, an excrescence on his valuable work. The salient difference between the process that he looks upon as Induction and that which he looks upon as Deduction, is that in the first the theory may be regarded as established to begin with, and we may take its consequences as certain beforehand, while in the second, the theory is a guess, which may be confirmed, if whatever we predict by it, or explain from it, turns out right. No hard and fast line, however, can be drawn between the two. All theories, at one stage of their history, have occupied an intermediate position. They have enabled predictions to be made with some confidence, and have themselves been confirmed when these predictions turned out true.

The above considerations are sufficient, I think, to make it clear that Mill's metaphysical theory, that causation is reducible to the mere constant conjunction of events, was a source of nothing but confusion to him in his logical teaching. A class of considerations that place in a strong light its inadequacy to explain the facts that it professes to explain, are those connected with that description of causation that in the Aristotelian system is known as the *causa materialis*. In his criticism of Hamilton's theory, Mill, no doubt, hardly goes too far in describing the latter's amazing fancy that causation involves an innate belief in the indestructibility of matter, as little better than a *mauvaise plaisanterie*. He misses, on the other hand, the interesting point that Hamilton brings out, that, when we analyze our conception of cause and effect, we find that "we think of the cause as containing all that is contained in the effect, the effect as containing nothing but what was contained in the cause." It is all very well for Mill to say that the cause that Hamilton refers to is *Materia*, and that

what all the rest of the world mean by a cause is *Efficiens*. But the rest of the world, both lay and philosophic, continually and naturally treat *Materia* as a cause quite equally with *Efficiens*. What, for example, to revert to an instance suggested above, can be more natural than to describe last night's rain as the cause of the floods in the rivers and of the pools of water in the streets to-day? The significant element in causal conjunctions of this sort is that, not only do they give us priority on the part of the cause and sequence on the part of the effect, but even after the effect is produced we continue to see the whole cause in it. Mill himself recognizes that the causal connection between the combination of oxygen and hydrogen and the phenomenon of water, is Transformation.¹ This is surely something very different from invariable conjunction, but the necessity of modifying the Humist canon in conformity with such a conclusion does not occur to him.

It is in the perception of this underlying identity between the cause and the effect that the intelligibility of causation, in so far as it is intelligible, consists. Hume remarks, with regard to such a sequence as that between the length of the arm in the lever and the force that it enables us to exert, that we know nothing about it *a priori*, any more than we do about such a sequence as that between the ignition of powder and the consequent explosion. In that, of course, he is perfectly right. The fancy that *a priori* knowledge, itself a contradiction in terms, has anything to do with self-evidence is a pure illusion. There is, however, it is obvious, a wide distinction between the sequence in the case of the lever and in that of the spark and the gunpowder. We can, as we put it, understand the one, but not the other. We notice, too, this about the sequence in the case of the lever, that it is difficult even to state it as the conjunction of two facts. It presents itself as indissolubly one, and any separation we can make between its beginning and its ending is obviously purely artificial. It is the case, of course, that in a lever of the first kind, an arm of a yard in length between us and the fulcrum,

will give us greater power than an arm of a foot in length ; but that is only a small part of the truth. The full truth would involve an expression of the quantitative concomitant variation between the length of the arm and the resulting power. Hence, in any practical instance of the use of the lever, we have not one conjunction of events presented to us, but an infinitude of conjunctions, crowded into each moment. We have a series without a break, and that is what conforms to our conception of a whole or a unity. At bottom, not only is the unity of the fact a series, but the unity of the thing also consists in its being a series ; though, in the latter case, it is further, as Kant observes, a reversible series. It thus happens that, in the case of the lever, our description of the cause, involving particulars as to the length of the arm, the force of the agent, the weight of the thing acted upon, and the fact of the exertion of the force, is a description also of the effect. A sequence of this sort is the ideal of causation. It is a case of causation which is all under our eyes, in which there is no gap left to fill up by inference. It is the only sort of causation that will correspond to Mill's conception of invariable unconditional antecedence. His example of such antecedence ¹ is the case of the presence of the sun, with his light not extinct and no opaque object between us and him, and daylight, an instance in which the same words that describe the cause describe the effect also. It is a self-subsistent whole, that suggests no further enquiry. The case of the spark and the explosion, on the contrary, is like the beginning and end of a sentence, with the middle left out. We have the two ends of the series, and a manifest hiatus between them. Such gaps it is the business of science to fill up. The interpolation of the missing links we regard as the explanation of the phenomenon presented. It brings us nearer to the perception of the fact as a whole, and thus we seem to approach a comprehension of it. With each link that is filled up, it must be observed that we reach a law of wider generality. Between the phenomenon of the beating of a drum and the sound that we hear, science

¹ *Logic*, vol. I, p. 350.

has interpolated the air wave; and not only is it the case that the connection between air waves and sound is a wider law than the connection between drum beats and sound, but the conception of wave motion as the cause of the sensation of sound suggested it as the cause of the sensations of light and radiant heat also. Hence we seem always to be approaching the same goal by different roads. On the one hand, the perception of an analogy gives us the clue to fill up a missing link in the series that we call a fact; on the other, every missing link filled up involves an extension of our analogies, an apparent approach to an ever receding unity.

The approximation to identity between cause and effect is something that admits of degrees. Suppose I paste some discs of white paper on a black surface; the result is piebald. It is hard to say whether 'Black and white is piebald' is more properly to be regarded as an identical proposition like 'Black is black,' or whether it is to be reckoned among the truths that we call empirical. If I move some distance off, the result is gray; or if I make the experiment with blue and yellow, the result is green. That the mixture of a blue pigment with a yellow one makes green, is beyond all question an empirical truth. It is not without surprise that most of us learn, in the first instance, that it does so.¹ Yet there are points at which it is hard to say whether the phenomenon presented is blue and yellow, or is green; and even when it is clear that it is green, we still continue to see the blue and yellow in the green, that is, the whole cause in the effect. The same thing is true of the blending of pressures in the parallelogram of forces. We have in such cases resemblance between cause and effect, and resemblance which is a clue to their identity. This very invariable conjunction that we hear so much about, what is it in truth? There is never such a thing in the world of concrete realities as the mere conjunction of two isolated facts. Not only does fire cause the sensation of heat, but the intensity

¹ The continuity between simple and heteropathic causation is also seen in the case of sound, in the insensible transition from a series of noises to a musical note.

of the sensation is in proportion to the size or nearness of the fire, and varies as it varies. The concomitant variation between the number of vibrations and the pitch of musical notes is a familiar illustration of the same principle. Such concomitant variations are brought under the head of constant conjunction, by supposing them to be due to the repetition of some imaginary unit in the cause and in the effect at once. The notion is strained, as the unit is entirely fictitious; still it may be useful as assisting us to understand what this constant conjunction is, and in what its significance lies. The equivalent multiplication of the supposed unit would be what in mathematics we call proportion, and which is the very type of analogy. It seems that constant conjunction itself is therefore simply the most elementary form in which this all-pervading principle of proportion, fitness, resemblance, and finally identity, between cause and effect, the very existence of which is denied, presents itself.

Mill, like Hume, throughout treats any resemblance that makes itself apparent between causes and their effects as a mere source of illusion. This is due to his confining his attention to examples of a very special character, drawn for the most part from chemistry. In practical enquiries some resemblance between something in the cause and something in the effect, the track and the foot, the wound and the instrument that inflicted it, the substance on the instrument and human blood, is ordinarily all that gives us a clue to the solution of our problem. It is to be remarked, however, that mere resemblance in itself warrants no inference. It is only resemblance, in as far as it indicates identity, that does so. How widely the rule holds good that resemblance is an indication of that sort of identity that warrants inference, is a fact that has been, in the main, overlooked by logicians. The known equality of two objects always imports that they have been made equal to each other. Their equality is a characteristic that necessarily has a history. Paint from one pot presents a resemblance, no matter what surface it covers, to other paint from the same pot, and a resemblance that may guide us to its origin. In organic life, Nature works by the same rule. Resemblance is

there, if sufficiently essential, an infallible clue to origin. We have, in such a fact as this, one of that class of widely prevalent laws which Aristotle, more than two thousand years ago, detected and named "imitations of first principles."¹ Closely connected with it is the fact that the changes which one individual subject undergoes are largely the equivalent of the differences between various individual subjects of the same class. So much so is this the case, that even so accurate a writer as Mill ordinarily confounds the two. His application of all his methods refers miscellaneously to changes that take place in individual objects, and to differences that exist between objects of the same class.

We find a striking imitation on the part of Nature of the first principle last alluded to, in the fact that the development of the embryo is an epitome of the development of the race. The existence of such imitations of first principles helps to account for some of the marvellous guesses of philosophy. In England and France, the prevalent tendency is to slight the attention paid in Germany to matters of abstract thinking. We must not forget, however, that Leibnitz, with his law of the continuous gradation of created beings, anticipated by two hundred years the discovery of the evolution of species; and, in his theory of causation, came very near to an anticipation of the discovery of the conservation of energy. The attention paid to first principles in Germany also brought it about that, fifty or a hundred years ago, historical questions were treated there, not only by Hegel, but long before his day by Lessing, in a manner in which we are only beginning to treat them now in England, in the light of Darwin's all-embracing theory. If we ask, moreover, whence it was that Carlyle drew his characteristic doctrine that nothing survives in the world but what deserves to survive, — a corollary, as one would think, from the law of the survival of the fittest, — the answer must be that it was assuredly not from any scientific source, in the narrower sense of that word. It had filtered down to him, through Goethe, from Spinoza and Leibnitz, and had its origin in the

¹ *Metaphysics*, bk. I, ch. VI *ad finem*.

conception, common to these two great thinkers, of evil as something negative and necessarily self-destructive.

If the causal relation consisted in nothing else but the constant conjunction of one physical fact with another, then, of course, the attempt to infer from physical facts a supersensible cause would be necessarily an illusion. As that view of the causal relation, however, though much in fashion at present, will not in any way square with what it has to explain, the attempt at such an inference is not, at any rate on that simple and obvious ground, at once out of court. Not only in practical enquiries, but in the enquiries of such sciences as geology and archaeology, we start from an effect only as our datum, and endeavor, from what we can discover as to the nature of this effect, to reconstruct the whole of which it is a fragment. A phenomenon that presents a manifest adaptation of means to ends, while what or who brought about this adaptation remains unknown, will always be for us a fragment that suggests the necessity for some explanation. It is easy to label the inference, that such instances of adaptation must be the work of some mind more or less analogous to the human mind, as 'anthropomorphism'; and thus think that we are done with it; but who will tell us where legitimate inference ends, and where this anthropomorphism begins? There is a sense in which it is anthropomorphism for me to infer that the feelings of another are like my own from the similarity of their outward expression; but this anthropomorphism is not an illusion. At what point does it begin to be one? How far may we legitimately press the inference of purpose as manifested in human works to the inference of purpose as manifested in Nature? That is the main theme of Kant's great work. Unfortunately any one can find there any answer which he desires to find. Huxley and Lilly can quote Kant with equal approval, and, for that very reason, with equal futility. His conception of the universe of sense and thought is one of several universes separated by impassable chasms. One chasm divides the things of sense from the things of intelligence; another, the truths of speculation from the truths

of practice. Hence, the existence of God may be true from the practical point of view, but untrue from the speculative, so that we are left no wiser than we were before. The conception of the existence of any such abysses between one class and another of the facts of Nature and Mind, is a misleading one. There is, on the contrary, a perfect solidarity discoverable between them all, between our most rudimentary localization of a sensation, and our insight into the deepest law of physics or of thought. It took mankind many ages to evolve the conception of Mind as the cause of the order and beauty observable in the universe, and to get rid of "the vain theories of the earlier ages."¹ It may take them many ages more to so modify the conception as to bring it into harmony with their ever widening knowledge. It seems hardly possible to believe, however, that, once discovered, such a conception will ever be altogether cast aside or lost to the world. It may be that the belief in Mind as somehow immanent in Nature, is destined to be the belief of the future; but if it is, such immanence will still unquestionably have to be reconciled with the fact of a forethought that has planned the processes in which it is immanent.

WILLIAM W. CARLILE.

¹ Aristotle, *Metaph.*, bk. I, ch. III *ad finem*.

THE NATURE OF INTELLECTUAL SYNTHESIS.

IT is one of the commonplaces of modern philosophical theories that knowledge is the result of the synthetic activity of consciousness. There is, perhaps, no notion to which appeal is so frequently made in current epistemological discussion as that of Synthesis. The significance of Hume in the history of speculation, it is often remarked, consists in the fact that he demonstrated the impossibility of accounting for knowledge from the standpoint of individual impressions and ideas. His investigations proved conclusively that if all mental states are distinct and separate existences, it is impossible to discover any principles of universal and necessary connection which afford at the same time any justification of their use. And the historical expositions with which all are familiar, proceed to show how Kant answered the problem which his predecessor had pronounced insoluble, by bringing to light the synthetic activity of consciousness, and proving that knowledge is the result of a construction on the part of the mind itself. The justification of synthetic propositions *a priori*, — that is, of propositions which do not depend upon this or that particular experience, but are valid for all men, — is to be found in the fact that the thinking process which determines the nature of these propositions is itself a synthetic unity.

Historically, then, we find that the notion of Synthesis was brought into prominence in modern times through Kant. Moreover, the influence of the Kantian system — and especially of the *Kritik of Pure Reason* — has been so great that there is, perhaps, danger that this principle may become obscure from its very familiarity. For, as the *K. d. r. V.* has formed an important factor in nearly everybody's philosophical education, it is probable that one's mode of conceiving of Synthesis has, consciously or unconsciously, been influenced by Kant. It may, therefore, be advantageous, before attempting any exposi-

tion of this notion, to undertake a brief inquiry regarding the nature of the function which this principle is called upon to perform in the Kantian theory of knowledge.

It will, perhaps, make the matter plainer if I first state my conclusions. The thesis which I think can be established without going into any very detailed examination of particular passages in the *K. d. r. V.*, is that Kant always conceived of Synthesis as a process of externally joining part to part. The parts are supposed to be combined together in an order which possesses strict universality and necessity, but yet they are regarded as really existing things which enter externally into the nature of the whole. In short, we may say that the product of Synthesis remains for Kant a mechanical, and not an ideal, whole. I shall also attempt incidentally to show that the negative conclusions of the first *Kritik* are the immediate consequences of the external way in which he continued to think of this fundamental principle. It may also be well to add here, in order to anticipate an obvious objection, that there can be no question that the passages in which Kant exhibits the unity of Apperception as the highest principle of Synthesis *can be read* so as to refute the interpretation which I have undertaken to defend. Indeed, these passages may be said to contain in germ the whole of the newer doctrine of Synthesis which has been developed since Kant's time. Nevertheless, there can be no doubt that Kant builded wiser than he knew. Whether or not we accept Fichte's conjecture that the Holy Ghost spoke truth through Kant of which the latter did not dream, both the form in which he stated his problem, and the consequences he deduced from his system regarding the limitation of knowledge, prove conclusively that he could never have realized the full reach and significance of the doctrine of the synthetic unity of apperception.

The mechanical nature of Kant's conception of Synthesis is at once evident from the description of Judgment given in the Introduction to the *K. d. r. V.* For in that account he assumes the correctness of the traditional view of Judgment, as a process of passing from a given subject-notion in order to

unite a predicate with it. This doctrine of Judgment may be fairly said to be based upon an analysis of the spoken or written proposition, rather than upon that of the thought-process of which the proposition is the expression. In speaking or writing, the parts of the proposition fall outside each other: the subject comes first and the predicate later. The same relations are therefore supposed to hold true of the parts of the Judgment. Where the predicate is not already contained in the subject, as is the case in analytic propositions, Judgment consists in going beyond the subject to a predicate which lies completely outside it. Accordingly, we find that the problem which Kant sets for himself is to discover how it is ever possible, with full assurance of the universality and necessity of the process, to go beyond a given concept *A* to a foreign predicate *B*, and also to determine the limits of the validity of this procedure. It is true he maintained that, so long as we are dealing merely with concepts, the analytical function of thought alone has validity, and no synthetic process can find justification. The point which I wish to bring out in this connection, however, as indicative of Kant's thought, is the *ideal* of synthesis here set forth, and the external character of the function which this principle is called upon to fulfil.

To pass on now to our next argument, we find Kant maintaining that the synthetic use of understanding is only possible in that transcendental or real function by means of which it unites a manifold of impressions into a whole for knowledge. "The same understanding, and through the same operations by which in concepts it achieves through analytical unity the form of a judgment, introduces also through the synthetical unity of the manifold in perception a transcendental element into its ideas."¹ What we have to follow here is the process by which Thought transforms the manifold, given in sense, into a world of objects for experience. This work is accomplished through the synthesizing activity of consciousness. Now in the operation of that function Kant maintains we can distinguish three neces-

¹ *Werke*, Bd. III, p. 99; Max Müller's translation, p. 70. The references to Kant's works are to the Hartenstein edition of 1867.

sary steps or stages. There is a synthesis of apprehension in perception, a synthesis of reproduction in imagination, and a synthesis of recognition through concepts. It is very difficult to do justice to Kant's account in a summary statement. For beneath the synthesis of the empirical manifold there runs a synthesis of pure or *a priori* elements to which he constantly refers as the explanation of the former connection. For example, in the first two stages which we have enumerated, consciousness is described as operating with the pure *a priori* manifold of sense, Space and Time. Space and Time only become wholes through a synthesis of the manifold which sense offers in its original receptivity.¹ It is clear, however, that this transcendental synthesis at once involves the connection of the empirical elements which are in Space and Time, and furnishes at the same time the explanation of the necessary character of their union.

It may, perhaps, be worth while to turn aside from the main line of our inquiry for a little, in order to investigate somewhat more closely the nature of this bewildering *a priori* process to which it seems so difficult to ascribe any concrete meaning. Without venturing to express any opinion regarding the exact nature of Kant's conception of the *a priori*,² we may, I think, see what real significance it had for his system. As we learn from the Introduction, and from numerous passages throughout the *K. d. r. V.*, universality and necessity are the unfailing criteria of the *a priori* character of any synthesis. Experience never gives us more than a mere factual union of different objects, and carries with it no insight into the necessity and universality of this connection. The function, therefore, which the *a priori* synthesis is called upon to perform, is to guarantee the objective character of the judgments which enter into and constitute the nature of our experience. But, since Kant took

¹ Cf. *Werke*, Bd. III, p. 118, note; Müller, p. 89.

² Vaihinger has shown (*Commentar zu Kant's Kritik*, Bd. II, pp. 80 ff.) that Kant really supposed the *a priori* forms to exist ready in the mind, in a way almost identical with the doctrine of innate ideas. We are concerned here, however, to determine only the *function* of the *a priori* in the Kantian system, not the nature of its existence.

for the object of his inquiry the process by which knowledge is attained in the consciousness of the individual, rather than the nature of thought as such, and as, moreover, he assumes the correctness of Hume's description of the empirical consciousness, he is compelled, in order to explain the universality and necessity presupposed in our judgments, to have recourse to a synthetic process *a priori* which goes on within the shadowy realms of pure thought.

In order to awaken popular sympathy, it is only necessary for one to pronounce on the uselessness and absurdity of any such '*a priori*' or 'transcendental' function. Instead of doing this, or delaying to criticise the machinery which Kant introduced to account for synthetic propositions *a priori*, it is, I think, more important to note the real significance of the conception. For, if we free this from the accidental peculiarities which attach to it in Kant's system, it is evident that to assert the existence of synthetic judgments *a priori*, means only that we *do* succeed in reaching conclusions, into the universality and necessity of which it is possible to see. Or, in other words, it is to assume merely the possibility of certainty with regard to our knowledge. Furthermore, this certainty (as Hume showed) cannot be justified in any way from the facts of the purely empirical consciousness, but forces us beyond it. Without attempting to defend Kant's mode of conceiving this *a priori* function, it is possible to recognize the importance of bringing to light this objective aspect of Thought. Kant's description of pure or *a priori* processes of Synthesis, then, will not be without meaning, if we understand that his object is to get beyond the individual consciousness, with which he began his investigation, to the objective or necessary conditions presupposed in knowledge as such.¹

After this digression, we may now return to the examination of the process by which knowledge is constituted. The synthesis of sense and that of imagination (which are really

¹ Since the above was written my attention has been called to an article by Kühnemann in the *Archiv f. syst. Phil.*, I, 165, which seems to give the same interpretation of the *a priori*.

inseparably connected and presuppose each other¹) result in a collocation of images which are not yet objects for knowledge. Before the images, thus held together by imagination, can enter into the unity of experience, the understanding must recognize the necessity of the rule which the synthesis has hitherto been following blindly. That is, the connection must be justified by the recognition, on the part of the understanding, that the process has taken place in accordance with the nature of the highest principle of Synthesis, the unity of self-consciousness. As I have already admitted, this latter doctrine, *taken by itself*, can easily be interpreted so as to carry us beyond the province of the mechanical categories. But the manner in which the schemata, 'sensuous on one side and intellectual on the other,' are interpolated to bring the sensuous image into connection with the pure categories, indicates that even here Kant is thinking of the synthetic process as an external union of disparate elements. And this impression receives further confirmation by an examination of the highest application of the categories in the passages treating of the Analogies of Experience.

"These Analogies are nothing but principles for determining the existence of phenomena in time according to the three modes of the latter."² Even when phenomena are determined by the highest of these principles, that of Reciprocity, they do not form a whole of experience in any true sense. For, although the phenomenal objects cohere according to necessary laws, their connection is still an external relation which exists *between* them. The categories of Relation are external bonds which fix and objectify the temporal relations of phenomena, not ideal principles which transform perceptive togetherness into an intellectual unity. As a consequence, each object refers to something outside itself, and so gives rise to an infinite regress. In spite of the reference to the Unity of Apperception, nature exhibits no true unity, for its objects still retain in large measure the characteristic isolation which belonged to

¹ *Werke*, Bd. III, p. 127; Müller, p. 91.

² *Ibid.*, Bd. III, p. 191; Müller, p. 188.

them before their union with the category. Even when these highest categories have done their work, thought has constituted no systematic whole of experience, within which ideal unity objects might fall as mutually determining parts. Our experience remains to the last an external aggregation of perceptive objects standing outside each other in Space and Time, which by their very nature forbid the possibility of complete unification.

Another point which may be put in evidence, is the opposition which Kant maintains between Analysis and Synthesis, as that between the formal, or logical, and the real, or transcendental, functions of thinking. The analytic activity of Thought, as we have already seen, operates in accordance with the Law of Identity, when we are concerned with the relations of concepts to each other. From this field Synthesis is excluded. It, however, finds valid employment in unifying the manifold given in Perception, — a field in which Analysis is powerless. Each thought-activity, therefore, is regarded as having its own separate function to which the other is not suited, and each is supposed to work in isolation from the other. But Analysis cannot be opposed to Synthesis in this way, unless the latter is regarded as a process of building up a whole, in a way analogous to that by which material wholes are constituted. When we are dealing with a material thing, the process of putting together parts *is* the opposite of that of decomposition or disintegration. In an intellectual process, as I shall try to show later, this opposition has no meaning. Here Analysis and Synthesis presuppose each other, and must go hand in hand. Only if we assume that, in thinking of Synthesis, Kant must have had an image of material processes before his mind's eye, is it possible to explain his separation and opposition of two aspects which are involved in every act of Thought.¹

¹ Kant does say that Analysis always presupposes a previous Synthesis, but this is only because it is impossible to disjoin what has not already been conjoined. (*Werke*, Bd. III, p. 115.) The passage does not, I think, afford any ground for supposing that he believed Analysis and Synthesis to be involved in one and the same activity.

The most convincing proof that Kant never got beyond a mechanical view of Synthesis is found, however, in the conclusions which he drew from his system, regarding the limitation of knowledge. For it might possibly be maintained that his formulation of the problem, and earlier utterances, are to be taken as merely provisional, and not as indicative of his real position. And it may well be admitted that it is always necessary, in reading the first portions of the *K. d. r. V.*, to attach considerable importance to what Professor Caird has called Kant's 'pedagogical method' of going beyond and transforming the point of view which he at first provisionally adopts. But the negative doctrines which are stated at the end of the *Analytic*, and worked out more fully in the *Dialectic*, were written after the positive part of the system had been completed, and are, moreover, of such importance in themselves that there can be no doubt that the ideal of knowledge which they presuppose represents Kant's final view. And the arguments upon which these conclusions are based rest, as we shall see, upon that conception of Synthesis which has been found to exist in the earlier passages of the *Kritik*.

The valid use of concepts presupposes that perceptions are given in experience to which they are applied. "What is required of every concept is, first, the logical form of a concept in general; and, secondly, something to which it refers. . . . The only way in which an object can be given to a concept is in perception (*Anschauung*). . . . All concepts, therefore, and with them all principles, though they may be possible *a priori*, refer nevertheless to empirical perceptions, that is, to data of a possible experience. Without this they would be a mere play, whether of the imagination or the understanding, with their respective ideas."¹ "It is for this reason that an abstract concept is required to be made *sensuous*, that is, that its corresponding object is required to be shown in perception, because without this the concept (as people say) is without *sense*, that is, without meaning."² "It might therefore be

¹ *Werke*, Bd. III, p. 211. Müller, p. 208.

² *Ibid.*, Bd. III, p. 211. Müller, p. 209.

advisable to express ourselves in the following way : The pure categories, without the formal conditions of sensibility, have a transcendental character only, but do not admit of any transcendental use ; because such use is in itself impossible, as the categories are deprived of all the conditions of being used in judgments, that is, of the formal conditions of the subsumption of any possible object under these concepts. Since, therefore, as pure categories, they are not meant to be used empirically, and cannot be used transcendently, they admit, if separated from sensibility, of no use at all. That is, they cannot be applied to any possible object, and are nothing but the pure form of the use of the understanding with reference to objects in general, without enabling us to think or to determine any object by their means alone." ¹

A multitude of passages to the same purpose might easily be cited, for this is a doctrine which is constantly reiterated throughout the whole of the *Dialectic*. On examining these statements a little more closely, however, there seem to be two ways in which they may be understood. One might take them as simply equivalent to the assertion that thought cannot operate in a vacuum, but must always take the facts of sensuous experience as its datum. Or, secondly, their meaning may be that, before we can have valid knowledge about anything, sensuous 'matter' *corresponding to that object* must either be actually given, or at least be conceivably capable of being so given. The first proposition asserts that, in attempting to understand the world, we must begin with our perceptive experience of it ; the second demands that, in the case of each 'object of knowledge,' the appropriate matter be furnished for subsumption under a concept. Now I venture to think that it is not unusual for one, without clearly realizing this distinction, to adopt the consequences of the second of these positions out of sympathy for the undoubted truth contained in the first. Kant brought philosophy back from the fruitless attempt to evolve knowledge out of concepts by purely logical processes, by showing that these latter could only result in the thought of

¹ *Werke*, Bd. III, p. 216. Müller, p. 216.

‘an object in general,’ and were utterly incapable of furnishing the determination necessary for a concrete object of experience. The great service which the Dialectic really performed in this respect, by overthrowing the dogmatism of eighteenth-century Rationalism, is to a nineteenth-century mind a strong point in its favor. But to overthrow Rationalism, it would have been sufficient to show the barrenness of thought when divorced altogether from the reality given in perceptive experience. Kant, however, as I shall proceed to show, held to the doctrine contained in our second proposition, and on this view is based his denial of a constitutive function to the Ideas of Reason.

When we turn to the different destructive arguments of the Dialectic, it becomes clear that they all rest ultimately on the impossibility of any object *corresponding* to the various Ideas of Reason being given in experience. Thus in the first Paralogism of Psychology we find Kant arguing: “So far from being able to deduce these properties [Immutability, Immortality, etc.] from the pure category of substance, we have on the contrary to lay hold of the permanence of an object given in experience, if we wish to apply to it the empirically useful concept of substance. *In this case, however, we had no experience to lay hold of.*¹ . . . For, though the Ego exists in all thoughts, not the slightest perception is connected with that idea by means of which it might be distinguished from other objects of perception.”² In the proof of the Antithesis to the Second Antinomy — that there exists in the world nothing simple — Kant’s argument is simply that no perception of anything corresponding to a simple object can be given in any possible experience.³ It is the lack of the appropriate ‘matter of perception,’ necessary to convert the mere concept of a Supreme Being into a real object of knowledge,

¹ Italics added.

² *Werke*, Bd. III, p. 587. Müller, p. 304. Cf. also *Werke*, Bd. III, p. 286. Müller, pp. 330, 344, 345.

³ Hegel puts Kant’s argument as follows: “The entire experience of our seeing, feeling, etc., reveals to us only the compound. Also the best microscopes and sharpest knives never enable us to reach the simple. Reason then must not assume it either.” — *Werke*, Bd. III, p. 217.

that invalidates the Ontological argument, to which the Cosmological and Teleological arguments ultimately go back. That in every case a valid object of knowledge can only come into existence when the matter from which it is to be made can be furnished by perception, is so clear from the whole course of the Dialectic that it seems superfluous to cite more passages in support of the statement.¹ It is, I think, already sufficiently evident that the synthetic activity, by means of which the mind makes its objects, is confined to cases where the 'matter' necessary for this construction can be given in sense perception. Cognition of supersensible objects is pronounced invalid, not because there is no datum from which Thought may start, but because nothing *corresponding to* the object which we claim to know, can from the very nature of the case be given in perception. The Category is at hand ready to do its work; there is, however, no 'manifold of sensation' to which it may be applied, and from which it can derive the definiteness and specification which necessarily pertain to an object of knowledge. And so we are left with the conclusion that only objects which are in Space and Time are capable of being known, for the material out of which objects are fashioned is not given except under these forms.

Although it has obviously been impossible to undertake here an exhaustive examination of special points in the *K. d. r. V.*, the fundamental character of Synthesis as it was employed by Kant and some of its more important consequences have, I hope, been made clear by our discussion so far. We have found that Kant must have interpreted the statement that experience is a compound, in the most literal and external fashion. Each object of knowledge is taken as really composed of a contribution from sense and a contribution from understanding. These elements really enter into it, and can be analyzed out of it, as a chemical substance is decomposed into its elements. The synthetic character of thought, which Kant brought to light, is conceived by him as analogous to a process of mechanical fabrication, or chemical combination.

¹ Cf., however, *Werke*, Bd. III, p. 511; Müller, p. 663; *Prolegomena*, § 34.

The new wine of the Critical Philosophy was still contained in eighteenth-century bottles.

So far I have not attempted any positive statement as to how Kant's conception of this principle must be transformed. There are two reasons which might be given in justification of the course we have been following. In the first place, consciously or unconsciously, we are almost certain to think of Synthesis through the images which the *K. d. r. V.* has made so familiar to us; and secondly, here, as so often, Kant enables us to see beyond the conclusions in which he himself rests. In going on to indicate how it is necessary to transcend his way of conceiving Synthesis, we shall then be frequently following the direction which he himself has marked out. It was Kant's great merit to show that thinking is synthetic; *i.e.*, that it is not confined to a merely formal use, but is directly concerned with the nature of real things. For real things, at least in so far as they are of any importance for knowledge, depend for their very existence upon the synthetic activity of thought. But although he admitted that the purely logical use of understanding does not serve in the least to extend our knowledge, and 'can never carry us very far,' it was still retained alongside of Synthesis as a real and separate characteristic which belonged to the nature of thought.

In going beyond Kant, one must in the first place assert that the distinction between the real and the formal or logical function of thought is a fiction. All thinking is concerned with the nature of reality. Judgment, as a process of operating with concepts which have been divorced from real things by abstraction, has no existence outside treatises on Formal Logic. It will not be difficult, I think, for one to convince himself that every real judgment is an activity by means of which thought seeks to make some part of the real world (and hence the world as a whole) more fully intelligible to itself. If one adopts the view that Judgment deals only with ideas, it is difficult to see how, after having determined, according to the rules of Formal Logic, the consistency of one's

thoughts, the horrible suspicion can be averted that perhaps, after all, the whole fabric of supposed knowledge may not be true of reality. When we attend, however, to what takes place in consciousness, when we actually *judge for ourselves* and do not merely repeat meaningless propositions like, 'Man is mortal,' 'Socrates is a man,' the inadequacy of the definitions which make Judgment consist in the connection or separation of ideas becomes evident.¹ The very essence of the judgment-process consists in going beyond ideas and professing to specify the nature of something real. I do not wish to discuss here the question, how it is thus possible for Judgment to affirm a relation that holds true beyond itself. That would be to raise the whole problem, how knowledge is possible at all. It is at once evident, however, that we are required to assume: (1) that the judgment function is something more than a psychological process which exists in a single time-moment; and (2) that the real world to which we refer, falls, at least partially, within our thought.

I have already said that the description which Formal Logic gives of a Judgment, as a process of passing from a subject to a predicate notion, is based upon an analysis of the Proposition. A Judgment, however, is a whole, and is not made up of independently existing parts, like the Proposition. It may be urged, nevertheless, that it is always possible to find within a judgment elements which correspond to Subject and Predicate. The answer to this is, that differences are just as essential to the nature of Judgment as identity. A judgment always exhibits the identity or unity of different elements or aspects of reality. What must be denied, however, is that the starting-point of the process is a whole without differences, — a Subject which is subsequently qualified by the addition of a foreign Predicate-notion. It is possible that it may still be objected that all judgments presuppose the existence of concepts. May we

¹ According to Sigwart "the act of judging consists in the thought by which two ideas are consciously unified" (*Logik*, Bd. I, p. 63). Wundt, on the other hand, finds the essence of Judgment to consist in the Analysis of a *Gesammtvorstellung* into its elements (*Logik*, Bd. I, pp. 154 ff.).

not have a concept of an object without making any judgment whatsoever? This question might fairly be answered by pointing out that concepts also presuppose that judgments have taken place. The objection, however, rests upon the assumption that a concept is a fixed and substantial existence which maintains itself permanently, apart from any activity of consciousness. The concept is regarded as something lifeless, something which has within itself no capacity of development, but can be altered only by external modifications. To support the contention, it must either be supposed that the concept once formed, though the product of thinking, no longer requires the activity of intelligence to support it in consciousness; or, secondly, that it is possible to *think* a concept without making judgment regarding it. The first supposition is seen to be untenable as soon as we ask the question which Berkeley has taught us to raise: What *kind* of existence can the concept be conceived to possess under such circumstances? Its supposed existence rests upon the false idea that we can separate entirely the product of thought from the process of thinking. And, secondly, one may easily convince himself by actual experiment of the absurdity of supposing that it is possible to think of something without making any judgment regarding it. For it will be found that it is impossible to apprehend any object as absolutely simple, and, if differences are united in our thought of anything, we have already made it the object of a judgment.

It seems impossible, therefore, to maintain any essential difference between Conception and Judgment, or to distinguish them as earlier or later in time. One must rather regard a concept as the embodiment of a whole series of judgments. The concept of anything may be said to be a shorthand formula for the judgments that we are accustomed to make regarding it. Or, perhaps, it would be truer to say that our concept of an object at any time represents the permanent judgment, or implicit series of judgments, which consciousness is then affirming of it. A concept, then, is simply a permanent habit of judging about any content.¹

¹ Cf. Bosanquet, *Logic*, vol. I, p. 41.

If this interpretation be accepted, the statement that our starting-point in Judgment is the concept may be allowed to stand. It will now only signify, however, that we must set out from what we know. In seeking to specify and determine any part of reality more fully, our actually existing knowledge is the datum which is modified and supplemented. It would be a mistake, then, to suppose that the datum is ever merely a raw, unrelated 'atom' of sense. No matter how far one goes back in the development of consciousness, he will not come upon anything which is passively given. Nor is experience *logically* divisible into a 'matter of sensation' and a contribution from understanding. For consciousness itself is always a unity which takes the form of Judgment. The various stages of conscious life differ indeed in degree of explicitness, but are identical in essential character. In the more fully developed stages, *systematic* unity of whole and parts is more easily recognized than would be the case in its less advanced condition. The earlier consciousness, nevertheless, like the later, is a judgment, a whole into which differences enter, and not a mere lump of passive sensation. It is, then, a false theory of Judgment which describes it as an advance from the consciousness of a simple subject, which might be represented by *A*, to that of its relations with a 'foreign predicate,' resulting in the connection *A* is *B*.

The symbolic method of representing Judgment is another snare which always lies in wait for the writer on Formal Logic. It is a very serious question whether the symbolic representation of intellectual processes by circles, letters, and signs denoting numerical operations, does not always promote confusion rather than correctness in thought. It is certain that no external images of this kind can adequately exhibit the nature of Intelligence, and that all are open to the most serious objection. If, however, judgments *are* to be expressed symbolically, it must be borne in mind, not only that the form of Judgment belongs already to the consciousness which forms the datum, but also that the result of the further determination of the latter should find place in both parts of the proposition.

That is, since Judgment is a synthetic activity which transforms the whole content from within, the modifications to which it gives rise are not adequately represented as additions attaching themselves to the Predicate side of the proposition. If our way of judging regarding the real world, or some part of it, be represented by $A=B$, the result of a new thought-determination is not $A=B+C$. Subject and Predicate must be exhibited as developing *pari passu*, and our formula should rather read, $a=\beta$, or perhaps better still, $A(a, \gamma, \delta, \text{etc.})=B(\beta, \eta, \theta)$.¹ Although this statement has defects, it does not, like the old formula, lead one to suppose that Judgment supplements a simple datum by the addition of qualifications which lie outside it. Nor does the process appear to be an advance to something entirely new, which turns its back, as it were, upon the datum. For we see that it is the latter which emerges in a new form, though without loss of its identity, at the other end of the process. This transformation through which an identical content passes is the result of the activity of consciousness bringing to light, and relating within the systematic unity of the judgment, elements and differences hitherto unrecognized. The result of the process is to put the old in a new form. It is a process of development which results, here as everywhere, in increasing differentiation of parts, which are yet connected in a closer and more systematic unity.

What has preceded brings us to notice more explicitly the relative positions of Analysis and Synthesis in the evolution of thought. It is plain, from what has been already said, that these are correlative aspects or moments of thinking which mutually presuppose each other. If analytic reflection did not bring to light differences, there would be nothing for Synthesis to do; and if these differences were not comprehended as parts of one system, they would not be parts at all, but simply disparate units. There can be no Analysis without Synthesis, and no Synthesis without Analysis.² This statement does not

¹ Cf. Bosanquet, *Logic*, vol. I, p. 86.

² It was Fichte who first clearly grasped the relation between Analysis and Synthesis. The statements in the *Wissenschaftslehre* (*Werke*, Bd. I, pp. 115 ff.) indicate the great advance he had made beyond Kant's position.

merely imply that these operate alternately upon every content, as two different functions or modes of activity. We rather mean to express the fact that Intelligence is a two-edged function, which unites while it separates, and separates while it unites.¹

Synthesis as a process of intellectual construction, so far from being opposed to Analysis, includes the latter within it as an indispensable aspect of its own activity. For, when we are dealing with *thoughts*, the opposition between the process by which things are put together, and that by which they are taken to pieces, has no longer any meaning. It cannot be repeated too often that the product of an intellectual construction is *ideal*, not sensuous. That is, an object of knowledge is not the result of fusion, in mechanical or chemical fashion, of discrete psychological ideas which exist separately in different moments of time. For even if it could be shown how such psychical elements are held together, the product of their union would differ essentially from what is denoted by the expression 'unity of knowledge.' It is possible, of course, to conceive of psychical processes being fused together so as to form a sensuous unity or continuum; but this is *not* identical with that ideal connection of meanings to which synthetic intelligence gives rise in the act of judgment. I have else-

¹ I take from Mr. Bosanquet the following example, which seems to me to bring out excellently the mutual interdependence of Analysis and Synthesis when dealing with a concrete content: "If a watch is put into my hand with instructions to find out what makes it go as it does, I have primarily a thing in space as the given whole, and indefinite wheels, springs, etc. (which as yet I cannot distinguish by position or characteristic shape) as given parts. No doubt *in space* all the parts which I shall need to learn are given *in position* within the whole, and so we tend to describe the problem as one of Analysis, in contrast to the other (in which I had to find out or imagine the position of the parts in the whole) as Synthesis; and these titles serve well enough as superficial descriptions of certain cases to which judgment and inference are applied, not of *any* judgment or inference as such. But the whole is not, in the latter case any more than in the former, given as an intelligible machine, nor are the parts given within the whole of Knowledge because they are within the whole of space. In other words, to see the escapement wheel lying inside the watch does *not* 'give' me this wheel as a part of a mechanical arrangement; to know it as a part of *such* a whole I must understand it; and in understanding it, *i.e.*, in my analysis, perform the synthesis of the watch as a definite mechanical contrivance." — *Logic*, vol. I, p. 102.

where pointed out, that when the falsity of the 'atomistic' view of consciousness, which the Kantian system presupposes, has been shown, it by no means follows, as some modern psychologists have supposed, that the principle of Synthesis is no longer required to account for knowledge.¹ For the continuous wholeness of conscious processes, which it is the merit of modern psychology to have substituted for the 'separate and distinct' ideas of Hume, is after all a merely factual combination of psychical existences, and without the synthesizing and interpreting function of Thought would, like the unrelated 'atom' of sensation, be 'as good as nothing for knowledge.' For it must be emphasized that a system of knowledge is wholly different in *kind* from any combination of mere psychological ideas. Synthesis, in so far as the word has any application in a theory of knowledge, denotes the process by which fragmentary contents or meanings are systematized and ideally connected, and is quite distinct from any combination of ideas on the side of their sensuous particularity. If one should insist on making existence in a particular time-moment the sole test of reality, it would be necessary to admit that Synthesis is not concerned with the real, but with the ideal. Or, finally, we may say that intellectual Synthesis is not a function of binding together really existing processes to make a really existing whole, but is the idealization and interpretation of a content which, as we have seen, differs only in degree, not in essential character, from the final result.

An objection may here be raised, however, that we have altogether lost sight of Perception, with which, after all, experience begins. Is not knowledge, in large part at least, derived directly from Perception; and does not this form of knowing show a connection of real existences which is characteristically different from the ideal union of thoughts in terms of which we have hitherto endeavored to describe knowledge? Is not the view, so far maintained, guilty of neglecting the fundamental distinction between Perception and Conception, and so open to the charge, which Kant brought against

¹ PHILOSOPHICAL REVIEW, vol. III, pp. 196 ff.

Leibniz, of having *intellectualised phenomena*? It is plain that, if we are to reply to this objection, we must maintain that the distinction which it urges between Perception and Thought is merely one of degree. There cannot be two distinct and separate forms of knowing. Perception is incipient thinking, and Conception nothing but more fully systematized Perception. And, in spite of Kant's express statements, this is a view to which the teachings of the *K. d. r. V.* inevitably lead. For it is there shown that perceptions only become objects of knowledge through being *thought*. Whatever may be the ground of distinction between phenomena and noumena, it is clear that these cannot be separated into two classes, of which the one is 'given' but not 'thought,' while the other is 'thought' but not 'given.' For it is *only in so far* as Perceptions are *intellectualised* that they have any cognitive value at all; while, on the other hand, all valid conceptual knowledge must have its roots in perceptive experience.

Nevertheless, it may still be objected that it is idle to attempt to efface the essential differences of these two forms of knowing. Perception reveals to us a world of real objects, each occupying its own position in Space or Time, and therefore by that very fact isolated from other objects. Space and Time are forms of perceptive knowing, and, as principles of individuation, impose upon the objects existing in them a character essentially different from the nature of general conceptions. It may as well be admitted that this difficulty is a very serious one. I am not sure that any answer can be found which would be completely satisfactory. At any rate, to discuss the question fully would carry me beyond the limits of the present paper. It would, of course, be wrong to say that the presence or absence of Time and Space does not affect the nature of our experience. It must not be forgotten, however, that perceptive experiences are never *purely* spatial and temporal. That is, *mere* coexistence and *mere* sequence are both abstractions. If Perception were the result of a purely passive apprehension of the 'given,' it might conceivably be described wholly in terms of external space and time relations. But

what we call our perceptive experience, in so far as it yields us real knowledge, has already got beyond the externality of mere coexistence and sequence to the apprehension of necessary relations between objects. That is, Perception is a form of knowing *only in so far* as the synthetic activity of intelligence breaks down and destroys the isolation which belongs to objects as in Time and Space. Without this act of Synthesis, Space and Time themselves could never be apprehended. "The consciousness for which there is Time, has begun a process which tends to abolish Time."¹ It is not, however, *real* Space and Time, *i.e.*, Space and Time as sources of possible intelligible relations, which are thus removed, but the externality and isolation which belong to abstract Space and Time. We conclude, then, that even in Perception the elements of knowledge never fall wholly outside each other. In so far as objects are *known* as in Space and Time, they tend to cohere in an intelligible system. When, in the process of knowledge, we pass from Perception to Conception (if, indeed, it is possible to draw any dividing line), we follow the same course upon which we are already embarked. That is to say, Thought continues the process of unifying experience, already begun, by transforming what at first sight appear to be purely external relations, into relations of organic necessity.

It still remains to inquire what conclusions regarding the possible *extent* of knowledge naturally follow from the view here advanced. It has been found possible to trace Kant's limitation of knowledge to the inadequate manner in which he conceived the nature of synthetic intelligence. As we have seen, Synthesis was supposed to be analogous in nature to processes of material construction. Where the appropriate matter was not at hand, no object of knowledge could possibly result. If, however, we substitute for this conception the notion of an internal transformation, or interpretation of a datum in the sense already described, it is clear that the arguments of the Dialectic will no longer apply. Nevertheless, it is well to remember that these arguments completely refute the Dogmatism

¹ Bosanquet, *Logic*, vol. I, p. 267.

against which they were directed. For Dogmatism sought to forsake completely the field of experience, in order to pass to something entirely different from it. From what has preceded, it is evident that the nature of Thought affords no justification of any absolute *transition* which leaves its data behind. The experience which forms the starting-point of a process of thinking, undergoes reconstruction and transformation, but passes over in its altered form into the result. An inference does not involve a passage *from* premises *to* a conclusion, but in *thinking* the premises the latter is already present.

To admit, however, that it is impossible for Thought to get beyond experience, is by no means to limit knowledge to sense perception. For if we think at all — and without thinking no knowledge is possible — we must, *ipso facto*, go beyond the given and reach results which are not capable of being expressed in the form of sensuous particularity. Although no knowledge can transcend experience, all knowing transcends mere perception.¹

When we have once got beyond Perception, however, I do not see how it is possible to fix any limits to the possible extent of knowledge. One's ability to go on progressively determining and interpreting the nature of reality, will obviously not depend upon the quantity of the datum. For, as has often been remarked, to fully exhaust all the relations of a single object, would be completely to understand the universe. The possibility of advance will be rather conditioned by the capacity of thought to discover the incompleteness of any conception at which it has arrived, — that is, by its power of bringing to light, by any means, new differences or aspects which demand a more adequate mode of interpretation. The possibilities of thinking,

¹ "What men call the proofs of God's existence are, rightly understood, ways of describing and analyzing the native course of the mind, the course of *thought* thinking the *data* of the senses. The rise of thought beyond the world of sense, its passage from the finite to the infinite, the leap into the supersensible which it takes when it snaps asunder the chain of sense, all this transition is thought and nothing but thought. Say that there is to be no such passage, and you say that there is to be no thinking." — Wallace's translation of Hegel's *Logic*, p. 103; Hegel, *Werke*, Bd. VI, p. 107.

then, with which the range of knowledge is coincident, occupy no definitely bounded field like that which marks the sphere of possible perceptions. And it follows, further, that reality is not divided, by any such line as that which Kant drew between phenomena and noumena, into a knowable and an unknowable portion. Instead of supposing that certain parts of the real world may be fully known, while others are completely beyond cognition, it must rather be maintained that our knowledge is nowhere complete, but that reality is accessible to thought at all points. The history of Science and Philosophy will then indicate the various stages through which thought has successively passed, in the attempt to determine more and more completely the nature of that which is.

J. E. CREIGHTON.

GRAECO-LATIN AND GERMANIC ART.

THE arts¹ of the Germanic races differ markedly from those of the Greek and Latin races, both as to the relative importance and cultivation of the different arts, and as to the details in the cultivation of each individual art. The Greeks, for example, excelled especially in sculpture, whereas the Germanic races have accomplished but little in this direction. The latter, on the other hand, have devoted very much of their energy to music, which they have developed to a very high standard, while with the ancient Greeks and Romans music was comparatively simple and undeveloped, and hardly existed at all as a separate art. French and Italian music differs from Germanic music in many respects, among which may be mentioned the less use which the former makes of counterpoint, and its almost entire neglect of instrumental music. A fundamental difference between Germanic and Graeco-Latin literature is found in the tendency of the former towards romanticism, and of the latter towards classicism. The greater adherence to the unities of time, place, and action, shown in Graeco-Latin when compared with Germanic dramas, is another such difference. In painting we also find a difference between the races, inasmuch as in the paintings of the Germanic artists there is less attention paid to form and grouping than in those of the French and Italians; and in architecture, finally, the complexity of Germanic, compared with the simplicity of Greek and Latin buildings, furnishes us with another such difference.

Among all these differences and distinctions, is there one fundamental distinction, or are there several, of which all or most of the others are merely varieties? I think there are two such, and they may be formulated as follows. (1) Germanic

¹ By 'arts' is meant only the five most important arts, namely, music, literature, painting, sculpture, and architecture.

art-works offer to the mind of the enjoyer more objects simultaneously than do Graeco-Latin art-works. By an 'object' is meant here anything that can be an object of consciousness. In this sense the melody of a musical composition, or the thought suggested by a poem, is an object, just as much as a figure in a painting or a pillar in a building. (2) Graeco-Latin art-works depend for their effectiveness at any moment, more than do Germanic art-works, on what they immediately present to the enjoyer at that moment; while Germanic art-works depend for their effectiveness, more than do Graeco-Latin ones, on the relations or connections between what they immediately present and something not thus immediately given. These connections depend on association, comparison, and so forth, and may be connections with preceding parts of the same art-work, or with previous experiences of the enjoyer.

These two principles run parallel with each other to a great degree, one often being the means by which the other finds application. Thus, since the effectiveness of Germanic art-works depends greatly upon the connections between that which is immediately presented and that which is not thus presented, such art-works often offer to the enjoyer immediate material which has many such connections; whereas Graeco-Latin works more often offer merely the immediate material, with few or no such connections. In other words, the Germanic art-works, in such cases, offer more objects to the enjoyer simultaneously than do the Graeco-Latin works. Again, where many objects are presented simultaneously in an art-work, there are more possibilities of connection of these objects with past or succeeding parts of the same work. The greater number of objects which Germanic art-works offer to the enjoyer simultaneously, is thus often the cause of the fact that the connections or relations of certain parts of these works with other parts are increased in number and brought into greater prominence.

These two distinctions are found, not only between the art-works of the Germanic and Graeco-Latin races, but also between those of the ancient Graeco-Latin and the modern

Latin, that is, the Romance races. The Romance works of art resemble those of the Teutons, when compared to the works of the ancients, and this is just what we should expect to find; for the modern Latins are mixed to a considerable degree with the Teutons, and it is but natural, therefore, for their arts to show some Teutonic characteristics. In brief, we may say that our two principles are found to hold, first, between Germanic art and ancient Graeco-Roman art; second, to a less degree, between Germanic art and Romance art; and third, to a still less degree, between Romance art and ancient Graeco-Roman art.

Most clearly, perhaps, are the distinctions shown in music, where they may be traced in various ways, — among which are the great use of counterpoint in Germanic music, the neglect of purely instrumental music by the Romance nations and its cultivation by the Germans, and the difference in treatment of the opera by the Germans, on the one hand, and the French and Italians, on the other. Germanic music has always been characterized by its great use of counterpoint. Indeed, counterpoint was developed and perfected almost entirely by a Germanic nation, the Dutch, while the two greatest exponents of strictly contrapuntal music, Bach and Handel, were Germans. To the Graeco-Latin nature, on the contrary, counterpoint has always been rather foreign. It was totally unknown to the ancient Greeks and Latins, and it has been used but sparingly by the French and Italians.

Now, contrapuntal music, being music in which two or more melodies exist side by side, offers to the hearer more objects, simultaneously, than homophonous music. For in the latter one hears but one voice or melody at a time, or one melody and its harmonic accompaniment. In contrapuntal music, on the contrary, there are at least two voices or melodies, and often more, at a time, and frequently a rich harmonic accompaniment in addition; that is, more objects are offered simultaneously to the hearer than in homophonous music. Our first principle thus finds a good illustration in music, through this great use of counterpoint by the Teutons.

The second principle also finds an illustration here, since the effectiveness of contrapuntal music is due greatly to the repetition and variations of the same musical themes and phrases in the same composition. The value of such themes or phrases is greatly due to the fact that they are recognized as themes or phrases occurring in previous parts of the composition, or as similar ones ; in other words, it is due greatly to the relations of the themes or phrases, immediately given, to previous ones. The effectiveness of homophonous music, on the other hand, is, *cæteris paribus*, due more to that which is immediately given, and not so much to the kind of relations mentioned above. It is due greatly to the immediate effect of the melody, and of the tone-quality of the voice or instrument rendering that melody. This is true of French, and also, in a more marked degree, of Italian opera, — that species of music which embodies some of the best musical efforts of the Latin races. Here rich orchestration, contrapuntal development of themes, action, dramatic truth, are again and again sacrificed merely for the sake of fine melodies, which are to please by their own immediate effect and by the immediate effect of the tone-quality of the voices which sing these melodies. In German opera, on the contrary, greater importance is attached to the orchestra, and more use is made of counterpoint. Greater importance is also attached to the connection between the words and music. While in Italian opera the music is often very little expressive of the sentiment of the words, in German opera great care is taken to make the two correspond. Finally, there is in German opera more dramatic truth and a more logical development of the plot. This is the case especially in the music-dramas of Richard Wagner.

All these facts about opera are illustrative of both our principles. Whereas in French and Italian opera the effectiveness, as stated above, is due principally to that which is immediately given, in German opera it is due more to the relations between the words and the accompanying music, and to the relations between the words and music at any one

moment and the words and music of preceding parts of the opera ; that is, it is due more to the relations of that which is immediately given to that which is not thus given.¹ Again, through all these relations as well as through its greater use of counterpoint, German opera presents more objects to the hearer simultaneously than does French or Italian opera. This can easily be shown by a comparison of any representative Italian opera with one of Wagner's music-dramas. In the latter, it may be said, more objects are offered the enjoyer than in any other form of art. The listener has often presented to him at the same time melody (or recitative), poetic words, dramatic action, an elaborate accompaniment in the orchestra (in which several themes and instrumental tone-qualities are often to be distinguished at once), the relations of the orchestral themes to the words and actions on the stage, and the relations of these words and actions to preceding words and actions.

Our principles apply equally well in the case of purely instrumental music, which is a form of music that has been cultivated almost exclusively by the Germans. One of its peculiarities, as compared with vocal music, is the complexity of the forms in which it is often written, of which the symphony, quartet, and sonata are examples. Such complex forms are built up of many themes and parts, which succeed each other according to certain rules. A mere consciousness of each theme and part as it occurs will not suffice for a thorough appreciation of the music ; besides this, the hearer must have a consciousness also of the relations of those themes and parts. He must, whenever a theme is repeated, not only hear it, but he must be aware that it is the same theme he heard before, and often must also remember in what part of

¹ This is true, not only where the relations of present parts of the opera to past parts are noticed, but often also where the relations of the words and actions to the accompanying music are noticed. For these words and actions, together with the music, are generally not perceived in exactly the same moments, but rather in quickly succeeding moments. The words are heard, or actions seen, and a moment later the correspondence of the music to the same is noticed ; or, *vice versa*, the music is heard and then the correspondence of the words and actions to it is perceived.

the composition it occurred. Much more of the effectiveness of such music is naturally due to the connections between that which is immediately given and that which is not thus given, than is the case in vocal music, with its simpler forms. And this is especially true of the instrumental music of the great German masters — which is the highest form of Germanic music — as compared with the great French and Italian operas, which represent the best musical efforts of the Romance nations.

All this is in favor of our two principles, so far as Germanic and Romance music are concerned. These principles apply even more forcibly, however, when we come to compare Germanic with ancient music. For in ancient music harmony was almost entirely, and counterpoint altogether, unknown. This music was confined almost wholly to the progression of a single voice at a time, and there was in it no complexity of form. Under these circumstances it was, of course, impossible to offer many objects simultaneously to the hearer, or to offer him objects with many relations to other objects. This, it would seem, from our slight knowledge of ancient music, was possible even less than in Romance music ; so that our principles may be said to hold in a slight degree, also, between Romance and ancient music.

We pass, now, to a brief consideration of the other arts. Alliteration and rhyme, through their cultivation in the poetry of the Germanic and Romance nations and their absence in the poetry of the ancients, furnish illustrations of our principles, so far as the literature of these nations is concerned. For both alliteration and rhyme depend for their effect on relations of similarity between certain immediately given and certain previously given letters or words ; and, furthermore, the recognition of these relations furnishes additional objects to the enjoyer which are not given by verse without alliteration and rhyme. Metaphors and allegories also prove that our principles apply in the case of Germanic and Romance as opposed to ancient poetry. For both were more numerous in the former than in the latter, and in the appreciation of both it is necessary to grasp, not only the literal meaning, but also

the relation between this and the figurative meaning, which latter is not given directly.

A better illustration, and one which holds between Germanic and the whole of Graeco-Latin poetry, and also between Romance and ancient poetry, is afforded by a consideration of the drama. English and German dramas, through their greater number of characters and consequent greater number of complications, offer many more objects to the enjoyer simultaneously than do Graeco-Latin dramas. This they do also through the several plots which they often develop on the stage at the same time. Again, on account of these numerous complications and plots, they present to the mind more relations between the action immediately going on and past or future action than do Graeco-Latin dramas. The infringement of the unities of time and place has the same effect, for by this infringement relations are brought about between actions immediately going on and actions in other times and places, such as would not be possible if the unities were observed.

The best instance of our principles, however, is the tendency of Graeco-Latin literature towards classicism and of Germanic literature towards romanticism. Classic works depend for their effectiveness, much more than romantic works, on what they immediately present to the enjoyer, while romantic works depend more on relations between that which is immediately and that which is not immediately presented. Thus classic works lay great stress on beauty of form and style, while often in romantic works but little attention is paid to these. The latter are effective more by means of deep symbolical meanings, thoughts about bygone times and distant lands, and reminiscences of past personal experiences of the enjoyer, which are suggested by that which is immediately given. And since these suggested objects are additional to those immediately presented, romantic works, *caeteris paribus*, offer more objects to the enjoyer simultaneously than do classic works.

It is evident that our first principle holds in architecture, if we compare the simplicity and sparsity of decoration, and the moderate size of Greek, Roman, Renaissance, and even Rococo

buildings, with the immense size of Gothic cathedrals, their innumerable pinnacles, buttresses, columns, and statues, their wood-carved pulpits, glowing windows, and symbolical forms. Not only the first principle, however, but also the second here receives an illustration. For Gothic cathedrals, on account of the many objects they offer, cannot so easily be taken in at a glance as Graeco-Latin buildings. Their different parts must be viewed successively, and in this way the effect of any one part may depend largely upon its relation to other parts previously seen. This is the case, for example, when we view the different parts of a cathedral in which the upward tendency is manifest. Some of these are seen in one moment, some in the next, and so on. Those which are seen first, however, are not entirely forgotten while the later ones are receiving attention. They exist in the mind as a kind of 'fringe,' and their similarity to the later ones modifies materially the effect which these would make by themselves. They aid greatly in producing that sublime consciousness of upward striving which these cathedrals give.

Less clear, perhaps, than in architecture is the application of the principles in painting, although here also they are easily traceable. As an illustration of the first principle, we may take the paintings of the old German and Dutch masters, with their many accessories and their fine detail-work, and as an illustration of the second principle the expressive portraits of Dutch and English masters, in which the whole life and nature of a person is often suggested to us. Another instance of the second principle can be found in the didactic nature of many German and English paintings. In these the picture is not meant to please in itself, but through its reference to a moral truth. When we compare with all this the simplicity and the beauty of form and coloring of Italian pictures, qualities which appeal immediately to the mind, we must admit that in painting also the same differences are to be met with which exist in the other arts.

Coming now to sculpture, we find that, where the Germanic races have made extensive use of this art, they have done so

in ways which would enable them to present many objects simultaneously to the observer. This is shown, for example, in Gothic when compared with Grecian sculpture. The latter, being an independent art, often offered only one or two figures to the eye, whereas the former, being indissolubly connected with Gothic architecture, offered its figures in connection with all the other features of the buildings they adorned. Furthermore, these figures were often so numerous as really to overload certain parts of the buildings, being often crowded in above the portals of cathedrals, for example, to the number of one hundred or more. The most characteristic feature about sculpture, however, in this connection, is the very slight cultivation of the art by the Teutons; and this brings us to the comparative excellence of the different races in the different arts. The art in which the Germanic races have especially excelled is music. In literature, also, they have accomplished much, having at least equalled and probably surpassed the Graeco-Latins in this respect. The latter, on the other hand, have excelled in painting and architecture, and more especially in sculpture. Let us endeavor to ascertain whether it is not possible to throw some light on all this by means of our two principles.

Music and poetry¹ are the two arts which from their nature are effective largely through the relations between that which is immediately, and that which was previously, presented. For the works in these arts are presented to the enjoyer, not all at once, but in successive moments of time, and that which is given at any one moment is dependent thus on its relations to that which was given in previous moments. In painting, sculpture, and architecture, however, the case is different. Works of these arts may be presented in single moments, and the enjoyer may simply dwell, later, on that which was given him in the first moment. Thus a bust, a portrait, or the front of a Greek temple when viewed from a distance, may be enjoyed as a whole by simple perception, that which is seen

¹ 'Poetry' is here taken in its widest sense, as including all artistic productions in literature.

at any one moment not being dependent on something seen before. From all this we might naturally expect (according to our second principle) that the Germanic races should have devoted themselves more to music and literature than to the other three arts, and that the Graeco-Latin races should have excelled in the latter. This we find borne out by the facts. We might also expect that, of the three latter arts, the Teutons should have cultivated painting and architecture more than sculpture. For in the two former it is easier to offer many objects simultaneously to the enjoyer, since it is easier to paint a picture with many figures, or to erect a building with many elements that may be regarded as separate objects, than it is to hew elaborate groups out of marble. And here again our expectation is borne out by the facts, for sculpture is indeed the art in which the Teutons have accomplished least.

We have seen, now, how our principles are illustrated in the most various ways in the different arts. It might perhaps be objected that we have simply collected a number of cases which confirm these principles, and that others might also be found which would contradict them. It is to be noticed, however, that most of these illustrations of the principles are based on distinctions in the arts which are themselves important and fundamental, as, for example, the romanticism of Germanic literature as opposed to the classicism of Graeco-Latin literature, the great cultivation of counterpoint in Germanic music and its neglect in Romance music, and the complexity of Gothic cathedrals when compared with the simplicity of Greek and Italian buildings. Surely, principles which comprehend and explain such important distinctions between the arts, may be regarded as applying to those arts as a whole.

These principles, representing two very fundamental distinctions between Germanic and Graeco-Latin art, are important, even if we should gain no further knowledge from them. If, however, they should throw some light on the nature of the minds of these races, — if they should show us a fundamental distinction between those minds, — then, indeed, they would be

much more important still. And this it is very natural for us to expect from them. For the arts of a people depend perhaps less than any of its other institutions on external uncontrollable circumstances; they are, more than the other institutions, a voluntary product, and they ought, therefore, to show more clearly the mental nature of the people.

What, now, would be the most natural inference to make as to the mental nature of the Germanic races, in whose arts many objects are offered simultaneously to the enjoyer? Obviously, one would say that the state of mind in these races, in the enjoyment of their arts, was typical also of their normal state of mind. One would say that, just as in his art the Teuton has more objects presented to his mind simultaneously than the Graeco-Latin, so also normally, in everyday life, he has more objects in his mind simultaneously. Since, however, it is possible for only one, or, at most, very few objects, to exist definitely in the mind at any one moment, it follows that we must be conscious of all other objects which are in our minds at that moment in a vague, indefinite way. These other objects, in fact, form a kind of 'penumbra' or 'fringe' (as Professor James would call it) around the foremost objects in the mind. The statement, therefore, that the Germanic mind has more objects in it simultaneously than the Graeco-Latin mind, might better be put that the Germanic mind has a larger 'fringe' than the Graeco-Latin mind. We can arrive at this conclusion also by means of our second principle. Germanic art-works, as we saw above, present to the enjoyer immediate material that has more relations with that which is not given immediately, than is the case with the immediate material presented by Graeco-Latin art-works. Now it is just the "consciousness of this halo of relations around the image [in the mind]" that constitutes the so-called 'fringe.' And art-works which offer immediate material (which corresponds to the 'image' in the quotation above) with many of the above-mentioned relations, require the exercise of a larger fringe in the mind than do art-works with fewer of these relations. From the nature of Germanic and Graeco-Latin

art-works, we can thus conclude that the Germanic mind in general has a larger fringe than the Graeco-Latin mind.

We have now in two ways, by each one of our principles, arrived at the same conclusion regarding the Germanic and the Graeco-Latin mind, and we have at the same time found the common root of the two principles. If we want to give one general formula for the differences between Germanic and Graeco-Latin art, we can say that the former calls into play a larger fringe in the mind than the latter. It might perhaps be objected to this statement, — that the distinctive features of Germanic and Graeco-Latin art are due to a difference of fringe in the minds of these races, — that many of these features are the result of outside accidental influences; that the peculiarities of Romance art, for example, might have been found also in Germanic art, if the external conditions of the development of the latter had been different, and *vice versa*. To a certain degree this is, of course, true. It was, for example, more natural for the Italians to erect buildings imitative of the classical styles, which had always been before their eyes, than it was for the Germanic peoples, who were not accustomed to seeing such buildings. In this case, however, as in similar ones, the question is only shifted. Why did not the ancient Greeks, when they evolved their style of architecture, evolve a more complex style — one more similar in this respect to the Gothic style of the Northerners? It is very natural to suppose that a difference in the minds of the Greeks and the Northerners enters here, which must be taken into account. It would carry us too far to examine all the distinctive peculiarities of Germanic and Graeco-Latin art, and try to determine to what extent these are due to a difference in mind, and to what extent to mere outside accidental factors. It will suffice to say that there are certain of these peculiarities which seem to depend *wholly* on a difference of mind. Music furnishes us with several of these. Counterpoint was known in Romance countries as early as in Germanic countries. There were no external circumstances, no ancient traditions, to prevent the Romance races from using counterpoint just

as much as the Germanic races, and yet they have not done so. Again, there were no external conditions to prevent the Italians and French from cultivating complex forms of instrumental music, and yet such music has been cultivated almost exclusively by the Germans. And, finally, we see no external reasons why the Germans should have developed opera in a manner so different from the Italians, especially since German opera was at first nothing but an imitation of Italian opera. Evidently all these differences depend on differences of mind, not of external conditions ; and the same could be said also of many other differences between Graeco-Latin and Germanic art. The application of our two principles, finally, is far too universal to be merely the result of accidental external circumstances, that is, of chance. There must be a racial difference of mind to account for it.

We may say, therefore, with assurance, that the Germanic mind is characterized by a larger fringe than the Graeco-Latin mind. Can we say also that it is characterized by a larger fringe than the Celtic mind? A comparison of Germanic and French art would show this statement to hold regarding the Germanic and the French mind, and the Frenchman is partly a Celt, as well as a Latin (and to a lesser degree a Teuton). Is the peculiarity of his art, when compared with that of the Teuton, due only to the Latin nature in him, or is it also an expression of his Celtic nature? Evidently it would be very difficult to decide this question merely from the data already given. We might perhaps come a little nearer to a solution, if we could examine other examples of Celtic art ; but unfortunately we have but few specimens of this. The question will therefore be left undecided here.

If, now, there is such a difference in the mental nature of the Germanic and Graeco-Latin races as that indicated above, we ought to be able to trace it not merely in the arts but also in many other activities of these races. We should, by doing this, explain to a great degree these activities, and at the same time find new verifications of our principles. It is not my purpose here to attempt an elaborate exposition of such

verifications. I shall merely hint at some of them, leaving a detailed consideration for some future essay.

In the first place, our principles, together with the psychological result we obtained from them, would explain the greater love of nature by the Germanic races, when compared with the Graeco-Latin races. Where are there so many objects offered to the mind simultaneously as in nature? And where is there more occasion for the exercise of a large fringe in the mind than in the enjoyment of nature? Half the pleasure derived from a beautiful mountain-scene often comes from a vague wonder as to what lies beyond the mountains immediately seen, which vague wonder exists as a kind of fringe in the mind. The same is true in our enjoyment of a dark forest, a babbling brook, or a wreath of smoke curling up from a distant village. It is the vague thoughts about the mysterious supernatural creatures of the forest, about the whence and whither of the brook, and about the human beings busy in the distant village—thoughts existing as a mere fringe in the mind—that constitute a great part of our enjoyment. And it is perfectly natural that a race with a smaller fringe, like the Graeco-Latins, should take less delight in natural scenes, and should try to arrange nature into regular, unified objects,—as has been done in French gardens and parks.

Our principles would explain also the slowness, deliberation, and hesitation of the Teuton in his actions, when compared with the quickness and vivacity of the Graeco-Latin. For psychology teaches us that the realization of a thought in action depends upon the preponderance of that thought in consciousness. Now, in a mind with a small fringe, that is, with few relations or objects, any single thought can gain preponderance more easily than in a mind with a large fringe or many relations. For in the latter it is more likely that opposing thoughts exist, or will come up, before the thought in question can gain preponderance. The result will be deliberation, and often inaction. In the same way the greater persistency of effort or tenacity of the Germanic races can be explained. For persistency of effort requires consciousness of

the end of effort. This consciousness, however, will often, in fact generally, be a consciousness in the way of a fringe only. Where, as in the Graeco-Latins, the fringe is small, the consciousness in question will often be crowded out, and actions contrary to the end will be the result. Since the Celtic races have quickness and vivacity, as well as lack of persistency, in common with the Graeco-Latins, we have here an additional clue to the nature of their minds. They also would seem to have a smaller fringe than the Teutons.

The greater tendency of the Teutons towards brooding and melancholy, as well as their greater religious consciousness, could also be explained to a degree by the mental peculiarity mentioned above. For brooding and melancholy, as well as religious consciousness, depend largely upon the presence of certain thoughts in the mind as a fringe, and where there is a larger fringe there is also more probability that these thoughts will be present. Even such institutions as the language and national religion of these races could have some light thrown on them in this way, although outside influences, of course, play a great part here, and would have to be taken into account. If, for example, it could be shown that there was more suspension of the sense in Germanic than in Graeco-Latin languages, this would go towards proving our point. For where the sense is suspended in a sentence, the former parts of that sentence must exist in the mind, as a kind of fringe, until the suspension is ended. The extreme length of German sentences, as well as the many modifying clauses and the placing of parts of the verb at the end, would all go to show that there is more of this suspension in Germanic languages. The custom of using auxiliary verbs for certain tenses, in English and German, is another case in point. The subject, however, is a large one, and would need careful study before a final decision could be arrived at. Another, and perhaps one of the most important verifications of our principles, could be found in the peculiarities of Germanic science and philosophy, — in their great depth and comprehensiveness. The complexity of Germanic life and political institutions could perhaps

also be explained, at least in part, by the peculiarity of the Germanic mind which we have indicated. Indeed, the applications of our distinction between the minds of the Teutons and the Graeco-Latins (and Celts) are so numerous and fruitful as to warrant us in saying that we have found one of the deepest and most important mental distinctions between these races.

ALBERT GEHRING.

DISCUSSION.

NON-EUCLIDEAN GEOMETRY AND THE KANTIAN *A PRIORI*.

FROM the days of Pythagoras and Plato down to those of Kant and Herbart the mathematical sciences, and especially geometry, have played so important a part in the discussions of philosophers as models of method and patterns of certitude, that philosophy cannot but be extremely sensitive to any change or progress occurring in the views of mathematicians. Accordingly the philosophic world was considerably startled, not so many years ago, to hear that certain mathematicians and physicists had had the audacity to question the assumptions concerning the nature of Space, which had been consecrated by the tradition of 2000 years and set forth in the geometry of Euclid. The possibilities of non-Euclidean spaces, which were as yet necessarily ill-defined and ill-understood, promptly attracted the adherents of all views for which orthodox science appeared to have no room, and no notion seemed too fantastic to become credible, if not intelligible, in space of four or more dimensions. The mathematicians themselves, who were engaged in elaborating the new conceptions, were too busy or too uncertain of their ground to resist successfully this inundation of crankiness, and the consequent discredit into which the subject fell seems to have killed the general interest in it everywhere but in France. Meanwhile mathematicians proceeded quietly with the work of analysing the new conceptions and of deducing their consequences, and thereby reached a clearer consciousness of their import. The result has been that saner views have begun to prevail, and that the sensational features of the new geometry have been mitigated or eliminated. The question has become arguable without the opposing champions considering each other respectively unintelligible cranks or unimaginative stick-in-the-muds. Not but what the rhapsodical view still periodically finds expression in print,¹ but the tendency of the interesting exchange of opinions which has been going on for the last few years in the French philosophical and scientific journals between MM. Delbœuf, Renouvier, Poincaré, Calinon, Lechalas, de Broglie, etc., seems to me to be decidedly in the direction of agreement based upon a retreat from extreme and extravagant positions on either side. In other words,

¹ *E.g.*, *Monist*, IV, p. 483.

the blare of trumpets which announced and advertised the arrival of the new claimant to scientific recognition is over, the pachydermatous ears of the established conservatism have recovered from the shock, and preparations are being made to assign to the newcomer a definite place in the array of the sciences.

The time then seems to be becoming opportune for attempting to summarize the results of all this controversy, with a view to (a) bringing out the most important points established by the new 'metageometry,' (b) considering what light they throw on the nature of Space, (c) estimating what changes will have to be made in the references to geometry which philosophers have been so addicted to making. It is indeed possible that the attempt is still premature, that the parties are still too bitter to be completely reconciled, that the subject is still too inchoate and chaotic for its full significance to be determined. In that case the present writer would console himself with the reflection that his efforts can at least do no harm. His arbitration is wholly unauthorized, and compromises neither the metageometers nor their opponents. His opinions, although they will be found to have most affinity with the views of Professor Delbœuf, cannot claim to rest upon the doctrine of any great authority on either side, — they are merely the subjective inferences of a spectator with divided sympathies; and if he succeeds in arousing interest and elucidatory comment, his object will have been as fully attained as he is entitled to expect.

I. I shall begin, therefore, by stating a point which the metageometers have not to my mind satisfactorily established, and that is the value of the conception of a *fourth* dimension. I say advisedly "of the conception," for the actual existence, or even the possibility of imagining a fourth dimension seems to have been practically given up. The chief value of the conception seems nowadays to be situated in the possibility of making symmetrical solids coincide by revolving them in a fourth dimension. But this seems a somewhat slender basis on which to found the conception of a fourth dimension, and the same end could apparently¹ also be achieved by means of the conception of a 'spherical' space. Here then, probably, is the reason why of late the fourth dimension has not been so prominent in the forefront of the battle, and why its place has, with a great advance in intelligibility, been taken by spherical and pseudo-spherical *three-dimensional* 'space.'

¹ Cp. Delbœuf, *Rev. Phil.*, XIX, 4 (abstracted in *PHILOSOPHICAL REVIEW*, III, p. 502).

It is on rendering these latter thinkable that the non-Euclidean have concentrated efforts, and, so far as I can judge, they have, in a large measure, been successful. It has been shown that Euclidean geometry may, nay, logically must, be regarded as a special case of general geometry, and as logically on a par with spherical and pseudo-spherical geometry. It is a species of a genus, and the differentia which constitutes it is the famous "postulate of Euclid," which Euclid postulated because he could not prove it, and which the failures of all his successors have only brought into clearer light as an indispensable presupposition. The non-Euclidean, on the other hand, have shown that it does not require proof, because it embodies the definition of the sort of space dealt with by ordinary geometry; and that in both of its equivalent forms, whether as the axiom of parallels or of the equality of the angles of a triangle to two right angles, it forms a special case intermediate between that of spherical and that of pseudo-spherical space. In spherical space nothing analogous to the Euclidean parallels is to be found; in pseudo-spherical space, on the other hand, not one, but *two* 'parallels' may be drawn through any point. So while spherical triangles always have their angles *greater* than two right angles, the pseudo-spherical triangles always have them *less* than two right angles. Moreover, the Euclidean case can always be reached by supposing the 'parameter' of the non-Euclidean spaces infinitely large. So much for the possibility of a general geometry, including the Euclidean amongst others.

It has also, I think, been shown that the non-Euclidean geometries would form coherent and consistent systems, like the Euclidean, in which an indefinite number of propositions might be shown to follow from their initial definitions. They are, that is to say, thoroughly *thinkable* and free from contradiction, and intellectually on a level with the Euclidean conception of space. They are thinkable, — but (as yet) no more; and this explains their defence against the two objections upon which their more unprejudiced opponents incline to lay most stress. It is objected (1) that there is, *e.g.*, no such thing as a spherical space, only a spherical surface. True; but there is nothing to prevent us from *conceiving* the peculiar properties of a spherical surface as pervading every portion of the space it bounds. We can conceive a spherical surface of a constant curvature making up the texture of space, just as well as the Euclidean plane surface. In the latter case the homogeneity of Space is entire in *all* respects, in the former only in *some*. It is argued (2) that metageometry is

dependent on Euclidean geometry, because it is reached only through the latter. But it is not clear that it may not be logically independent, even though historically it has developed out of Euclidean geometry, and even though psychologically the latter affords the simplest means of representing spatial images.

Theoretically, then, metageometry seems to be able to give a very good account of itself. But it must be confessed that this at present only accentuates its practical failure. It is admitted that Euclidean geometry yields the simplest formulas for calculating spatial relations, and even M. Calinon¹ hardly ventures to hope that non-Euclidean formulas will be found serviceable. Metageometers mostly confine themselves to supposing imaginary worlds, of which the laws would naturally suggest a non-Euclidean formulation.² In short, practically the supremacy of the old geometry remains incontestable, because of its greater simplicity and consequent facility of application.

II. I pass on to the second question, the light thrown by non-Euclidean geometry on the nature of Space. In this respect incomparably its most important achievement seems to have been to force upon all the distinction between *perceptual* and *conceptual* space, or rather spaces. On this point both parties are at one, and we find, e.g., M. Delbœuf³ and M. Poincaré⁴ stating the characteristics of Euclidean space and its fundamental distinction from perceptual space in almost identical terms. The former is one, empty, homogeneous, continuous, infinite, infinitely divisible, identical, invariable; the latter is many, filled, heterogeneous, continuous only for perception (if the atomic view of matter holds), probably finite, not infinitely divisible and variable. Both sides agree that our physical world is neither in Euclidean nor in non-Euclidean space, both of which are conceptual abstractions; their dispute is merely as to which furnishes the proper method for calculating spatial phenomena.⁵ Thus all geometrical spaces are grounded on the same experience of physical space, which they interpret differently, while seeking to simplify and systematize it by means of the various postulates which define them.

¹ *Rev. Phil.*, XVIII, 12 (abstracted in PHILOSOPHICAL REVIEW, III, p. 369).

² E.g., M. Poincaré, *Rev. de Mét.*, III, 6, pp. 641 ff.

³ *Rev. Phil.*, XVIII, 11 (abstracted in PHILOSOPHICAL REVIEW, III, p. 233).

⁴ *Rev. de Mét.*, III, p. 632.

⁵ Cp. Calinon, *Rev. Phil.*, XVIII, 12, "Sur l'indétermination géométrique de l'univers."

But if conceptual and perceptual space are so different, have they anything in common but the name? If the former are abstracted from the latter, upon what principles and by what methods does the abstraction proceed?

I conceive the answer to this important question to be, by the same methods as those by which 'real' or physical space is developed out of the *psychological* spaces. For, as M. Poincaré¹ well shows, we form our notion of real space by fusing together the data derived from visual, tactile, and motor sensations. That fusion is largely accomplished by ignoring the differences between their several deliverances and by correcting the appearances to one sense by another, in such a manner as to give the most complete and trustworthy perception of the object. We manipulate the data of the senses in order to perceive *things* (in 'real' space), and at a higher stage the same purposive process yields conceptual space, of course at first in its simplest form, the Euclidean. And (though I have not found this stated) all the characteristics of Euclidean space may be shown to have been constructed in this manner. Just as, *e.g.*, the varying appearances of things to the different senses were ignored in order to arrive at their 'real' place, so the varying and irregular deformations to which they are subjected at different places, when abstracted from, lead to the homogeneity of space. They are slight enough to be neglected, but if they were larger and followed some definite and simple law, they might suggest a non-Euclidean geometry. Similarly, geometrical space is one and infinite, because as soon as we abolish any boundary *in thought*, we can abolish all; it is infinitely divisible, because as soon as the division is conceived of as proceeding *in thought* the same act may be repeated as often as we please. And so on; geometrical space appears throughout as a construction of the intellect, which proceeds by the ordinary methods of that intellect in the achievement of its peculiar purposes. Nor is there anything new or mysterious about the process; no new faculty need be invoked, no new laws of mental operation need be formulated.

III. That the philosophic importance of this result is capital, is surely evident. The *certainty* of geometry is thereby shown to be nothing but the certainty with which conclusions follow from non-contradictory premisses, and in each geometry it flows from the definitions. The certainty with which the sum of the angles of a triangle may be asserted to equal two right angles in Euclidean

¹ *Loc. cit.*

geometry, is precisely the same as that with which it may be shown to be greater or less in non-Euclidean systems.

And this shows that certainty in the sense of intrinsic consistency has nothing to do with the question of the real validity of a geometry. The latter depends on the possibility of systematizing our spatial experience by means of the geometry. Our experience being what it is, we find the Euclidean the simplest and most effective system, alike to cover the facts and to calculate the divergences between the ideal and the actual results; and so we use it. But if our experience were different, a non-Euclidean system might conceivably seem preferable. In short, *as applied*, a geometry is not certain, but useful.

Again, the *necessity* of geometry is simply the necessity of a logical inference, — hypothetical, and in no wise peculiar to geometry. Similarly, the *universality* of geometrical judgments is by no means peculiar to them, but may be explained as arising out of the *methodological* character of the assumptions on which they rest. If we decide to make certain assumptions because they are the most serviceable, we can certainly know beforehand that we shall always and under all circumstances judge accordingly. To expect us to do otherwise, would be to expect us to stultify ourselves. And certainly we have a great interest in upholding the universal validity of geometrical judgments. Is it a small thing to be able to draw a figure on paper in one's study, and on the strength of it, and by virtue of the homogeneity of space, to draw inferences about what happens beyond the path of the outmost sun? Should we not be incredible idiots, if we allowed any cheat of appearances to cajole us into a moment's doubt of so precious an organon of knowledge? It would seem, then, that the chief result of metageometry is to raise into clearer consciousness the nature of the complex processes whereby we organize our experiences, and to assimilate the case of space to our procedure elsewhere.

But it has already become abundantly evident that a view of Space, such as that propounded, provokes conflicts with ancient and venerable views that have long adorned the histories of Philosophy. Among them Kant's conception of the apriority of Space is pre-eminent.

At a cursory glance it might indeed seem as though the new geometry afforded a welcome support to the Kantian position. If Euclidean geometry alone could prove the possibility of synthetic judgements *a priori*, could enrich us with absolutely certain knowledg

absolutely independent of experience, could sustain an all-embracing, though empty, form of pure intuition, surely now that it is reinforced by two or more sister sciences, a boundless extension of our *a priori* knowledge might reasonably be anticipated. Unfortunately it proves a case of 'too many cooks' and the embarrassment of riches, rather than of 'the more the merrier.' To suppose *three a priori* forms of intuition corresponding to the three geometries is evidently not feasible, for they are in hopeless conflict with each other. If it is a universal and necessary truth that the angles of a triangle are equal to two right angles, it cannot be an equally universal and necessary truth that they are greater, according as we happen to be speaking of a Euclidean or of a spherical triangle. Clearly, there must be something seriously wrong about the assumed relation of geometry to space, or about the import of the criterion of apriority. Just as the *de facto* existence of geometry seemed to Kant to prove the possibility of an *a priori* intuition of Space, so the *de facto* existence of metageometry indicates the derivative nature of an intuition Kant had considered ultimate.

And the analysis thus necessitated rapidly discovers the seat of the error. Kant, like all philosophers before and far too many since his time, regards the conception of Space as simple and primary and the word as unambiguous. He does not distinguish between physical and geometrical space, between the problems of pure and of applied geometry. Hence he is forced to make his *Anschauung* an unintelligible hybrid between a percept and a concept, to argue alternately that 'space' could not be either, and to infer that it must therefore be some third thing. The possibility that it might be both never struck him. Still less did he suspect that each of these alternatives was complex, and that perceptual space was constructed out of no less than three sensory spaces, while it was susceptible of three different conceptual interpretations. What Kant calls 'space' therefore is not really one, but *seven*, and the force of his argument is made by their union. Confined to any one of them, the argument falls to pieces. When we see these facts as clearly as the development of metageometry has compelled us to see them, we must surely confess that the Kantian account of Space is hopelessly and demonstrably antiquated and can lend no support to the rest of his system. And should we not henceforth take care to eschew the vice of talking vaguely of 'space' without specifying what kind of space we mean, whether conceptual or perceptual, and what form of each? Even pedagogically, one would think, there can no longer be any

advantage in confusing what is capable of being so clearly distinguished.

It would exceed my limits if I were to try to investigate whether Kant has not been guilty of a parallel confusion between felt succession and conceptual time in his account of the latter, still more were I to discuss whether after the withdrawal of the 'forms of pure intuition' any meaning could continue to be assigned to the Kantian conception of the *a priori*. I shall conclude, therefore, with the hope that some of the many professed believers in the *Transcendental Aesthetic* will not disdain to define their position in face of the development of modern metageometry.

F. C. S. SCHILLER.

REVIEWS OF BOOKS.

Einleitung in die Philosophie. Von OSWALD KÜLPE, Professor an der Universität Würzburg. Leipzig, S. Hirzel, 1895.— pp. viii, 276.

Külpe distinguishes between an introduction to philosophy which consists in presenting a system in outline (in stating the chief problems of philosophy and intimating the solutions which commend themselves to the writer), and one which, ignoring or keeping in the background the writer's own personal views, aims at presenting a bird's-eye view of the whole field of philosophical endeavor of the past and present. Külpe's *Introduction* aims to be of the latter sort. Assuming no previous knowledge of the subject on the part of his reader, he seeks to give him an insight into the development and present condition of philosophy in its various branches. He divides his work into four parts or chapters. In the first he treats briefly of the definition and divisions of philosophy as historically determined; in the second he considers in considerable detail the different philosophical disciplines; in the third he treats, also in considerable detail, the principal directions or tendencies of philosophical thought, and explains the important philosophical distinctions; and in the last he sketches briefly what, on the basis of what has gone before, he conceives to be the true definition and systematization of philosophy.

Chapter I, *Begriff und Eintheilung der Philosophie*, gives us, first, a rapid yet clear account of the various conceptions formed of philosophy in the past and the present. None of these is regarded as in itself satisfactory,—as determined, that is, by the real nature of the subject-matter; they are, rather, definitions of the science as it has been presented in actual systems. An independent attempt at defining philosophy is reserved for the last chapter. Next, attention is called to the fact that just as the definition of philosophy has varied, so likewise have the divisions of the subject, some disciplines formerly recognized as philosophical being no longer regarded as such. The attempt, therefore, to give a systematic and comprehensive classification of philosophical disciplines which would be accepted, is impossible while there is no accepted definition of philosophy itself. After giving, therefore, the more important fundamental divisions of philosophy which have been proposed,

Külpe classifies, for the purposes of his work, the disciplines actually recognized to-day as philosophical into two groups, *general* and *special*, the former treating of the presuppositions, completion, and exposition of the whole field of knowledge, the latter of a particular branch of knowledge. The general philosophical disciplines are metaphysics, epistemology, and logic; the special are the philosophy of nature, psychology, ethics and philosophy of rights, aesthetics, philosophy of religion, and the philosophy of history (including sociology).

Chapter II, *Die philosophischen Disciplinen*, devotes a section to each of the disciplines named. The general disciplines are treated first. After presenting the various conceptions of metaphysics given in the course of the history of philosophy, Külpe declares that the task of metaphysics is to give us a *Weltanschauung*, — a rational and unitary view of the sum-total of reality. Metaphysics as the science of the most general principles or concepts, he identifies with epistemology. Logic treats of the most general *forms* of knowledge. Epistemology treats of the most general *contents* of knowledge. Locke is declared to have been the real founder of epistemology. He it was who, in his *Essay*, first undertook a systematic investigation into the origin, certainty, nature, and extent of human knowledge. Since the sixties of our century the main endeavor of philosophers has been to construct a sound theory of knowledge as the assured basis of all philosophy and science. Epistemology has to critically investigate (1) the possibility of knowledge; (2) the separation of the content of knowledge into subjective and objective; (3) the distinction of the formal and material elements in knowledge; (4) the most general concepts of being and becoming. In addition to investigating these logical presuppositions of *all* special sciences, epistemology has to consider certain special concepts common only to a particular group of the sciences, such concepts, for example, as matter, force, energy, life, the soul. It has also to deal with the relation between psychical and physical processes, etc. It is no wonder that Professor Külpe writes: "Undoubtedly epistemological investigations are among the most difficult in the whole field of philosophy."

The author turns next to the special philosophical disciplines. In treating these (and the treatment is excellent throughout) he is careful to distinguish the properly philosophical problems from the strictly scientific ones connected with them. Take, for example, psychology. A scientific psychology, he finds, leaves unanswered,

while forcing forward for answer, a multitude of properly philosophical problems. The consideration of these constitutes psychology as a department of philosophy, or the philosophy of mind. This has as its task to investigate (1) the epistemological and logical presuppositions of empirical psychology, such as the concept of the psychical subject or individual, psychical causality, the analytic and synthetic and genetic methods, etc.; (2) the fundamental concepts employed in empirical psychology, such as consciousness and the unconscious, the soul and its relations to the body, psychical 'element,' etc.; (3) the general theories of scientific psychology, such as those concerning our ideas of space and time, association, sense perception, etc. As the first modern contribution to such a philosophical psychology Külpe names Rehmke's *Lehrbuch der allgemeinen Psychologie* (1894), and would doubtless have added the still abler work by Professor Ladd on *The Philosophy of Mind* (1895) had he been acquainted with it in time. It is particularly gratifying to find Professor Külpe, who is a thoroughly up-to-date scientific psychologist, as his *Grundriss* abundantly shows, thus frankly recognizing and cordially encouraging the consideration of these wider problems of psychology. His attitude toward these questions is in striking contrast with that taken by some conspicuous cultivators of scientific psychology in this country.

Chapter III, *Die philosophischen Richtungen*, is by far the most important. The author begins with an enumeration of the directions or tendencies of philosophical thought, so far as these relate to the *content* of the various philosophical disciplines treated in the previous chapter. These directions or tendencies of thought are divided into three groups,—metaphysical, epistemological, and ethical. The metaphysical are divided into five subclasses, the first and second having a general, the other three a special significance in the formation of a *Weltanschauung*. The first deals with the *number* of ultimate principles postulated, and the possible conceptions are Singularism and Pluralism. The second relates to the quality, or nature, of the ultimate principles, and as our principles may be either those of being or those of becoming, we have the metaphysical lines of thought relating to being expressed by the terms 'materialism,' 'spiritualism,' 'dualism,' and 'monism'; and those relating to becoming (or causality) expressed by the terms 'mechanism' and 'teleology' (finality). Of the three special metaphysical tendencies, the first may be called the theological, as it relates to the conception of a Supreme Being; and here we have pantheism, theism, deism,

and atheism as rival views presented for our acceptance. The second relates to the problem of freedom, and gives rise to the contrasted conceptions, determinism and indeterminism (freedom). The last deals with the nature of the soul; the acceptance or rejection of a soul-substance giving us 'substantialism' and 'actualism,' and the question as to the primacy of intellect or of will, giving us 'intellectualism' and 'voluntarism.' The character of any particular metaphysical system will be determined by the position which its author takes in these various directions. For example, Külpe characterizes Spinoza as a singularist, monist, mechanist, pantheist, determinist, actualist and intellectualist; Lotze, on the other hand, as a qualified singularist, a spiritualist, a teleologist, a theist, an indeterminist, a substantialist. The tendencies belonging to the five groups may, however, be differently combined in different systems.

The epistemological directions of thought relate, according to Külpe, to (1) the *origin* of knowledge, giving us rationalism, empiricism, and criticism; (2) the validity, or limits, of knowledge, giving us dogmatism, skepticism, positivism, and criticism; (3) the nature of the object or content of knowledge, giving us idealism, realism, phenomenalism. Finally, the tendencies or lines of ethical thought relate to (1) the origin of morality,—intuitionism or apriorism, and empiricism or evolutionism; (2) the ethical motive,—*Gefühlsmoral* and *Reflexionsmoral*, according as the motive is regarded as some form of feeling or of reflective thought; (3) the ethical object,—individualism and universalism; (4) the ethical end,—subjective feeling (hedonism, eudaemonism), or objectivism (perfectionism, evolutionism, naturalism, utilitarianism). To take the same examples as before, Spinoza, in epistemological characteristics, is a rationalist, dogmatist, and realist; in ethical, an autonomist, egoist, objectivist, and as regards the ethical motive, occupies a mediating position; Lotze, on the other hand, accepts criticism, realism, autonomism, intuitionism, altruism, and eudaemonism, while, as regards the ethical motive, he is a *Gefühlsmoralist*.

After thus classifying the directions or tendencies of philosophical thought, Professor Külpe explains and discusses each in turn. His discussions exhibit wide and accurate historical knowledge, are uniformly clear and impartial, and on the whole, show an admirable grasp of the subjects considered. This part of the work we believe would be especially helpful to the beginner, enabling him to get clearly before his mind the great issues in philosophical speculation, past and present.

It is unnecessary to follow in detail Professor Külpe's discussions ; but two or three of his positions may be noticed. His brief criticism of materialism (pp. 132-137), in the course of which attention is called to the absolute lack of an epistemological foundation for materialism, is especially good. Of the four competing views, materialism, spiritualism, dualism, and monism, Külpe himself leans toward dualism as on the whole the most probable, since it harmonizes with science and satisfies epistemological and logical demands. The least tenable is materialism ; while, next to dualism, spiritualism is regarded as most tenable. The author notices the fact that metaphysical monism is by most of its adherents but a form of spiritualism, and in a note calls attention to the various meanings of the term 'monism.' The brief criticism (pp. 190-193) of the *Actualitätstheorie* which Wundt and others offer as a substitute for the theory of the soul as substance, is worthy of notice. In dealing with idealism, Külpe takes the ground that epistemology is incompetent to decide the question as to the reality of a non-ego. When epistemology has determined the character of the subjective and the objective in connection with the quality of the original content of experience, it has done all that rightly belongs to it. For anything further we must look to metaphysics. In the discussion of rationalism, empiricism, and criticism, we are told that the whole question as to the origin of knowledge is a psychological, and in no true sense an epistemological, question, and that the inquiry into the universal validity and necessity of knowledge belongs to logic. It seems, therefore, rather inconsistent to treat these topics under the head of epistemology.

The closing chapter, *Aufgabe und System der Philosophie*, although very brief, presents some suggestive remarks on the definition and systematization of philosophy.

When one attempts, in so brief a space, to treat so many great subjects as the author does in this little manual, there is danger of losing the sense of proportion and of becoming at times superficial or too abstract. It is too much to say that Professor Külpe has wholly escaped these and other faults of treatment. We notice a tendency toward an unnecessary multiplication of terms and refinement of distinctions. Occasionally, too, there is a lack of precision in statement. For example, speaking of the various forms of the ontological argument for the being of God, the author remarks : "Sie alle kommen darauf hinaus, aus dem Begriff eines Wesens seine Existenz zu erschliessen," — which is correct only when we insert

before *Wesens* the all-important qualifying adjective *allervollkommensten*. But in spite of such defects and others which might be pointed out, Professor Külpe has succeeded in producing an unusually good book of its kind, and one which we would gladly welcome in a good English rendering.

GEORGE MARTIN DUNCAN.

A Short Study of Ethics. By CHARLES F. D'ARCY, B.D.
London and New York, Macmillan & Co., 1895. — pp. xix, 278.

The object of this book is, in the author's own words, "to give, *in small space*, an account as well of the metaphysical basis as of the ethical superstructure." Its standpoint is, in the main, that of the late Professor Green, and it follows very closely on the lines of the shorter expositions of Professor Dewey, Mr. Muirhead, and Professor Mackenzie. Mr. D'Arcy's criticism of the latter works is that "all three build without a foundation." To the reader who is familiar with Professor T. H. Green's ethical method, the lucidity of these books is admirable. But the author cannot help wondering whether his enjoyment in reading them would have been as great as it was if he had not previously made the acquaintance of the great *Prolegomena*, a work which "among all modern English contributions" to ethical literature "stands easily first" (Preface). To remedy this defect of the more recent Neo-Hegelian presentations of the subject, Mr. D'Arcy follows Green's example, and devotes the first Part of his book to "the philosophical basis of ethics." Here it soon becomes evident that, in spite of his general adherence to the standpoint of his master, Mr. D'Arcy is rethinking the questions for himself, and does not hesitate, in important particulars, to criticise and to modify the answers given by Green and his disciples. He agrees with Green's metaphysics of knowledge, and re-states his doctrine of the spiritual principle in nature, and of reality as a system of relations. His re-statement does not, in my opinion, add to the persuasiveness of the doctrine: his effort to resolve the sensational matter into the relational form of knowledge meets with no better success than previous efforts of a similar sort. The familiar reconciliation of freedom and necessity produces a like impression. The most valuable chapter of this Part is that in which Mr. D'Arcy parts company with his teachers, and ventures an independent contribution to philosophical theory, — Chapter V, entitled "Community." What he calls "the point of discontinuity in all idealisms" occurs "where the effort is made to distinguish, and at the same time to reconcile,

the human spirit and the Divine. Even Hegelianism, the greatest and most profound of all idealisms, seems to have escaped the difficulty only by avoiding it. By constantly speaking of Spirit as if it were impersonal (instead of personal, as it essentially is), Hegel was able to shift the standpoint of his inquiry from the human to the Divine, and from the Divine to the human" (p. 43). "Nor is Green more successful than Hegel. Profoundly important and valuable as is his discussion of the philosophical basis of ethics, it is impossible to be satisfied with his account of the relation between the spiritual principle in Nature and the spiritual principle in the individual thinker" (p. 44). "Either man is deprived of all real self-hood, or the self in man is identified with God" (p. 45). "The only fair interpretation which can be put upon Green's doctrine is that he identified the self in every man with God. But this is a position which cannot be maintained. Self is no mere abstract principle of unity. Self is the ultimate concrete unit of the cosmos of experience. Self is for every man unique and ultimate. Further, the identification of the self in every man with God involves the identification of all human selves. But since each self is for itself unique and ultimate, this identification amounts to a denial of the essential nature of self-hood. The one instance of a plurality which the self cannot unify, is the plurality of selves. Every person is separated from every other person by an abyss which thought cannot bridge; and any doctrine which leads to the identification of all persons reduces itself thereby to an absurdity" (p. 46).

This inevitable isolation of personality forces us to reconsider our conception of God, and "to believe that, though personal, He is yet more than personal" (p. 47). "It is impossible to end in a disconnected multiplicity. The mind is compelled in spite of itself, if only for regulative purposes, to suppose some principle of unity deeper than the unity of self-consciousness. . . . On the objective side, nature is a whole which integrates all possible experiences. Surely there must be something to correspond on the subjective side? Yet thought contains no principle capable of unifying a subjective multiplicity. It is necessary, therefore, to suppose that there is in God a transcendent principle by which He forms the ultimate bond of union among the multitude of persons" (pp. 47, 48). "As to the mode of the union of all spirits in God we are ignorant, and must remain ignorant as long as our faculties are what they are. The principle which makes the union possible is inscrutable, but the fact of the union must be assumed as the ultimate basis of all coherence, specu-

lative and practical" (p. 48). The candor and modesty of this position are characteristic of the author, as are also its independence and originality. The attitude taken to the contingent is similar. "The cosmos of experience is not a perfect cosmos. It does not form a completely articulated system. It is not perfectly rational. If it were, every element would be necessary. But every element is not necessary. Side by side with the necessary we must recognize the contingent" (p. 50). This implies that "the world-constituting activity of the self is subject in its operation to some limiting influence." "This limitation must be traced . . . to the existence and operation of the multitude of spirits, each of whom, in the exercise of his self-determination, imposes limits upon all the rest. Further, it must not be forgotten that above this multitude of spirits there is one who is Spirit, and more than Spirit, one who is the ultimate source of all being, subjective and objective" (p. 51). The ethical implication of this doctrine of the relation of persons to one another and to God is of fundamental importance. "All persons limit one another, and all persons are one in God. Hence all persons form a *community*. The end of one is the end of all. The end of the universe is the end of man. The Absolute Good is the true Good for every person" (p. 52).

The application of this principle to the problem of altruism is particularly important, because it constitutes the author's most serious ethical departure from the standpoint of Green. "The fact remains that reason cannot escape the circle of the self. Every man is, as a reasonable being, his own end. Every act of will exemplifies the truth of the assertion. What the man seeks in the effort of will is some end which he selects as his personal good, some object with which he identifies his personal satisfaction. The will is by nature egoistic. It is self-objectifying. Thus man is an end to himself. It does not follow, however, that because every man is an end to himself, therefore every other man is an end to him. The scientific use of reason provides no principle capable of proving such a proposition. On the contrary, the reason of every man exalts him to a supreme position, a position of unique and commanding importance. . . . Mr. Kidd is therefore right when, in his *Social Evolution*, he describes reason as essentially anti-social. Why should the individual subordinate his private interests to the interests of the community? Why should he deny himself pleasure that others may benefit? No purely reasonable answer can be given to these questions. If they are to be answered at all, the answer must, to

some extent at all events, transcend reason, or, as Mr. Kidd puts it, be ultra-rational" (pp. 58, 59). This is surely an exaggeration of the facts. If reason needs the energy of feeling to execute the unity which it has planned, it is no less true that feeling needs the illumination of reason to teach it the nature of that unity. The interests of the moral individual, since they are personal interests, are not merely private but public. The same rational insight which dictates the subordination of the partial and temporary to the total and enduring interests of the self, dictates the subordination of the private to the public interests of the self. The partiality of the individual to himself is the partiality of feeling, not of reason: reason is, by its very nature, impartial, and therefore a social rather than an anti-social principle. In this point Mr. D'Arcy seems, in parting company with Green, to have lost sight of a great truth which we can ill afford to lose. Probably he has been misled by a confusion of the question of the *ratio* with that of the *causa*, of the final with the efficient cause, in spite of his own caution (p. 200) that "ethics, as a science, deals not with the discovery of causes, but with the discovery of ends."

From the philosophical standpoint thus described, Mr. D'Arcy proceeds, in Part II, to sketch an "Outline of Ethical Theory." This part, constituting the body of the book, is an admirably clear and impressive presentation of the central doctrine under its most important aspects. If space permitted, attention might be called to several fresh and striking statements. The whole gains greatly by the preparation laid for it in the metaphysical discussion of Part I. Perhaps its most valuable and interesting features are the recurring insistence upon the religious basis and significance of morality, and upon the social and objective character of the good life. The fine ethical spirit and delicate insight of the author are apparent on every page.

Part III contains an all too brief "Criticism" of other ethical theories. Having first built up his own position independently, the author desires, in closing, to come to terms with opposing views. The best chapter is, perhaps, the third, on "Evolutionary Ethics."

JAMES SETH.

Tempérament et caractère selon les individus, les sexes, et les races.

Par ALFRED FOUILLÉE. Paris, Félix Alcan, 1895. — pp. xx, 378.

In the preface to this volume, the author points out that the laws of abstract psychology can no more account for the special character

of any given person than the general laws of physics can explain the physical peculiarities of different individuals. The stimulus which moves one man has no influence whatever on another. To account for the individual difference thus manifested, is, according to M. Fouillée, the problem with which the science of Character has to deal. Hitherto, he continues, the writers on the subject have contented themselves with definition, description, and empirical classification. The time has now come, however, for bringing the scattered materials together and attempting to show that it is possible to sketch in the first outlines of a scientific theory. The aim of the present work is to present a theory of this sort, based on biology and psychology.

The conception which the author wishes most of all to introduce is that of Evolution. The natural disposition of each individual is the result of a long development, and at the same time the point of departure for a new advance brought about by the individual himself. If we examine more explicitly the elements that are concerned in the building up of character, we find that natural disposition is due to race, sex, and the peculiar constitution of the individual. This natural disposition, however, is but the starting-point of a new development. It is modified, in a passive way, by the environment, and, in an active way, by the reaction of intelligence and will. It is this latter reaction which constitutes Character proper in opposition to Temperament, which is entirely a matter of physical constitution. From this general statement, it will be seen that the book falls naturally into four parts, dealing with Temperament, Character, Sex, and Race, respectively.

In attempting to determine what Temperament is, M. Fouillée goes for help to biology. All anatomical structures, on the one hand, and all physiological functions, on the other, are now interpreted as changes, constructive and destructive, in the living matter itself. These two series of changes may be combined in various degrees, and the particular way in which they are related in any given case accounts for the temperament of the individual. Thus the old division of temperaments into Receptive (*sensitif*) and Active (*actif*) is seen to have a natural basis, for while feeling and action each involve both constructive and destructive processes, still, in general results, feeling is favorable to integration and action to disintegration. Each of the classes mentioned has two divisions, since psychical reaction, either in the way of feeling or action, may be prompt without being intense or intense without being prompt. No concrete

individual, the author is careful to say, is the realization of any of the four abstract types which thus result. In any given instance, two or more types will be found in combination. Further, it must be remembered that the perfect and harmonious temperament is one in which there is a proper balance between the constructive and the destructive elements.

In the section that deals with Character, M. Fouillée sets out by demonstrating that intellect is not a superfluous accompaniment of the other psychological processes. The lowest organic being manifests a *preference* for one form of nourishment rather than another. But before one thing can be preferred to another, the two must be *cognized* as different from one another. The intellectual element, therefore, is present and active at the earliest stage. Further, Darwin has shown that in the struggle for existence intelligence is a condition of supremacy, and hence has developed more and more. If it were merely a useless concomitant, this would not be the case. Having thus proved that intellect is a primary and essential element, the author proceeds to classify characters according to the predominance and varying relation of the three great psychological factors—intellect, feeling, and will. This classification, he claims with justice, is more fundamental than the classification according to the objects to which our tendencies are directed. Objects are far from exhausting the subjective content of our tendencies, of which they are simply the points of application, the external occasions. What escapes in the classification by objects is precisely what is most important, namely, the tendencies themselves.

The influence of Sex on temperament and character is discussed from the point of view of Geddes and Thomson's theory, that Sex is due to the preponderance of the constructive or destructive elements in the organism. The former is more prominent in the female, the latter in the male. By means of this biological principle the mental and moral characteristics of the two sexes are deduced. Woman represents the conservative element, while in man the active, restless, disintegrative element is predominant. Hence, in comparison with men, women are calmer, more patient, less courageous, more emotional, less highly developed intellectually. On this view it is evident that the two sexes must be regarded as essentially different. They are complementary, however, and the one has the same worth as the other.

The chapters devoted to the determination of character according to race are the least satisfactory in the book. After pointing out

that in myths, religious customs, etc., we have evidence of the essential unity of the human spirit, M. Fouillée tries to explain how the differences observable between the various races have originated. The Negroes and the Orientals are then hurriedly characterized, and the Whites are dismissed with the remark that every one knows all about their essential traits. The author is not afraid lest the Eastern peoples should overrun Europe and dominate the world. The Whites are intellectually superior, and intellect can always devise means for the maintenance of its supremacy.

Though this book is admirable in many respects, the general impression which it leaves is not altogether satisfactory. It is written in a clear and interesting manner, and the acuteness of the author is everywhere apparent. But, though it contains nothing that is altogether irrelevant, it contains a good deal that might with advantage have been compressed. In this respect it does not compare favorably with M. Paulhan's compact treatise, *Les caractères*. Further, although M. Fouillée has attempted to go beyond mere empirical observation and classification, he cannot be said to have worked out a scientific theory in any very systematic way. The 'given' element in character is regarded as due to race, sex, and individual constitution. The last is dependent, presumably, on the relation existing in the organism between the constructive and destructive elements. But Sex also is determined by the same relation, so that on the author's principles two of the factors which he enumerates should fall together. At all events there is a difficulty here which should be taken into account. Moreover, Temperament and Character are treated altogether independently of one another. The two should surely be brought into some relation, for both must be united in any concrete individual. It might be added that it is not obvious why there should be a classification of characters according to the predominance of intellect, feeling, or will, if character "is the reaction of intellect and will" on the 'given' (p. xvii). Indeed, it is very difficult to get any notion of what the author understands by Character and Temperament respectively. This fundamental distinction is rather indicated than sharply outlined. The book, in short, though interesting and suggestive, is somewhat loosely put together. Still it is an advance on previous works dealing with this subject, and should be welcomed accordingly.

DAVID IRONS.

Philo about the Contemplative Life, or, The Fourth Book of the Treatise concerning Virtues. Critically edited with a defence of its genuineness. By FRED. C. CONYBEARE, M.A., Late Fellow of University College, Oxford. Oxford, at the Clarendon Press, 1895. — pp. xvi, 403.

The author tells us that this is the first volume on Philo which has issued from the University Press in this century, important as Philo has been to generation after generation of Catholic teachers. One must not, however, conjecture from this statement in the author's preface that Philo has been ignored all these years in England. Within a very brief period we have had the admirable works of Drummond, Hatch, and J. Rendel Harris, and the Germans have not been idle. Cohn, Cumont, Wendland, Zeller, Wolff, Bernays, and Freudenthal, have all within the last decade and a half made more or less important contributions to the Philonean literature. The volume before us is concerned only with that tractate, amongst the voluminous works of Philo, known as the *περὶ βίου θεωρητικοῦ*, being the fourth book in an account of his embassy to Gaius, which series of books was entitled *περὶ ἀρετῶν*. The Greek text of the tractate occupies upwards of 20 pages, but to examine these minutely it has required upwards of 400. We have an *apparatus criticus*, exhaustive philological notes and general commentary, a very detailed excursus in defence of the Philonean authorship, excerpts from the *Historiæ ecclesiasticæ* of Eusebius, from the Armenian Version, from the Old Latin Version, and a set of indexes, which by their fulness and painstaking accuracy ought to fill every reader's heart with gratefulness and delight. The work is altogether an admirable piece of bookmaking.

The chief concern of the author is to rescue this treatise from the hands of the German critics, who had lately concluded it did not belong to the Philonean writings, and to restore it to Philo, where he conceives it rightfully to belong. Some thirty years ago Grätz, in his *History of the Jews*, had expressed strong doubts about the Philonean authorship and in fact criticised Zeller for accepting the treatise as authentic. But Zeller (replying in the second edition of his *Philosophie der Griechen*) did not regard Grätz as having made out his case. However, after Lucius published his work on the Therapeutæ (*Die Therapeuten und ihre Stellung in der Geschichte der Askese*, Strassburg, 1879), Zeller was convinced and faced about. In his third edition (III, ii, p. 307, note) he accepts the position of Lucius as in the main correct. And so with the unauthenticity of Philo's

tractate on the *Contemplative Life*, the sect of Therapeutae, therein and nowhere else described, vanishes as the dream of some ancient literary forger.

At the time of Jonathan the Maccabean (160 B.C.), there were three sects of the Jews: the Pharisees, Sadducees, and Essenes. The last named was a religious order, similar to the monastic orders of the Church, and had at the beginning of the Christian Era some 3000 members. They lived in cloisters; divided the day into a fixed *régime* of work, worship, and charity; possessed no private property, but had all things in common; and by their manner of life and method of government furnished the prototype of the Christian monks. Further, these Essenes are thought to have handed down in their sect the doctrines out of which grew the secret teachings of the Kabbala, so important in the history of Jewish thought and custom. As Jewish monks they are important figures in the history of monasticism. They were scattered mainly through Palestine and Syria. The Therapeutae or Worshippers have been heretofore regarded as a sect of Jewish recluses, whose doctrines and practices differed only in minor points from those of the Essenes. They were supposed to be found only in Egypt, their chief seat being on the Mareotic Lake, near Alexandria.

That such a sect ever existed, we know only from Philo, and only from this one tractate of Philo. But Lucius and his followers regard this work as having been written toward the end of the third century, because it depicts, as they think, a set of conditions exactly found at this period and not before. They further suppose it to have been written by some apologist of Christian asceticism and published under the name of Philo, in order to give it the weight of a distinguished name. If this position is to prevail, we shall have to cut out one article from our encyclopaedias and one chapter from our histories of religious sects. The main arguments of the opponents of the authenticity, Lucius and his party, are briefly these: 1) There is no mention of the Therapeutae or of the tractate on the *Contemplative Life* before Eusebius, although Josephus and also Strabo (in his account of the Mareotic Lake) had occasion to mention them, had they been in existence. Even Philo himself never mentions the *Θεραπευταί*, except in this document, always using that word elsewhere in its usual meaning to signify worshippers or the pious in general and not any particular sect. 2) The *De Vita Contemplativa* is an appendix to the *Quod Omnis Probus Liber Est*. But this *Q. O. P. L.* and the lost treatise: *Every Evildoer is a Slave*, formed a single

literary whole and therefore wanted no appendix. 3) Philo puts a much lower value on asceticism than does the author of the *Contemplative Life*. 4) The *Contemplative Life* differs materially in use of words and manner of statement from the other treatises of Philo, while it bears strong linguistic resemblance to the writings of the later Christians. 5) The description of asceticism is drawn from conditions prevailing late in the third century. 6) Why was the sect not mentioned in *Quod Omnis Probus Liber Est*, where the Essenes are treated, if the order was an historical one and in existence at the time of that writing?

These are very strong arguments and knotty points for Mr. Conybeare to handle. But he is not dismayed by the character of the opposing evidence nor by the weight and array of the opposing scholars. He says in reply: 1) Josephus is silent about the Christianity growing up under his eyes. An argument *a silentio* cannot therefore in the case of Josephus count for much. As for Strabo, in his long description of Egypt he only refers to the Jews, in a single line, to say that the papyrus trade was in their hands. You could not conclude from his account of Alexandria that it contained a single Jewish citizen. And as far as contemporary silence in general is concerned, have we not the analogy of the Copts, of whom we know nothing until we suddenly hear of them in the fourth century, when they were already a numerous sect with a great body of monks? The *De Mutatione Nominum*, the *De Profugis*, and the *Quod Deterius Potiori Insidiatur* give us an account of such ascetics and recluses as are described in the *De Vita Contemplativa*; and all of these treatises are admittedly genuine. 2) The *D. V. C.* does not announce itself to be a continuation of the *Q. O. P. L.*, but it might very well be an appendix to Philo's lost *Apology for the Jews*, which contained an account of the sect of the Essenes referred to in the first sentence of this tractate on the *Contemplative Life*. 3) Mr. Conybeare shows from the *De Mutatione Nominum*, the *De Profugis*, and the *Leg. Alleg.*, that Philo's attitude towards asceticism was the approving one found in the author of the *De Vita Contemplativa*, though he approved of the monastic or recluse life beginning only after a man had withstood the temptations of the world and had comprehended the meaning of Socratic self-mastery, the worth of which Philo well understood. His ideal, however, of the wise and good man is an ascetic one, and is found in the *Allegories of the Sacred Laws* (iii. 48). "So also, now, he who is perfectly wise, that is, Moses, will be found to have utterly shaken off and discarded the pleasures." The author of the *D. V. C.*

puts no higher worth on asceticism than this. 4) Mr. Conybeare, in a minute, if not exhaustive, criticism of Philonean diction (pp. 343 ff.), finds parallels in the authentic writings of Philo to the supposed un-Philonean words and phrases in the *D. V. C.* These pages and the preparation of the *Testimonia* exhibit the most painstaking and scholarly work of the volume and are on the whole the most conclusive proofs for his contention. 5) In reply to the fifth objection, our author points out that the Eusebian and Armenian texts, the Old Latin and existing Greek texts, "can have converged only at a point long anterior to 300 A.D." (p. 332). The picture of Roman luxury in the *D. V. C.* best agrees with the age of Augustus, and not at all with the end of the third century. Furthermore, the fusion of Judaism with Greek elements, particularly with Pythagoreanism and Stoicism, is not peculiar to the *D. V. C.*, but is precisely what we find in the other writings of Philo. 6) The author adduces strong evidence (pp. 276 ff.) from the *De Somniis* and *Quod Omnis Probus Liber Est* to show that the *D. V. C.* was composed earlier than these two treatises.

These replies to his opponents are all substantiated by a large mass of historical and philological citations, which cannot receive mention here. Although these are the main arguments in the volume, there is a wealth of subsidiary evidence brought to the defence of the author's thesis, which tells powerfully in favor of his contention. He is a good controversialist because he has thoroughly mastered the evidence, but he is too impatient in manner and inclined to ignore the amenities of literary warfare. One cannot but feel that in his handling of the objections of Grätz (vol. V of whose *History of the Jews* has just appeared in English) he weakens his cause by flippancy and impatience, the more so because the reader is not always convinced of the soundness of Mr. Conybeare's arguments. He has certainly brought no direct and conclusive proof that the *Therapeutae* are referred to by any other author or in any other writing of Philo. And for this curious omission he has brought no really satisfactory explanation. He has, however, I think, made a conclusive defence of the Philonean authorship of the tractate, and if we accept the testimony of Philo as valid for history, then we are either obliged to admit the existence of the sect in question or suppose that he is using the term *θεραπευταὶ* here in the general sense of worshippers, and not in the sense of any organization. And there seems to be really no evidence in the *D. V. C.* to compel us to the view that the *θεραπευταὶ* are to be accredited with a definite organization such

as would constitute them a sect. Philo is simply referring to these people as a class of worshippers amongst the Jews who in Egypt went into solitude and devoted themselves to a life of contemplation. Similar *θεραπευταὶ* there have been amongst mystics and ascetics everywhere. In Egypt they had some particular marks, owing to the status of Judaism there, but were not an organized body of devotees, committed to any particular faith or ritual, beyond that of the Mosaic law. Such a theory would make easier of explanation the lack of mention of any supposed sect of Therapeutae by Josephus, Strabo, Pliny, or by Philo himself. This view, while it preserves the tractate *D. V. C.* in the Philonean canon, would regard any organized sect of Therapeutae as unhistorical and born of misinterpretation.

The volume is an opportune one in view of the unsatisfactory state of the controversy in the last twenty years. It will show, not only that the ghost of the *D. V. C.* has not been laid, but that Lucius and his followers have been mistaken in regarding it as a ghost at all.

W. A. HAMMOND.

SUMMARIES OF ARTICLES.

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

PSYCHOLOGICAL.

Attention and Will: A Study in Involuntary Action. A. F. SHAND. *Mind*, No. 16, pp. 450-471.

The principal inferences which can be based on the fact of involuntary action may be summarized as follows. That which makes an action *involuntary* as distinguished from one merely *non-voluntary*, is the presence of a volition opposed to it. This volition is abortive: we will to realize one idea and fail; but we realize a counter-idea which we opposed. This abortive volition is more than attention to an idea with desire and effort, and contains a distinctive event, — the exclusive identification of ourselves with one idea. This identification is specific, and cannot be resolved into the assimilation of one idea by a body of thought and tendency, which we find in all thought. This identification, this event Will, regarded in its quality or character, is a unique differentiation of conative thought. This event, like all other events, is active, and modifies the psychosis into which it enters. — It is evident from this analysis of involuntary action that it cannot be maintained that realization of the idea is essential to volition. In involuntary action the fundamental character is that the idea we will to realize does *not* produce its existence. It might seem strange that realization of an idea ever came to be maintained as essential to volition, if we did not remember that otherwise, on the common theory, the distinction between thought and will is lost. The analysis of involuntary action also enables us to settle another question. Though many practical people have a

strong conviction that the will does not always follow the strongest motive, psychologists have felt that in order to give any scientific account of the Will, they must assume that it always does. Professor James indeed says that "in all hard cases of volition" we feel as if the line taken were that of greater resistance, but he has not ventured to express more than this surmise. But, in involuntary action, we have no mere surmise that the will sometimes follows the weaker motive, but evidence apparently so strong that we can only draw one conclusion from it. It is, of course, very difficult to find any method for estimating the strength of opposite motives, but, taking everything into account, it may reasonably be inferred that the intense effort sometimes felt when there is a counter-idea present, is due mainly to the superior strength of that idea over the other. — Will, therefore, must be regarded as possessing a unique quality of its own. It is that decisive event which must occur in a process of thought or attention to ideas, before the latter can become volition in any sense that will enable us to distinguish voluntary from involuntary action. Just as in comparing visual and auditory sensations we see that each has developed a special quality of its own, so when we compare Will with Thought and Feeling, or with the lower conative developments, we find in it too a unique quality which cannot be analyzed into others.

DAVID IRONS.

Psychologie du nominalisme. L. DUGAS. Rev. de Mét., III, 6, pp. 645-672.

Generality can be predicated only of a form of activity, not of ideas or things. The perception of an object is a definite act. Just in so far as a series of such acts involves the same form of activity, a habit or tendency to that *kind* of activity is established. This habit as such cannot be ideated. An idea is a habit determined to a particular act. Hence there are no 'general ideas.' An idea must be a determinate act, and so particular. The only generality lies in the *habitude* viewed as the possibility of any or any number, indifferently, of a series of perceptive acts. Generality is, then, at bottom, a predicate of the will rather than of the intellect. Thought is limited activity. The different series of acts constituting the different habits or lines of activity are determined by the different organs receiving stimuli. Thus again the general may be defined as 'the identical *manner* in which reactions against impressions occur.' If at every stimulation the *habitude* were completely determined, all the acts in

the series would be reproduced. But what is wanted in thinking, that is, in getting at the relations between these lines of mental movement, is not the whole series of particular acts, but merely the kind or form of activity involved. Hence the need of a symbol to stand for the form involved in the series as a whole. This symbolizing is the function of language. The word thus becomes the stimulus, not for a series of particular acts, but for an attitude of mind. There is, then, more justification for the nominalists' view that universality resides only in words, than for the conceptualists' contention that it resides only in ideas. For universality is in the word functionally, while it is in no sense in the idea. In fact, both are wrong, the real seat of universality being in the movement, the form of the activity which the language symbolizes. The freer the habit becomes, the less definite are the images stimulated by the symbol. The value of the activity is felt immediately through the symbol. Hence the more abstract and general knowledge becomes, the more truly may we say that it is only language well constructed, if we understand by 'language,' not something outside thought, but the concentrated form of thought.

A. W. MOORE.

The Confusion of Function and Content in Mental Analysis.

D. S. MILLER. Psych. Rev., II, 6, pp. 535-550.

Function and content are two different aspects of mental phenomena, though the distinction between them is too commonly obscured. The confusion referred to consists in supposing that mental causes, unlike physical, must themselves be an index, by the internal evidence they offer, of the train of consequences they entail; that their function must be wholly determined by their content, and that accordingly their content is a sufficient key to their function. This confusion can be brought out most clearly by examination of a series of cases. (1) In the case of generic ideas what we have in our minds is a perfectly concrete, though a more or less blurred and shifting, vision. In addition to this image, however, there is the tendency of this mental state, by its associations, to prompt the right action towards the members of the class, and inhibit any false thoughts about them. The importance of these forms of consciousness does not depend upon any inner significance they may possess, but upon what they bring after them in the mental train. (2) A probable theory of belief is that it is occasioned by a spontaneous, and not by an indissoluble, association of ideas. If this theory be accepted, it

shows that it is not the presentation of ideas which is of importance in the production of belief, but their behavior after they are presented, that is, their influence in preserving each other in firm association. (3) When I try to think of 'nothing,' in a room, *e.g.*, I picture to myself the room, and continually keep excluding the image of any object in the room that may come before my mind. Here it is the maintenance of my idea and the inhibition of all other ideas—in short, the *function* and not the *content* of ideas—that enables me to think of nothing. (4) It is the function of our sense-perceptions to stand for certain objective facts, and in such a way as to guide our action in reference to them. But these perceptions do not have *in themselves* a conscious intent to represent the objective facts. If such were the case, function and content would be inseparable. As it is, the confusion of these two points of view leads to the conclusion that state of consciousness and mental object, idea and content, are different.

G. A. COGSWELL.

On Dreaming of the Dead. HAVELOCK ELLIS. *Psych. Rev.*, II, 5, pp. 458-461.

There are instances of dreams in which the dead are seen as alive. This dream-type may be accounted for as follows. The death of a friend sets up a barrier which cuts into two the stream of impressions concerning him. To effect a harmony between the images representing him as dead and those representing him as alive, the dream-consciousness produces the theory that the person has come to life. If these dreams have an organic foundation which causes them to occur with some degree of frequency, they may in primitive times have played an important part in evolving the belief that death is only a transitory and apparent phenomenon.

I. M. BENTLEY.

Les phénomènes élémentaires de la vie. F. DANTEC. *Rev. Ph.*, XX, 8, pp. 113-153.

The two phenomena here considered are the two that are absolutely necessary for the maintenance of all life, namely, *addition* and *assimilation*. The term 'addition' covers all processes that introduce new material into the protoplasm. As observed in unicellular animals, the process is wholly under the control of mechanical forces. All the intra-protoplasmic actions of the protozoa could take place without any nucleus in the cell, if one supposes that in some way the com-

position of the protoplasm is kept constant. But addition changes the composition of the protoplasm. All the processes which dispose of new material so as to maintain the composition of the protoplasm constant within certain limits, are included under the term 'assimilation.' The studies of Balbiani, Hofer, and Verworn confirm M. Dantec in his conclusion that assimilation takes place only when there is a nucleus present in the protoplasm. The relation of the assimilative process to the nucleus remains a mystery. Yet the question is worthy of investigation, for it is the true vital phenomenon upon which all other vital processes depend.

ALICE J. HAMLIN.

Sur l'origine sensorielle des notions mécaniques. CLÉMENTITCH
DE ENGELMEYER. Rev. Ph., XX, 5, pp. 511-517.

Students very quickly form a notion of Velocity, but the distinction between Force and Work presents great difficulty. Reflection upon this anomaly suggests a problem for physiological psychology. What part is played by sight, touch, and the muscular sense, respectively, in our knowledge of motion, of force, and of mechanical work? Sight tells us nothing concerning either force or work; it enables us to perceive the quantity and direction of motion. Touch gives us the notion of pressure, rarely that of motion also. The muscular sense fails to distinguish between motion and work, between work and force, thus giving rise to a confusion between these ideas. It acts towards these phenomena as if they were of the same order, differing in intensity only. The teacher of mechanics should begin with the notions most familiar and most evident to the beginner. Physiological psychology should inform us what these notions are.

D. R. MAJOR.

Reaction Time with reference to Race. R. M. BACHE. Psych.
Rev., II, 5, pp. 475-486.

Spencer calls attention to the contrast between the savage and the civilized man in that the former is so much more than the latter a creature of secondary reflex movements. If, for example, a savage hurts his foot against a stone, he will in all probability immediately kick the stone. This fact can be accounted for, on the ground that the automatic preceded the intellectual condition of man, and that with the disappearance of the primitive conditions of life secondary

reflexes became less and less necessary for self-preservation. The savage ought then to have quicker reflex action than civilized man. In support of this conclusion the reaction-time of 12 Whites, 11 Indians, and 11 Africans is given, for auditory, visual, and electric stimulation. The average time for Indians and for Africans is found to be much shorter than for Whites.

I. M. BENTLEY.

Emotion, Desire, and Interest: Descriptive. S. F. M'LENNAN.
Psych. Rev., II, 5, pp. 462-474.

In analyzing concrete emotional experiences we find it difficult to say at first, whether we are dealing with emotion, desire, or a fact of interest. If we examine such states as 'love' and 'hatred,' we shall find all three involved. There is a primary interest, then emotion with desire, and, when desire is realized, interest again. Interest is thus at the beginning and end of both emotion and desire. Analyzing more closely emotion and desire, we find that each involves (1) an intellectual element, (2) an attitude towards or against the stimulus, (3) the swell or drive of feeling, (4) pleasure and pain coloring. In the nature of emotion there is inner strife and yet unity, a lack of equilibrium and a seeking for harmony. When the conflicting elements are finally harmonized and we know what we are going to do, the state passes over into volition. If present action is inhibited, desire or preparedness for action ensues. This 'preparedness' does not 'set' immediately, however, and any new suggestion may bring about the old turmoil. Until the desire is 'set' it may pass back into emotion. When inhibition is removed and the 'set' reaction pours forth, we have deepest interest.

I. M. BENTLEY.

ETHICS.

Social Evolution. DAVID G. RITCHIE. *Int. J. E.*, VI, 2, pp. 165-181.

The phrase 'social evolution,' as generally used, implies the assumption that biological conceptions throw *some* light on social phenomena; it generally implies also that without biological theories and conceptions social phenomena cannot be properly studied, nor social problems scientifically dealt with. It is worth while to con-

sider, however, what light biological theories of evolution throw upon the history and the practical problems of human society. The greater complexity of social life among human beings, as compared with what one finds among plants and animals, even social animals, may well suggest that biological conceptions cannot, without considerable modification, be applied to social phenomena. Biological conceptions are certainly less inadequate than mathematical, physical, or chemical conceptions; but an uncritical use of them in this connection involves a constant risk of mistaking metaphors for scientific laws. The applicability of the idea of *natural selection* to human society may be taken as an illustration. The question for the biologist is: What other factors than natural selection, if any, are there in organic evolution? The question for the sociologist is more complicated; for he must not assume without proof that there are no other factors in social than in organic evolution, nor that natural selection means exactly the same thing in human society that it does among plants and animals. For example, in sub-human evolution, races and individuals that have injurious customs perish by natural selection; but in human evolution, where there is consciousness and reflection, the injurious custom may be changed without the extinction of the race or individual that practises it. The natural results of natural selection are continually checked in human society. Thus the theory of natural selection, when applied to human society, sets a problem, but does not solve it. Take, for example, the case of religion. 'Religion exists everywhere among human beings; therefore it must be due to natural selection; therefore its essence is to further social utility.' Thus reasons Mr. Benjamin Kidd in his *Social Evolution*. But what is a 'religion' in Mr. Kidd's sense of the term? One of the problems which most puzzles the student of human history is presented by the apparently anti-social and injurious elements contained in so many of the religions of the world. This very matter has been urged as an objection to the applicability of the theory of natural selection to the explanation of social phenomena. There can be no doubt that 'in primitive conditions of society' religion is the strongest bond of social cohesion; but it is certainly not the sole bond between human beings; nor is a conservative force necessarily under all circumstances beneficial. Again, mere increase in numbers does not always mean 'social progress,' nor decrease, 'national decay,' as biological sociologists are apt to suppose.

D. R. MAJOR.

The Conscience: Its Nature and Origin. WILLIAM W. CARLILE.
Int. J. E., VI, 1, pp. 63-77.

Kant's most conspicuous service to ethical science consists in his having secured practically universal recognition of the fact, that any satisfactory theory of the nature and origin of conscience must account for the absence of all considerations of personal consequences, in this world or the next, in action that can claim the sense of duty as its motive. Opposed to this view, however, is the theory of Spencer, that our current conceptions of duty are the result of the experience of past generations with reference to rewards and punishments. But this latter theory wrongly postulates the validity of the method of chemistry in the explanation of psychological metamorphoses. Rather must the method of verification, as used in physics, be applied. An explanation that postulates a metamorphosis in which the new product has nothing in common with the old, is, in psychology, simply equivalent to no explanation at all. But, if we grant that as to its origin Conscience is ultimate and unanalyzable, the question as to its nature still remains. Is it a special sense, the Moral Sense, or must it be regarded under the category of Reason? Clearly the latter view must be accepted. But, if we regard it as Reason pure and simple, we are viewing it as a lever without a fulcrum. Reason aids us to determine what is just and unjust, but assuredly it does not give justice and injustice their meaning. Whence then this meaning? As the child gets his first conception of truth and untruth when he sees them in the concrete and in contrast, so also he gets his first conception of justice and injustice when he meets them in experience. He learns to apply to himself what he first sees in others. The sense of justice is resentment become impersonal. There is no thought of consequences in our indignation at wrong done to another. As the explanation of the prohibitive aspect of the Conscience is to be found in the transformation of resentment, so the explanation of its positive aspect, of the approval that we accord to virtue, is to be found in the transformation of gratitude. The criterion of the good, as well as of the true, is, in the last resort, the concurrent opinion of others. The principle of the 'parity of reasoning' holds in ethical as in speculative thought.

J. F. BROWN.

METAPHYSICAL AND EPISTEMOLOGICAL.

The Hegemony of Science and Philosophy. ALFRED FOUILLÉE.

Int. J. E., VI, 2, pp. 137-164.

This article consists of three parts. The first deals with the conflict between those who boast the achievements of Science, and those who insist that scientific methods are inapplicable in certain departments of reality. Philosophy alone, it is claimed, can put an end to the strife. In the second part an effort is made to state the mutual relations of Science and Philosophy; also, to show the attitude of each to reality. "Science concerns itself with the mutual relation of objects, considered independently of their relation (1) to a sentient and thinking subject, (2) to the whole of existence. Science undertakes to determine the objective relations of phenomena, while it eliminates as much as possible the consciousness for which they exist and through which they are known. Such a point of view is partial and abstract, since it does not embrace the whole of reality. After abstracting the thinking subject, pure sciences abstract still further all objects other than the one which is to be considered. Philosophy corrects the abstraction which has been made of the thinking subject, reestablishes the unity of nature and of thought." The third part treats of the place of 'faith' or 'belief' in practical life. It contains, also, a discussion of the relations of science, religion, and philosophy.

D. R. MAJOR.

L'espace et la géométrie. H. POINCARÉ. Rev. de Mét., III, 6, pp. 631-646.

Representative space in its triple form — visual, tactile, and motor — is essentially different from geometrical space. The latter is continuous, infinite, tri-dimensional, and homogeneous, that is, all its points are of identical value in it. Pure visual space has only two dimensions, is limited, not continuous, not homogeneous. Tactile space is still more complex and further removed from geometrical space. Motor space is not homogeneous, and has *potentially* as many dimensions as there are nerve fibres reporting external objects. This number is *actually* reduced, by neglecting certain of these reports, finding by experience that they agree, sufficiently for practical purposes, with certain others. But this reduction is not an

a priori form imposed necessarily upon our sensibility. It is wholly a matter of expediency. But are not all objects represented in geometrical space? No, but we may reason about them as if they were. 'Localizing' an object in space means representing the movements necessary to reach it. What then is the significance of geometrical space? Phenomena are (1) Involuntary — not accompanied by muscular sensations and so attributed to external objects, or (2) Voluntary — accompanied by muscular sensations and attributed to our own body. Among the changes in (1) are *some* which can be 'corrected' by correlative changes in (2). The laws of this process of correction constitute the Science of Geometry. Such correction is only possible in the case of solid bodies. Geometry deals therefore with only one particular phase of space experience in general, *viz.*, adjustments involving solidity. Were there no solids in nature there would be no Geometry. The three dimensions of geometrical space are due to the fact that we happen to be constituted as we are, and happen to live in this particular kind of world. In a different world and for a different self, space might have fewer or more dimensions. Finally, though experience plays so large a part in geometry, the latter is not an experiential science, for it is occupied not with actual but with ideal solids.

A. W. MOORE.

The Origin of a 'Thing' and its Nature. J. MARK BALDWIN.
Psych. Rev., II, 6, pp. 551-573.

The author's conclusions may be summed up as follows. (1) All statements of the nature of a 'thing' are, for the most part, statements of origin. (2) Statements of origin, however, never exhaust the reality of a thing, since they cannot be true to the experiences which they state unless they construe the reality, not only as a thing which has had a career, but also as one which is about to have a career; for the expectation of the future career rests upon the same historical series as the belief in the past career. (3) All attempts to rule out prospective organization or teleology from the world would be fatal to natural science, and also to the historical interpretation of the world found in the evolution hypothesis; for the category of teleology is but the prospective reading of the same series which, when read retrospectively, we call evolution. (4) The fact that a thing, and more especially mental products, ideas, intuitions, etc., have a natural history, is no argument against their validity or worth as having application beyond the details of their own

history ; since, if this were so, a natural history series could produce nothing new. (5) All these points may be held together in a view which gives each mental content a twofold value in the active life. Each such content begets two attitudes, by its function as a genetic factor in the progressive development of the individual. As far as it fulfils earlier habits, it begets and confirms the historical or retrospective attitude ; as far as it is not entirely exhausted in the channels of habit, so far it begets the expectant or progressive attitude. (6) All organization in the world rests ultimately on the basis of an unconscious convention of our organisms, made during the growth of our experience. The category of causation, *e.g.*, has come to be applied to reality through a continual selecting out, from the mass of events, of those which have exhibited the more definite and invariable aspects of behavior. This category, however, is not capable of universal application, since it fails to explain the origin of that very selective activity on the basis of which it has arisen. (7) Both the naturalist and the intuitionist define 'nature' in terms of 'origin.' At any point in the career of a thing, the former can describe *what* the thing is, only by tracing its career further back ; while the latter naturally interprets the nature of the First Cause in the light of mental behavior. The true way of regarding the nature of a thing is to view it, at any given stage of its career, both retrospectively and prospectively — in the latter case as promising a widened sphere of action. (8) In order to explain the category of potentiality a new refinement must be introduced. When we speak of the potency that exists in the behavior of a thing, we have a general expectation of a further career for the thing, but always under the condition that when it shall have reached any point in its future career it can then be interpreted in terms of retrospection.

G. A. COGSWELL.

Organic Evolution and Mental Elaboration. HUBERT M. FOSTON. *Mind*, No. 16, pp. 472-488.

To regard man as a microcosm, as containing in himself a copy of the universe in all its essential aspects, is a characteristic of philosophical thought especially in modern times. The aim of this article is to trace the correspondence between mental life in its three stages of Perception, Imagination, and Conception or Reason, on the one hand, and organic life in its three stages of Vegetable life, Animal life, and Social life, on the other. The analogy between perceptions and plants is seen in the fact that both show, in the early stages of their development, evidence of differentiation and

integration,—the former showing an evolution from an original “sensation-continuum,” and the latter exhibiting a progressive advance from a primary “hypothetical simple tissue.” Both perceptions and vegetables are also subject to the law of the ‘survival of the fittest.’ In the next stage of development, both animals and images show an advance over the preceding stage in the fact that they are less dependent on their environment, are not so much subject to the *here* and the *now*. The after-memory image, on the one side, and reflex action, on the other, form the transition between the first and the second of these stages. Interest begins to reveal itself in the case of the representative images, and purpose, in the conscious life of animals. The formation of the generic image, by which a number of like images are fused into one, and the possibility of their preservation thus secured, corresponds to the joining together of a number of scattered members into a flock or herd, by which the destruction of these individuals is prevented. The growth of class-marks in the mind, by which the over-specialization of separate ideas is prevented, has its counterpart in the growth of custom in early human societies. Language, as the expression and preservation of a distinct mutual connection between things, has its parallel in a system of positive institutions in the tribal group. Finally, as society fulfils its function better, the more it allows liberty to the individual to develop his own capacities, so in reason there are a variety of aspects of individual objects which must be recognized, if reason is to have an effective application to things as they are. The condition of positive intellectual progress is the patience to let an object form its own true character in our minds, and what we here call ‘patience’ is called ‘tolerance’ in society. G. A. COGSWELL.

HISTORICAL.

Gedächtniss-theoretische Untersuchungen und mnemotechnische Spielereien im Altertum. BERGEMANN. A. f. G. d. Ph., VIII, 4, pp. 484–497.

Scientific psychology made no progress amongst the Greeks after Aristotle. There was no longer any originality in Greek intellectual life, and scholars began to sift, collect, and acquaint themselves with the mass of science and literature already produced. Of these scholars there were some who were impelled by a speculative interest,

others by a practical interest. To the former class belong the Stoics, Epicureans, and Neo-Platonists, and to the latter, physicians, orators, and teachers of oratory. Amongst the former, only the Neo-Platonists have done anything of importance. Plotinus (205-270 A.D.), in opposition to Aristotle, maintains the view of dualism. Man is a double being, made up of body and soul, and there is no physical process which corresponds to psychical phenomena. There is no material substrate of sensation, and so we find here no psychophysical theory of memory as with Aristotle. Memory is for Plotinus a purely psychical function. The body does affect memory, however, in a negative way. How the body does this, Plotinus does not make plain. He simply says that, by keeping the body in due subordination, memory receives the negative assistance of not being hindered. The age of Plotinus, as the age of encyclopedic knowledge, of collections and libraries, was the golden age of mnemotechnics. Artificial devices for the assistance of memory are by no means a new invention. Mnemotechnics were probably first devised by one of the Sophists in the age of Socrates. M. Antonius Grapio, who has been identified with the "incertus auctor rhetoricorum ad Herennium," and Cicero, invented mnemotechnic helps to memory, and both had a high opinion of such artificial aid. Quintilian, on the other hand, in the *Institutio Oratoria* expresses disapprobation of all these mnemonic artificialities, on the ground that they in no wise tend to strengthen memory, but rather load it with a double burden. The most important thing to him is the constant exercise of memory, by the committing of passages of literature, and the repetition of what has been learned. In thus training the memory systematically, one trains it effectively, and in this Plutarch and Lucian agree.

W. A. H.

Zu Anaxagoras. EMIL ARLETH. Ar. f. G. d. Ph., VIII, 4, pp. 461-465.

Arleth replies to the objections of Zeller, and explains the misunderstandings in regard to the interpretation of frag. 5 of Anaxagoras. In defence of the view that *λεπτότατον* and *καθαρώτατον* may be predicates of spirit, he cites as an analogous case the statement of Anselm of Canterbury in reference to God, *id quo majus cogitari nequit*; also the distinctions made by Descartes between *vera extensio* and *extensio per analogiam*, the first applying to body, the latter to spirit. Further, in regard to the ambiguity in frag. 5, whether immanence or transcendence is to be ascribed to the divine

Nous, the author asserts that one is not helped by Zeller's explanation (*Ar.*, VIII, p. 151), an analysis of which he takes up in detail.

W. A. H.

Auguste Comte. L. DUGAS. *Rev. Ph.*, XX, 9, 225-251; 10, 360-398.

It is almost impossible to make a clear and connected summary of these articles, but the following points may be given. The ideal of Comte, as a young man, was to realize in his life and thought the Greek ideal of harmony, and, according to Dugas, he was always true to this ideal. Positivism denies the existence of absolute truth. All truth is relative to man, 'man' being understood to mean the species and not the individual, so that truth is capable of fixity and universality. The first step towards realizing the ideal of harmony is to establish a universal creed. This agreement of minds is not to be realized in doctrines, but in the acceptance of a common method. Philosophy, after all, is not the possession of, but the search for, truth. It is enough to possess a common method and the necessary principles; the applications one can make for one's self. As soon as the positivist doctrine began to take form, the harmony of the positivists was disturbed. Though willing to accept a common method, all would not accept Comte's application of this method. They separated into two classes, called by Comte, respectively, positivists of the heart, and positivists of the intellect. Positivism must appeal to both intellect and heart, to those who are largely intellectual, and to those who are largely intuitional, women and the poorly educated. In this very appeal to feeling, the source of moral conduct, positivism becomes a practical philosophy. Comte is not satisfied with this harmony and equality of intellect and feeling, but in the second phase or period of his philosophy subordinates intellect to feeling, emphasizing sociology and religion. In this way he seems to make a return to the first of the three stages which he lays down as necessary in the natural development of man, namely, the theological. The religion of Humanity is the end, and positivism is the means for attaining it. Positivism, supposed to be the third stage, in the end thus returns to the first stage. Dugas asserts that, notwithstanding this vicious circle, positivism is always in accord with itself, though he does not explain just how this comes about. The social point of view dominates positivism, which in some measure accounts for this subordination of the intellect to the heart. After

formulating this principle, Comte becomes more and more mystical, giving fuller play to his imagination. In the religion of Humanity, humanity becomes *le grand être*, and Mme. de Vaux, as the personification of *le grand être*, the object of adoration. Comte thought and lived for humanity, and should therefore be respected by humanity. He reformed science, only for the ultimate purpose of reforming manners and morals. He is the founder of sociology.

FRANCES C. NEVINS.

The Idea of Nature in Plato. ALFRED BENN. Ar. f. G. d. Ph., IX, 1, pp. 24-49.

Plato's conception of nature as an objective standard of human action is a neglected feature of his philosophy. It represents the influence of the Sophists. There were two schools of Sophists, one following νόμος, the other φύσις. Protagoras represents the former, Hippias the latter. In the *Protagoras* and the *Gorgias*, Plato accepts the supremacy of law, but tries to harmonise law and nature. The frequent use of the phrases *κατὰ φύσιν* and *παρὰ φύσιν* probably indicates a late dialogue. If this be true, then we find a gradual development of naturalistic doctrine, reaching its height in the *Laws*. Here nature is exalted over law, but, as before, there is an attempt to harmonise the two. Plato's communism was probably derived from the Naturalists. Its great development in the *Laws* points to his growing sympathy with the latter.

ELLEN B. TALBOT.

NOTICES OF NEW BOOKS.

The Conception of God. Published by the Philosophical Union of the University of California, Berkeley, 1895.—pp. 84.

This is an address by Professor Royce with comments by Professors Mezes, Le Conte, and Howison. The text of the address fills one-third of the volume; and the comments by Professor Howison somewhat more. It is highly creditable to the University of California to have arranged for the consideration of the high theme discussed, and complimentary to the public that "some fifteen hundred persons" assembled to listen to such addresses. If the effect on the mind of a reader is not so stirring as it was to the listener in Berkeley, this is doubtless in part due to the difference between oral and written discourse, and in part to the circumstance that the proceedings were supplementary to previous studies of the Philosophical Union, of which the present pamphlet contains no record.

Professor Royce makes his position very clear. If there is a God, we must discover him in experience. Our individual experience is made up of shreds and patches. But we interpret it by the consensus of the various experiences of our fellow-men, and by the relatively organized conceptions of science. Nay, we advance beyond these to the ideal of an absolutely organized experience,—as if all phases of actual and imaginable experience were expressions of a universal meaning present to one universal subject. The question whether there is an absolute reality (God), is equivalent to the question whether there be such an absolutely organized experience. And that there must be, Professor Royce satisfies himself by two considerations; namely, first, that its bare ideality, held *true*, implies its reality; and, secondly, that its non-existence, supposed *real*, presumes it. I take this substantially to mean that the very fragmentariness and error of our actual experience must, to account for themselves, postulate an absolutely complete and perfect experience. And of such experiences absolute reality (God) is the necessary correlate.

Professor Mezes objects that this reasoning does not prove that there is a real being worthy of the exalted name of God. Professor Royce's all-inclusive being is, so far as the argument leads, devoid of spirituality.

Next, Professor Le Conte, abandoning the "subtle method of Professor Royce in reaching the conclusion of the personal existence of God," sets forth the argument of cosmic theism. As against Professor Royce's emphasis of thought, he emphasizes power and love as divine attributes. Professor Le Conte accepts the orthodox view of moral evil, and endeavors to vindicate our hope of immortality. Like the preceding speaker he is clear, forcible, and even eloquent.

Professor Howison has the last word. He makes criticisms and raises questions. The distinguishing note of his paper is that God must be conceived primarily from the point of view of conscience. The so-called Absolute Idealism of Professor Royce gives too intellectual an interpretation to the ultimate reality. Besides, the notion of "absolute experience" is a suspicious one. I have not space to follow Professor Howison into details. But his recapitulation in a series of questions (pp. 81-84) offers abundant material for reflection upon the issues raised by the various speakers.

All these thinkers believe in God; no one of them is satisfied with the other's proof of that belief. This makes the pamphlet suggestive, if unsatisfying reading. One lays it down with the feeling that much is still needed to clear up our notions regarding the nature of the Divine Being. If we all knew what we meant by the word God, there would, I suspect, be much less disagreement as to the question of the existence of God.

J. G. S.

Arnold Geulincx und seine Philosophie. Von J. P. N. LAND, Professor an der Universität Leyden. The Hague, Martinus Nijhoff, 1895. — pp. x, 219.

Geulincx could not have found a better biographer and expositor than Professor Land of the University of Leyden, the editor of his collected works and the author of numerous treatises on his life and writings. The volume before us was prepared at the request of a "German colleague" (his name is not given), who has assumed the editorship of a series of popular monographs on the leaders of philosophy, resembling *Blackwood's Philosophical Classics* and similar excellent collections. But owing to a misunderstanding with the publisher, Professor Land felt obliged to sever his connection with the German enterprise, and to publish his work under his own auspices. It is safe to say that the author's reputation and the merit of his book will procure for it the recognition it deserves.

Geulincx' life and system are clearly and logically set forth according to information obtained from the very latest manuscripts. Due regard is paid to the proper proportion of the parts, and though the book contains quite a number of typographical errors, it is well printed. The presence of an index would, in my opinion, add to the value of the little volume. It would also have been wise (considering the original purpose of the work, and in view of the fact that the author regards Geulincx as a more independent follower of Descartes than is usually supposed), had Land devoted a special chapter to the consideration of the relation between the two. He combats the theory that the philosophy of the disciple is merely an exaggeration of the principles of the master. It cannot be denied that the former is not a slavish imitator of the latter. Of course, the two systems closely resemble each other. Geulincx' contempt for scholastic learning, his doubts, his principle of self-certainty, his doctrine of innate ideas, his

criterion of truth, his rationalism, his dualism of body and mind, his attributes of extension and thought, his conception of the freedom of the will, etc., all these are Cartesian elements. But we notice important differences between him and the great Frenchman. There are critical tendencies in the pupil, which, had they been developed, might have eclipsed the glory of the teacher. "We must not imagine," he says (p. 116), "that things exist as they appear to the senses, *nor even as they are thought by us*. We cannot tell what they are in themselves; which proves how imperfect we are. . . . Although we ascribe to things the illusions of the senses and of the understanding, a divine element within us invariably tells us that we are mistaken." God alone has a knowledge of things-in-themselves; we, on the other hand, know our own ego merely. All other knowledge is uncertain. This is indeed a great deviation from Cartesianism.

Geulincx' dualism is also more consistent than that of Descartes: he repudiates the notion of reciprocal action, or *influxus physicus*. Land shows that the term 'Occasionalism' cannot be applied to the philosophy under consideration (pp. 141 ff.). We cannot act upon the physical world, nor can the physical world act upon us. Nor are my volitions the *causae occasionales* for God's producing movements in the physical world, nor movements the *causae occasionales* for his creating ideas in me. Nor did he pre-establish the harmony between soul and body, for the will is free. God knows what I am going to will, although my will is free, and the entire universe has been arranged according to that knowledge. "God in his infinite wisdom has instituted laws of motion, so that a movement which is entirely independent of my will and power coincides with my free volition."

The book is divided as follows: Introduction (pp. 1-12); Part I, Life (pp. 12-89); Part II, The Doctrine (pp. 89-215), Ch. I, Human Knowledge (pp. 89-129), Ch. II, Nature and World (pp. 129-160), Ch. III, The Rational Life (pp. 160-215); Conclusion (pp. 215-219).

FRANK THILLY.

Ueber den Einfluss von Gesichtsassociationen auf die Raumwahrnehmungen der Haut. Von MARGARET FLOY WASHBURN. Leipzig, W. Engelmann, 1895. — pp. 60.

Experiments on tactile space-estimations have hitherto left out of account the fact that such estimations, by persons of ordinary 'visualizing' powers, can never be made in purely tactile terms. Reagents whose visual imagination is normal will have in consciousness, during experiments of this sort, a kind of visual map of the surface operated on, in which the general outlines and salient features of the surface will be more or less clearly represented. The more aid given by this set of visual associations, the more accurate the space-estimation will be. It is obvious that when the points touched in the experiment lie near the (visual) boundary-lines of the

surface, or near some salient feature, the visual associations will be stronger, and localization in consequence more accurate.

This theory has direct bearing on the following results of previous experiment. (1) A smaller distance between two compass-points can be perceived on small surfaces (*e.g.*, finger-tip) than on large surfaces (*e.g.*, back). The two points will approach the visual boundary-lines more closely on a small than on a large surface. Of course, anatomical conditions largely account for this difference, but visual associations probably play some part in the case of normal reagents. (2) A smaller distance between two points can be perceived on the limbs, if the points lie in a line horizontal to the length of the limb, than if they lie in a line parallel to it. Obviously, in the former case, they approach the visual boundary-lines more closely. (3) The ratio between the local discriminativeness of two parts which is found by the method of equivalents, is closer to unity than a ratio between the same parts found by other methods (Camerer). The method of equivalents puts a much greater strain on the reagent than other methods, and he is more likely to help himself out by visual associations during experiments by that method. And the more the judgments are made in terms of sight, the closer to objective equality will be the distances estimated as equal on different parts of the body, and the closer the equivalence ratio will be to unity. (4) The larger the distances compared by the method of equivalents, the nearer to unity is the equivalence ratio (Camerer). The explanation of this fact is obvious from what has been said.

The following results of my experiments tend to confirm the above theory. (1) The superiority of 'horizontal' over 'vertical' impressions failed to appear in the case of a woman blind for forty-five years, and of two persons whose visualizing powers were slight. The other two reagents, both fairly good visualizers, showed it, and it appeared in the case of the former two when a sufficiently large distance between the points was taken. (2) Certain reagents who showed power of control over their tendency to visualize, gave an equivalence ratio further from unity when the tendency was controlled than when it was given full play.

Other results of the experiments described in this paper bear upon the methods most suitable for use in such experiments. 'Right and wrong cases' was found to be the best method, and more regular results were obtained when the order of impressions (*e.g.*, 'horizontal' or 'vertical') was regularly varied, than when the series was wholly irregular or perfectly uniform.

AUTHOR.

Die Vieldeutigkeit des Urtheils. Von Dr. ADOLF STÖHR. Leipzig und Wien, Franz Deuticke, 1895.—pp. 71.

The thesis of this little work is that the term 'Judgment,' as used in Logic and Psychology, rests upon the figure of a judicial decision in a legal process. The possible significations of the name, then, are only limited by

the number of applications of which this figure is capable. As different processes which the word 'Judgment' has been used to express, the author distinguishes: (1) Judgment in the sense of expectation; (2) as mathematical construction; (3) as the spoken expression of existence; (4) in the sense of logical comparison; (5) as an analysis of Concepts; (6) as a process of naming differently an identical phenomenon; (7) as subsumption; (8) as an expression of the possibility of subsumption; (9) as synthesis; (10) as affirmation or negation; (11) as that which is true or false; (12) as approval or disapproval. This list is not exhaustive, but simply enumerates some of the most important senses in which the word is used. It is quite useless, then, to investigate the nature of Judgment in general, or to formulate any theory regarding its function. The term 'Judgment' represents a more than twelvefold equivocation, and each of its types must receive separate analysis.

As no proof, or even semblance of proof, is brought forward for the author's main contention,—that different mental processes are included under the term 'Judgment' in virtue of the judicial image which can be applied to all of them,—it need not, I think, be taken very seriously. Many of the distinctions given above as instances of the ambiguity of Judgment seem, also, to be distinctions without a difference. J. E. C.

Zur Theorie der Aufmerksamkeit. Von Dr. H. E. KOHN. Halle, Niemeyer, 1895. — pp. 48.

The author states that the thesis of his pamphlet is the proposition that there is no *essential* difference between 'attentive' consciousness and 'inattentive consciousness; that they are only differences of degree of one and the same attribute. He attacks the subject from the Herbartian standpoint, regarding every change in consciousness as the result of the fusion of a Perception-mass and an Apperception-mass. An attentive state differs only in the greater intensity of its reproduction; or, in sensibly excited attention, in the greater intensity of the stimulus due to the disposition of the sense-organs and of the mind. The "mechanical correlate" of the psychical process of Apperception is taken to be the assimilation of a new stimulus in the central organ. And this central organ, by virtue of its earlier experiences, affects the stimulus in various ways. No further account is given of the physiological side of the process of attention.

The pamphlet closes with a criticism of the theories of attention advanced by Stumpf, Wundt, and James. The criticism of Stumpf is chiefly concerned with two points: (1) Stumpf's definition of attention as "pleasure in observing"; (2) his inconsistency in constructing on this basis the two classes of voluntary and involuntary attention. The author holds that Stumpf is logically bound to recognize all attention as voluntary, in the sense in which that word is used by Stumpf himself. The criticism of Wundt is less satisfactory, though more extensive. The points criticised

are more or less open to attack, but I believe the author interprets them in a narrow and dogmatic fashion, ignoring statements that essentially modify those quoted by him. The careful student of Wundt must recognize this, I think, in the one-sided presentation of Wundt's distinction between the intensity or consciousness limen, and the clearness or apperception limen. The best part of the author's analysis of Wundt's theory is his discussion of the physiological process of attention as described by Wundt. In the midst of the present controversy over the process as a reënforcement or an inhibition of stimuli, this account of the twofold theory involved, but not fully expressed, in the last edition of the *Psychologie*, should be recognized as a useful contribution to the subject. The criticism of James takes up two topics: (1) James' separation of attention and consciousness; (2) his theory that strain sensations always accompany attention. The author contents himself here with quoting other passages from James, which show the obstacles that should prevent him from accepting either of these positions.

On the whole we may say that the pamphlet covers but a small part of its subject, and refers to a limited number of the theories now claiming notice. But within its own field it gives a clear and straightforward presentation of the Herbartian theory divested of metaphysical assumptions, and it contributes something to the criticism of three prominent theories of attention.

Alice J. Hamlin.

Histoire de la philosophie atomistique. Par LÉOPOLD MABILLEAU, ancien membre de l'école française de Rome, Professeur de philosophie à la faculté des lettres de Caen. Paris, Félix Alcan, 1895. — pp. vii, 560.

The history of the atomic theory is narrated here by M. Mabillean, from the standpoint of a sympathizer with the doctrine. The work is divided into five books. In the first the theory is discussed in its earliest form amongst the Hindus; the second book is occupied with the development of the doctrine amongst the Greeks; the third continues the subject in the Middle Ages amongst the Arabs and Alchemists; and the fourth concerns itself with atomism in modern philosophy. This concludes the history of the doctrine, and Book V is taken up with a discussion of the import of the atomic theory for the physical and abstract sciences. The work won the Cousin prize in 1894, was crowned by the Academy, and published by authority of the government at the National Press. A review of the volume will follow.

W. A. H.

Mental Development in the Child and the Race; Methods and Processes. By J. MARK BALDWIN. Second edition, corrected. New York and London, Macmillan & Co. 1895. — pp. xvi, 496.

This new edition has the following preface: "The demand for a new edition of my book gives me the opportunity to make certain minor correc-

tions throughout. The only important alteration is to be found in the tables (I and II) on p. 52, in which certain columns had been substituted from other tables which lie unpublished among my papers." The first edition was recently reviewed in this magazine (vol. IV, p. 423).

The following books have also been received :—

Moral Pathology. By A. E. GILES. London, Swan Sonnenschein & Co.; New York, Charles Scribner's Sons, 1895. — pp. vii, 179.

Proceedings of the Aristotelian Society. London, Williams & Norgate, 1895. — pp. 190.

Christianity Re-Interpreted. By C. STRONG, D.D. Melbourne, George Robertson & Co., 1894. — pp. vi, 142.

Mythes cultes et religion. Par A. LANG. Traduit par Léon Marillier avec la collaboration de A. Dirr. Paris, Félix Alcan, 1896. — pp. xxviii, 680.

Le Psittacisme et la pensée symbolique. Par L. DUGAS. Paris, Félix Alcan, 1896. — pp. 202.

La musique et la psychophysiologie. Par MARIE JAËLL. Paris, Félix Alcan, 1896. — pp. vi, 174.

Les sciences sociales en Allemagne. Par C. BOUGLÉ. Paris, Félix Alcan, 1896. — pp. 172.

L'idée. Par Abbé C. PIAT. Paris, Poussielgue, 1895. — pp. vi, 347.

Naturphilosophie. Von Dr. F. HARMS. Leipzig, Th. Grieben's Verlag, 1895. — pp. iv, 204.

Psychologische Arbeiten. Herausgegeben von Professor EMIL KRAEPELIN. Erster Band, 2. und 3. Heft. Leipzig, Wilhelm Engelmann, 1895. — pp. 209-488.

Allgemeinheit und Einheit des sittlichen Bewusstseins. Von Professor W. SCHNEIDER. Köln, J. P. Bachem, 1895. — pp. 132.

Von der menschlichen Freiheit. Von Dr. H. ACHTER. Leipzig, Wilhelm Engelmann, 1895. — pp. 49.

Eine wissenschaftliche Weltanschauung auf religiöser Grundlage. Von J. BARON MIKOS. Leipzig, O. Mutze, 1895. — pp. 39.

Die Lehre des hl. Thomas von Aquino. Von Fr. THOMAS ESSER, Münster, Aschendorff, 1895. — pp. vi, 176.

Notas sueltas sobre la Pena de Muerte. Q. NEWMAN. Santiágo de Chile, Imprenta i Enquadernazion, Barzelona, 1896. — pp. xii, 228.

NOTES.

BARTHÉLEMY-SAINT-HILAIRE.

M. Jules Barthélemy-Saint-Hilaire, the distinguished translator of Aristotle and long eminent in philosophy and politics, died in Paris, November 4, 1895. Born August 19, 1805, he saw the first and last decade of the century; and in his last years, with hale genial face and elastic step, was still a conspicuous figure in the streets of his native city. His naturally vigorous constitution was preserved by a life-long devotion to walking (one cannot avoid thinking of the Peripatetic to whom he devoted threescore years) and by his simple daily *régime*. He realized Juvenal's prayer of *mens sana in corpore sano*. Barthélemy rendered distinguished service to his country in politics and diplomacy; he was one of the most prominent figures in the Institute for nearly sixty years, during which time he made numerous reports in the philosophical section of the division of the Institute known as the *Académie des sciences, morales et politiques*; he did more than any other man in France, save perhaps Cousin, to awaken and maintain an interest in the great monuments of philosophy; and up to the last, when covered with all the honors his compatriots gladly bestowed on the aged statesman and *savant*, he continued to set forward his literary work. Almost the same may be said of him that Cicero said of the founder of the Athenian Academy: *mortuus est scribens*. Only five months before his death, his life of Cousin was published, a fitting close to the literary and philosophic labors of the learned Academician. It was to Cousin that he was indebted for most of his inspiration and for his career in philosophy, and so, as the last work of his life, he pays Cousin the tribute of a biography. No man in France was so competent to write it. To Cousin, Barthélemy had already dedicated, in the early days of his career, the translation of Aristotle's *Logic* (the first version of the *Logic* ever made in the French language!); then in later years, after the death of Cousin, he dedicated to his memory the *Metaphysics* and the *Problems*. Cousin, by his brilliant success in the translation of Plato, had inspired Barthélemy to do a like service for Aristotle. Furthermore, Cousin was a great and inspiring teacher, and was regarded as a model for French lecturers on Philosophy. During 1828 he had constantly an attendance of above 2000 hearers at his lectures, and through his labors scores of his young contemporaries were impelled to fruitful investigations in the history of philosophic thought. Amongst these no one was more prominent than Barthélemy-Saint-Hilaire.

It was Littré, *père*, who first advised Barthélemy to undertake the preparation of a French version of Aristotle, and it was on this suggestion that he actually began it in 1832, although he had doubtless been influenced by the call of Cousin, first made in 1820 in the preface to his *Proclus* (tome

I, p. xvi), that somebody should do for Aristotle what Schleiermacher had done for Plato. Five years later (1825) the Royal Academy at Berlin, at the suggestion of Schleiermacher, began its monumental edition of the writings of the Stagirite, and charged two of its members—Bekker and Brandis—with the collation of all the MSS. of Aristotle extant in the libraries of Europe. These numbered over one hundred. The task was an immensely arduous one. The new text accompanied by variants appeared, after an incredibly short time for preparation, in 1831. The scholia, index, Latin version, and fragments, filling out five thick quarto volumes, appeared at intervals up to the completion of the work in 1870. This great edition, probably the most perfect ever made of an ancient author, is now being supplemented by the same Academy by the publication of a corpus of the Greek commentators; and about twenty volumes of this supplement have already been published. Nothing so important has been done since the appearance of the Aldine Edition in 1495. This Aristotelian text of the Prussian Academy appeared at a very opportune moment for Barthélemy. The text was complete in 1831; Barthélemy began his French version in 1832, and the first volumes issued from the press in 1837. The first work translated was the *Politics* (2 vols.). It was dedicated to Littré, *père*, who had been a generous patron of his studies, and had, when he was Minister of Finance in 1825, taken the young Barthélemy into his bureau as clerk.

This was the beginning of Barthélemy's public career. From 1827 to 1830 he worked on the *Globe* as a leading contributor of political articles. He was the last survivor of that famous group of journalists who signed the protest—the remonstrance of July, 1830—against the ordinances of Charles X. After the revolution of 1830 he established, along with Rodde and Couchois-Lemaire, the *Bons Sens*, and was a vigorous and voluminous contributor to other journals, espousing the cause of the Liberal party in the *Constitutionnel* and *National*. Towards the close of 1833 he abandoned journalism and public life, in order to devote himself entirely to science and philosophy. In 1834 he became tutor and examiner in French literature in the Polytechnic School. In 1837 his treatise on the *Logic of Aristotle* was crowned by the Institute. In 1838 he was appointed to the chair of Greek and Roman Philosophy in the Collège de France, and in the following year was elected a member of the Academy of Moral and Political Sciences. He was not yet thirty-five years of age when he had acquired the reputation of being one of the most learned men in France. Two years later he became chief of Cousin's cabinet, in the Ministry of Public Instruction. After this brief interruption in his academic studies he retired to his investigations in the history of philosophy, until he was again called away from them into the political arena by the revolution of 1848, when he was elected to the Constituent Assembly. He became one of the chief figures in the republican *tiers-parti*. He approved the measures taken against the Socialists, but refused his support to General Cavaignac, making himself

the spokesman of the Dictator's opponents. After the *coup d'état* of December 2, 1852 (a year previously he had been banished to Mazas), he refused the oath of allegiance to Napoleon III, and resigned his chair in the Collège de France. He was, however, reinstated in 1862. In this interval he interested himself in the plan for building the Suez canal, and was associated with de Lesseps in that enterprise, supporting it with important articles in the *Journal des Débats*. He further used his long residence in Egypt for the prosecution of his Oriental studies (he had already published his work on the Sankhya and on the Alexandrian school). In 1867 Cousin died at Cannes, and made Barthélemy his literary executor (as did also Thiers later) and curator of his great private library, which he bequeathed to the Sorbonne. At the general election in 1869 Barthélemy was returned to the *Corps Legislatif* from the first division of Seine-et-Oise. From the same department he was sent as representative to the National Assembly at Bordeaux during the armistice in the siege of the capital. Here he was one of the most zealous and prominent supporters of his old friend M. Thiers, during whose presidency he was secretary-general. Barthélemy also served on the committee of fifteen appointed to conduct negotiations for peace with Prussia. On December 10, 1875, he was elected a life senator, and took his seat with the Republican minority. During the presidency of M. Ferry (1880-81) he had the portfolio of Foreign Affairs, and although at that time an old man, he performed the arduous duties of this office with extraordinary skill and success. In his secretaryship, France made the valuable acquisition of Tunis, which was, in the main, brought about by him.

During the whole of this long and busy career, filled with academic and political labors, Aristotle continued to be his *grande passion*. After his retirement from public service in 1881, no less than eleven volumes on Aristotle (exclusive of other writings) issued from the press, exhibiting in this grand veteran a prodigious strength and activity. Barthélemy created no system of philosophy, nor did he profess adherence to any historical system. He was in his philosophic thought an eclectic, dominated by ideas similar to those of Victor Cousin (before the latter reverted from Hegelianism to the Scottish school), with, however, a stronger religious bias than his senior. He was a historian of philosophy, more particularly an interpreter of Greek thought, rather than a systematic and constructive producer. His service especially to Aristotle is inestimable. His elaborate introductions and commentaries are masterpieces of interpretative writing. His translation is freer than many scholars would like to have it, but in dealing with Aristotle we do not have a good text and a finished literary product, as in the case of Plato; and no scholar, however great his skill, will ever be able to make a close translation of Aristotle that will be intelligible and readable. Barthélemy's work will doubtless remain for many generations the standard Aristotle in France, and no French scholar in after years will be able to think of the immortal philosopher of the Lyceum without

associating with his name that of Barthélemy-Saint-Hilaire. In 1892 he completed his version, consisting of thirty-three volumes, and at the same time he presented to the *Bibliothèque nationale* his unrivalled collection of editions of Aristotle and commentaries in many languages. No scholar in this century, excepting Trendelenburg, understood Aristotle so well, or did so much to enable others to know him. The following bibliography will exhibit the range and progress of his literary and scientific career :

- 1832. Psychologie criminelle.
- 1835. Mémoire sur l'ordre des livres de la Politique d'Aristote.
- 1837. Politique d'Aristote (2 vols.).
- 1838. De la logique d'Aristote (2 vols., crowned in 1837 by the Institute).
- 1839. Mémoire sur la philosophie sanscrite.
- 1839-44. Logique d'Aristote (4 vols.).
- 1845. De l'école d'Alexandrie.
- 1846. Psychologie d'Aristote, Traité de l'âme.
- 1847. Psychologie d'Aristote, Opuscules.
- 1849. De la vraie démocratie.
- 1850. Lois organiques.
- 1851-52. Mémoire sur le Sankhya (read in ten sessions of the Academy between April 5, 1851, and February 28, 1852).
- 1854. Des Védas.
- 1855. Du Bouddhisme.
- 1856. Lettres sur l'Égypte.
- 1856. Morale d'Aristote (3 vols.).
- 1858. Poétique d'Aristote.
- 1858. La Bouddha et sa religion.
- 1862. Physique d'Aristote.
- 1863. Météorologie d'Aristote.
- 1865. Mahomet et le Coran.
- 1865. Traité du ciel d'Aristote.
- 1866. Traité de la production et de la destruction des choses d'Aristote.
- 1866. Philosophie des deux Ampères.
- 1869. L'Iliade d'Homère (2 vols.).
- 1870. Rhétorique d'Aristote (2 vols.).
- 1874. A la démocratie française.
- 1876. Pensées de Marc-Aurèle.
- 1879. Métaphysique d'Aristote (3 vols.).
- 1879. De la Métaphysique.
- 1880. Le Christianisme et le Bouddhisme.
- 1883. Histoire des animaux d'Aristote (3 vols.).
- 1885. Traités des parties des animaux d'Aristote (2 vols.).
- 1887. Traité de la génération des animaux d'Aristote (2 vols.).
- 1887. L'Inde anglaise.
- 1889. La philosophie dans ses rapports avec les sciences et la religion.
- 1890. Étude sur François Bacon.
- 1891. Les problèmes d'Aristote (2 vols.).
- 1892. Traduction générale d'Aristote, Table alphabétique des matières (2 vols.).
- 1895. M. Victor Cousin et sa correspondance (3 vols.).

The foregoing list does not include certain memoirs to be found in the proceedings of the Academy of Moral and Political Sciences.

W. A. H.

Professor Vaihinger, the author of the well-known *Commentar zu Kants Kritik der reinen Vernunft*, has undertaken the editorship of a journal especially devoted to Kant, and to be entitled *Kant-Studien*. In this work he will have the coöperation of E. Adickes, É. Boutroux, Edward Caird, G. Cantoni, J. E. Creighton, W. Dilthey, B. Erdmann, K. Fischer, M. Heinze, R. Reicke, A. Riehl, W. Windelband, and others interested in the subject. *Kant-Studien* will contain original articles, furnishing both exposition and criticism of Kant's philosophy, and dealing with the psychological and historical conditions under which it arose, and with its relations to previous systems as well as to those which immediately succeeded it. The new journal will also contain thorough and exhaustive critical reviews, as well as brief notices of new books by the authors themselves. There is also to be a section devoted to the exegesis and criticism of the Kantian text; and each year an account will be given of the literature of the subject appearing in the various European countries and in America. Another important feature will be a complete *Litteraturbericht*, furnishing brief notes on all books, dissertations, magazine articles, etc., which deal either directly or indirectly with the Kantian philosophy.

Professor Campbell Fraser is continuing his course of Gifford Lectures, at Edinburgh University, on the "Philosophy of Theism." At St. Andrews, Professor Lewis Campbell, as Gifford Lecturer, is treating of "The Religious Conceptions of the Greeks"; while at Aberdeen, on the same foundation, Dr. James Ward is lecturing on "Naturalism and Agnosticism."

Professor J. Gibson, formerly of the University of St. Andrews, has been elected to the Professorship of Philosophy in Bangor College, Wales.

W. G. Smith, M.A. (Edinburgh), Ph.D. (Leipzig), has been appointed Professor of Psychology in Smith College.

Johns Hopkins University has recently established a Lectureship in Experimental Psychology, and has called Dr. Herbert Nichols to take charge of the work.

The Russian magazine, *Voprosy Filosofii i Psychologii*, for November, 1895, contains the following articles: "An Ethical Tractate by Lorenzo Valla," by M. Korelin; "God as Felt and as Known," by A. Kozlov; "The Foundations of Experimental Psychology," by N. Grote; "The Distinction between the Phenomenal and the Real as it appears in Consciousness," by L. Lopatine; "The Unconditional Principle of Morality," by V. Soloviev; "An Attempt at a Scientific Reconciliation of Moral Contradictions," by L. Obolensky; "In Memory of Hugo Grotius," by V. Goltsev; "Iv. G. Shad," by Th. Zelenogorskii; "On Kozlov's Analysis of Tolstoi's *Master and Man*," by M. A. B—ch.

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LOTZE'S MONISM.

LOTZE'S reputation as a sound and cautious thinker deservedly stands so high that any attempt to question the cogency of his argument is naturally received with suspicion, and needs to be fully and clearly established before its conclusions can be accepted. As, however, no true view is in the long run strengthened by stifling the objections against it, and no false view can in the end be considered beneficial to the highest interests of mankind without thereby implying a profoundly pessimistic divorce between Truth and Goodness, I will venture to set forth my reasons for denying the success of Lotze's proof of Monism. And while I trust that my criticism will always remain sensible of the extent of my obligations to the author criticised, I feel it would be useless to try to conceal on that account the extent of my divergence from him, and so will commence by stating the propositions which I hope to establish in the course of this paper.

They are as follows :

I. *That Lotze had not on his own principles any ground for seeking an underlying unity of things.*

II. *That his argument in reaching it is unsound, and conflicts with his own truer insight.*

III. *That, when reached, it throws no light on any of the problems it is supposed to explain.*

IV. *That it is not essentially connected with the religious conception of a God, nor with Lotze's treatment of that conception.*

V. *That even when it is so connected, it does not contribute anything of value to religious philosophy.*

I am aware that these propositions do not mince matters, and that I shall probably be called on to explain how a thinker of Lotze's eminence should have laid himself open to such censure. I may therefore fittingly preface my remarks by a theory of the way in which such lapses are psychologically explicable. The theory I would advance is in brief that the elaborate thoroughness and detail of Lotze's discussions occasionally avenge themselves on Lotze also, by generating a readiness finally to accept the first clue out of the labyrinth which offers itself, so that at the end of a chapter full of the subtlest and minutest criticism he sometimes consents to adopt views which certainly would not have passed muster at the beginning. A similar effect produced on the reader, who is loth to believe that the display of so much acumen should be followed by momentary relapses into untenable positions, relaxes his critical attention, and so possibly explains his acquiescence in Lotze's conclusions. I have sometimes felt that the process in question is well exhibited, *e.g.*, in the chapter on Time in the *Metaphysics*, and that the disproportionate abruptness and the obscurity of its conclusion are similarly conditioned by a temporary lapse of the critical faculty.

The fullest statement of the grounds on which Lotze asserts the existence of an underlying unity of things is of course to be found in the sixth and seventh chapters of the *Metaphysics*, (since the *Outlines of the Philosophy of Religion* merely accepts it as established in the *Metaphysics*), and though the argument is well known, it will not be inappropriate to sketch its course in so far as it bears on the present discussion. It will be remembered that Lotze is driven to postulate a unity of things by the metaphysical difficulties discovered in the conception of Causation, taken as the assertion that one thing influences another. The impossibility of explaining such transeunt caus-

ation compels to the inference that things are not really separate and independent, but embraced in a unity which is the medium in which they exist, and renders superfluous any further question as to how change in *A* passes over to become a change in *B*. Thus by means of this unity, which in the *Philosophy of Religion* is frankly called the Absolute, all *transeunt* becomes *immanent* action, and is held thereby to have been explained. The next step, which it requires careful reading to recognize as an advance at all, is to treat this unity as prior to, and more real than, the plurality of things it serves to connect. Accordingly (*Met.* § 70) it is hypostasized as "the single truly existing substance," and it is explained at length how the self-maintenance of the identical meaning of this Absolute may be conceived as producing the world of experience with its regular succession of phenomena. The discussion closes with a vigorous protest against recognizing "things" as anything more than actions of the Absolute upon spiritual beings, which, by being centres of experience, are thereby rendered independent of the Absolute (§ 97, 98).

It seems on the face of it that the argument ends in something very like self-contradiction, inasmuch as it seems to assert that spiritual beings are *ipso facto* independent of the Absolute, after inferring the existence of that Absolute from the fact that "things" (in which spiritual beings are presumably included, even if they do not constitute the whole class) could not be independent.¹ But I hope to show that verbal contradictions are not the only nor the most serious flaws to be found in Lotze's argument.

I. It is in the first place by no means clear that a unity of things must be specially provided to account for the fact that things act on one another. That necessity only exists if the problem it is to solve is a valid one, *i.e.*, if the fact of inter-

¹ Lotze generally prefers to use "*unabhängig*" when proving that there must be an all-embracing unity, "*selbständig*" when showing that the unity cannot embrace the conscious centres of experience.- But he sometimes, as *e.g.* in *Outlines of Philosophy of Religion*, § 18, uses *selbständig* also in the first case, so that the verbal conflict is complete. The English translation partly conceals the point by rendering *selbständig* by "self-dependent" in § 98 and by "independent" in § 69.

action really requires explanation. If it does not, there is no basis for any further argument. And it may be plausibly contended that it does not.

For interaction is essential to the existence of the world in a more fundamental manner even than Lotze suggests. It is the condition of there being a world at all. Without it there could be no things, no plurality, and hence no assemblage of things, no world. For each of the possible constituents of a world, holding no sort of communication with any other, would remain shut up in itself. It is easy to illustrate this by showing that in every case in which we predicate the coexistence of several things, we imply that they directly or indirectly act on one another. *E.g.*, in the case of the gravitation of all the bodies in the universe, the interaction is direct; in the case, *e.g.*, of Hamlet and the Chimera it takes place through the medium of a mind which connects them. But interaction in some way there must be, if coexistence is to be recognized. We may therefore confidently affirm that *without interaction there is no coexistence, and without coexistence there is no world.* The existence of interaction is just as primary a fact as the existence of the world itself, and the assertion that things act on one another is an 'analytical' proposition, which merely expands what was already asserted in saying 'there is a world.'

But is this latter proposition one which requires explanation? Have we not learnt from Lotze himself¹ that it is an improper question to ask why there should be a world at all, since the given existence of the world is the basis and presupposition of all our questionings? That has always seemed to me one of the most lucid and valuable of Lotze's contributions to philosophy, and if it is an error to attempt to derive the existence of the world, it must be equally mistaken to derive the interaction of the world's elements. For coexistence and interaction have been shown to be equivalent.

There is not, then, on Lotze's principles any need to recognize any unity of things other than that which consists of their actual interactions. Having given a plurality of interacting

¹ *E.g.*, *Met.* §§ 5 and 11, *Trans.* pp. 36, 46.

things, our thought may distinguish a unity implied in this, *viz.*, the possibility of their interaction. That does not assert more than that when a thing is actual it must be conceived as also possible, and here we are forbidden to pry into the questions how either the actuality or the possibility come about. And so far from unity in this sense being a royal road to Monism, it is the common ground which Monism shares with Pluralism; nay, it is the very fact which, by constituting plurality, renders possible the metaphysical doctrine that plurality is ultimate.

Similar conclusions may be extracted from Lotze's theory of substantiality. He tells us (§ 37, *Trans.* p. 100) that the notion of a kernel of substance is a useless superstition, that "it is not in virtue of a substance contained in them that things are, they are when they are able to produce an appearance of there being a substance in them." Presumably that declaration is applicable also to "the single truly existing substance" (*Trans.* § 70, p. 167), and we ought then to say 'it is not in virtue of a single substance underlying them that things are; they are when they are able to produce the appearance of there being such a substance.' In other words, we have no right to infer that there is a substantial One underlying the interactions of the Many. The unity which is involved as a conceptual possibility in the actual plurality is a unity in the Many and of the Many, and must not be hypostasized into anything transcendent or more truly existent. If it is, the problem of the relations of the One and the Many becomes insoluble, simply because by calling it existent we are compelled to construe its existence as analogous to that of the Many, which it cannot be if its function is to be that of uniting the Many.

It appears, then, that Lotze sets out to find a unity which, on his own showing, he did not need to find, and finds it in a way which conflicts with his own doctrine of the self-evidence of the world's existence and with his own view of substantiality.

II. In tracing the further development of Lotze's conception of the Unity of Things, the point of capital importance is the process whereby the unity becomes hypostasized into a real

existence superior to the plurality which it unites. To explain interaction there is only needed a unity in the Many, not a One creating and embracing the Many, a union, not a unit. And, as we have seen, that union does not need explanation. Lotze, however, having failed to see that in its general and abstract form the possibility of causation needs not to be deduced, has to reject transeunt action as inexplicable and to try to substitute immanent action in its place. We are accordingly told that the interactions of things become intelligible when regarded as the ways in which the Absolute changes its states. The question as to why it is a more intelligible conception that a being should change its own states rather than those of another is not raised in this connection. We are merely told that *de facto* we do not "scruple about accepting it as a given fact" (§ 68, *Trans.* p. 164). Yet in § 46 Lotze had clearly seen that while we treat "this immanent operation, which develops state out of state within one and the same essential being as a matter of fact calling for no further effort of thought," "this operation in its turn remains completely incomprehensible in respect of the manner in which it comes about." "We acquiesce in the notion of immanent operation, not as though we had any insight into its genesis, but because we feel no hindrance to recognizing it without question as a given fact." Does not this pretty decisively admit that the superior intelligibility of immanent as compared with transeunt action is not logical but psychological, due to the familiarity with it which we seem to find in our own inner experience?

But is it permissible to argue that because immanent action passes unchallenged in our own case it would therefore do so likewise in the case of the Absolute?

Perhaps we shall be able to decide this when we have analysed the reasons why it seems natural to us that one state of consciousness should be followed by another. Let us ask then why we should change. That question may be taken in two senses, according as the stress is laid on the "we" or on the "change." In the first case the question will refer to the preservation of identity in immanent change, and can

be answered only by an appeal to inner experience. That A_1 , A_2 , A_3 are all states of A is in our own case based on our feeling of our continuity and identity. *We* can change, because we are conscious beings with a feeling of our identity. But in so far as we have here the ground for our easy acceptance of the conception of immanent action, it is evidently inapplicable to the Absolute. We can neither feel the Absolute's continuity like our own, nor even infer it like other people's on the analogy of our own. For if the Absolute can be conceived as conscious at all, its consciousness would differ radically from ours in that it would be all-embracing, not merely in the sense of having representations of all things within it, but in the sense of actually *being and feeling* the inner and unique continuity of each thing.

If, secondly, we ask why we *change*, instead of remaining as we are, our common reason seems unhesitatingly to answer, either because we are stimulated from without, or because our psychical condition is disequibrated, is one of unsatisfied desire, so that we long to change it. In neither case do we consider ourselves subject to unprovoked and capricious changes. In the first case, immanent change in ourselves distinctly presupposes transeunt action upon us from without and consists only of our self-maintenance against such action. In the second case there is presupposed a defect of nature which puts a good we desire beyond our reach. But in the Absolute immanent change can be explained in neither of these two ways. There is nothing outside it to stimulate it to self-maintenance. And we cannot rashly ascribe to an Absolute which is to have any religious value an essential want or defect in its nature. The very considerations, therefore, that render immanent action intelligible in our own case are utterly unthinkable in that of the Absolute; the very reasons which render it natural that we should change render it very unreasonable that the Absolute should. If it does change, both the fact and the manner of that change must remain wholly inexplicable facts. And if transeunt action be a mystery, immanent action in the Absolute is not only as great a mystery, but, in addition, comes very near to being an absurdity.

Taking next the argument from commensurability (*Met.* § 69), I cannot see either that it validly leads to any conclusion at all, or to the conclusion Lotze desires. It argues from the fact that all things are comparable or commensurable to a ground of this commensurability. If all things had been quite incommensurable, like, *e.g.*, sweet and red, there would have been no principle of connection between them. There would have been no reason to expect the consequence *F* from the relation of two incommensurables *A* and *B*, rather than any other. For that relation would have been the same as that of *A* to *M* or *B* to *N* or *M* to *N*. Hence there would be no reason for any definite connection whatever. Commensurability, therefore, being a fact, its origin from a single root in the permanent immanence of the elements of the world in one being is rendered probable.

Now I cannot see the cogency of this argument. Its very statement seems defective, and involves an 'undistributed middle' in arguing from the common incommensurability of the relation of *A* to *B* and of *M* to *N* to their identity, in spite of the fact that incommensurables may be very various. And even if we overlooked this, the logical inference from the supposition that every pair of the world's elements stood in the same relation would seem to be not to a world of a chaotic and infinite variety, but to one of eternal monotony, in which whatever combination of elements was tried the same consequence always ensued!

Nor, looking at the matter more broadly, can I see that commensurability proves anything. In a very general sense it must, of course, be granted; for if the elements of a proposed universe had turned out to be absolutely incommensurable, no world could have resulted. There cannot, therefore, be any things strictly incommensurable in the world, — even red, sweet, and loud are comparable at least as sensations, — and it is mere tautology to say that the elements forming a world must have been commensurable to form a world. Nor does this carry us beyond the possibility of interaction which we saw was implied in actual plurality.

Moreover, it would seem that by arguing from the existence of commensurability to a source of commensurability Lotze rendered his argument obnoxious to an objection which he elsewhere admits to be valid. The course of his argument here runs parallel to that of the old teleological argument, which has been so successfully challenged by Darwinism. The teleological argument in biology proceeded from the given existence of adaptation in structure to an intelligent source of that adaptation — *i.e.*, it argued from an adaptation to an adapter. But Darwinism seemed to show that the same result might occur without supposing any original and preëxistent fitness of structure, merely by the survival of better adapted structures. And as against this objection Lotze admits that the old teleology loses its demonstrative force: he admits (*Phil. of Religion*, § 11 s. f.) that the completely automatic origin even of the most perfectly adapted system is not impossible, but only improbable, and that it is not unthinkable (*loc. cit.* § 12 s. f.) that an original Chaos should develop itself into purposively ordered nature.

But if so, a logical extension of the same argument would seem to be fatal to Lotze's position here. Why should not the initial commensurability of the elements of the world itself have arisen by a process of natural selection similar to that which has guided its subsequent development? Given the necessary conditions, and the argument seems to work equally well. Just as in the biological field it presupposed the possibility of indefinite variation in all directions, so here in ontology it might, it seems, suppose an indefinite multitude of elements of possible worlds, some commensurable, the immensely greater number not. If so, it would be possible to conceive the world as constituting itself out of a fortuitous concourse of the atoms which happened to be congruous or commensurable, while those which were not would simply stay out, and appear in the actual results as little as the countless variations which did not survive. In both cases the essence of the argument would be the same, and consist in destroying the unique peculiarity of the actual result by regarding it as one out of an indefinite number of

possible results. Against the atheism thus implicit in the Darwinian method Lotze's argument seems to afford no adequate protection. He cannot show that the inference he draws to an underlying unity of the world is the only one conceivable. The supposed origin of a commensurable world out of an indefinite number of commensurable and incommensurable elements is *thinkable*.

Whether, to be sure, it is also *tenable* is another question, which, personally, I would answer by a strenuous negative. For if the immense majority of things were really incommensurable with us and our world, they would be unknowable. Hence we could have no positive ground for affirming their existence. And we have no right to affirm unknowables merely for the sake of discrediting the known. Hence this bare possibility could not, to my mind, be actually propounded as an explanation of the order of nature, nor held to detract from the purposiveness we actually find there. But this protest does not help Lotze; the bare possibility of thinking such a process is enough to set aside his contention that his own solution is alone conceivable.¹

Altogether, then, it would seem as if "not proven" was the most lenient verdict that could be passed on Lotze's derivation of the Unity of Things.

III. But what shall we say of the metaphysical value of this conception in the explanation of things?

(1) It has already been shown that it does nothing to solve the problem of Causation and to relieve the difficulty Lotze discovers in the action of things on one another.

(2) Does it explain, then, the orderly succession of events? Lotze labors hard to show this. He regards the changes of the world as being so ordered by the Absolute as to preserve at each moment the unchanging self-identity of the Absolute, the equation $M = M$, and to give "a new identical expression of the same meaning," in a harmony which is "not preëstablished, but which at each moment reproduces itself through the power of the one existence." This hypothetical meaning of

¹ Cf. *Microc.* II, p. 598.

the Absolute has to explain all the peculiarities about the succession of events which Lotze finds in the world and all those he wishes to find. Nor, obviously, is it possible to gainsay him so long as that meaning is admitted to be inscrutable. But for all that I would contend that the introduction of the Absolute had made events not easier to understand but harder. At first indeed it might seem, as Lotze argues (*Met.* § 72), that when one thing in the world changes, the rest must maintain the identical meaning of the world by counterbalancing changes. But what if we raise the question why anything should change at all?

(3) It will appear, I think, that no rational case is made out for the existence of change at all. The conception of the Absolute in itself contains no suggestion of change. The only thing we know about it, *viz.*, the unchanging identity of the meaning it preserves in the world, distinctly suggests an equal immutability for the expression of that meaning. Thus the fact of change has to be accepted as empirically characteristic of the Absolute, but it is rendered more unintelligible by the assertion that all the changing aspects of things always mean one and the same thing.

(4) The belief that the world has a meaning, that the riddle of life has an answer, has always been the common inspiration of religious, philosophic, and scientific minds. To be disabused of it would plunge us into the deepest abyss of negation where scepticism fraternizes with pessimism. Hence it is reassuring to hear Lotze speaking so emphatically of the meaning of the universe as the supreme law which determines the succession of events. It is not until one attempts to work out the conception in connection with his Absolute, that one is regretfully forced to the conclusion that the meaning of the universe is really unmeaning.

Lotze tells us that the meaning of the Absolute has to be maintained against the changes set up, we know not how, in its parts. That is the reason why *B* follows on *A* in orderly succession. But how can any action of the parts of the whole conceivably imperil the identical meaning of the whole? They

have not a $\pi\omicron\upsilon\ \sigma\tau\acute{\omega}$ outside the universe whence they could affect its meaning or value. And if it could be in any way jeopardized, why should not any means be as competent to reestablish the equation $M = M$ as any other? Why should not C or X or Y follow as effectively on A as B ? Where there is absolute choice of means, unvarying order becomes inexplicable. One would expect rather an agreeably various or sportively miraculous succession of events. Thus the introduction of an Absolute, on which no laws are binding, because it makes them all, really leaves the order of the world at the mercy of a principle which forever threatens to reduce it to Chaos.

Nay, more; neither the existences nor the changes of the world can have any meaning if they are absolutely dependent on the Absolute, and are merely instruments in the expression of its 'identical meaning.' * That meaning may be expressed by one thing as well as by another, it may be preserved by one variation as surely as by another. Thus both events and existences lose all special significance or relation to the supposed meaning. The same holds true of the past of the world with respect to its subsequent course. The caprice of the Absolute cannot be controlled even by its own past.

(5) The foregoing will have shown, I hope, that Lotze was not very successful in avoiding the besetting sin of Monism, *viz.*, that of reducing the Many to mere phantoms, whose existence is otiose and impotent. But a disregard of the practical absurdities that might result from too rigid a theory was not one of Lotze's weaknesses, and so when we come to the last sections of his ontology we find him saving the significance of the Many by a *volte-face* which may be considered more creditable to his heart than to his head. He recognizes that beings which are merely immanent in the Absolute have no *raison d'être*, and so denies the existence of *things*. Spiritual beings, on the other hand, in virtue of their consciousness, detach themselves from and step out of the Absolute; they stand as it were on their own feet and become independent members of the cosmos. I heartily agree; but I am at a loss how to

reconcile this with the previous course of his argument. What use was there in emphasizing the one ground of all existence, if finally everybody that is anybody is to escape and 'detach' himself from the underlying unity of the Absolute? Doubtless Lotze's doctrine is here completely in accord with the facts, doubtless it is true, as Professor Andrew Seth says, that a spiritual being preserves its own centre even in its dealings with the Deity; no doubt also Lotze's own doctrine required such quasi-independent spirits to provoke Providence by the freaks of their free will and to generate the necessary friction in order to make the Absolute's maintenance of its identical meaning something more than child's play; but how is the incomprehensible feat accomplished?

The points mentioned should, I believe, suffice to prove my contention that the Absolute is not a principle of explanation that has any scientific or philosophic value. It resolves no difficulties, it aggravates many, it creates some of an utterly insoluble character. And by undoing his own work in the case of conscious beings and insisting on detaching them from his Absolute, Lotze himself may be considered to have afforded practical confirmation of this view.

IV. It remains to discuss the identification of the Unity of Things with the Deity. In the *Outlines of the Philosophy of Religion* Lotze accepts the Unity of Things which renders interaction possible as the basis of the conception of God, thereby making his metaphysical argument his means of proving the existence of God. One might have expected him therefore to go on to develop the consequences of this conception and to show how they agreed with the religious notions on the subject. This is not, however, what Lotze actually does. He makes no attempt to show that the Unity of Things, as discovered by metaphysics, must be susceptible of the religious predicates, must be conceived as personal, holy, just, and wise, nor that these attributes may be inferred from the manner in which the Absolute unites the universe. Instead of this, he contents himself with entitling his second chapter 'Further Determinations of the Absolute,' and then goes on to prove that God cannot

rightly be conceived as other than spiritual and personal. Now against the contents of this chapter I have not a word to say; his argument in it seems to me most admirable and cogent. What I do wish to protest against is the way in which he shifts his ground, is the *μετάβασις εἰς ἄλλο γένος* which his method at this point involves. For instead of developing a metaphysical conception, he here passes over to a criticism of popular conceptions of and objections to the nature of the Deity, and these are in every case disposed of by arguments which have nothing to do with the Absolute's function of unifying the world. Thus the spirituality of God is proved by showing that materialism is inadequate and dualism sterile; His personality, by showing that while no analogy in our experience justifies conceptions like those of an unconscious reason or impersonal spirit, our own personality is so imperfect that perfect personality is capable of forming an ideal which can be attributed to the Deity. But what has all this to do with the Unity of Things? Such arguments are quite independent of his metaphysical monism, and are not brought into any logical connection with it merely by calling the Unity of Things God.

I would contend, then, that just as the hypostasization of the Unity of Things was unnecessary in the *Metaphysics*, so its deification is unnecessary in the *Philosophy of Religion*. Not even for monotheistic religions is there any necessary transition from the assertion of one Absolute to that of one God. For the unity of the Godhead in monotheism is primarily directed against polytheism, and intended to safeguard the unity of plan and operation in the Divine governance of the world; it cannot be equated with the unity of the Absolute, unless the conceptions of plan and guidance are applicable to the latter. But this is just what we have seen they are not: the Absolute could have no plan and could guide nothing; its unity therefore has no religious value.

The reason, then, for this hiatus in Lotze's argumentation is simply this, that an Absolute is not a God and that none of the Divine attributes can be extracted from it; hence Lotze must perforce derive them from considerations of a different kind.

V. In the sequel, moreover, this derivation of the Deity from the metaphysical unity of things is for the most part ignored, and the interesting discussions in which Lotze elucidates the nature of the fundamental religious conceptions presuppose nothing but the traditional conceptions and historically given problems of religious philosophy. Throughout the whole of this most valuable part of Lotze's book (§§ 21-70) I cannot find that he expresses any opinion rendered logically necessary by his doctrine of the Absolute, while there seem to be several, *e.g.*, the defence of Free Will, which accord with it but badly. As already stated, Lotze cannot dispense with this conception in order to uphold the conception of a Divine governance, which reestablishes the 'identical meaning' of the world against the disturbances due to free actions. And it is in this way that he explains the fact that the world exhibits a succession of phases, all of which, we are required to believe, mean one and the same thing. But the reflection is obvious that these 'free' actions also are included in the Absolute, and that their existence is one of its given characteristics. Metaphysically, therefore, we have to say that the Absolute is subject to these uncaused perturbations, which exhibit its internal instability. It is this inner instability which is the ultimate ground for change, and the question which in the *Metaphysics* (§83) Lotze tried so hard to put aside, *viz.*, as to the reason why the Absolute is in motion, returns with renewed force. Lotze had there contended that the motion must be accepted as a fact and its direction likewise. But can the *kind* of motion be similarly accepted? We may not in ordinary life require an explanation when we see a man walking in the usual fashion, but when we see him staggering along as though about to fall and only just preserving his equilibrium, we think that such a mode of progression requires an explanation, and probably put it down to alcohol. Yet this somewhat undignified simile, *si parva licet componere magnis*, exactly expresses the characteristic motion of the Absolute according to Lotze. The world is ever recovering the equilibrium which is constantly endangered; it maintains itself in a constant struggle against the

consequences of its own inner instability. And what we call Evil is merely one of the incidents of the struggle. If then it were true that the motion of the world required no explanation, it would be equally true that the evil of the world required none. But this is not only a conclusion monstrous in itself, but one by no means accepted by Lotze. He admits that the problem of Evil is a real one, and only regrets the failure of all the solutions proffered. But of this more anon. At present I content myself with noting that though the admission of Free Will affords a logical ground for the conception of a Divine guidance and providence, it rearouses scruples about the Absolute which had only with difficulty been quieted.

It is not until we come to § 71 that the Unity of Things intervenes again in Lotze's discussion, and then it intervenes with disastrous effect. For it is appealed to only to refute the attempt to account for the existence of Evil by the limitations of the divine activity by the original nature of the world's constituents. But, Lotze remarks, if so, it would be necessary to assume a second superior deity in order to account for the action of the first upon such a world. And if we admit that the Deity is to be identified with the unity which makes interaction possible, it must be admitted that his objection is quite sound. But with this rejection of a Deity who can have an intelligent purpose, and a need to guide the course of the world just because he is not unlimited in the choice of his means, vanishes the last hope of solving the problem of Evil.

The magnitude of that problem and the futility of all the solutions he mentions is quite frankly confessed by Lotze both in *Philosophy of Religion* (§§ 70-74) and in the *Microcosm* (*Trans.* II, pp. 716 ff.). He admits that pessimistic inferences might quite well be drawn from this failure of philosophy, and does not believe that pessimism can theoretically be refuted. But pessimism is merely a cheap and easy way of getting rid of the problem, and he himself prefers to cling to the belief in a solution he cannot see, and to persevere in a search which is nobler and more difficult. Thus in Lotze also knowledge finally has to take shelter with faith and to return dejected to the home

whence it set out with such sanguine hopes of making clear the riddle of existence. Lotze's language is certainly frank enough, and if frankness were all that is needed his honest declaration of his insolvency might be condoned. But one has a right to expect that a philosopher whose arguments lead him into such manifest bankruptcy should be prompted thereby to reëxamine and possibly to revise his premisses; and this Lotze fails to do. The suspicion that the nature of the Absolute which he has identified with the Deity may have something to do with the lamentable failure of his attempts to account for Evil never seems to enter his mind. The conclusions of his philosophy may be in the most patent conflict with the facts, but so much the worse for the facts. We are bidden to have faith in the impossible, if necessary, and pessimism is waved aside with a sneer as being too easy and obvious.

Now that a writer ordinarily as sympathetic as Lotze should have acquiesced in so flimsy a theodicy shows, I think, the desperate straits to which he was reduced, and seriously detracts from the value of his religious philosophy. I am far from denying that an element of faith must enter into our ultimate convictions about the world; for whoever admits the reality of Evil and the possibility of its elimination thereby declares his faith in an ideal which is not yet realized. But surely we have a right to demand that our intellect should only be required to believe in a solution which it does not see, not in one which it sees to be impossible. And the nature of faith is of the latter sort on Lotze's theory, as we shall see and as he all but admits. It may be meritorious to attempt what is difficult, but it is mere folly to attempt the impossible. Very few, therefore, whether pessimists or otherwise, are likely to be attracted by Lotze's 'faith.' And his sneer at pessimism is a little ungenerous. Pessimism may be cheap and easy and obvious *intellectually*. That is an excellent reason for meeting it with the strongest, most comprehensible and obvious arguments we can, — to prevent simpler minds from falling into it. But pessimism is assuredly *not* a cheap and easy view to hold *emotionally*. The burden of most lives is so heavy that none can desire to

crush themselves down utterly by dwelling on the futility and worthlessness of it all. No one, therefore, is willingly a pessimist : every one would fain believe in a more inspiring view. But all the encouragement Lotze gives is that pessimism is theoretically tenable and any other view is extremely difficult !

Yet he is quite right ; that is all the encouragement he is able to give. He cannot account for the existence of Evil ; he cannot deny that it conflicts utterly with his conception of God. For he has from the very first scorned the common philosophic device of calling God a power which has no moral attributes or preferences. His God is intended to be theistic and not a mere cloak for pantheism. Yet by identifying God with the Absolute he inevitably opens the way for this very kind of pantheism. Once equate God with the totality of existence, and no one can understand how there can be in the All an element which is alien to the All. All the phases of existence, therefore, are alike characteristic of the All. God is evil as well as good, or better still, non-moral and indifferent, manifesting himself in all things alike. But this conception, to which its premisses irresistibly drive Lotze's argument, is certainly neither the God of what is commonly understood as religion, nor can it do the work of one. It is as impotent as a practical power as it was sterile as a theoretical principle. Its sole value would seem to have been to have drawn attention to certain incompatibilities and inconsistencies in the existing conception of the Deity.

And the importance of that service should not be lightly disparaged. If Lotze's careful, candid, and yet sympathetic examination failed to clear away the incompatibilities alluded to, we may be sure that others will not succeed, and that it is time to consider whether the requirements both of religion and of philosophy may not be better met by a different conception of the Deity. We must not be tempted by the ease with which an (unmeaning) Absolute is arrived at to accept it in lieu of the more difficult demonstration of a real God. And I believe that a clearer conception of the Deity, more clearly differentiated from the All of things, could not fail also to be of the

greatest practical value. At present the conception of the Deity is not clearly defined ; it melts away into mist at various points ; it requires a certain 'atmosphere' to be perceived. But a God who requires an 'atmosphere' has to be kept at a certain distance by his worshippers, and so is conducive neither to intimacy of communion nor to robustness of faith. This, however, is a line of thought I must leave to theologians to work out.

The general philosophical conclusion which I would draw from Lotze's lack of success in defining the conception of God is that of the futility of the *a priori* proofs of God's existence. Their common weakness lies in their being far too abstract and consequently applicable to the conception of a universe as such and not to our particular world. Thus the ontological proof argues that there must be a God from the fact that there is a world at all ; the cosmological, from the fact of causation taken in the abstract : the physico-theological, even, is made to argue quite generally from order to a designer thereof. Lotze's proof from interaction is of an exactly similar character. It argues generally and abstractly from the existence of interaction to a ground of interaction. It is, in fact, a form of the ontological proof, since interaction is the presupposition of there being a world at all.

Now the flaw in all these arguments is the same. They fail because they attempt to prove too much. If they hold at all, they hold quite generally and are applicable to any sort of a world. In ^{intelligible} any world we could argue from its existence to a God, from its change to a First Cause, from its arrangement to a designer, from its interaction to a single ground of its possibility ; the argument is in each case quite unaffected by the nature of the world about which it is used. It follows that the God derived by such an argument must similarly be catholic in his applicability and indifferent to the contents of the world. The best and the worst of thinkable worlds must alike have God for their cause and for the ground of their interaction. The inference from the world to God would be equally good, therefore, in Heaven and in Hell. The deity, therefore, inferred by this mode of argumentation must be essentially

indifferent to moral distinctions, and this is the ultimate reason why the attempt to ascribe moral attributes to him in the end invariably breaks down. In Lotze's case, *e.g.*, the world would just as much imply a God whether its interactions were perfectly harmonious or utterly discordant; and God, therefore, cannot be conceived as a principle deciding which of these thinkable cases is to be realized.

Now all this is not at all what we wanted the proofs of God's existence to do. We did *not* want a proof which held good in all thinkable universes, but one which should hold in our actual given world, and give us an assurance that whatever might be the case in possible universes, there was in ours a power able and willing to direct its course. But this the 'proofs' haughtily declined to do; they mocked us instead with characterless deities 'for application to any universe.' Yet there is not, at least in the case of the cosmological and physico-theological proofs, any reason why they should not be given a specific application. On the contrary, a much stronger argument can be made for assuming a cause and beginning of its motion for *our* existing order of things than for 'a universe' as such, for interpreting the actual order and development of *our* world by an intelligent purpose than a mere order in the abstract. Even the ontological proof, if we adopt Lotze's version of its real meaning (*Phil. of Religion*, § 6), may be given a more pointed reference by making it express the conviction that the totality of the True and the Good and the Beautiful must be provided with a home in *our* world.

Thus the objections to all the proofs may be obviated by making the proofs *a posteriori*, and basing them, not on the nature of existence in the abstract, but on the nature of our empirical world. The same might be done also with the argument from interaction: it might be claimed that the peculiar nature of the interaction of things was such that a single underlying existence might be inferred in our case, although in general a unity in the Many was alone needed. And indeed Lotze comes very near at times to seeing that this was the proper method of proving the unity of things, as, *e.g.*, when (*Met.* § 85, 90) he

insists that his Absolute is never actual as an abstract form which subsequently receives a content, but always has a perfectly determinate and concrete value. But if so, why did he use such perfectly abstract arguments in order to prove its existence? Why did he not derive the Absolute in its concreteness from the concrete facts in which it manifests itself? Had he done so, he would have disarmed most of the above criticism and would have closed the road to many a misconception and many a difficulty. It would have been needless to ask, *e.g.*, why the Absolute should be in motion, for in arriving at it we should have had to state the reason not only for the motion but also for its amount and direction. Again, it would have been superfluous to puzzle ourselves as to how the One united the Many; for it would have been as a definite mode of combining the Many that we should have found the One.

No doubt such methods of discovering first principles are less easy, less sweeping, and therefore less attractive; the philosopher moves more smoothly in a cloudland where he can manipulate abstractions which *seem* to assume whatever shape he wills. But the philosophic interpretation of the concrete experiences of life is far safer and, in the end, more satisfying. And whatever the defects of his own practice, it is to Lotze as much as to any one that we owe the conviction that even the most imposing castles which philosophers have builded in the air have had no other source than the experience of the actual whence to draw their materials and their inspiration.

F. C. S. SCHILLER.

THE CATEGORY OF SUBSTANCE.

IT is the object of this investigation to determine the psychological origin of the category of substance, and in the light of this to estimate its metaphysical value. We shall begin by considering the way in which it has been employed by philosophers, especial attention being given to its modern use and to the modifications it owes to physical science.

It is important to notice that the category has for the most part been used without any attempt at preliminary criticism or psychological analysis. This is notably true of the system of Spinoza. It would be natural to expect, from one to whom this category represented the Absolute, a complete analysis of its elements, yet Spinoza is far from offering such an analysis. It is, indeed, in one sense natural that he should not; for the very reasons which made it possible for him to attach such importance to substance prevented such an analysis. A psychological investigation into it would have probably proved fatal to its claims. It never occurred to him to institute such an inquiry; he found the concept ready to hand, and he accepted it without question as of absolute value.

It is further necessary to distinguish from the special doctrine of substance other doctrines which may be associated with it. For instance, the meaning of substance which illumines most of Spinoza's reasoning is that of *summum genus*. In the classification of things, substance is the highest logical abstraction. From this point of view, it is further intelligible in what sense Spinoza speaks of substance as cause, or again, as logical ground. Yet did we look merely at this logical series of abstractions, Spinoza's system would be unintelligible; its special form is due to the presence of another thought.

In Locke's *Essay*, the first great work in Criticism, there is to be found a valuable exposition of the conception, and the

three elements which are brought into view may be regarded as being, for a first analysis, the most important. First, substance is that which supports the qualities we perceive. The Latin original of the word indicates this, and the corresponding Greek word is similar in meaning. At first, this interpretation seems to derive little countenance from Spinoza, whether his definition of substance be considered, or his proof that substance is the cause of itself, or his statement of the relation between substance and attributes. Yet, on the other hand, his system does not present merely a progressive series of abstractions. From beginning to end he presupposes that substance is supporting the attributes. There are often in men's minds potent factors on which they have not reflected, and it would not be too much to say that, unconsciously to himself, Spinoza allowed this relationship to determine the mould of his whole system.

It readily follows, as Locke further observes, that substance is other than the particular qualities known to perception. It is not merely the essential, for the essential may be only a selected number of these qualities. It seems to be almost equivalent to essence, when it is conceived as the generic qualities in the species, yet even then it is more than essence, for the generic qualities are other than any particular form of them. Locke interprets it more definitely as the somewhat other than qualities which we suppose to support them. In the case of Spinoza, notwithstanding his definition of attribute as that which constitutes the essence of substance, it can be seen that substance is continually regarded as that which is the basis of the attributes, and is not resolvable into them.

It is further noted by Locke that substance is an unknown somewhat. This unknowableness is a characteristic of the Spinozistic substance. Intelligibility stops with the attributes. Substance in itself, in spite of its position as *summum genus* of knowable entities, remains still their mysterious ground. The Kantian thing-in-itself when most unknowable is most like substance. It is not apparent that substance should necessarily be regarded agnostically. According to Aristotle

and others, it is expressed in the 'definition,' and, therefore, it is completely intelligible. Yet even Aristotle appears to find another kind of substance relation: matter which is ultimately formless and indefinable is τὸ ὑποκείμενον. Agnosticism generally tends to creep into the idea of substance.

While the idea of substance had this significance for Spinoza and others, modern science was developing. The Atomic theory had been revived, and attempts were made to determine the ultimate constitution of matter. It might have been hoped that material substance would be laid bare to the eye of the observer when the form of the atoms was determined. Yet a little thought shows that any space-filling body cannot be regarded as simple, for simplicity is reached only with the spaceless, indivisible point. Thus, while the atoms were regarded as forming the substance of the world, they offered to reflection the old problems: each atom was a substance. But, with the revival of the Atomic theory, another conception is found to be receiving more and more consideration. In the systems of philosophy that look to Aristotle, the idea of causality is subordinate to that of substance. For Aristotle the efficient cause tends to merge itself in the final, and thus has a character of immanence which puts it in strong contrast to the modern idea of physical causation. Even in the older Atomic theories the idea of motion is subordinate.¹ But as science has progressed and the interactions of things have been observed, causality has gained a new importance; and energy, into which the category of cause has been translated, has even threatened to supersede substance altogether. Now, instead of the maxim that the substance of the world is permanent, we find in the place of first importance the doctrine of the conservation of energy. The plausible theory has been advanced that the atom is extensionless and is a mere centre of energy. Physical science may not commit itself to such a purely dynamical theory; yet even when it is taught that the ultimate constituents of matter have extension, as in Lord Kelvin's vortex theory, it is evident that these space-filling

¹ Cf. Lucretius, *De Rerum Natura*, lib. I, pp. 431 ff.

atoms cannot be regarded as the ultimate simples. If space-filling, they must admit of division. It would scarcely be unjust to say that, while science abstains from dogmatism on the subject, the tendency of thought is to find in matter nothing but forms of energy, and, therefore, to regard the substance of the world as the system of forces. At the same time it does not concern us to take a side in the controversy about atoms, and if the idea of space-filling atoms, as entities not further to be analyzed, be retained, we should simply have associated with the modern idea of energy the older idea of substance.

It is interesting to observe that the reduction of matter to energy has its parallel in the treatment of the soul. The substance of the soul was formerly regarded as similar in character to, if not identical with, the substance of material things. Empiricism applied the principles of the atomic philosophy to states of consciousness, and the different sensations were thought to be the units which by their combination yield the present soul life. But the atomicity, as well as the older doctrine of substance, tends to be forgotten, and the soul life is construed as an activity of some sort, or even as a stream of consciousness.

Yet a history of the modern development and criticism of the concept is far from giving us the light on its psychological genesis of which we are in need. While it does not concern science to reflect on its concepts, it might have been expected that those who carried on the psychological and epistemological work of Locke would have offered, in satisfactory form, the requisite analysis; but it is to be regretted that, even in the age of criticism, this concept, like most of the rational concepts, has received no adequate treatment. Transcendentalists have been content to show that it is of *a priori* origin, and to regard it as an ultimate mental fact. But though it may be admitted that a concept such as substance is due to the spontaneity of the understanding, we are far from being absolved from the labor of further historical investigation. Nor may it be said that we have to do with such concepts only in their present significance,

and that it matters not what their genesis is. It is true that the present is not to be explained by a mere reference to the past: the mature plant is not explained by reference to the seed. Yet it is also true that an analysis of the structure of the mature organism is often best accomplished by history, the separate threads being seen before they are woven together. And we shall probably be helped to estimate the value of substance, if we determine what materials have gone to its making. It would be natural to look to empiricists for such an analysis, but they have been too much blinded by prejudices of their own. They have desired to reduce all mental phenomena to the simplest sensational elements, and have been unwilling to recognize anything else as present in the mind. But no false ideas of causality or evolution should prevent us from recognizing at once the full value of the present contents of consciousness, and at the same time their historical origin. We may acknowledge with Kant the presence in this concept of the spontaneity of the understanding, and we may at the same time find that it has grown from elementary sensations and feelings.

Hegel has made a great and laudable effort to furnish such a scale of categories that their order in respect of complexity and fulness of meaning may be apparent. He has rightly put the categories of Being among the lowest. Psychology has made progress since Hegel's time, and at least the beginning of a proper psychological treatment of the categories of Being and Reality has been made in the attempt to affiliate them to the sensations of the external senses. Mr. Fraser, in his article on the 'Foundations of Realism'¹ has made an interesting study of the part played by the feeling of touch in giving us the idea of a real world, and, without following his account too closely, we may trace the following development. Reality proves to be in the last analysis that which affects the sense of touch. Touch has this preëminence among the senses for reasons of utility, since the most important concern of the

¹ *American Journal of Psychology*, vol. IV, pp. 429 ff.

animal is with the things immediately in contact with it. Touch having gained this ascendancy reserves all testing of reality to itself. When something seen is said to be real, it is meant that the vision has called up the idea of pressure. It is further to be observed that the idea of reality is not something which, though gained by the sense of touch, is yet distinct from it. The idea of reality is primarily just the sensation of touch, present or recalled. At the same time this idea undergoes certain changes. There is variety in touches, and the idea of reality is the resultant of the various touches or their composite image. This idea is thus an abstract category. We have here a fine illustration of the way in which such categories are derived from sensational experiences; while not explained by these experiences, they yet grow from them.

The so-called categories of Being are primary and elementary, and are added to, or transcended, as the mind advances in the intellectual construction of the world. So long as the bare idea of reality is adhered to, the subjective and objective are inextricably joined together. The sensation of hardness is real in the sense that to it other sensations are referred. But it is not the reality of distinct, self-inclosed, isolated individuality. Just as little is it recognized as merely subjective. It belongs to a stage of thought at which distinctions of subject and object have not made their appearance. A new advance is made, when the world shapes itself before the mind into a system of units, so that a man distinguishes himself from other individual things around him. It does not concern us here to trace all the steps by which this breaking up into units takes place; it is the result of the process that is important. There is an association of the group of feelings which may be called the self-feelings with the visible and tangible reality of the body. The man who has accomplished this association in the case of his own body associates with other bodies psychic experiences similar to his own. That which has the marks of individuality which his own body has, is regarded as a conscious being. This is the logic of animism. The self is thus projected into the world in manifold multiplication. It

is to animism that the idea of substance is more immediately to be traced.

What are the self-feelings? Self-consciousness has often been regarded as that attribute of man in which he shows likeliest God. It should be noticed, however, that the self-consciousness which has so high a dignity is an ideal self-consciousness. It is thought of as belonging to the man who knows the self as identical with the source of all that is, and yet as infinitely superior to all that is merely natural. Self-consciousness is thus a large part of philosophy. It is doubtful whether the perfectly developed self would view itself quite as such theories suppose. In any case, the ordinary consciousness of self is of a different nature. When the individual first distinguishes himself from other things, it is the spatial distinctness of his body which is present to the mind. The self is the body; self-consciousness is primarily what has been called "somatic consciousness." In this somatic consciousness the chief importance attaches to the feelings of the trunk. The muscular feelings of this part of the body; closely associated with these, the extended, peripheral touch-feelings; still more, the feelings derived from the organs of breathing, digestion, and circulation, — all these give filling to the idea of the self. Characteristic of these feelings is their relative constancy. They abide with us. Ideas come and go; nothing is more changeable than the ideational life. Arms and legs are now in motion and now at rest. But many of the trunk feelings, if not without variableness, are much more permanent; and this constancy fits them to represent the self. They are further fitted for this function by their emotional quality: they give the greatest sense of well-being or ill-being; they determine the moods of melancholy and happiness; they add thrill and reverberation to other finer feelings of pleasure and pain. It should be added that, even in such strongly contrasted states as pleasure and pain, there is much that remains constant: the parts affected are the same; they may even be similarly affected. This brings us back to what is in some respects the most important qualification of these feelings for yielding

the idea of the self: they have a well-marked local character. Usually, indeed, they are said to be vague, and badly localised; and, in one sense, the statement is correct: an internal pain may be difficult to locate with definiteness. But these feelings are local, inasmuch as they are recognized as belonging to the trunk. They are body-filling, and at the same time body-limited. The ideas of imagination have a much less definite location: they seem to be where the things thought of are, and they thus may be anywhere save for the muscular sensations connected with them. The trunk feelings, on the other hand, are distinctly subjective.

The feelings which make up the somatic consciousness are vague. The idea of the self is not these feelings in their immediate form and quality. It is the resultant of the feelings experienced at various times. It is a composite photograph of them. Further, the various feelings are combined in a massive continuum. They blend, as the first dim sensations of the infant may be supposed to blend, in an undifferentiated mass. This is the idea of the self which follows a man like his shadow. To this other features may be added. One of the most strongly marked is the faculty of volition. The predominant interests of the individual, scientific, aesthetic, or religious, also go to complete the idea.

But while each individual tends to gain a more specialized conception of his self, a contrary process takes place in the development of animism. The world, which is regarded as a world of living souls, begins to show to a closer inspection the diversities of classes and individuals. There are differences in form and size, and, as some do not speak or move, there is manifest diversity in feelings of activity, and in response to stimuli. Therefore only certain elements in the self can be rightly projected outwards. Those must be selected which are common to all the selves. If the intellectual has been recognized at all, it must be pronounced non-essential. The muscular feelings, so far as connected with volition, are probably an uncertain fringe around the idea of the self. There is left, as the common element in all individuals, the blend of vague, massive, body-

filling sensations. This residuum, this permanent identical core of individual things, is substance. It is the same substance for material as for living things. Even the later division of substances into extended and spiritual does not affect the generic concept.

From this origin of the conception of substance, we can infer the meaning of the support which substance renders to attributes. All ideas of physical support are ultimately, it is true, derived from our muscular feelings. But there are feelings of support of one kind, when the outstretched hand holds a weight or the legs sustain the body. The feelings of support now in question are those in which the trunk-feelings are involved. The phenomenal life may be regarded as resting on this substrate of the self, or as at least attached to it and forming a continuity with it; or, on the other hand, it may emerge from the self as the forthputting of its energy in effortful volitions. The analogues of these kinds of support can be seen in the relations of substance to its qualities.

Further, in this account of the meaning of substance we can probably find the explanation of the agnosticism which tends to adhere to it. The feelings which enter into the concept are massive and vague, little comparable to the finely differentiated sensations of sight and hearing. Probably it is precisely the vagueness of these primal sensations that is the original justification of the agnostic dogma of a mysterious unintelligible background of phenomena. Not that substance, as we have already remarked, is of necessity to be construed agnostically; yet it is scarcely necessary to cite further evidence of the general correctness of Locke's view that it is conceived as an unknown somewhat. The reason why this agnosticism has not been transcended is to be found in the want of reflection on the origin of the concept. Substance being originally defined as the vague something that supports phenomena, there is thenceforth necessity for supplying this unknown entity, however far the limits of the intelligible may be extended.

It remains to consider the metaphysical value of the category. That it is metaphysical, is evident from the fact that it

transcends particular sensations, and is a ground to which they are referred. While it owes its existence to bodily sensations, it is regarded as something beyond them : it is their resultant in which they are found in modified form. Its metaphysical character is especially evident when external things are considered. The appearance of objects is made up of the sensations of the various external senses, and substance is the inner reality other than appearance. Substance is not merely a synthesis of sensations, as Kant maintained. Even in Kant's treatment of it, it becomes apparent that it is an essay of the mind at interpretation of the reality behind sense-data.

An estimate of the metaphysical value of the concept is, in important respects, a comparatively easy task, after its genesis has been traced psychologically. Its claims can scarcely be taken seriously. As regards the soul, it cannot be maintained that its core of reality is to be found in the bodily sensations enumerated above. Their vagueness, massiveness, and comparative monotony are apparent, and if an identical or permanent element is demanded they seem at first sight to meet the demand. Yet how far they are from fulfilling the function claimed for them, it does not need much reflection to perceive. Even were this identity established, it would not be proved that this persistent monotone is entitled to any special dignity in the soul's life, or that it offers any explanation of the other phenomena of that life. But that identity does not exist. Changes in the quality of the sensations referred to may be less apparent to gross perception, yet, nevertheless, they are continual. The identity is merely that of a composite image or abstract idea.

When we turn to external objects, the crudeness of the idea of substance scarcely needs any illustration. We are not entitled to regard the vague body-sensations, even when transformed by the process of abstraction, as resembling the inner reality of material objects. At the same time this projection of ourselves into other objects, even those which are known as material, involves a principle of the highest importance. We can interpret things only by our experience ; the data of con-

sciousness, intellectual, emotional, volitional, are the only keys we have to the meaning of things; and we may not say *a priori* in any particular case that the use of them is illegitimate. Yet we are not, therefore, to proceed uncritically and assume that any or every part of experience can be projected externally: we cannot assert that the feelings referred to are the truth of material objects.

The reduction of the substances of the world to unity does not change the intrinsic nature of the conception. It may be due to a religious impulse, as in the transition from Polytheism to Pantheism; or it may be due to the philosophical desire for unity. In both cases the want of a proper critical treatment vitiates the process.

The doctrine that the substance of the world is permanent offers itself here for consideration. It presupposes an extended matter, and the purport of its teaching regarding matter is that, even were it cut up into the finest particles, and were these thrown into any number of combinations, the amount would remain throughout unchanged, and that the substance associated with extension, similarly subdivided, would be likewise constant. Now it is true that space is permanent, and that no subdivision affects it. But the theory that substance remains the same in all changes of its relations, is one which conscious experience does not justify. But we shall have occasion to consider the importance of changes in relations, when we turn to the conception of energy; we are the more directly brought to this problem, as the permanence of substance is for science a permanence of mass and thus a manifestation of energy.

It is necessary to consider the metaphysical value of the conception of energy, because of its tendency to substitute itself for the conception of substance. Energy, though the fashionable category of science, is, like substance, metaphysical. Science, indeed, never escapes metaphysics. To think is to be metaphysical, for thought is a negation of sense-data, and an apprehension of that by which they are transcended. Energy is not the sensations of sight or touch; it is an entity beyond

these. Therefore the idea of it is metaphysical, and its employment must be justified at the bar of metaphysics.

Energy is the modern version of causality. On a purely dynamical theory of matter, energy would show its distinctness from causality in this, that it would be considered as cut loose from the agent and existing as an entity in itself, while causality, on older interpretations, was energy emanating from a substance. However this may be, energy is unquestionably the descendant and heir of causality, so that through the latter its genealogy must be traced. Whence comes the idea of causality? The question obliges us to revert to psychology. Were this the place to discuss fully the origin of the category, we might find, in a survey of the attempts to explain it, striking illustrations of the failure of extreme Empiricism on the one hand, and extreme Transcendentalism on the other. It must suffice here to recall the well-known futility of the attempted reduction of causality to mere succession, and at the same time the insufficient analysis offered by the Transcendental doctrine. Causality is a new element added to the succession, and this element seems to be derived from the feelings of voluntary effort. We are, for our own minds, united with movements in our bodies, and indirectly with movements in external bodies, through our efforts. This association of effort with change is not restricted by the individual to his own agency; it is taken to hold for other individuals, and for the external world as well. Thus the changes in external objects, not preceded by his volition, are attributed to a volition resembling his, though other than it. For the animist, the souls with which the world is peopled act as he does. The substances are active substances. Thus causality is a modification of the feeling of effort. Energy, though so much more definite as used in modern science, is still the feeling of effort and strain. What a further analysis of effort has to show, is a vexed question. The feeling is probably made up, at least in part, of peripheral feelings,—those of head, throat, chest, and other portions of the body. Frequently it has been regarded as the ‘feeling of innervation.’ Even should this be insisted on, we must, unless we deny the

correlation of mind and body, regard the feeling as simply be-tokening, like sensations, the metabolism going on in the brain cells. Therefore, in any case, the feeling of effort is not essentially different from those 'feelings' known as sensations.

This glance at the psychological origin of the conception of energy is sufficient to make it clear that from the metaphysical point of view it is not less crude than substance. It may again be said that the interpretation of the world in terms of the self has much to justify it; the only interpretation possible for us is of this kind. And it may not be said *a priori* that the sensations of knit brow and tense throat, and the feelings of innervation (if there are such), have not their analogues in the material world. Yet the common doctrine of energy is naive and uncritical, and before its claims can be established there must be accomplished a psychological and metaphysical investigation, the beginnings of which have scarcely been made.

It is scarcely a digression to notice the efforts in recent metaphysical works to install the will in the throne of the Absolute. By 'will,' seems to be meant chiefly the feeling of effort. Those who would thus eject the feeling of effort should give evidence that they are constructing their hypothesis in view of psychological analyses of the will. If the feeling of effort is composed of peripheral sensations, the rashness and hastiness of the thinking which would uncritically adopt it as the absolute principle of the universe, are at once exposed. Even the feeling of innervation cannot *a priori* claim any more metaphysical dignity than a sensation of smell or taste.

Nevertheless, the principles of the conservation and transformation of energy have proved of such fundamental importance in research into nature that it is desirable to make a critical examination, in the light of what we have learned, of the view of the world-substance which they present. These doctrines are rightly understood when they are taken to refer simply to relations of succession and coexistence among phenomena. They mean that in the sequence of phenomena certain rules are observed; more especially do they teach that a certain series of phenomena can, in thinkable conditions, be given in

reverse order. There is no necessary reference to the particular metaphysical entity entitled 'energy.' That a produces b , and in certain other conditions can be produced by b , is stated with equal satisfaction for the purpose of science, when we say a is followed by b , and b in other conditions is followed by a . Science speaks of energy because of our inveterate association of change with effort. Science would not need to revise any of its calculations did it cancel this association.

Yet when the laws of the conservation and transformation of energy are thought to express the real nature of a world other than the phenomenal, there is offered a theory of the world which has the defects noted above, and besides can be shown to contain contradictory elements. First of all, there is an inconsistency in the law of the conservation of energy, inasmuch as it is an attempt to state what is qualitative in terms of quantity: the energy in the universe, while undergoing change, remains the same in amount. So far as the inner being of nature is referred to by such statements, it is readily apparent that there are being applied to it categories which do not fit it. As that inner being changes, there are constituted ever new systems of relationship. To say that one of these systems is equal in amount to another, is to say what is false, because it is meaningless. Let it be remembered that the world is interpreted after the analogy of our conscious existence, and that the idea of energy is derived from feelings of effort. Suppose that the physical universe has for its being feelings of effort, or feelings of any kind, these must be supposed to change in quality from moment to moment, just as ours would change from moment to moment were we, say, hauled now one way, now another. What meaning could be put into the statement that the quantity of the sensations remained the same? Psychical states cannot be compared in respect of quantity. Qualitative differences in feeling have quantitative terms applied to them, only because of the tendency to universalize spatial ideas. Space is the only true quantity: to it alone belong the differences of 'less' and 'more.' Quantitative terms are properly applied to the psychical, only as symbols of

a special kind of qualitative difference. If, therefore, the concept of energy is justified as an interpretation of the physical world, that is, if the physical is to be interpreted on the analogy of the psychical, the grossly quantitative idea of the conservation of energy is untenable.

The analogy of our conscious experience likewise fails to afford any support to the view that energy cannot be lost; that, in fact, it is impossible for us to think it away. The 'experience' of nature, so to speak, is varying. Our conscious experience of each moment vanishes, never to return; and so, in nature, the past manifestations of energy are forever lost. The seeming impossibility of thinking energy away is due to the fact that we adhere to the idea of something existent, and that, while we hold to it, we cannot at the same time introduce the thought of its non-existence. Unless the idea is held to in this fashion, the possibility of disappearance must be recognized. It is too manifest from our experience to be questioned. The metaphysics of change may present difficulties enough; what it is of importance to observe at present is that, if the idea of change is accepted, that of conservation or permanence is sacrificed. It may still be urged that this energy cannot escape from the world and must be somewhere. It should be remembered that our experience likewise vanishes and is irrecoverable, yet it is not somewhere,—it never was spatial, and its being cannot be so characterized. Again, the term 'potential' may seem helpful, the energy at any stage in the world's history being thought of as existing potentially at earlier stages in that history. However, an existence that is in this sense potential is simply that which occurs at a definite place in a series of phenomena. To say that in some other way one concrete reality may be contained in another, is to contradict all the results reached by a study of the relations of our own actual experience. Potential is a useful term, but an experience which is contained in another experience is not to be found in the concrete world. Potentiality is an idea, abstract like causality, and, like causality, only symbolical.

With reference to the doctrine of transformations of energy,

it is necessary to state more clearly what is implied in the statements already made. It is said that the energy while remaining the same appears in various forms. It is now heat, now light, now electricity, yet preserves its identity in some occult character. But conscious experience does not warrant such statements. It offers a succession of conscious states, each of which is qualitatively distinct. It cannot be said that one is changed into another, except in the sense that one gives place to another ; and it cannot be said that there is in these conscious states an identical element ; it cannot even be said that they have thought in common, for thought when so apprehended is an abstraction for which we should search concrete experience in vain. In truth, the principle of the transformations of an energy that remains identical, is based on the old doctrine of abstract ideas, according to which there is in different individuals an identical element. It is thus in strange contrast with the quantitative statement referred to above. It is impossible, moreover, to find in two concrete experiences such an identical element as that demanded.

For transformations of energy the more cautious expression 'Correlation of Forces' has been used. The expression indicates the view that, while it is right to say that one force produces another, it is yet not legitimate to assert that the one changes into the other. This recognition of difference in the forces is valuable, but the principle is not carried far enough. Each force is still an abstraction, and the attempt to unify the 'modes' of one force is exposed to objections as much as the attempt to reduce the forms of energy to unity.

We have thus seen that in the ordinary account of energy as the world-substance, while the conceptions used have been derived from familiar elements in our experience, there has been no faithful study of that experience, and that, in place of a view derived from observation of concrete experience and in harmony with it, there is exhibited a play with abstract categories.

The category of substance has rarely in recent times been applied to the soul. It cannot be said, however, that the substitutes offered for it have proved themselves fitted to take its

place. The will, which sometimes appears as such a substitute, is, as we have already found, an entity which we have created by a process of abstraction. It is likewise to abstraction that we owe sensation, and thought or reason, as primal entities, or processes. Abstract ideas, however, are not like the concrete reality to which they refer ; much less do they explain it.

The discussion of this subject by Hegel must be referred to by itself. The Absolute, Hegel says, is not substance, but subject. This utterance signaled a great philosophical advance. It recalled the philosophy of the soul to the actual facts of experience. Yet, in spite of this, it is not legitimate to interpret all the so-called lower forms of existence as vanishing moments in the dialectic process leading up to self-consciousness. The statement that the Absolute is subject is valuable, because it points to what is concrete. In accordance with it, material substance should be interpreted concretely, and therefore not in abstract categories. Even self-consciousness cannot be explained by categories, and equally or yet more is it true of material substance that there is in it something other than the category.

To conclude, substance is an essay towards knowledge. Modern science has done much to give the conceptions of substance and energy a mathematical form, but it has not thereby given us more genuine knowledge of the world. All the help is needed which mathematics can give, but at the same time cognition is imitation of the reality, and the reality is not imitated or represented by mathematical formulae. We cannot, indeed, say *a priori* whether the emotional or intellectual elements in consciousness furnish the best key for the interpretation of the world. But we can say that it is not by formulae or abstract categories as such that we reach the world's essence. Abstract ideas, even when developed into ideas of laws, do not represent anything save as symbols. The world may be knowable, and it may be, as a purified animism teaches, a spiritual hierarchy. If it is, it can be known only through Sympathy.

WALTER SMITH.

SOME ASPECTS OF HEGEL'S PHILOSOPHY.

THE misfortune of Hegel is that he is more criticised and refuted than understood. There was a time when his system was, even to philosophers of high merit, as impenetrable as a rock of adamant. But yet critics were not wanting who made short work of him, and held him up as an example of the appalling consequences of frequenting the "high *priori* road." Now, however, the circumstances are quite changed. It is generally admitted that knowledge of Hegel is an essential requirement in one who has anything to do with philosophy, whether he agrees with him or not. The difficulties of Hegel have also, to a great extent, been obviated by the labors of competent scholars. "The English student," says Mr. Muirhead, "is no longer debarred by the uncouthness of Hegel's own writings from the study of his ideas. His 'nuggets' have been broken down by the enthusiastic labors of younger thinkers in our own country, and have now become current coin in every field of speculation."¹ Though this is true, it is by no means sure, if we are to judge from certain recent objections, that some of his main principles have been correctly seized. Indeed, most of the objections seem to be based upon entire misapprehension of his ideas. It is necessary, therefore, especially for those who, without being Hegelians in the strict sense of the term, believe that his system must be the foundation of all profitable speculation in the future, to understand exactly the nature of what may be regarded as the hinges on which his philosophy turns. In this paper an humble attempt will be made to throw some light upon certain knotty problems in Hegel's system, with occasional references to recent discussions.

The theory of the identity of Thought and Being is an old difficulty in Hegel, and, notwithstanding the vast mass of

¹ *Elements of Ethics*, 2d ed., p. 182.

expository writing upon it, the critics still shake their heads dubiously. To maintain, it is argued, that Thought is identical with Being is in itself absurd; but even if the doctrine be tenable, Hegel has not proved it, but has begun by quietly assuming it. Now the difficulty of perceiving the soundness of Hegel's doctrine arises, I think, from our psychological prepossessions. By 'thought' we ordinarily mean, either the psychic processes of thinking, or the products of subjective thought. Hegel does not use the term 'thought' in either of these senses. Nor does he mean by it the epistemological 'unity of self-consciousness.' Whether Hegel was justified in using the term in any other sense may fairly be doubted, but it is of the utmost importance to distinguish clearly the signification which it has in his system from the ordinary meanings of it. Thought, in Hegel's sense, is synonymous with Reason, and Reason is the only ultimate Reality. It is, in short, the Absolute Idea which reconciles with each other, comprehends within itself, and overreaches, all partial existences or "appearances," to use Mr. Bradley's language, and thus *exists* or has *being* in the truest sense of the term. Hegel has supreme contempt for that which merely exists. To have mere being is as good as to be nothing. What really exists, the only true Being, is the Absolute Idea, Reason or Thought. The highest Being, the absolutely independent Being, it will thus be seen, is Thought. The distinction of subject and object is merely a distinction between two aspects of the Absolute Idea. The universal organism of Thought has the profoundest Being and the only true Being; the ultimate Reality is Thought. This is the proper meaning of Hegel's doctrine of the identity of Thought and Being. It is important to note that, if by 'thought' we mean merely the 'unity of self-consciousness,' it is impossible to say without gross self-contradiction that Thought is identical with Being. The unity of self-consciousness is the correlative of Being, and cannot, therefore, be identical with it. English Neo-Hegelianism, I cannot help thinking, is to some extent responsible for making Hegel's theory seem absurd. The followers of Hegel in England have

rendered a great service to true philosophy by showing that all existence must be relative to the self. But, with the exception of Professor Edward Caird, they have neglected to point out that the correlativity of the self and the world implies a higher and all-inclusive unity. This unity may, as we have seen, be called indifferently Thought or Being.

In reply to the objection that Hegel has rather assumed than proved the ultimate identity of Thought and Being, all that it is necessary to say is that the proof is furnished by the history of modern philosophy. It must never be forgotten that Hegelianism is the logical outcome of Kant's philosophy. If we grasp the central meaning of Kant, we are inevitably driven on to Hegel. It is not, I think, too much to say that Hegel's *Logic* is little more than a systematization of the lessons of Kant's great *Critiques*. Hegel regarded Kant's deduction of the categories as the corner-stone of his philosophy, and with true insight laid his finger upon it as the source of fresh and suggestive ideas. Now the important lesson of that deduction is, that knowledge of an objective world is relative to the synthetic unity of self-consciousness, and the synthetic unity of self-consciousness is itself relative to a known objective world. The manifold of sense can be brought into relations in space and time only by a combining principle, and such a combining principle is the self. The essence of the self, again, is that it is synthetic, and can exist only through the synthetic work that it performs. The self is a unity of plurality, and is as much relative to the plurality of the objective world as that plurality is relative to it. But does not this correlativity imply a higher unity? Unfortunately Kant did not see this implication of his theory. If the self and the world are correlative to each other, evidently there is a higher principle which comprehends and transcends them, and makes their correlativity possible. This higher unity cannot be less than either Thought or Being. It is not Being only, for Being is *one* of the correlatives which it includes within itself. For the same reason it is not Thought only. It is Thought which is Being, Being which is Thought, or, in

one word, Thinking Being. This is the conception which Kant's deduction of the categories makes necessary, and with which Hegel starts. This all-inclusive unity, it is needless to say now, is not a barren identity. Let us carefully observe the path that leads up to it. We begin with the objective world. Under Kant's guidance we see that it is essentially the work of the understanding. We carefully distinguish the universal elements from the mere particulars which are as good as nothing. These universal elements are the categories. The determination of the manifold of sense by the categories presupposes the unity of the self. We are thus led on from the object to the subject. But the subject, the synthetic unity of apperception, as Kant himself points out, presupposes the objective world which it makes possible. The object drives us to the subject and the subject drives us back to the object. But this forward and backward movement is only the circulation of the life-blood of the highest Reality — the final unity, a unity which is neither Thought only, nor Being only, but both at once. But where are we? Are we not already surrounded by the familiar atmosphere of Hegel's *Logic*? It comes to this then, that Hegel travels by the same path by which Kant travelled. Only his terminus is a little beyond Kant's, and he is more wary than his great predecessor, and is careful to survey minutely every inch of ground that he traverses. Kant gives us a very meagre list of categories. Hegel enriches it by making large and important additions. Kant neglects to show the organic inter-connexion of the categories. Hegel admirably performs the work in his "Objective Logic." Kant shows that the objective world determined by the categories implies the unity of the self. Hegel, in the latter part of the "Doctrine of Essence" demonstrates how the *Begriff* is the central principle of the objective world. Kant points out that the unity of apperception is entirely relative to the objective world. Hegel, in the first part of the "Subjective Logic," shows how the *Begriff* finds its content in the object. Here Kant stops. Hegel, in the remaining part of the "Doctrine of the Notion," demonstrates the essential correlativity of

subject and object, and leads them up to the category of categories — the crowning principle of the universe of mind and matter — the Absolute Idea. Is it possible then to accuse Hegel of beginning with a big assumption? Does he not fully prove his theory by completing and systematizing the philosophy of Kant?

But Hegel does not lean upon Kant only. In the *Phenomenology of Spirit* and the introduction to the *Encyclopaedia*, he has himself shown the necessity of passing on to the point of view of the identity of Thought and Being. The *Phenomenology* is an introduction to his system, and those who read the *Logic* in the light of it will hardly find any reasonable ground for the accusation that his system is based upon a gratuitous assumption.

The Absolute is an organic unity — an organic unity which comprehends and transcends the universal elements of experience or the categories. But it is not enough to affirm merely the organic inter-connexion of the categories. Such inter-connexion must be fully demonstrated. To do this, is the function of Dialectic. A question, however, may, by the bye, be disposed of at this point. Are the categories subjective or objective? The answer to this follows from what has been already said. If the Absolute is both Thought and Being, if it is a unity that transcends the distinction of subject and object, the constituent elements of it must partake of its own character, that is to say, must be neither subjective merely nor objective merely, but both at once. But, in order to be strictly correct, it is perhaps better to say that some of the categories are objective, some subjective. We have seen that subject and object are two aspects of the Absolute. Those categories that make up the object — the categories, for example, enumerated by Kant in his *Critique of Pure Reason*, and those that are treated of in Hegel's "Doctrine of Being," "Doctrine of Essence," and the second division of the "Doctrine of the Notion" — are objective categories. Those categories, again, which constitute the subject, those that Hegel examines in the first and third divisions of the "Doc-

trine of the Notion," are subjective. But, as the object is essentially related to the subject, and the subject is mediated by the consciousness of objects, the objective categories are also subjective, and *vice versa*.

But what are the categories, and whence do they come? The most general answer that can be given to this question is that the categories are experience described in general terms, and are obtained from Science. They are the ground principles of Nature, the frames in which the particulars of experience are set. Now it is the work of Science to disengage the universal determining principles from the phenomena with which it deals. Philosophy can undertake the task of systematizing and affiliating to each other the connecting principles of phenomena, or the categories, only after science has discovered them. It has thus to *wait* for the results of Science, and cannot *anticipate* them. Kant's procedure, as is well known, was somewhat different. He, in an artificial way, deduced the twelve categories from the forms of Judgment recognized in Aristotle's *Logic*, and proceeded to show how they are imposed upon the manifold of sense. For Hegel there is no problem of artificially combining the subjective categories with the objective data of sense. Philosophy has not to perform the ambitious and impossible task of explaining the genesis of Nature. Its humble work is to *understand* what *is*, or to perceive the inter-connexion between the component factors of the Supreme Reality—the concrete universal—the Absolute. It, like Science, has nothing to do with mere particulars. The particular *as* particular has no value, nay, not even existence. Its concern is with the *significance* of the particulars. Philosophy does not undertake the task of finding out the universal principles of Nature. That work is done by the various sciences in their respective fields. It begins its work after the sciences have completed, partially at least, their labors. We thus see how unfounded is the charge that Hegel has evolved the categories out of his inner consciousness, and attempted to construct the universe *a priori*. All along he is face to face with the actually existing

Reality. Subjective fancies, optimistic dreams, vain Utopias, are furthest from his mind. Hegel is nothing if not realistic. And yet the charge of neglecting experience and frequenting the "high *priori* road," is constantly brought against him. Hegel is supposed to have done the very thing against which he most strenuously set his face! Such is the irony of fate! Hegel is misunderstood at this point even by those from whom such a misunderstanding would be least expected. We are familiar with Green's remarks on Hegel's dialectic method.¹ These remarks are based upon the misconception that Hegel interrogates subjective consciousness and not Nature. True philosophy, according to Green, must be founded upon a painstaking analysis of Nature. Exactly so. But in saying this Green merely repeats Hegel's own opinion. Hegel is no admirer of the merely subjective consciousness. He has, rather, great contempt for it. Is not subjective idealism one of the things against which he inveighs at every turn? The fact is that Hegel has not the audacity to override Science, but bases his whole philosophy upon it. It would have been impossible for him to find out the categories, if he had neglected experience.

But Hegel himself is partly to blame, if he has been misunderstood. He is never tired of speaking of the immanent movement of Dialectic, and of disparaging mere external reflection. It sometimes appears as if he believed that we have nothing to do but to hold fast to the category of Pure Being, and the spontaneous movement of Dialectic will lead us on from category to category till we reach the Absolute Idea. This, however, is not Hegel's meaning. "Hegel," as Professor Andrew Seth truly remarks, "would not have spoken as he does of the 'labour of the Notion,' if he had had nothing to do but to *set* his apparatus at Being and Nothing, and let it unwind itself of its own accord."² Dialectic has no power of

¹ I regret that I have not before me just now Green's *Works*, vol. III, and cannot, therefore, quote the famous passage in which he speaks of the "one essential aberration of Hegel." The passage occurs in the review of Dr. John Caird's *Philosophy of Religion*.

² *Scottish Philosophy*, 1st ed., p. 194.

discovering the categories. It only enables us to perceive the organic inter-connexion of the categories, — to realize how every category is meaningless without the others and the Whole of which they are elements. What Hegel calls ‘reflection’ describes the categories separately, as if they were independent of each other, and brings them into relation to each other in an external and mechanical way. This is, for instance, what Kant did in his *Critique of Pure Reason*. A living organism, however, is more than an aggregate of its component parts; you do not give a proper account of it, if you merely draw up a list of the various limbs and organs of the body, with their descriptions. An adequate conception of a living body is not possible without an insight into the mutual relations of its various parts and the functions which they discharge in the economy of the whole. Reflection is analytic, or at best, *mechanically* synthetic. Dialectic, on the other hand, is *organically* synthetic. But because Dialectic goes deeper than mere reflection, it does not follow that it is independent of experience. It cannot perform miracles, and has not the power of producing something out of nothing. The categories being *given*, it shows how they grow out of each other, and are phases or aspects of a single Reality. But it cannot generate them. It is nothing more than the comprehensive insight which enables one to see the parts *through* the whole and the whole *through* the parts.

The categories, then, are the connecting links of experience, and the Absolute is the *system* of the categories. But have we not, after all, mere universals, an “unearthly ballet of bloodless categories,” than which a single atom is more real and has, therefore, greater worth? Is not the individual alone real? The truth is that you cannot separate the universal from the particular, any more than you can separate the concave from the convex side of an arch. Let me quote here a passage from Lotze which exactly expresses the truth. “The only reality given us, the true reality, includes as an inseparable part of itself this varying flow of phenomena in space and time, this course of Things that happen. This

ceaselessly advancing melody of event — it and nothing else — is the metaphysical place in which the connectedness of the world of Ideas, the multiplicity of its harmonious relations, not only is found by us but alone has its reality. Within this reality single products and single occurrences might be legitimately regarded as transitory instances, upon which the world of ideas impressed itself and from which it again withdrew ; for before and after and beside them the living idea remained active and present in innumerable other instances, and, while changing its forms, never disappeared from reality. But the whole of reality, the whole of this world, known and unknown together, could not properly be separated from the world of ideas as though it were possible for the latter to exist and hold good on its own account before realizing itself in the given world, and as though there might have been innumerable equivalent instances — innumerable other worlds besides this — in which the antecedent system of pure Ideas might equally have realized itself.”¹ These remarks are probably meant as a reply to Hegel, but they aptly express Hegel’s own thought. In his system there is no separation between the universal and the particular. The most general laws of Nature, the categories, are realized in the particular facts of experience. In philosophy, as in science, experience must needs be described in general terms, but it should never be forgotten that general statements always have particular implications. Critics of Hegel do not bear this simple truth in mind, and, consequently, put forward objections which do not in the least affect him.² For instance, we are told that the most trivial facts of experience have greater reality than the whole host of categories. Is this criticism? Is it not ridiculous to argue, for example, that a single case of an apple falling to the ground is more real than the general law that bodies attract

¹ *Metaphysics* (English translation, edited by Mr. Bosanquet), p. 73.

² In an article entitled “The Truth of Empiricism,” in the *PHILOSOPHICAL REVIEW*, No. 11, Professor James Seth attributes views to Hegel which are diametrically opposed to Hegel’s position as I understand it. Hegel would have cordially accepted Professor Seth’s statement of facts. The only question is how they are to be interpreted.

each other? Hegel is the last person in the world to deny that the mere universal is an empty abstraction. Coming after the age of Empiricism, it was not possible for him to revert to Platonism. What Aristotle was not, he could not be. But at the same time he could not possibly rest in Empiricism. Kant's criticism of Hume, if nothing else, made that impossible. Nor did Hegel seek to combine mechanically the universal with the particular. That attempt was made by Kant, and his signal failure is well known. Hegel's categories are the animating principles of Nature, and have their home there. They are the life-breath of the particular, which without them would have no existence. The individual is what it is (to use Lotze's language in a slightly modified form), only in consequence of the categories, and, conversely, the categories have no other reality but in the cases of their application. The Real, the Absolute Experience, is a universal which is particular, a particular which is universal; neither the one nor the other alone. To suppose that the real is a mere aggregate of the particular facts of experience, is the mistake of the Naturalist. To suppose that it is somewhere far away from the only world which we know, utterly divorced and different in kind from it, is the mistake of the Universalist or Transcendentalist.

From what has been said above, it is easy to understand Hegel's transition from Logic to Nature. This question has given rise to a good deal of discussion. Schelling, after Hegel's death, sought to demolish his whole system by directing his attack to this point. The fact, however, is that those who believe that there is a transition here from one thing to another are altogether on a wrong track. In fact, the advance from category to category has already ceased in the "Doctrine of the Notion."¹ The "Doctrine of the Notion" only elaborates or develops the results gained in the previous parts of the *Logic*. "The onward movement of the Notion," Hegel

¹ Mr. J. Ellis McTaggart's admirable articles in *Mind*, entitled, I believe, "The Changes of Method in Hegel's Dialectic," contain some valuable remarks on this subject.

himself is careful to point out, "is no longer either a transition into or a reflection on something else, but Development. . . . Transition into something else is the dialectical process within the range of Being : reflection (bringing something else into light) in the range of Essence. The movement of the Notion is *development*: by which that only is explicit which is already implicitly present."¹ In Nature there is nothing more than what there is in Logic. The Phenomena of Nature are nothing more than cases of application of the categories, and the categories live, move, and have their being only in the cases of their application. Nature may, therefore, be regarded as pictorial illustration of the system of categories. There is no transition at all from Logic to Nature. The same Reality which is viewed in its universal aspect in the *Logic*, is viewed in its particular aspect in the *Philosophy of Nature*. Here, again, Hegel himself has thrown obstacles in the way of a proper interpretation of the relation between the Logical Idea and Nature. His own pet formula has been the source of endless difficulties. We are told that the Logical Idea is the thesis ; of which the antithesis is Nature, and the synthesis Spirit. But we must not always interpret Hegel's statements too literally. Here, as everywhere, the letter killeth. As Professor Seth observes, "It is not unnatural for a man to be overridden by an important principle which he has brought to light ; and Hegel is not free from this failing."²

What has been said above is not, perhaps, sufficient to meet objections. Has not Hegel spoken of the contingency of Nature? Were not the phenomena of Nature found by him too refractory for systematic treatment? Is there not mention of things in the *Philosophy of Nature* to which counterparts are not to be found in *Logic*? How can all this be so, if the *Philosophy of Nature* is only Applied Logic? The answer is that there seems to be more in Nature than in the Logical Idea, because Hegel's *Logic* is itself imperfect. Hegel has certainly not discovered all the determining principles of

¹ Wallace's translation of Hegel's *Logic*, 2d ed., pp. 288, 289.

² *Scottish Philosophy*, p. 194.

Nature. No man can possibly do that. Science is continually bringing fresh categories to light, and it is the business of Logic to systematize them. For this purpose, however, it must humbly *follow* Science. Logic can be complete only if Science becomes complete. But the completeness of Science would mean full knowledge of Nature and the entire preclusion of contingency. Instead of suggesting that there is an irrational element in Nature, Hegel ought to have said that the seeming irrationality of Nature is due to the incompleteness of Logic. If there were irrationality in Nature, Hegel's philosophy would be a baseless structure. The presupposition of that philosophy is that Nature is intelligible to the very core. Hegel was so overridden by the passion for building a complete system that he seems to have labored under the delusion that his categories exhaust the rational significance of Nature. If the different sciences could completely determine the significance of the various groups of phenomena with which they deal, and if philosophy could fully systematize the materials supplied by them, the world of knowledge would be found to be "a system in which every element, being correlative to the other, at once presupposes and is presupposed by every other," and the existing want of correspondence between the Logical Idea and Nature would disappear. Nature seems to be more than cases of application of the categories, because the Logical Idea itself is not a completed system. If the Logical Idea is not a complete system, if Hegel has not given us a full list of the categories, and if without omniscience the list cannot be completed, how can a *system* of metaphysics be possible at all? I confess I have no satisfactory answer to give. Indeed, it seems to me that this question lays bare the Achilles' heel of Hegelianism, as of all systematic metaphysics. Philosophical synthesis must, for want of a full knowledge of materials, be premature, and premature synthesis is entirely valueless. Suppose I begin to work with four elements, *A*, *B*, *C*, *D*. Philosophical reflection shows that *A* stands to *B* in the relation x . With the progress of knowledge new elements, *E*, *F*, *G*, *H*, become known to me. In the light of these, I have

to revise my previous systematization. I now find that *A* stands to *B*, not in the old relation *x*, but in a different one, *y*. Such a modification must necessarily take place if the new elements, *E, F, G, H*, are not to be mechanically added to the old ones, but reduced to organic factors of the whole. What was *x* is transformed into *y*. Similarly, *y*, with further discoveries, must be changed into *z*, and so on *ad infinitum*. What, then, is the value of system-building? If every relation between categories that is determined is liable to modification and alteration, what is the good of taking the trouble to determine such a relation at all? Why should we amuse ourselves with system-building if no complete system—and a *system* must be complete—can be built? It is no answer to say that a relation that is discovered is true so far as it goes, though in the light of fuller knowledge we may perceive a deeper significance of it. The difference between *x* and *y* is not that the latter is more complete than the former; *y* is altogether a new relation, and is at least the contrary of *x*. The relation between *A* and *B*, when viewed in connexion with the context, *C, D, E, F, G, H*, must necessarily be different from what it is when *C* and *D* are the only elements associated with *A* and *B*. Does it not follow, then, that the attempt to affiliate one category to another is only to entangle ourselves in the cobwebs of imagination? This question makes me pause, and, until I can answer it satisfactorily, I am neither an Hegelian nor a firm believer in metaphysics. That the component elements of the universe are organically connected with each other because it is a systematic whole, is a rational conviction which obtrudes itself upon us; but the exact form and order of the connexion is perhaps beyond the reach of human intellect. The difficulty of the situation is this. The study of the history of philosophy drives the student on to Hegel's point of view. He cannot easily see how to avoid his conclusions, and yet he shrinks back from his method as from a dazzling light. But without method Hegelianism is nothing. Perhaps the only possible method is that which Mr. Bradley has adopted in his *Appearance and Reality*. All that we can

do, perhaps, is to show that partial knowledge is mere appearance, and demands an All-comprehensive Unity to systematize and give meaning to it ; and then to defend the conception of the Absolute against possible objections. Nothing short of omniscience can enable us to determine exactly the relations in which the elements of the Whole stand to each other.

I shall conclude with the consideration of one more point. Is it true, as is alleged, that Hegel has ignored Will altogether and made Thought all in all? The term Will, like Thought, has probably misled many. If by Will is meant 'sense of effort,' certainly Hegel has ignored it, for the simple reason that it is irrelevant in metaphysics, and has no place outside psycho-physics. But if Thought, as Dialectic proves, is essentially dynamic, it, in so far as it is dynamic, is Will. Hegel's Absolute is *energizing* Reason, and is therefore both Thought and Will. If there is no recognition of Will in Hegel's system, what is the significance of such categories as Attraction and Repulsion, Force and its Expression? It cannot be said that the thought of Attraction and Repulsion is very different from actual Attraction and Repulsion. We have already seen that Thought is not different from Being. Attraction and Repulsion, Force and its Expression, are only the modes in which the Absolute realizes itself ; and, if these do not constitute Will, it is difficult to say what does. The Absolute Idea is the synthesis of the True and the Good, and, if the True is Thought, is not the Good, Will? The truth is that Thought divorced from Will is a mere abstraction. The Absolute is *active* Reason. Is it not blissful, too? If we are justified in thinking that happiness is the incident of harmony, what can be more happy than the Absolute? It overcomes all finitude and discord. Pains and imperfections in the part only contribute to its harmony. Mr. Bradley is not, after all, wrong in maintaining that in the Absolute there is a balance of pleasure over pain. This opinion is not in any way inconsistent with Hegelianism, though, of course, Hegel has not expressly said anything on the subject. But I think it is a necessary corollary of Hegel's theory. If the Absolute is an

harmonious Whole how can it be other than blissful? If a conjecture were to be hazarded, at the risk of lapsing into mysticism, might it not be said that the beatitude of the Absolute is of the aesthetic type? The True, the Good, the Beautiful—this must ever remain the fittest description of the Absolute, or, in the words of the ancient philosophers of India, *Satyam, Sivam, Sundaram.*

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THE LIMITATIONS OF THE INTROSPECTIVE METHOD IN ETHICS.

AMONG the investigations which have given to modern psychology its character, one of the most important is the research of Sir Francis Galton in the field of mental imagery. Its significance, as is generally acknowledged, lies not so much in the facts brought to light, interesting as these undoubtedly are, as in the new method which it has put into the hand of the psychologist. It has demonstrated for all time that the exclusive use of introspection leads to nothing better than partial or one-sided results, — results which are scientifically worthless until checked and supplemented by the employment of some other method. Almost twenty years have elapsed since the publication of *Inquiries into Human Faculty*, and in the meantime the 'objective method' has become one of the most generally applied forms of psychological research. To it we owe directly a very considerable share of our present knowledge of the mental life. But when we turn to ethics, we find, strangely enough, that a thorough-going application of this method to the study of the moral consciousness has never been attempted. It is generally admitted that a large proportion of the problems of ethics are, properly speaking, psychological in their nature, and yet the perception of this fact has had no visible effect upon the plan of campaign. It is true that we are beginning to learn much about the moral judgments of other races besides our own, and this knowledge has had a profound effect in modifying some of the preconceptions with which we are apt to approach the subject. But in general it seems to be imagined that we can get about all the requisite or indeed available knowledge of the moral life by simply 'looking within our own breasts,' and studying the moral consciousness as it there reveals itself to our gaze. The ethics of to-day is avowedly little more than what, according to Martineau, every

branch of philosophy must always be, an attempt "to unify by sufficient reason and justify by intelligible pleas our deepest affections and admirations."

It is evident that introspection can be relied upon as a complete and safe method for the solution of ethical problems, only if the moral ideals and modes of judgment of the members of the highest races are in the main identical. It will be the aim of this paper to show that this condition is not fulfilled, in other words, that no such uniformity exists in the moral experience of the European races. We shall base our conclusions upon a study of the descriptions of the important features of the moral life offered us by some of the leading moralists. We shall find them in many instances flatly contradicting one another; at other times talking in a language which seems to their opponents utterly unintelligible. We cannot but suppose that in the majority of cases their statements correctly represent their own experiences. Their works must have at least some value as autobiography, as a record of their "deepest affections and admirations." But if this be admitted, then we can satisfactorily explain the appearance of so many conflicting theories only on the assumption that the writers in question have been betrayed into laying down as universal principles what were little more than the expressions of personal idiosyncrasies. The discrepancies referred to are of course well known, but it has been vaguely supposed that they can be accounted for by carelessness of observation, or 'the difficulties of the subject,' or the blinding effects of metaphysical or psychological prepossessions. That these are *verae causae* we should be the last to deny. But that they can be stretched to cover all the phenomena, we find it impossible to believe. And we shall accordingly try to show that the apparent mystery presented by the past and present state of ethical controversy can be cleared up on condition, and only on condition, that we assume that the moral consciousness is a complex; that its constituent elements are represented with varying degrees of completeness in different persons, while certain of these elements may be almost wholly or even entirely lacking in some cases.

On this view, most of the fundamental discrepancies can be accounted for, on the ground that each moralist kept his eyes fixed almost exclusively upon himself, and for this reason failed to notice important elements in the life of the race, and further was unable, through this shifting of the perspective, to interpret correctly even the data which were directly accessible to his own observation. If this position be correct, then the method of pure introspection, taken by itself, is inadequate for a correct solution of the problems of ethics. While, on the other hand, if the traditional theory is the true one, this, too, can only be demonstrated by means of the objective investigation which has hitherto been neglected. So that, turn which way we will, we seem forced to the conclusion that ethics, like psychology, must supplement old methods with new ones, if it is to mirror human life in all its varying forms, and at the same time present conclusions of universal validity. We begin our study of the contradictory statements of ethical writers by an examination of the grounds which have been represented as determining the approval or disapproval of conduct, the grounds of the distinction between right and wrong.

In the opening paragraphs of the third chapter of his *Autobiography*,¹ John Stuart Mill gives us a glimpse of the influences which determined his acceptance of Utilitarianism, and with it a particular theory of the nature of moral distinctions. In conclusion he writes: "When I laid down the last volume of [Bentham's] *Traité*, I had become a different being. The principle of utility, understood as Bentham understood it, and applied in the manner in which he applied it through these three volumes, fell exactly into its place as the keystone which held together the detached and fragmentary component parts of my knowledge and belief. It gave unity to my conception of things. I now had opinions, a creed, a doctrine, a philosophy; in one of the best senses of the word, a religion, the inculcation of which could be made the principal outward purpose of a life." Now, it is well known that the work in question contains no reasoned argument in favor of the Utilitarian theory, such as Hume or Sidgwick

¹ pp. 64-6.

presents. Bentham was above all else a legal reformer. Driven by the (for him) stern necessities of the case to the study of ethics, his treatment of its fundamental problems consists mainly in the dogmatic statement of his own opinions and the characterization of all others as meaningless or absurd. This kind of philosophizing can appear convincing only to one who, through the influence of temperament, strengthened perhaps, as in this instance, by early education, is already in sympathy with its conclusions. This was the case with Mill. The happiness of the race appealed to his broad altruism as an end worthy of his highest devotion. Hence whatever was inimical to this, either in the conduct of himself or others, necessarily met with his disapproval; whatever promised to contribute to this end he viewed with satisfaction. The one class of actions was accordingly for him good; the other, bad. With such ideals, it is no wonder that the 'reading of this book marked an epoch in his life.'

But others have studied Bentham also, to be moved not to admiration and enthusiasm, but to opposition, sometimes even to indignation or disgust. Can this difference be regarded as due entirely, or even mainly, to what may be called theoretical difficulties? Certainly we have one case where, beyond all possibility of doubt, the theoretical difficulties of Utilitarianism have played a comparatively unimportant part in determining the attitude of the individual. We refer to Professor Wundt. The following extract from his criticism of Utilitarianism has all the value of a personal confession, and gives us the clearest insight into the reasons for which he, at any rate, rejects the 'greatest happiness principle' with the same calm confidence with which Mill accepts it. "How the idea of an equable division of happiness among the now living members of the race can arouse the enthusiasm of any human being, with the possible exception of a Utilitarian philosopher, and can overcome the every-day impulses of self-regard and personal kindness, it is absolutely impossible to conceive. . . . The abstract idea of a sum of chopped up states of happiness is incapable of awakening a single emotion in the human breast."¹ A friend once said

¹ *Ethik*, pp. 365-7.

to the writer: "I cannot say that I am especially interested in the greatest happiness of the greatest number." It did not appeal to him as an end worth sacrificing anything of value for, and thus was lacking in what to him was the prime characteristic of any ideal deserving to be called moral. This is the attitude of Wundt. Hence he turns his back upon the Utilitarians and their ways, and sets up a rival definition of his own. Morality, he says, is the service of the "general will."

Now it is certainly not beyond the bounds of possibility for such an end to arouse enthusiasm. Many a man has cheerfully laid down his life for his country who would not sacrifice half an hour's comfort to help a fellow-countryman. There is, therefore, no reason to doubt that the formula just given represents correctly the author's own ideals. But alas for Wundt and the cause of 'scientific ethics'! One of his first reviewers is unkind enough to reject his definition for precisely the same reason that Wundt urges against Bentham and Mill: the abstract idea of the service of the general will is "incapable of awakening a single emotion" in the critic's breast. Thus, at least, we interpret certain sentences in the notice of the *Ethik* which appeared in *Mind* (vol. XII, pp. 285 ff.). The reviewer quotes Wundt's statement that "the social order is not a creation that exists for the sake of individuals; on which account also it needs no justification from the services it renders to the individual." "This," he continues, "is quite consistent with the principle of the general will as it is here laid down. In the eyes of some readers such a corollary will be of itself sufficient to condemn that principle." And with this single word of criticism the theory is dismissed.

If we turn now to a study of Schopenhauer's critique of Kantianism, we may be able to set our main contention in a still clearer light. What, according to Kant, is the fundamental moral motive, and therefore the ultimate ground of the approval and disapproval of conduct? The soul of man, he tells us, is a stranger in a far country. Imprisoned in a body which drags it down to earth, it has never lost the vision of its true home, the higher world. For the laws which govern pure spir-

itual beings are revealed in the conscience of man, and in virtue of his rational nature these laws are binding upon him. The fundamental moral motive is therefore reverence for the laws and for the persons of the citizens of this spiritual commonwealth. The commanding authority of morality is derived solely from this supersensible origin and this freedom from the taint of any connection with the world of time and sense.¹ He who refuses obedience condemns himself to self-contempt and abhorrence. He who obeys has obtained the one unconditional good in life, the perfected character, *den guten Willen*.

Now what says Schopenhauer to this? The idea of obligation which lies at the foundation of the Kantian ethics is simply, he tells us, another form of the familiar principle, 'You had better obey God, or you will catch it in the next world.' He maintains that Kant's ideal man, who relieves distress, not from sympathy with the unfortunate, but simply from a sense of duty, is a creature that outrages every moral feeling. The statement that the moral law, to have any genuine authority, must be of supersensible origin, he treats with but half-concealed levity. And of the picture of the kingdom of rational spirits in which each is at once subject and lawgiver, he writes, "*Difficile est, satiram non scribere.*" This display of elevation of character seems never to have specially impressed him; and the sense of obligation meant for him, as we have seen, merely the fear of punishment. What, then, does he take to be the moral motive and ground of the approval of conduct? Sympathy, he tells us, is the only conceivable one. He bids us imagine two men struggling with the temptation to kill a rival in love. One afterwards confesses that he was deterred from the commission of the crime because it was incompatible with the laws of the transcendental world. The other tells us that, when brought face

¹ *Fundamental Principles of the Metaphysics of Morals*, p. 28 (Abbott's Translation): "All moral conceptions have their seat and origin completely *a priori* in the reason. . . . It is just this purity of their origin that makes them worthy to serve as our supreme practical principle, and just in proportion as we add anything empirical, we detract from their genuine influence and from the absolute value of actions."

to face with his enemy, he was seized with pity, he forgot his jealousy, his heart melted, and he renounced his design. Which of these two characters, asks Schopenhauer, represents the real human being, and which the invention of a theorist's brain? That the world at large will decide in favor of the latter, he seems to have no manner of doubt. And yet he does not overlook the fact that both Kant and Spinoza do not regard sympathy as a virtue, but rather as a weakness to be overcome. This circumstance is only one more proof in his eyes of their ignorance of the nature of the moral life. "Do Kant's ethical writings mean anything to you?" the writer was once asked by a fellow-student. They evidently meant nothing to Schopenhauer; that is, they did not represent his "deepest affections and admirations," as Martineau would say. He accordingly argued that the account they gave of the moral life must necessarily be false.

A third set of examples may conclude the discussion of this part of the subject. It has already been stated that Kant regards character, or "the good will," as the one unconditionally good thing in life. With his opening words in the *Fundamental Principles of the Metaphysics of Morals*, every reader of this paper is doubtless familiar. "A good will is good not because of what it performs or effects . . . Even if, with its greatest efforts, it should yet achieve nothing, . . . then, like a jewel, it would still shine by its own light, as a thing which has its whole value in itself." Character is precious in his eyes, not because its effects are profitable to self or others, but because it is attractive or admirable *per se*. To the Utilitarianism of Mill, he would doubtless have replied with Carlyle: "Is the heroic inspiration we call virtue but some bubble of the blood, bubbling in the direction others *profit* by?" Observe the contrast between such utterances and the following confession of faith, which Professor Sidgwick gives us: "In my view this subjective rightness of volition is not good [*i.e.*, valuable] in itself, but only as a means to the production of other good effects."¹

¹ *Methods of Ethics*, 4th ed., p. 395. Cf. Hume, *Inquiry into the Principles of Morals*, vol. V, pt. II; Gizycki, *Moral Philosophy* (translated by Stanton Coit), p. 112.

And by these good effects he means the happiness of those affected.

Thus does one authority flatly contradict another with regard to matters which seem to lie within the range of ordinary introspection. Furthermore, as any one familiar with ethical treatises will testify, each investigator ordinarily looks upon his own theory as equally self-evident with the simplest propositions of geometry. Leslie Stephen asserts that "the utilitarian argument appears from certain points of view to be so cogent that one is half disposed to regard all the argumentation about morality as grotesque,"¹ while of the Kantian system Schiller writes: "After the demonstration which he (Kant) has given us, there can be no more controversy among thinking men *who are willing to be convinced.*"² Surely this talk about the difficulties of introspection, carelessness of observation, and the distorting influence of metaphysical prepossessions is the merest trifling. Indeed, in the case of Kant and Fichte, this hypothesis in its last form breaks down completely, for their metaphysics is avowedly based on their ethics, and not the reverse.

If, however, we take the position that the experience of one moralist differs from that of another more radically than is commonly supposed, the apparent mystery presented by their divergent statements is easily solved. And this may be admitted without assuming any absolute break in the continuity of the race consciousness. The moralist, like every one else, has grown up in a community that possesses a code of moral rules. These he presumably makes it a matter of principle to obey, regardless of the pleasure or pain involved in the particular action. Now the motives that habitually impel to such action, so far from being reducible to a single one, really amount, as is well known, to a considerable number. They will doubtless be present in varying degrees of intensity in any given individual, but, in comparison with the rest, some one is almost certain to be so strong as to overshadow all the

¹ *Science of Ethics*, p. 357.

² *Aesthetische Schriften*, Ausgabe Kohler (Stuttgart), p. 100. The italics are in the original.

others. When such a person comes to make a systematic study of the moral life, if he follows the common practice of treating his own experience as an adequate representative of the type, this dominating motive is certain to get more than its fair share of the attention, and to be made to play the *rôle* of the sole fundamental moral force. Its significance for the race is measured by the position it occupies among his own springs of action.

But, it will be asked, when confronted with reports of experiences different from his own, why does he not at once recognize the narrowness of his own theory and proceed to correct and supplement it by making a place in it for the new facts? To understand this, we must call to mind the familiar distinction between moral and non-moral motives for right action. The latter merely make us *act* in outward conformity to what is considered right, while the former, in addition, lead us to *approve* of right action both in self and others. In applying this distinction to the problem before us, we must premise that it has usually been assumed that there can exist but one *moral* spring of action. For it is declared impossible to bring our ethical judgments into the form of a consistent system, unless the grounds of approbation are reducible to a single one. Now when the moralist, whose moral life happens to be under the more or less complete domination of a single principle, is confronted by a man who claims that his motive for right action is an entirely different one, the following dilemma seems to arise: Either his neighbor has made the mistake of confounding one of the non-moral impulses with the moral motive, or else his own cherished ideals are non-moral in their character. Such an admission no earnest man will readily consent to make. Take, for example, a man with a keen sense for the beautiful in conduct; one whose deepest aspirations find expression in the words of our beloved poet:—

“ Build thee more stately mansions, O my soul,
As the swift seasons roll.”

Suppose him, moreover, to have no exceptionally intense sympathies beyond the circle of his family and personal acquaint-

ances. Such a one will not be "especially interested in the greatest happiness of the greatest number." He will doubtless reason as follows: 'I am leading, or at least trying to lead, a moral life. But the general diffusion of happiness is not my usual motive for denying myself pleasure, nor is it my reason for approving such sacrifice when made by others. Nor, if the happiness of the race really constituted the ethical ideal, would morality ever appeal to me as something worthy to claim the supreme place in my life. But it does thus appeal to me. Therefore the general happiness cannot, as the Utilitarians claim, be the ultimate goal of moral action. And when they maintain it is, they are simply putting a non-moral spring of action, namely altruism, into the place of the moral motive, devotion to an ideal of personal character.'

It is in just this same way that the Utilitarians, on the other hand, deal with the desire for beauty of character. Mill, Bain, Stephen, Gizycki, Sidgwick, all admit its existence as a fact. But a reference to the *Methods of Ethics*¹ will show that the last-mentioned authority, at least, expressly ranks it as a pro-ethical force. Their own personal interests being centred in the social effects of morality, they evidently do not appreciate the profound significance this other aspect has for many of their neighbors. They accordingly do little more than mention it in passing, and in the greater part of their published investigations habitually ignore its existence.

If the position here taken be correct, then the student of ethics has not finished his work until he has made an exhaustive study of the moral judgments of examples of all types of human nature. Such an investigation will disclose, we believe, the existence of a considerable number of motives justly entitled to be called moral. We may, in other words, not only do the right, but also approve of right-doing, for a variety of reasons. In the case of the civilized man of the nineteenth century, we may discover at least four classes of these. The first may perhaps be termed the teleological. The ground or cause of approval or disapproval is mainly the relation in which the actor places

¹ Fourth ed., p. 108, note 1.

himself to the interests or well-being of other persons besides himself. The second is the aesthetic, determined by the relation of the conduct in question to an ideal of beauty of character. The former of these two lies at the foundation of universalistic Hedonism; the latter dominates such widely differing systems as those of Plato, Aristotle, Kant, and Green. The third is logical in its nature, and accounts to a considerable degree for our approval of fairness and consistency. The fourth may be termed that of unreasoned sentiment. As an example of what is meant we may cite the case of the wife of a well-known Arctic explorer, who declared she would prefer to have her husband die of starvation in the Polar night, rather than consent to save his life by eating human flesh. The feelings against incest, against over-indulgence in sensual pleasure, and against avarice, seem to be largely composed of elements of this nature. Additional classes might be named, but those given are probably the most important ones.

How to evolve from this multiplicity of apparently incompatible principles a consistent and universally valid system of moral judgments, is a problem which it lies beyond the scope of the present inquiry to consider. It is a question for what may be termed logical or systematic, as opposed to psychological, ethics, or for what Mr. Mackenzie would call 'moral philosophy,' as distinguished from moral science. The latter investigates, not actions and motives — as is sometimes stated — but judgments of approbation and reprobation as they actually occur; the former, on the other hand, asks what we ought to approve. But the moral philosophy that is not based upon a complete acquaintance with the results of moral science is as barren, as arbitrary, and in every respect as useless a product of human ingenuity as a philosophy of nature built upon a high-school boy's knowledge of physics and biology. When I ask what conduct ought to be approved, I am in the last analysis inquiring which of the ordinary everyday judgments of myself and others can stand the test of dispassionate reflection. And if any man imagines that this problem can be solved in the absence of a complete acquaintance with these judgments in all their

varying forms, he deceives himself as to his relation to society and his own past.

It would be a fortunate thing if the influence of the personal equation had been confined to the determination of the criterion of right action, but as a matter of fact it has made itself felt equally in every department of the subject. Ethical treatises fairly swarm with theories, often pretentious, put forward as explanations of facts of whose alleged or implied universal occurrence no other evidence is offered than the bare affirmation of the writer himself. His statements may turn out to be true or false, but at all events they exhibit no trace of having been subjected to any rigid tests. The list of offenders is not confined to any one school, but includes Empiricists, 'Nineteenth-Century Idealists,' and Intuitionists, in about equal proportions. Hume informs us confidently that feeling and impulse are subjects of moral judgment as truly as deliberate choice — and apparently expects us to take his word for it. At a critical point in his argument, Green claims that "it is not pleasure as such to be enjoyed by other persons that [the beneficent man] seeks to bring about, but an improvement of the person, of which pleasure is the incident and the sign."¹ This, being interpreted, would seem to mean that the beneficent man can find genuine satisfaction in his sacrifices or labors for others, only in proportion as they contribute to the betterment of the character or the development of the capabilities of the individual affected. Important, if true, this; but where is the evidence to silence him whose experience appears to him to tell another story? One of the pillars of Martineau's system is the proposition that, in the presence of two competing springs of action, we can perceive instantly and with absolute certainty which is the higher and which the lower, and this however complex the motives in question may be. So that, the problem of the proper means to the given end having been solved, we know at once which of the two possible alternatives duty commands us to follow. If this theory is true, it should follow that, when any problem of conduct has once been reduced to a

¹ *Prolegomena to Ethics*, p. 254.

matter of the comparison of motives, it would be answered unhesitatingly and with absolute assurance of the correctness of the judgment. Furthermore, the results obtained from any number of individuals whatever should be uniform throughout. These corollaries the writer has recently submitted to a rough test, and they were found to hold true in the case of only a comparatively small percentage of the persons studied. In fact, a more careful examination than was actually attempted would probably show that the proportion of the former class is no greater than the relative number of those who find it possible to form their decisions instantly and unhesitatingly in matters involving aesthetic taste, social tact, or practical judgment. To one unaware of this fact, conscience might well seem a direct revelation of the will of God. But if a further careful investigation should confirm the impression already gained, it will be impossible to believe that this revelation is vouchsafed even to the majority, while confidence in its infallibility must suffer a rude shock from a study of the conflicting answers given to the same question, alike by the hesitating and the elect.

Thus, wherever we turn, we find evidences of the baneful influence of the personal equation. Plainly, the next step forward in the progress of ethics must be the supplementing of the method of introspection by that of objective investigation. A programme for such a study it is no part of the object of this paper to present. We shall be content if we have succeeded in demonstrating that it is necessary. One corollary, however, remains to be stated, although by this time it may seem sufficiently obvious. Whatever aspect the moral life as a whole may assume, as a result of the application of objective in addition to subjective methods, the validity of the result must not be supposed to be dependent upon whether it happens to satisfy in detail, and completely, our "deepest affections and admirations." For these vary—to an extent still to be determined—from individual to individual, their exact nature being a function mainly of temperament. Our own ideals must, indeed, find their place in the completed picture, but they must not be allowed to determine its character by them-

selves. This relative self-elimination, this comparative repression of the imperious demands of one's own nature, may be exceedingly difficult, but until it has been accomplished works on ethics can be little better than more or less interesting autobiographies. As Karl Pearson has reminded us in his *Grammar of Science*: "The classification of facts, and the formation of absolute judgments upon the basis of the classification — judgments independent of the idiosyncrasies of the individual mind — is peculiarly the scope and method of modern science. The scientific man has, above all things, to aim at self-elimination in his judgments, to provide an argument which is as true for each individual as for himself." Certain it is, that until this is done a *science* of ethics is impossible.

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REVIEWS OF BOOKS.

Studies in the Evolutionary Psychology of Feeling. By H. M. STANLEY. New York, Macmillan & Co., 1895. — pp. viii, 392.

Mr. Stanley has given us a book of about four hundred solidly thought out and solidly written octavo pages ; and he has done his work so conscientiously that a reviewer who wishes to give an account of its contents cannot have recourse to compression by means of squeezing out padding and useless repetitions. It is quite out of the question, therefore, that the account should be adequate as to extent. The resource must be to give, if possible, some representative samples ; premising that, from the point of view of method and general scope as well as of specific content (especially in the way of frequent shrewd and apt observations, in no wise trite or shop-worn, about feeling and feelings), the book demands the attention of every psychologist interested in this intricate and obscure side of his work.

The pure psychology of feeling, as Mr. Stanley remarks, is advanced but little. Is there any way out of the confusion and darkness? "If the study of feeling is to become scientific, we must, I think, assume that all feeling is a biological function, governed by the general laws of life and subject in origin and development to the law of struggle for existence" (p. 3). The difficulty of applying the biological method is not, however, underrated. "No amount of objective physiological research can tell us anything about the real nature of feeling" (p. 6), and again, "Mind can be for us only what mind is in us" (p. 5). With the assurance, then, that Mr. Stanley recognizes to the full the difficulties inherent in his subject-matter,¹ let us see what the biological point of view can tell us.

Assuming consciousness as a purely biological function, as a mode for securing favorable reactions, we are brought to the point of view of self-conservation. Mental function must have originated in some very simple form, as demanded for self-conservation at a critical point

¹ As we shall see, the objection which may be brought against Mr. Stanley is not that he has unduly magnified the biological region as against that of introspection, but rather that he has not, his problem granted, utilized the biological data enough. There is practically no discussion of biological detail in the book.

in the organism's career. Hence an origin in cognitive consciousness may fairly be ruled out. "Mere apprehension would not serve the being any more than the property of reflection the mirror." The organism reacts through pain. This pain, at the outset, must have been bare, undifferentiated pain without particular quality. With this primitive act of blind, formless pain is associated the will act of struggle and effort. "The first consciousness was a flash of pain, of small intensity, yet sufficient to awaken struggle and preserve life" (p. 14). Pleasure is not an accompaniment of pain; it does not follow from it at first. Pleasure, perhaps, came after two modes of pain had differentiated, pain of lack and pain of excess, and came in as intermediary between them (p. 16). Mr. Stanley endeavors to reinforce this view of feeling as primitive from certain considerations derived from the present mature consciousness, and also by rebuttals of certain ideas of Ward and Höffding. The general line taken is that "centrality of response" (identified with feeling) is the initial element still, even in every developed psychosis, preceding cognitive discrimination and purposive action. "A bright color gives pleasure before we see it, and this pleasure incites to the seeing it" (p. 19). "It is pain-pleasure which forces all action" (p. 29).¹

Personally, I have not found Mr. Stanley's argument convincing. If we are to have any ideas at all upon such hypothetic matters as the character of primitive consciousness, I remain of the belief that the simplest possible consciousness always shows itself to reflection to possess the threefold phases; and that, on *a priori* grounds, every consciousness which is to be serviceable in the struggle for self-conservation must possess something corresponding to these phases. I utterly fail to see how pure, bare pain can be (1) a stimulus at all, or (2) a stimulus to any serviceable action. Pain, as it approaches sheer pain, seems to me always paralyzing, inhibitory as to action. It marks loss of some sort; and the sense of loss, taken *per se*, is anything but stimulating. The doctrine that pain has some specially useful function is due, I think, to the ascetic phases of Christian teaching, and remains as a harmful survival of the Puritanic consciousness, — a sort of offset to the hedonistic phases of Christianity. When pain is stimulating to action, it is so, I think, not immediately, but through the medium of thought or some sensory *quale*. Loss

¹ Mr. Stanley's views are the absolute, or generalized, opposite of the James-Lange theory. The latter, however, hardly receives the attention it would seem to require.

may stop a man in full flood of action, and by causing him to readjust his mental perspective, his sense of values, affect his subsequent action — but not as direct stimulus.

However, it may be said that pain is notoriously associated with writhing movements to relieve it, to escape the painful object, etc. I do not think we are in position to say whether these movements *follow* pain naturally; or whether pain is naturally associated with certain forms of dis-coördinated movements; or whether, again, we have simply found in experience that pain is more bearable as we effect alterations in its quality, and have also found that we can effect this alteration through change of position. A combination of the two latter hypotheses seems to me more likely, but I would not dogmatize. But in any case, where is the evidence that such movements as are 'stimulated' by pain are serviceable? Blind, formless pain (admitting that it gives rise to action at all) would be bound, we must say, to give rise to blind, formless movements, which, if useful, would be so purely by chance. To rule out all discriminative character from the feeling, while allowing it to the consequent action, is certainly illegitimate. An animal, I should say, had much better trust to the sheer mechanism of his organization in a crisis than have the additional problem of pain to wrestle with; if his actions are to be a matter of chance anyway, I think the chances are more in his favor if he does not have a pain seizure. Introduce differential features into the pain, and the case undoubtedly changes; one pain may be one kind of a signal, and another pain, another kind. But the introduction of this differential *quale* means, of course, something of the same nature as that which in our developed consciousness we call knowledge; differentia falling within content of feeling being the closest analogue we can imagine to our 'objective' consciousness. But in this case, the primitive character of mere feeling goes.

It must be remembered that the one phase which has the floor at any or all periods of development, is action corresponding to present volitional consciousness. The organism which can have a 'flash of pain' is an organism which already seeks and assimilates food and reproduces its kind. There is not even a question of whether pleasure-pain determines function or *vice versa*; some functional activity, that of the food process, *must* be predicated at the outset, or there is no organism to feel, and no biological point of view to take. It appears much more natural, then, to build up our hypothetic consciousness by reference of feeling to actions performed with reference to food and reproduction, than *vice versa*, especially as this

method requires a correlative and contemporaneous 'intellectual' development. This, moreover, is quite consonant with what Mr. Stanley says (pp. 62-72) regarding sensations being not original and simple elements of mind, but rather developed forms of some general undifferentiated cognitive state, as apprehension of bodily disturbance. This point of view is one certainly reinforced by all biological considerations, and is fatal to the tendency recently decadent but now very prominent in the Wundtian school, to build up mind out of sensations as elements.

The type of reaction first discussed by Mr. Stanley deals with feeling due to injury actually experienced. It marks a distinct advance in the evolutionary scale, when the animal can act from feeling which anticipates actual injury. When this stage arrives, there is emotion. Its essential *rationale* is, therefore, its anticipatory function. I remarked before that it is possible to object to Mr. Stanley, not by any means on the ground of his too great use of the evolutionary method, and of biological data, but because he uses them too little. The account of the *rationale* of the origin of emotion just given is obviously biological in type; the account which follows of the mental mechanism involved in this anticipatory function seems to me based wholly on the analysis of a complex and mature human experience. It not only does not grow out of any consideration of biological data, but, for myself, I confess inability to make it square with any image of any type of animal consciousness, unless possibly the just sub-human.

The account runs as follows. Anticipation involves representation. This is something more than mere revival of past experience. It is not simple re-presentation, for that is only presentation over again. It involves *sense* of return. It must be appreciated *as* revival. This would not avail as anticipation, unless there were also *sense* of value for future experience. It is an experience *of* (past) experience and *for* (future) experience. That is, the objectifying of the past experience is not self-contained, but conveys a meaning for experience. Besides, there must be not simply representation of object, but re-feeling of some previous feeling; the representation of object is only subsidiary. But we have not the complete analysis of emotion yet. It is not the revival of feeling, but a new feeling, *sui generis*, created by this complex of revivals, which constitutes emotion. "However we may be puzzled to see how mere cognition of experienceable pain develops a peculiar pain which is the essence of fear, yet we must acknowledge its production to be a fact" (p. 102).

An emotion, in fine, is a "feeling reaction from the representation of the feeling potency of the object" (p. 107).

As an analysis of emotion in the human consciousness, this seems to me not only a painstaking, but — barring a criticism now to be made — a fairly successful one. As regards emotion in its present developed state, Mr. Stanley seems to me to fall into the psychologist's fallacy, — he introduces into the emotional experiencing, as its own distinctions, different elements which come out only in the psychologist's reflection. 'Object,' 'feeling of object,' and 'feeling of this feeling' are differences which we mark out when we look at the emotion critically, not distinctions falling in any sense within its own content. Object is always an ambiguous term; it may mean either the total psychological object, *i.e.*, the content of the entire experience, or it may mean the intellectual, or knowledge-giving, phase of this experience discriminated in afterthought. Surely the real psychological object is not object, cognitive function, *plus* feeling, but is sensory *quale* felt as having such and such a worth, the marking off of subjective and objective sides coming in only as one looks back and retrospectively analyzes the experiencing previously had. The problem of 'how cognition of experienceable pain develops a peculiar pain,' fear, is, if not settled, at least much simplified by recognizing the difference of these two points of view. It now becomes simply one case of the general problem of the emotional setting attaching to any *quale* of experience.

Taking the problem in this way, and considering the matter not from the standpoint of full-fledged emotion in an adult human being, but from that of early stages of development, Mr. Stanley fails to recognize that the James-Lange theory, taken together with Darwin's theory, affords a complete account of what, on the basis of his own theory, remains an ultimate and inexplicable pure fact. If fear, as feeling, is subsequent to action, the problem is simply to discover the particular differentia of the type of activity under which fear arises.¹ The emotion is accounted for by being placed. But if one feeling arouses another directly, and not through the mediation of action, the genesis of the particular qualitative experience of fear remains a mystery. We can only bow to the fact. The ultimate contradiction in Mr. Stanley's method, here as elsewhere, is giving a teleological function to psychological values having only a purely blind origin. The feelings continually become more and more important, on one side, as affording the whole evolutionary *nisus*, while, on the other side

¹ See, for example, my article in the *Psychological Review*, January, 1895.

(that of origin) they become more and more meaningless. The emotion, *after* it is there, has great evolutionary significance ; but it has no evolutionary origin.

More in detail, what ground is there for assimilating the animal type of emotional experience to the human? Is not Mr. Stanley's account unduly anthropomorphic? If we are to define emotion as distinctly representative in character, must we not ascribe emotion to all the lower animal forms only by heteronymy? That animals are afraid and angry, etc., in the practical sense of those terms, admits of no doubt: *i.e.*, they *act* afraid, etc. But to insist that the lower animals have not only a revival of a previous object, but in addition a *sense* of revival, and a *sense* of value for future experience in the revival, seems to me to break down all distinctions, in the evolutionary process, between lower and higher stages. Of course an animal which can recognize a re-presentation *as* representation is capable of discriminating image from reality, psychical event from objective function. How an animal can make this conscious distinction between appearance and reality here, and not make it elsewhere and thus build up the whole critical apparatus of science for accurately discriminating between the two, I do not see. In other words, I see no reason whatever (and a good many reasons to the contrary) for supposing any of the animal's revivals are of another type than those which Mr. Stanley calls 'hallucinatory.' A revival of a past experience can function as a directive or monitory stimulus for the future, simply as a psychical event. All we need is the principle of habit. That this principle sometimes means getting cheated, and is not economical to the fullest degree, is, no doubt, a fact. But certainly the emergence of the human animal has some evolutionary significance, marks some great gain in economy, and the reasonable supposition is that it marks the ability to discriminate between image as psychical occurrence and the reality which that image indicates. I should not dwell upon this point at such length were it not for its connection with the matter of the evolutionary significance of feeling. It is by no means simply a matter of individual preference that Mr. Stanley ascribes this complex character to comparatively primitive emotion. Holding, as he does, the evolutionary *nisus* to be always in feeling, he must find a great change in type of feeling for every great evolutionary advance. That he is compelled to give a representative or consciously ideal character to feeling so far down in development, seems to me perilously near a *reductio ad absurdum* of the part attributed to feeling. Leaving the lower animals out of account, we know

enough of emotion in child and savage life to say that all primitive emotion is based on what Mr. Stanley calls the hallucinatory type of revival, and that this type is tremendously effective in action even in relatively complex human societies.

I have covered only a little over one-third of Mr. Stanley's work. The rest of the book discusses desire, attention, self-feeling, feeling and the logical development, the aesthetic and ethical emotions. I need hardly say that one finds careful observation and thoughtful analysis throughout. When one fails to agree, he still receives a valuable service: he is forced to think out reasons for differing, and to define his own position.

I have tried to fulfil the pleasant task of giving a sample of the method and of the conclusions reached, and the less pleasant one of indicating why both seem to me suggestive of the need of another view. I may resume by saying that, as to method, Mr. Stanley appears to me to have attempted to defend, upon the basis of an analysis of a complex adult consciousness, a certain view of the part played by feeling in evolution, rather than an evolutionary discussion of feeling as such; while, as to conclusion, the origin of the different types of feeling is left inexplicable, a teleological function being ascribed to them which it is quite impossible they should possess, severed from connection with discriminative quality and from relation to habits of life. The book suffers throughout, it also appears to me (though I freely admit I may be led astray here by my own special interests and attempted investigations), by failure to recognize the meaning, to say nothing of the claims, of the James-Lange theory taken in connection with Darwin's. This theory, it may be recalled, accounts for the evolution of feelings by reference to habits of use in maintaining life, whether getting food, attack and defence in relation to enemies, or reproduction; and holds that the emotional stress of feeling emerges, when formed habits conflict with the line of action demanded by a changed situation, — when, accordingly, it is necessary to readjust the habit.

In conclusion, I may point out that Mr. Stanley's position pushes the tension, already urgent enough, between the biologist and the psychologist to the breaking point. That pain-pleasure determines function (p. 47); that an animal is not fierce because he possesses claws, but possesses claws, etc., because he is fierce (p. 128); that feeling, indirectly if not directly, produces nerve-structure (p. 376), — these and similar statements, in their present unmediated form, seem to me to make impossible any understanding between the psychologist and

the biologist, no matter how open-minded the latter may be. The problem of the place of consciousness in evolution is a hard enough one at best; to assume that mere feeling, as feeling, has been the primal, persistent, and essential factor of evolution, on the biological as well as the psychological side, introduces simplicity only at the expense of an irreconcilable quarrel between the sciences. It is not simply that the individual biologist will not be inclined to accept the doctrine: it means that, as a biologist, he cannot. It is simply to say that the biological process cannot be stated in biological terms. Start with the priority of action, not feeling, and ultimate agreement is at least conceivable. Life-preserving actions being objectively teleological (*i.e.*, in result) it is at least conceivable that *consciousness* of this teleological element should be a distinct advantage. The difficulties in this view are those of detail, not of principle; *i.e.*, it is theoretically possible to state it in biological as well as in psychological terms. Moreover, it is difficult to avoid the conclusion that there is an ambiguity in Mr. Stanley's own treatment. At times we have such statements as the following: "Evolutionary psychology bases itself on the idea that mental development originates and is continued through struggle, or will-effort." First, this is ambiguous, because it is not easy to tell in what relation it stands to the doctrine of the primitive character of feeling. It is one thing to say that will-effort comes first and is painful, and another to say that pain initiates will-activity. Second, it is not possible to tell what is meant by will-effort, when the term is used in this unanalyzed way. If it is set up as a faculty by itself, the statement needs very close scrutiny. If it means that the nodal points of psychical development come when life habits which are objectively useful have to be readjusted, and are thus differentiated or mediated, the doctrine appears to be identical with that which I have already positively stated; but such a doctrine demands a large reconstruction of many other positions taken in the book.

JOHN DEWEY.

Théorie de l'âme humaine. Essai de psychologie métaphysique. Par J. E. ALAUX, Professeur de Faculté, Professeur de philosophie à l'École des lettres d'Alger. Paris, Félix Alcan, 1896. — pp. x, 557.

According to its sub-title, this work is an essay in metaphysical psychology. In reality it is both less and more. Less, for although it touches on nearly all the problems of rational psychology, they are

not discussed with systematic completeness nor (apparently) in full acquaintance with the work of contemporary psychologists beyond the borders of France. More, because to psychological discussions it adds a consideration of various questions in noëtics, metaphysics, aesthetics, ethics, and the philosophy of religion. As it is written, moreover, in a style professedly adapted for the comprehension of the layman, the result is a general sketch of a philosophical system, in so far as this can be connected with an analysis of consciousness and a theory of the soul, and so far as it does not forestall altogether a second promised volume on *Dieu et le monde, la raison des choses dans leur rapport avec l'homme*.

By some of the critics of his earlier writings, M. Alaux has been called a Cartesian; by others, a belated member of the school of Cousin. Without doubt he is right in repelling both of these assertions. It would not be easy to overlook in his work certain affinities with the thought of the French spiritualists of the earlier type; but his claim to breadth of view beyond the limits of their horizon is well founded. Indeed, it might be difficult to say which of all the long line of apriorists and idealists or spiritualists, from Plato to Hegel, is not represented in some phase of his speculation. Most definitely, perhaps, he has been influenced in his thinking, by Leibnitz. It is the general *a priori* and spiritualistic or idealistic tradition, continued at the end of the nineteenth century, under the influence of Leibnitzian conceptions and in face of the problems of the day,—with account taken, also, of many questions which have come down on the stream of this tradition, but which by the majority are now little considered.

The work is divided into six *Études*, entitled respectively *La psychologie métaphysique, L'intelligence, La sensibilité, La volonté, La vie humaine, La vie éternelle*. In the first of these there is reached a view of the soul, which, expanded and confirmed, reappears throughout the volume. Starting from the facts of self-consciousness and the incommensurability of psychical and physical phenomena, the author concludes that the soul exists; that it is one, permanent, and indivisible; that it may exist unconsciously, since it is not to be defined with the Cartesians as a thinking being but as a being capable of thought; that it depends on stimulation from without for the passage from its potential to its active condition; that it stands in relation to the body, but yet is not one with it, nor even an element with it in a composite creature—man. The soul is the self and the man. It uses the body, and its own conscious life is conditioned by

the body, but it is not of the body. Nevertheless, soul and body are not disparate in the ordinary, spiritualistic sense of the word. The one is a force, the other a complex of forces, which by a "not gratuitous hypothesis" may themselves be conceived as in some degree conscious. The two, then, according to the favorite figure of M. Alaux, are like a general and his army. The leader cannot act without his men, the men in turn form a body employed by their chief, yet leader and followers are in the last analysis of the same order of beings. The cogency of these conclusions, however, falls below their interest. The author's empirical psychology is more than once at fault, as when he implies that all human consciousness includes the consciousness of self. The proofs advanced in support of his positions at times rise little above the level of mere assertion. The metaphysical concepts employed—permanence, unity, identity, substance, being, above all, force—receive no adequate discussion or analysis, especially in view of the questionings of recent thought concerning them. And in the further development of his theory, M. Alaux adds to the positions already gained certain psychological assumptions which lie quite outside the range of present scientific consideration, *e.g.*, the assumption of a nervous fluid or ethereal body intermediate between the soul and the organic body, to explain interaction, to account for many of the phenomena of hypnotism, and to make *conscious* immortality possible; the preëxistence and reincarnation of the "being of the soul," though not of the person, to get rid of some of the antinomies of ethics and the philosophy of religion.

The second *Étude* is the most extensive in the volume. It begins with an epitome of the intellectual functions, which is followed by M. Alaux's theory of knowledge. This has for its central point the doctrine of *innéisme*, which, however, is not to be understood as an innateness of conscious states or of 'images,' conscious or unconscious, but of 'Ideas.' The Ideas, again, are the categories and general concepts. The categories are implicit in human reason as in the divine, of which also they constitute the essential ground, though without prejudice to its inherent attribute of personality. They are always exponential of relations, enabling us to reach being without us and within, because of the fixed points of fact given in the phenomena of sensational consciousness that form the needed first terms for our relational constructions. Moreover, nature and self alike imply *l'être absolu*, which both is and is known absolutely in spite of the relative character of the principles of knowledge. In general, M.

Alaux finds in Being, relative or absolute, a concept to conjure with in philosophy,—one which shares the honors in his system with that of Force alone, if, indeed, we should not understand him to identify the two. Yet in the one case, as in the other, we sadly miss the patient, thorough inquiry which the central importance of the ideas demands. General concepts are held to be as integral to knowledge and as truly *a priori* as the categories. First knowledge is not particular, it is urged, but general, M. Alaux here advancing an analysis of primitive thought which, by its confusion of the unspecialized with the abstract and the abstract with the general, renders the whole argument untenable. Moreover, general concepts are declared to have a metaphysical import of the realistic kind. Unless this were true, it is argued, natural science itself would be unthinkable; it is only a conceptual realism or *idéalisme objectif*, scorned by scientists along with the rest of metaphysics, that makes scientific procedure possible. Thus by several lines of approach our author conducts us from noëtics to metaphysics. Space; time; matter, which is ultimately composed of unextended force-monads; the soul as defined above; the being of beings over all, to whose existence and nature there is hardly need to argue, since they are so evidently postulated in the existence and knowledge of the world and the ego,—all these subjects and many more are brought in rapid review before the reader's mind, and all the problems concerning them are solved with bewildering ease and certainty.

It is more agreeable to turn to the views of aesthetics, ethics, and religion, given in the later portions of the book. Here, too, are many principles to which it is impossible to assent, and some of crucial importance which are dismissed far too lightly; but it is a pleasure to recognize the purity of aim and the nobility of spirit exhibited throughout the argument. This is the French tradition at its best. The spirit of Bossuet and of Fénelon is manifest, not only in the quotations from their writings, but in the author's own conclusions; while the moral elevation of his thinking reinforces his philosophical insight. It would be unjust, indeed, to imply that this ever disappears; but it is often much obscured by grave faults both in method and results.

A. C. ARMSTRONG, JR.

Mental Physiology. By THEO. B. HYSLOP, M.D., Lecturer on Mental Disease to St. Mary's Hospital Medical School, and Assistant Physician to Bethlem Royal Hospital. Philadelphia, P. Blakiston, Son, & Co., 1895. — pp. 552.

Mental physiology is but a division of the great department of the science called Physiology. An eminent psychologist (Ladd) has called it "the science which investigates the correlations that exist between the structures and functions of the human nervous mechanism and the phenomena of consciousness, and which derives therefrom conclusions as to the laws and nature of mind." Or, as the author says, it seeks to "solve trains of thought in physical terms."

The subject, no matter how approached, is difficult to handle. The impossibility of examining the human brain while performing its functions, and the limitations that necessarily hedge in the study of mind, render any system of mental science peculiarly liable to error. It is well, therefore, as the author states in his introduction, to recognize frankly that in the nature of things mental phenomena are often hopelessly beyond our powers of elucidation. Professor Tyndall has remarked, in a paragraph that has become famous for its aptness, that "the passage from the physics of the brain to the corresponding facts of consciousness is unthinkable. Granted that a definite thought and a definite molecular action in the brain occur simultaneously, we do not possess the intellectual organ, nor apparently any rudiment of the organ, which would enable us to pass by a process of reasoning from one to the other." Dr. Hyslop recognizes the futility of trying to explain mental phenomena satisfactorily, and contents himself with an effort "to bring into apposition, as it were, some of the more important cerebral and mental facts," and to formulate the accepted theories respecting their association and interdependence.

The introductory section discusses the tests to which every affirmation in any system of mental science must be subjected, and considers the boundaries of the subject, the relations of psycho-physiology to the general study of mind, the relations of mind to body, and the various theories of perception. It concludes as follows: "That our minds have a physical basis without which their phenomena would not exist for us, is as true as the statement that life itself has a physical basis without which it would not exist for us. The physiological psychologist seeks only to establish some relationship between the process of conduction of physical forces and the process of

thought, without in any way attempting to throw light on their ultimate nature or causal origin."

Four chapters are devoted to the anatomy and physiology of the nervous system. The arrangement of the brain cortex and the localization of the mental faculties, the chemical composition of the brain, its physiological and lymphatic supply, its lymph cisterns, its perivascular channels, its cerebro-spinal fluid and pacchionian granulations are fully treated, as are also the influence of the sympathetic system and the areas of mental and motor activity. This part of the book, while not strictly original, contains much that is comparatively recent, and may be considered as representing the latest researches of a large number of investigators.

Chapter V is devoted to the special study of the mind. It begins with Coupland's formulation of our total resources for obtaining insight into its nature, as follows: (1) subjective observation and analysis; (2) artificial experimentation, chiefly by employing definite external stimuli, the subjective effects of which are objectively noted and registered; (3) pathology, or a study of bodily diseases with their mental correlations; (4) the study of the growth of mind (*a*) by comparing mental development with the evolution of the nervous structures throughout the animal kingdom, (*b*) by study of the manifestations of mentality in the progress of mankind from a condition of barbarism to present civilization, (*c*) by examining the development of the individual mind in the higher races of to-day.

In discussing the subjective and objective methods of mind-study, the author points out that the former method is of little value unless combined with the latter. He agrees with Coupland that "an individualistic psychology, aided by all the resources of the physical laboratory or clinical experience, would be but a maimed and incomplete psychology." Of this there can be scarcely any question, for the objective method, whereby we study the mind by means of external objects, is indispensable to us, especially when we are dealing with the morbid mental manifestations of the insane. The author is undoubtedly correct in affirming that "in pathological mental conditions, the psychologist has an opportunity of observing the phenomena of mind in varying and unusual combinations," and that such observations "help to confirm the theory of evolution by exhibiting the reverse order of mental development."

The author devotes many pages to an analysis and criticism of the theories of Spencer, James, Mill, Bain, Fechner, Tyndall, and many others, as regards the evolution of conscious intelligence, but

leaves us quite in the dark respecting his own views. He appears, however, to agree with Spencer that "the science of mental life and of bodily life are one, namely, the continuous adjustment of inner to outer relations."

Sensation, perception, sensory perversion, and hallucination are treated in Chapters VI, VII, VIII, and IX. Considerable attention is given to the special senses of sight, hearing, taste, touch, and smell. The errors of perception known as illusions and hallucinations form two of the most interesting subjects discussed. The author objects to the usual definition of illusion, and points out that it is insufficient to call it "false sensory perception." The difficulty, however, we think is entirely cleared away, if we regard illusion as a misinterpretation of the impression received by the mind through the medium of a special sense, as when a hitching-post is mistaken for a person, or the whistle of a locomotive for the voice of God. We agree with Dr. Hyslop's view that hallucinations are closely related to illusions, and probably often owe their existence to psychic disturbance. Practically, however, we must regard hallucinations as of more serious import than illusions, owing to their essentially cerebral origin. As they exist without external excitation, they indicate a more or less grave disturbance of the nervous system. The author calls attention to the difference of opinion among psychologists as to the nervous tracts affected in hallucinations, but we are inclined to the view that "the same parts of the nervous apparatus which are concerned with normal sense presentation are also concerned with the abnormal or hallucinatory presentation," the only difference being that the centres that are normally excited from without are now excited from within.

Chapter X is devoted to the mental processes of attention, conception, judgment, and imagination. Their relative importance is shown, and the significance of impairment in mental derangement is carefully considered. Chapter XI discusses the memory and its disorders. The author characterizes the memory as one of the principal elements of the mind, and an important factor in every act of perception and in the acquisition of every new mode of thought. Forgetfulness is regarded as an equally important function. Chapter XII deals with states of feeling, their relations to the intellect, the instincts, and emotions; and the theory of their existence and operation. Chapter XIII discusses the will. In this connection the author raises an interesting question as to the nature of deliberate purpose. Whether the soul possesses an independent energy

which makes the individual the source of activity, and therefore reasonably and justly responsible for his conduct, is held to be a matter of individual opinion. The will is finally asserted to be "the conscious selection of the most appropriate reaction to circumstances, and the voluntary activity thereby involved." The book concludes with a short treatise on the factors of the insanities, their causation and character; the relation of genius to insanity; the effects of heredity, intemperance, and bodily disease; religion, age, and environment. The closing pages deal with hypnotism.

Considered as a whole, Dr. Hyslop's book is a very desirable addition to a philosophical or psychological library, and cannot fail to be useful to the student of mental medicine. It enters a field of speculative and theoretical knowledge that has been much traversed by eminent thinkers, but about which there is still a great deal to be learned. It deals also with the practical side of psychology in endeavoring to explain mental operation under diseased conditions of the brain, and points out the special significance of many symptoms commonly observed in the insane. The author has drawn liberally from the works of other writers, often advantageously, but has, we think, somewhat obscured the text by the frequency and extent of his citations. The book, however, is well arranged, and contains a great deal of valuable matter, and deserves hearty commendation.

CHARLES G. WAGNER.

De la contingence des lois de la nature. Par ÉMILE BOUTROUX.
Paris, Félix Alcan, 1895.—pp. 171.

De l'idée de loi naturelle dans la science et la philosophie contemporaines. Cours de ÉMILE BOUTROUX, professé à la Sorbonne en 1892-1893. Paris, Félix Alcan, 1895.—pp. 144.

The first-named work is a reprint of the author's thesis for the doctorate presented to the Sorbonne in 1874; the second contains the lectures delivered by him on essentially the same subject nearly twenty years later. The intervening years have matured the author's thought and improved his powers of exposition, but they have not materially affected his views on the subject under discussion. Both works have the same aim, the vindication of the idea of freedom as spontaneous activity of will, by the proof that the laws of nature, particularly the mathematico-mechanical laws, which are often supposed to imply necessity and determinism, are contingent. The

later work, however, is by no means a mere reproduction of the earlier. The argument is the same, but it is more definitely connected with the actual historical development of the fundamental conceptions of modern science; the argument in the dissertation is more abstract. On the other hand, it is in the later work that the author shows more clearly the connection of his views on the contingency of natural law with his metaphysics.

Unfortunately, the important conception of Contingency is not precisely defined. We are familiar with the conception of the contingency of fact, less familiar with that of the contingency of law. Indeed, we commonly suppose that a law of nature, if it be really a law and not merely a hypothesis which for the time being is regarded as such, is universal and necessary. But necessity is not opposed to contingency, unless it be absolute; in the case of hypothetical necessity, necessity and contingency are aspects of the same fact. And absolute necessity is a patent contradiction. To say, then, that a law of nature is necessary, either implies no more than that it is a fact, or implicitly affirms its relativity in its dependence on conditions, its lack of self-sufficiency, in a word, its contingency. As to the universality of law, this again is not opposed to its contingency, unless it be absolute universality. A law which holds universally only of a part or aspect of the universe, cannot be held to be the determining principle of the whole. The contingency of natural law is thus a clear and cardinal doctrine in a philosophy which holds that the truth is the whole, and even a philosophy which holds that truth is not the whole can well maintain the contingency of the truths of nature, in the sense that they are relative to, and conditioned by, the whole truth, or at least in the sense that they are subject to the conditions which the real world supplies for their application.

M. Boutroux, in rejecting Absolute Idealism, of course makes no use of the Hegelian dictum that the truth is the whole, and, although a large part of his argument is based on the relativity of the laws of nature (according to which what is true of one aspect or part of the world cannot be straightway assumed to be true of another, is in fact untrue when thus universalized), his view of the contingency of natural law is still more radical, and amounts, if we understand him, to this, — that no law establishes necessity of connection even in its own department; on the contrary, that every law, however universal its statement, is invested with something of the contingency of a particular which is simply given, and cannot be deduced purely *a*

priori, or be made perfectly intelligible. In a chapter on Necessity, the first in *De la contingence des lois de la nature*, the criterion of the necessity of a relation is said to be the possibility of referring it analytically to a synthesis subjectively and objectively valid. The argument of the entire work is that there is no principle from which such deduction is possible. No law of nature is necessary *a priori*, and the necessity which reigns in fact is found to be abstract and not the expression of the concrete nature of things. And in the *Loi naturelle* the contention throughout is that, as we go from one department of science to another, from the logical to the mathematical, and thence to the mechanical, the physical, the chemical, the biological, and so on to the psychological and sociological, we find with each advance new elements not deducible from the preceding, new laws neither intelligible in themselves nor capable of making intelligible, in any ultimate sense, the way in which phenomena are determined. The only perfectly intelligible and therefore clearly necessary laws, are the so-called primary laws of thought. But those tell us nothing as to the connections of fact,—as to whether, for example, any real thing contains identity without contradiction. The other logical laws, the laws of conception, of judgment, and of the syllogism, involve such unintelligibilities as the relations of unity and multiplicity, of predicate and subject, of the implicit and the explicit; and the extent of their validity in the real world is in all cases subject to the empirical facts. But if logical laws do not determine the relations of objects, still less do natural laws. Natural law is never a constitutive principle *a priori*. It does not follow, however, that its origin is merely empirical. It is a product of the mind in its intercourse with experience. It “represents the character we have to attribute to things in order that they may be expressed by the symbols at our disposal.” And although it turns out that certain phenomena lend themselves to the exigency of our intellectual demands, so that, for instance, the notion of mechanical law dominates, at least as regulative, all scientific research, yet this is a very different thing from saying that we have perfect insight into the necessity of mechanical law, or that mechanical law absolutely dominates the nature of things (*L. N.*, p. 38).

How far the author’s idea of the contingency of law carries him appears in the fact that he impugns even the supposed necessity of mathematics. Not only does science involve elements “brute and impenetrable,” like that of infinity, but others are possible. The very constitution and progress of the mathematical sciences are due

to the invention of axioms and definitions which allow the greatest possible continuity in the development of the demonstrations. How can we affirm that principles thus assumed for the perfecting of a method are all necessary and perfectly intelligible? (*L. N.*, p. 137.) And yet we cannot say that they have no objective validity, only that the degree of their validity cannot be determined *a priori*. We postulate a correspondence between that which satisfies human intelligence and the nature of things, because we assume that man is not a monster in the world; but how far this correspondence goes can only be decided by an examination of the concrete laws of experience (*L. N.*, p. 27). The same thing holds with regard to the principle of causation in mechanical physics. The principle cannot establish necessity of connection *a priori*; science has nothing to do with necessity of connection, but only with invariable relation and quantitative identity of condition and consequent. It cannot even establish a *de facto* necessity; if things, though able to change, do not change, the relation thought would be invariable none the less. Moreover, variations may exist which elude our measurement. And when, going beyond quantitative relations, we take the qualitative differences of phenomena into account and consider how often, from the point of view of quality, the effect is disproportionate to the cause, we are bound to admit that nowhere in the real world of concrete existences is the principle of (mechanical) causality rigorously applicable (*Cont.*, p. 26).

The student of Kant will be struck by the contrast between Boutroux's and Kant's account of the origin and validity of mathematics and the causal principle. The latter regards them as synthetic judgments *a priori*, and because constitutive of experience necessarily valid of its objects; the former asserts that they are neither *a priori*, in the sense of being deducible from the pure intelligence, nor are they constitutive, in any real sense, of objects. There is unquestionably here a fundamental difference in the point of view. And yet it seems possible, without any very great distortion, to tone down the difference so as to make it appear inappreciable. For with Kant, too, the principles of mathematics are not deducible from the pure intelligence, since they require the 'intuitions' of space and time, and these intuitions as 'given' constitute, in so far, an element of contingency. Nor is there any reason why Kant should not allow the further contingency connected with the artifices, *e.g.*, $\sqrt{-1}$, whereby mathematical science is developed. Even the given space-intuition does not preclude the possibility of non-Euclidean geometry, unless we assume that not only space but also our conceptions of

space are forever unalterable. And in regard to the causal principle, although it is held by Kant to establish everywhere in nature immutable relations of necessity, still the 'necessity' spoken of is not absolute, and the principle itself seems at times to amount to no more than the reasonable postulate that, *if* an order of succession is to be regarded as objective, the relations of its members must be conceived as determinate. Is not this but another way of saying what M. Boutroux says at the close of his later volume, "What we call the laws of nature are the totality of the methods which we have discovered for assimilating things to our intelligence"? M. Boutroux adds, "and making them subservient to the accomplishment of our volitions." For, like Kant, it is in the practical sphere that he finds the inner kernel of reality and the meaning of the contingency of experience as it appears under the categories of the understanding. The understanding cannot grasp reality. The contingency of its laws makes it possible to trust the sentiment of freedom, but the positive metaphysical construction starts from the practical consciousness of ideals of action. It is thus that in the last part of the *De la contingence des lois de la nature*, M. Boutroux develops a metaphysics of freedom, of which it should be praise enough to say that, following in the line of Kant but more dogmatic in results, it reminds us not a little, in essential outlines, of Lotze.

H. N. GARDINER.

SUMMARIES OF ARTICLES.

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

PSYCHOLOGICAL.

Begriff und Grenzen der Psychologie. WILHELM SCHUPPE.
Zeitsch. für immanente Philosophie, I, 1, pp. 37-76.

The content of consciousness may be divided into two parts, (1) that which belongs to the individual as an individual, and (2) that which belongs to consciousness as such. In defining the limits of psychology it is necessary to keep in mind this distinction. Psychology has to do with the factors of consciousness which arise from individuality. These factors constitute the true *individuum*. Consciousness as such is the abstraction from all individual determinations. It is related to the concrete consciousness as the genus to the particular. — Psychology cannot be the fundamental science, for, if mind is regarded as an immaterial substance apart from the external world, the doctrine of substance is presupposed; if it is conceived as the individual consciousness, the whole world of things must exist for the mind as the objectively given. — Thought, feeling, the impulse to form conclusions, are known to the individual from his own consciousness only; but, when these facts are analyzed, there is found the one and the same reality, which is independent of the individual as such, and which forms the common objective world. Psychology, in dealing with the conscious factors belonging to the *individuum*, — to that which is properly subjective, — is separated from ethics, philosophy of right, aesthetics, logic, and other disciplines whose material is given through consciousness as such, independently of the individual. These disciplines establish laws

and norms of objective validity. What identity and causality are, what object, activity, and force are, it is the business of epistemology and logic to discuss. The problem of psychology is to investigate the laws and conditions from which it follows that in every *individuum* such and such contents occupy the fixation point of consciousness. These laws and conditions are referable in part to bodily processes, and in part to mental events not explicable in physiological terms.

I. M. BENTLEY.

Bemerkungen zur allgemeinen Physiologie. R. WLISSAK.
V. f. w. Ph., XIX, 4, pp. 391-405.

This article is a criticism of a book by Verworn, entitled *Allgemeine Physiologie* (Jena, Fischer, 1895), and especially of the claim which it makes to lay down the lines upon which a 'universal' physiology may be constructed. The author of this book believes that the 'universality' of his results have been obtained mainly through his study of the cell, and through the use which he has made of the 'comparative method.' Wlassak finds, after an examination of the results obtained by these methods, that this claim is not established. He maintains, further, that nothing worthy of the name of 'universal physiology' is possible in the present state of our knowledge. The article concludes by pointing out inconsistencies and historical blunders in a chapter of the work mentioned dealing with the relations of physiology and psychology.

J. E. C.

Sex and Art. COLIN A. SCOTT. Am. J. Ps., VII, 2, pp. 153-226.

The periodic erethism found in all animals, even the lowest, is the physiological basis of both sex and art. This tension, or erethism, is the result of a high state of assimilation or nutrition just on the point of decay. Energy is thus liberated, movement increased, emotion intensified or created. In its developed state the sexual system is characterized by its complexity, its plasticity, and its capacity for erethism and radiation. Combat and courting are important radiations, the first tending to pass into the latter, which may yet be a delicate form of combat. Fear and anger underlie courting and combat, and make the whole condition more erethic. Bright feathers, dramatic movements, etc., are indications of vigor and fighting power. When highly developed, the males are generally

more sensitive than the females to these signs which form the basis of the aesthetic capacity. Both to the male and female, however, they are a matter of simple sensibility, taken for themselves rather than for the meaning they contain. In the lower human races the springtime still manifests itself as the great erethic period. Spring-meetings occur where battles are fought and wives exchanged. These battles are largely a matter of display, and have the effect of courting on the women. Singing, rude dramatic performances, wurdances, etc., lead up to, and sometimes take the place of actual fighting. Tattooing is of great value both in courting and combat. Sometimes rudiments of clothing take the place of tattooing. As compared with the lower animals, these symbols are significant more of a psychical than a physical development. It is the personality rather than the person which is made attractive. Shame and jealousy are a moral irradiation of the use of clothes, which even in civilized man heighten the effect of the aesthetic feeling. Religions are a more organized result of the spring-meetings. Sexual needs are originally the occasion, and afterwards the basis, of the aesthetico-religious radiation. Phallicism in its various forms was for thousands of years the dominating religion of the world. It was amalgamated with, and perhaps gave rise to, fire, sun, and star worship, serpent and tree worship, and the worship of ancestors with its consequences for love of fatherland and higher social organization. Christianity reëdited many of its symbols and applied them to higher meanings, but since Puritanic times has been too liable to cut itself off from the biological sources from which it springs. The author recommends a modern Phallicism based on the facts of biology and history, a spirit "which is able to find in the sexual instinct the centre of evolution, the heart and soul of the world, the holy of holies to all right feeling men."

AUTHOR'S SUMMARY.

Le moi des mourants. V. EGGER. Rev. Ph., XXI, 1, pp. 26-38.

As death is the abrupt stoppage of the series of psychical states, the consciousness of impending dissolution naturally arouses an idea of that which is about to come to an end. Hence no civilized being at the point of death can avoid having, in some form or other, a peculiarly vivid idea of his individual self. This idea will differ according to circumstances. It will be abstract and conceptual, if the end comes slowly and one has time to reflect. It will consist of a rapid succession of images of important events, if one is threatened

with sudden death. This is the element of truth contained in the statements, frequently made, that persons in situations of extreme danger see the whole of their past life unrolled before them. No vivid idea of the self arises (1) when the notion of the self is undeveloped, as in the case of infants; (2) when the mental powers are impaired by disease; (3) when the individual regards death as but the transition to another state of existence, and so is more concerned with the future than with the past.

DAVID IRONS.

Ueber erklärende und beschreibende Psychologie. HERMANN EBBINGHAUS. *Z. f. Ps. u. Phys. d. Sinn.*, IX, 3 and 4, pp. 161-205.

This article is a criticism of Dilthey's "Ideen über eine beschreibende und zergliedernde Psychologie." Dilthey makes a sharp distinction between explanatory and descriptive psychology. He describes the prevalent psychology of the time as explanatory, and condemns it for following a false ideal, in that it seeks, in imitation of physics and chemistry, to arrange a limited number of definite elements in an all-embracing causal connection. The different unifying concepts with which we connect the facts of the external world, are themselves a part of what is given in consciousness. Psychology, then, needs only the observation and analysis of the concrete facts of experience. If it attempts to derive experience from elementary processes and to theorize, it is false in its methods and aim, and dangerous to philosophy, to religion, and to social and political science. Ebbinghaus maintains that Dilthey has failed to appreciate the system of any psychologist, except perhaps Herbart. In the second part of his work, devoted to concrete illustrations of the procedure of descriptive and analytic psychology, Dilthey contradicts himself, and uses the very hypotheses and concepts which he so severely condemned in the first part. After exposing several errors and inconsistencies, the criticism closes with a discussion of the real cause for that uncertainty in psychology which has called forth Dilthey's polemic. The uncertainties of psychology do not begin with its explanations and hypothetical constructions, but come up in connection with the simple establishment of its facts.

ALICE J. HAMLIN.

Skizze einer Willenstheorie. G. SIMMEL. *Z. f. Ps. u. Phys. d. Sinn.*, IX, 3 and 4, pp. 206-220.

The problem of the causality of the will, *i.e.*, of its first stage, the impulse, involves three questions: (1) Can psychical processes be the

cause of bodily processes? (2) Do any phenomena *require* the concept of 'impulse' for their classification or explanation? (3) If not, what is the real nature of so-called 'impulse'? The first question must be left to the future. The second we answer in the negative. When we have given a state of want and the action to relieve it, we need not insert in this simple causal series a member which contains the action by anticipation. The feelings which are called 'impulse' contain the future in no other sense than that in which every part of a causal series contains its future. The reply to the third question is that the so-called impulse does not precede the act, but is the conscious side of an act already begun. The *visible* act, which follows the impulse, is the result of deep-lying innervation processes. The impulse is their reflex in consciousness, and hence is not the cause of action. This theory solves many difficulties. We will without acting when the physical process is checked in its early stages. The conflict of simultaneous volitions arises from the simultaneous beginning of different innervation processes. The involuntary performance of acts usually voluntary is possible because the innervation is only *one* of the conditions of the impulse-feeling. Two facts help to bridge the gulf between desire and volition: (1) with young children all desires are volitions; (2) desire that is not volition seldom refers to objects attainable by a single act. Hence arise many innervations, of which none produce action, but which together release much will-feeling. Abulia may be due to paralysis of those parts of the brain from which innervations arise. The patient can neither act nor will because the innervations are lacking. If he feels desire, there is probably partial innervation.

ELLEN B. TALBOT.

Psychology and Physiology. G. S. FULLERTON. Psych. Rev., III, 1, pp. 1-20.

Where is the boundary-line between psychology and physiology, and how far is it profitable for workers in either field to trespass on that of the other? The answer to these inquiries may be given from the standpoint of 'parallelism,' or from the position of those who assert that there is a causal relation between body and mind. On the assumption of 'parallelism,' physiologists are forced from their own field to that of the psychologist, in attempting an explanation of the psychological result of nervous excitation. The changes assumed to take place in nervous substance are too subtle to be followed; also, if a connection between afferent impulse and resultant movement is to be

made, it seems necessary to indicate it in psychological terms. On the other view, there is one complete causal series from initial stimulus to motor result. The links in the chain stand: physiological—psychological—physiological. Here are two distinct kinds of facts, requiring entirely different treatment; one the method of the physiologist, the other that of psychological introspection. It seems better that each of these distinct fields should be occupied by its own investigators. Trespass is justifiable when either party may thereby make further progress in its own field. With increase of knowledge, physiology will grow independent of psychology. The latter, however, cannot be entirely divorced from the former, any more than physiology can be made independent of physics and chemistry. Let the psychologist avoid physiological work which has no psychological bearing.

I. M. BENTLEY.

ETHICAL.

The Hedonistic Interpretation of Subjective Value. HENRY W. STUART. *Journal of Political Economy*, IV, 1, pp. 64–84.

Political Economy in its formative period was intimately connected with the ethical theory of Utilitarianism; and the evil effects of this association remain to the present day. This may be shown by an examination of the recent articles of Professors Hadley and Taylor. Both assume the truth of the hedonistic contention that pleasure is the object of desire. Hadley arrives at the curious result that conduct is in part regulated by a calculation of pleasures and pains, and in part by custom and sentiment, which form an intense motive, but have no reference to hedonic calculations. This view involves an antithesis in human action which as a matter of fact does not exist. Taylor attempts to establish a distinction between 'worth' and 'value.' Worth is to be the supreme economic category in the future when scarcity and ignorance no longer affect choice. Goods will then be consumed according to their true worth, *i.e.*, according to the degree in which they conduce to man's highest welfare. But as subjective 'value' is determined by pleasure and pain, and as the new conception of Worth is not contradictory to the older one of Value, we must conclude that the distinction between Value and Worth corresponds to the distinction between 'lower' and 'higher' pleasures. But pleasures are not qualitatively different from one another.

'Quantity of pleasure being equal, pushpin is as good as poetry.' The proposed distinction cannot therefore be maintained on the basis of the hedonistic theory of desire. Further, a category of Worth (according to Taylor's definition of it) could have no place in Economics. The attempt to make the distinction in question can only be explained on the assumption that the notion of subjective value, as something determined by pleasure and pain, was felt to be untrustworthy. If the subjective value we place upon things be regarded as determined, not by the computation of hedonic results, but by the fitness of things to serve our own ends, there is no necessity for a category of Worth as opposed to that of Value. The papers of Hadley and Taylor, therefore, illustrate the growth of false economic theories from unsound psychological presuppositions.

J. F. BROWN.

Ableitung einer Rassenhygiene und ihrer Beziehungen zur Ethik.

A. PLOETZ. V. f. w. Ph., XIX, 4, pp. 368-377.

The author sets out from the proposition that a society is the better able to preserve itself, in proportion to the number of robust individuals it contains. He then proceeds to deduce various rules by means of which the weak may be kept from propagating their kind and be finally eradicated, and by the observance of which the strong may bring into the world healthy and vigorous descendants. The demands which Ethics makes may then be stated in the following way: (1) Do all in thy power to make thy fellow-men strong and vigorous; (2) Bring into the world no weaklings, but see to it that thy descendants may be as strong and vigorous as possible. The first demand has reference to the education of children, their preservation from diseases and other injuries, the care of the sick and the aged, etc. The second proposition forbids individuals to become parents under circumstances which might influence unfavorably the health and vigor of their offspring.

J. E. C.

METAPHYSICAL AND EPISTEMOLOGICAL.

Lord Salisbury on Evolution. HERBERT SPENCER. Popular Science Monthly, February, 1896, pp. 564-582.

It is a popular notion that Darwin's theory of Natural Selection and the doctrine of Organic Evolution are one and the same thing. This view is adopted by Lord Salisbury when he says, referring to Professor Weissmann, "I quite accept the Professor's dictum that if natural selection is rejected we have no resource but to fall back on the mediate or immediate agency of a principle of design." The notion is, however, untenable, for even if it were shown that natural selection is inoperative, or only partially operative, still the general doctrine that organisms have arisen by the continual superposing of modifications upon modifications would retain its validity. Again, absence of direct proof of natural selection is emphasized by Lord Salisbury, on the ground that "no man or succession of men has ever observed the whole process in any single case, and certainly no man has recorded the observation." But the same objection may equally well be urged against the opposing hypothesis of special creation, for, just as nobody has ever seen a species evolved, so no one has seen a species created. If we turn now to the indirect evidence for the two theories, we find that the results of paleontology, embryology, the classification and the distribution of species, all suggest a like history, which may be rendered intelligible if viewed as a process of adaptation to conditions. On the other hand, no fact in Nature points us to a special creation, and a world of facts is against it. And again, not only is it possible to conceive the principle of the Survival of the Fittest (which is a more accurate term than Natural Selection) as operating in Nature, but it is impossible to conceive it as not operating, to think of the better-adapted species being destroyed, and the ill-adapted continuing to exist. In short, the scientific theory is based upon both *a posteriori* and *a priori* grounds, while the doctrine of special creation has not a fact to support it, nor is it even a conceivable way of viewing the phenomena of Nature. It is objected by Lord Salisbury that the great length of time required for the production of species by the evolutionary process is a ground for disbelief; but a calculation shows that we need only postulate as great progress of development in 250 years as is found in the life of the foetus in one minute, which is certainly not an impossible demand. Finally, Lord Salisbury treats the

principle of evolution as if it were concerned only with things that 'breed'; but if the theory be true at all, it is true for everything. It has for its subject-matter the entire cosmic process, from nebular condensation down to the development of picture-records into written language, or the formation of local dialects; and its general result is to show that all the minor transformations in their infinite varieties are parts of the one vast transformation, and display throughout the same law and cause,—that the Infinite and Eternal Energy has manifested itself everywhere, and always in modes ever unlike in results, but ever like in principle.

ALEX. MEKLEJOHN.

Die Metaphysik in der Nationalökonomie. F. BLEI. V. f. w. Ph., XIX, 4, pp. 378–390.

The author of this article undertakes to prove that political economy has hitherto used metaphysical categories and presuppositions which have rendered its conclusions unscientific and valueless. Investigators have either deduced economic laws from the 'nature' of the economic community, treating the latter in abstraction from psychological laws; or they tend to emphasize the 'psychical' properties and capacities of man, as 'modifying' in some way the 'laws' of the economic society. Instead of describing the facts, therefore, writers on political economy use 'the economic society' or 'man' as transcendental categories, and derive from the 'nature' of these conceptions those 'laws' which accord with their previously formed theories.—The author proceeds to show that modern economic theories, like those of Marx and the Austrian School, are as much under the influence of metaphysics as were the older theories of Ricardo and Smith.

J. E. C.

Ueber die Realität des Zweckbegriffs. J. GOLDFRIEDRICH. V. f. w. Ph., XIX, 2, pp. 204–233.

In Purpose it is the idea of the effect which is active. The idea of the event which is to happen acts as motive. Hence, one can only speak of 'purpose' in the case of a being which is able to place before itself the idea of the end. Neither reflex-action nor impulse-action implies purpose, for the idea of the effect does not bring about the action. But we speak of purposiveness in both cases. What we mean is that both kinds of action fulfill a purpose, though not a designed purpose. Hence, we must distinguish between

purpose and purposiveness. — It is clear that purpose and causality are not opposed to one another. The essence of purpose is that it is at the same time cause and effect of the action. The idea of the effect is, as represented, at the same time the cause of the effect. Hence arises the illusion that we are free, *i.e.*, independent of the causal series. — Purpose has only psychological reality, and exists only in us and beings like us. It is a form of our intuition (*Anschauung*) which we, relying on the psychological appearance, regard as the real ground and basis of the event. But, though nature is not subjected to any end or purpose, nevertheless it exhibits purposiveness. It might be said that, if the reality of purpose be denied, it is not legitimate to talk of purposiveness. This objection rests upon an ambiguity. If we knew ten times over that purpose is not a principle applicable to the real, yet the world would still remain purposive, not in itself but for us. That is, everything has necessary conditions of existence, and these conditions may be called purposive with regard to their objects. They are purposive as any cause may be said to be purposive in reference to its effect. Hence, although purpose is not a real principle, the idea of purposiveness still remains important for us as a principle of knowledge. In Kantian language, the category of End is not constitutive but regulative.

D. R. MAJOR.

Zur Klassifikation der Wissenschaften. AUGUST STADLER. Ar. f. sys. Ph., II, 1, pp. 1-37.

The first four pages of this article are given to an examination of that part of Raoul de la Grassériè's work *De la classification objective et subjective des arts, de la littérature et des sciences*, which contains a classification of the sciences "according to all dimensions." Grassériè maintained that in order to obtain a complete classification one must determine whether a science is abstract or concrete, subjective or objective, particular or general, simple or complex; whether its medium is time or space; and to what human faculties it has reference. Such a method of classification is perplexing, because the origin of the variety of aspects, the method of selection, and the principle of combination are unknown. We have before us a system whose structure we do not understand, for there is wanting the idea of a whole. Then follow two pages containing a discussion of the principle of classification expounded by Wundt in "Ueber die Einteilung der Wissenschaften" (*Philosophische Studien*, Fünfter

Band). In the next eight pages the writer explains and defends the following statement of the problem of science: "The problem of science is to describe with the greatest possible exactness the totality of phenomena which are present to human consciousness." This statement does not include the search for causes or explanations, for all science is descriptive. What one calls 'explanation' is only a higher kind of description. To describe is to name; all naming presupposes the fact of abstraction; therefore all science is abstract, only the perception is concrete. But the perception as such contains no thought, therefore it is not science. The material of every science is concrete; the result of every compilation is abstract. The remaining pages explain the elaborate table which accompanies the article. The table shows at a glance the writer's classification of the sciences, and also the determining principles of the classification.

D. R. MAJOR.

Philosophy in its National Developments. W. KNIGHT. Mind, No. 17, pp. 60-71.

The philosophy of the world is an organic unity which has developed in an unbroken continuity, but which has, at the same time, been characterized by important national differences. Being the outcome of a continuous cosmic process, operating in all lands, its problems are fundamentally the same; but within each country differences arise in matters of detail. The main problem of the future historian of philosophy will probably be to show the fundamental differences inherent in each race, and thus to explain the local phases and peculiarities of development.—The progress of the world itself is best secured by the removal of every obstacle to individual and national growth. The further the differentiation of the race is carried, the more apparent will become its underlying unity. It is to be particularly noted, however, that the main condition of national progress lies in a gradual modification of existing social and political structures, and not in any radical or violent change initiated from without. Another important condition of the evolution of society is the preservation of a due balance between the power of the masses and that of individual leaders.—One of the best examples of the influence of nationality on philosophy is found in the case of Greece. The manifoldness and artistic completeness which characterized the thought of the Greeks were but the expression of their incessant intellectual activity and the many-sidedness

of their life. Directness and lucidity of expression became second nature to them, and hence characteristic of their philosophy.

G. A. COGSWELL.

Die erkenntnistheoretischen Grundlagen des historischen Materialismus. FRANZ MARSCHNER. Zeitsch. für immanente Philosophie, I, 1, pp. 129-152.

The materialistic view of human development may be summed up in the following quotation from Fr. Engels, in E. Dühring's *Umwaltz. d. Wissensch.* (Lpz., 1878, pp. 10 ff.): "Thus the existing economic structure of society forms the real basis, from which in the last instance is to be explained the entire superstructure of ethical and political tendencies, as well as the religious, philosophical, and other attitudes of the thought of each historical period. In this way, Idealism has been driven from its last refuge, *i.e.*, from the principles of history. A materialistic view of history has been given, and the way has been found to explain the consciousness of Man from his being (*sein*), instead of as formerly his being from his consciousness." It is to be noted here that by none of its leading modern exponents is this theory interpreted as implying a materialistic view of natural science, epistemology, or ethics. The philosophical import of the system, however, is revealed in Marx' criticism of the Hegelian Dialectic. Hegel had said that Nature is the reflection of Spirit, the Absolute in its immediate existence. His critic, while accepting the deterministic principles of the Dialectic, exactly reverses its conclusion, and declares that Spirit is the reflection of nature.—In considering the theory, we will first test its statement of the relations of material and spiritual, and then examine the notion of the Unconscious, which is represented as the determining factor in human development. As to the first question, we can accept neither the materialistic nor spiritualistic conclusions. It is as false to say that the world of perception is wholly determined by the world of ideas, as to maintain the contrary. The truth is that neither mind nor matter is prior to, or cause of, the other. The two stand in a relation of reciprocal determination, so that both physical and psychical factors are active in guiding the course of human development. In reference to the second point, we may say that while the materialistic view of history has emphasized economic conditions, regarded as independent of the human consciousness which they control, and has thus introduced the notion of the Unconscious

into nature, epistemological logic denies that there can be a reality independent of consciousness, and insists that all determination of the individual must be referred to the transcendental consciousness, which we are compelled to postulate. In the light of this theory, the economic conditions of society can be called 'unconscious' only in one of two senses: (1) that they are not content of the individual mind which is influenced by them (in which case, we cannot explain the fact of influence); or (2) that they are present in the consciousness of the individual, but are at first only dimly recognized. As these are the only two senses in which we can understand the term 'unconscious,' it is evident that the assumption of really unconscious mental activity cannot be allowed.

ALEX. MEIKLEJOHN.

Is Life Worth Living? W. JAMES. Int. J. E., VI, 1, pp. 1-24.

The great source of reflective Pessimism is the contradiction between the phenomena of nature, as they actually are, and the craving of the heart to believe that behind nature there is a spirit whose expression nature is. Now there are two stages of recovery by which we may emerge from the pessimistic view of things. The first stage is reached when we deny that there is any spiritual being which is revealed in nature. The fact of evil loses all its haunting and perplexing significance as soon as the mind attacks the separate instances of it, and ceases to trouble itself about their derivation from a single Power. As the contradiction which gave rise to the pessimistic view has disappeared, the individual can go through life contentedly taking things as they come, for it is a remarkable fact that suffering and hardship usually serve to give a keener zest to life. The second stage is attained when we deny, not that there is a divine spirit in the universe, but that it is adequately revealed in nature. We have a *right* to believe that the physical order is only a partial order; we have a *right* to supplement it by an unseen spiritual order, if only thereby life may seem to us better worth living again. This method of procedure may seem very 'unscientific,' but the scientist can bring nothing positive against it. Whatever else be certain, this at least is sure, that the world of our present natural knowledge is enveloped in a larger world of some sort, of whose residual properties we at present can frame no definite idea. And it is sheer dogmatic folly to say that with the forces which the hidden world *may* contain the mystical side of our nature *can* have no connection. That the world of physics is probably not absolute, the converging multitude

of arguments in favor of idealism tends to prove. And that our whole physical life may be set in a dimension of Being that we have at present no organ for apprehending, is vividly suggested to us by the analogy of the life of our domestic animals. Our dogs, for example, are *in* our human life, but not *of* it. They witness hourly an outward body of events whose inner meaning cannot, by any possible operation, be revealed to their intelligence, although in these events they may themselves play the cardinal part. So the world which is revealed to human beings may be encompassed by a still wider world which lies beyond our ken. This, it might be said, is only a case of 'maybe.' But science itself has much to do with 'maybe's,' and human life at large has everything to do with them.

DAVID IRONS.

HISTORICAL.

Locke's Theory of Mathematical Knowledge and of a Possible Science of Ethics. JAMES GIBSON. *Mind*, No. 17, pp. 38-59.

The writer's aim is purely historical. He endeavors to show (1) what Locke's theory regarding the relation between mathematics and ethics actually was; (2) the relation in which his theory stands to the previous development of ethical thought in England. L.'s theory of knowledge was as essentially a mathematical one as that of Descartes. The *rôle* played by intuition in L.'s system is much larger, and this partly because he was familiar only with the Euclidean Geometry, with its frequent appeal to an ideal superposition of one figure upon another. The possibility of representing our ideas by visible and lasting marks is that which brings him nearest to an explicit recognition of the intuitive character of the science. Diagrams are more unmistakable than words; and the figure, really individual, is thought as universal; in it intuition and thought are united. For L., this is the general type of knowledge. And 'mathematical certainty' is possible outside of mathematics, *e.g.*, as regards the principle of causality. The preëminence of mathematics over physical science rests upon its purely ideal character. And L. assumes that, where ideas are perfectly consistent, there can be no question as to their applicability to fact. Without this rationalistic assumption, his whole argument would fall to pieces. Now ethics, like mathematics, is capable of demonstration. The former, like the latter, is

mainly concerned with ideas of mixed modes and relations, in which there is no direct implication of actual existence. The attempt in the *Essay* to demonstrate certain propositions in ethics, did not meet with much success. L. himself seemed later to realize this; but he never really wavered in his conviction that a strictly demonstrative method could be applied to ethics. Turning now to the predecessors of L., we see that it was natural for the opponents of Hobbes, who attempted to construct a rational system of morality, to take mathematics as their ideal, since that was the only department of knowledge which had yet been reduced to the form of a science. Indirectly the Cambridge Platonists exerted an influence in this direction. Cumberland went further, and avowed his intention of constructing a science of ethics that should be analogous to mathematics. Where pure geometry would fail, the analytical method may succeed; hence C. attempts to discover a connection between the methods of ethics and algebra. L. seems to have been influenced by C.'s treatise.

E. A.

Der Logos bei Heraclit. ANATHON AALL. Z. f. Ph., CVI, 2, pp. 217-252.

The Logos of Heraclitus has been interpreted as an ontological principle which is only the spiritual expression of that creative Force from which all reality is derived. As against this, it is argued that the principle is not ontological at all, but belongs to a system of ethical and aesthetic reflections, which Heraclitus never attempted to connect with his theory of physical being. Upon this interpretation, the Logos must be taken as meaning the Universal Reason which controls the course of change, not in the sense of a divine personality, but rather as that rational order, law, or excellence which the wise man finds in every event of life, but which passes unheeded before the eyes of the ordinary man and the fool.

ALEX. MEIKLEJOHN.

NOTICES OF NEW BOOKS.

Kants Erkenntnisstheorie und seine Stellung zur Metaphysik. Eine Einführung in das Studium von Kants *Kritik der reinen Vernunft*. Von Dr. MAX APEL. Berlin, Mayer & Müller, 1895. — pp. 147.

It is difficult to say from what standpoint the author intends his work to be estimated, whether as an 'introduction' for the novice in the study of Kant, or as an attempt to find in the *intellectuelle Anschauung* a suggestive point of view from which to survey and criticise the Kantian epistemology. Regarded as an introduction, it presupposes too much, and is too fragmentary; regarded as a contribution of special research, it contains too much repetition of familiar material. The most suggestive part of the essay is that dealing with the conception of the *intellectuelle Anschauung*, and the author's thesis is that this is the fundamental, though not the central conception of the *Critique*. For the problem of epistemology is the question as to the validity of our thought. "To decide this question, to determine the relation of our thought to objective existence, we must employ as a criterion the conception of absolute truth, of the agreement of idea and object, of thought and existence," and this is the rôle played by the 'intellectual perception.' But this conception appears in Kant under three different aspects or in three successive stages, representing the successive standards of criticism by which our own mind with its two sides of receptivity and spontaneity must be judged. First, in 1770 and also later, Kant uses the conception of an intellectual perception which receives its content in non-sensuous fashion, not through forms of space and time. But this is inadequate for characterizing our spontaneity; and the conception of an *intellectus archetypus*, which is absolutely spontaneous, and creates its content, or rather for which there is no distinction between idea and reality, is introduced. This at first might seem to allow us to regard our own intellect as sustaining a relation to phenomena parallel to that of the divine mind to the things-in-themselves, but strictly speaking it is only in the single act in which we think 'I' that there is no trans-subjective reference (*Meinen*). All our *Vorstellungen* have this *Meinen* and are therefore incapable of being regarded as absolute knowledge. The *Reflexionen* are utilized to show various transitional phases of the problem, and some of the German literature is cited, but no reference is made to Caird's extended discussions of the subject.

J. H. TUFTS.

Kants transcendente Logik mit besonderer Berücksichtigung der schopenhauerschen Kritik der kantischen Philosophie. Von GEORG ALBERT. Wien, Hölder, 1895. — pp. 155.

The author of this attempt to popularize some of the main aspects of Kant's system ingenuously admits his ignorance of the *ungeheure Litteratur* of the subject, to make acquaintance with which would "swallow up half a lifetime," and proceeds cheerfully to add his contribution to the already existing 'ocean.' Only one previous expositor is noticed, "Kant's only true disciple," Schopenhauer. The exposition abounds in illustrations, but it is improbable that they will make the *Critique* attractive to the general reader, while for the purposes of the student a more thorough treatment is required.

J. H. TUFTS.

Les lois sociologiques. Par GUILLAUME DE GREEF, Docteur agrégé à la Faculté de droit, Professeur à l'École des sciences sociales de l'Université de Bruxelles. Paris, Félix Alcan, 1893. — pp. 181.

Le transformisme social. Essai sur le Progrès et le Représent des Sociétés. Par GUILLAUME DE GREEF, Professeur de Sociologie générale et de Philosophie à la Nouvelle Université libre de Bruxelles. Paris, Félix Alcan, 1895. — pp. 520.

These works are a continuation of an earlier publication, *Introduction à la sociologie*, of which two parts were issued in 1886 and 1889, and the third is about to appear. As we are promised in the preface to the first part (p. iii) a series of volumes on the various branches of sociology in the natural order of their classification and culminating in a positivistic political science, it is evident that the present works must be considered as parts of a series.

The author began his writing on philosophical subjects in 1882 with an abridgment of Mr. Spencer's *Principles of Psychology*, and since that time has published a number of works, most of which may be included in the field of sociology. He has been especially influenced by Mr. Spencer and by Comte, whom he calls (Introduction, p. 5) the two illustrious leaders of the positivist school in France and England, and whose differences regarding the hierarchical classification of the sciences he regards as more apparent than real. That the French writer has exerted more influence over him may be inferred from the fundamental similarity of their positions and from occasional references like the following: "Nevertheless his [Comte's] work is the most important of the century, because it marks the advent of a new era characterized by the decay of metaphysics and the triumph of a purely scientific philosophy" (*Trans. soc.*, p. 223). M. de Greef is an ardent advocate of the hierarchical classification of the sciences, and frequently recurs to this topic in his works. He holds that the order of logical dependence and the order of historical development are in sub-

stantial accord (*Lois soc.*, p. 6). Each proceeds from the simple to the complex, from the general to the special. The sciences in their hierarchical order are mathematics, astronomy, physics, chemistry, physiology, and psychology, rising to a culmination in sociology, which now claims the sceptre once wielded by theology.

By 'sociology' the author means the philosophy of the particular social sciences (*Lois soc.*, p. 31). The essential and qualitative difference between social phenomena and biological or psychological phenomena is found in contract. "Reciprocal consent appears for the first time in social phenomena." Until then they are not distinguishable from vital and mental phenomena (Introduction, vol. I, p. 131). Social, like all other phenomena, may be arranged in a hierarchical order of increasing complexity and speciality. The groups recognized are economic, generative, artistic, phenomena of belief, moral, legal and political (*ibid.*, p. 214). The main objects of the Introduction to Sociology are to prove the existence of sociology and that its phenomena may be hierarchically classified (*ibid.*, p. 24). But these two aims seem to be fundamentally one, since a science is really constituted when its classification conforms to rational laws (*ibid.*, p. 159).

The classification of the sciences is an example of what M. de Greef understands by a sociological law, *i.e.*, a necessary relation between a phenomenon and the conditions of its appearance (*Lois soc.*, pp. 35 ff.).

The author's most recent work is divided into two parts, the first part dealing with the growth of individual beliefs and doctrines concerning progress, the second aiming to discover from the life of society the main laws regarding social changes. He finds that social beliefs regarding progress are correlated with the character of collective life. "In times of decay pessimistic beliefs and theories attend upon other forms of social depression. In times of real progress optimistic beliefs and theories arise" (p. 512).

The author desires to see the social sciences introduced into the curricula of primary, intermediate, and high schools, as well as of the university. One cannot but question whether in their present state of development their disciplinary value to young students would be at all comparable to that of the studies displaced.

W. F. WILLCOX.

La logique sociale. Par G. TARDE. Paris, Félix Alcan, 1895. — pp. xiv, 464.

In M. Tarde's previous work, *Les lois de l'imitation, étude sociologique*, published in 1890 and dedicated to Cournot, one of the chapters is on the logical laws of imitation. The present work is an amplification and continuation of the opinions sketched in that part of the earlier volume, and cannot be fully comprehended apart from its predecessor.

May we have a science or only a history of society? If a social science is possible, why is it yet unborn? Mainly because its heralds have been

led astray by fancied mechanical or biological analogies, and have disregarded the fact that the true social causes demanding investigation are the acts of individuals, which gradually propagate themselves through imitation and transform society, as germs may the physical organism. The true social causes are the distinct discontinuous ideas of individuals (inventions) brought into a system through the acts of imitation they arouse. As vibration is a fundamental fact in the inorganic world, and heredity in the organic world, so imitation is in society, each being a form of repetition. Only similarities due to repetitions are properly subject to law, and hence in the social world, acts of imitation fall into the domain of sociology more naturally than acts of invention. But inventions are essentially due to the crossing and coöperation of two currents of imitation, and may thus be included within the scope of sociology. Imitation is the best touchstone for discriminating between social and vital phenomena. Whatever one does without copying another, *e.g.*, eating and crying, is vital; when imitation enters, it is social (p. vi).

All conscious and social phenomena may be resolved into three classes: certain primary elements of sensation, beliefs, and desires (p. 1). In a footnote to the earlier work (p. 163), we are informed that the writer is disposed to qualify somewhat his former statement (*Rev. Phil.*, Aug. and Sept., 1880) of the fundamental importance of belief and desire in individual psychology, but on the contrary to increase his emphasis upon their importance for sociology.

The usual meaning of Logic must be widened to include the conflict of ideas as well as their harmony, the illogical as well as the logical; its task is to establish a harmony of beliefs (p. 20), as a means to the further end — a maximum of belief (p. 23). To gain this ultimate end a quantitative measurement of belief must be secured. Logic looks to the guidance of belief, and teleology to the guidance of desires. The former is based on the familiar logical syllogism; the latter on the neglected teleological syllogism, in which the major premiss expresses an individual or social end, the minor a means, and the conclusion a duty (p. 53).

The second and larger part of the volume is occupied with applications of the author's theory to language, religion, the feelings, political economy, and art. The work, as a whole, is interesting, original, and acute; and with its predecessor constitutes perhaps the most successful and valuable of recent efforts to base sociology upon psychology rather than upon physics or biology. The effort doubtless marks a step in advance; still one cannot but question whether either the science of psychology or the science of sociology is yet so mature that speculations touching their independence can find that basis of demonstrable probability necessary to science.

W. F. WILLCOX.

Psychologisch-ethische Untersuchungen zur Werth-theorie. Von ALEXIUS MEINONG. Graz, Leuschner & Lubensky, K. K. Universitätsbuchhandlung, 1894. — pp. v, 232.

The subject of Value has received considerable attention from writers on economics, while comparatively little attention, and that for the most part only incidental, has been given to the subject by psychologists and metaphysicians. Not only economics, however, but also ethics, aesthetics, pedagogics, and in fact all normative sciences, have to do with questions of Value. Since it is a common factor in all these subjects, there is manifestly need of a general philosophical determination of the nature of Value as such. One of the most ambitious of several recent attempts to satisfy this need is the work of Meinong, now before us.

The general scope of the work may be seen from the following list of subjects of chapters. Part I, on Value in general, consists of three chapters, entitled, respectively: "The Idea of Value," "On Feelings of Judgment," "Estimation of Value and Value-Feelings." Part II, on Moral Value, contains four chapters: "The Object of Moral Value" (the longest in the book, pp. 85-159), "The Subject of Moral Value," "On the Moral Ought," "Concerning Responsibility and Freedom."

The feeling of value is not always caused by the object of value. "Where the value-object does not cause the value-feeling, then a *judgment* concerning the existence of the value-object is the cause of the value-feeling. It is the judgment in this case which establishes the connection between the value-feeling and the value-object" (p. 21). The central point in Meinong's theory is the connection which he discovers between value and judgment. All feelings must have some presentational content; some involve also a judgment. It is among this last class, the judgment-feelings, that the value-feelings are found. By a 'judgment' the author means an existential judgment. It will be readily admitted that a thing must exist, be thought to exist, or be thought to have existence in the future, in order to have value. But how existence can serve as a mark by which to distinguish value from any other attribute of things, is not explained. A free use of pseudo-mathematical symbols adds picturesqueness to the discussion, e.g., $W(gv) = -\frac{r}{g^2+1}$ (p. 136). The final impression left on my mind, after a somewhat careful perusal of the book, is that of a series of elaborate discriminations, subtle analyses, and mere platitudes. F. C. FRENCH.

La Métaphysique de Herbart et la Critique de Kant. Par MARCEL MAUXION, professeur de philosophie au lycée de Pau. Paris, Hachette et Cie., 1894. — pp. ix, 339.

Ever since 1871 the French nation has been reflecting on the terrible beating it received at the hands of the Germans, and trying to understand the sources of the superiority which the latter then so painfully impressed on

them. So we have witnessed in France a series of determined and long-sustained efforts of the *hommes sérieux* of the nation to learn from their foes the secret of their success. Nor has the study of German methods been confined to matters of military organization; it has been extended to questions of education and science, until now in some departments the French have excelled their teachers by winning German thoroughness without sacrificing their own peculiar lucidity and sense of form. Among the matters in which the Germans claimed to excel their rivals was philosophy, and so academic France set to work to study German philosophy, not with the light-hearted eclecticism of the time of Cousin, desirous only of hearing and relating some new thing, but seriously, and with a determination thoroughly to understand the German systems. Hence there have appeared in recent years a number of studies of German philosophers, and among them M. Mauxion's study of Herbart will assuredly take a high place. It is essentially a piece of historical exposition, put together with such care and skill that it may safely be trusted as an interpretation of Herbart's doctrine, and is admirably adapted to give a survey of the whole field of his thought. So strictly, indeed, does M. Mauxion construe his functions in the first part, that the reader is often inclined to ask for a few words of comment, if only to facilitate comparison with the work of other thinkers; but M. Mauxion's self-denial rises superior to every temptation, to the extent even of passing lightly over difficult points where a fuller treatment would almost inevitably have involved a critical discussion. It is only in the second part of the book (pp. 215-339), which is called a comparison of Herbart and Kant, that M. Mauxion allows himself a freer hand. But even here his chief care is to adjust the claims of the various Diadochi to the succession of Kant, and to determine in what sense Herbart was entitled to call himself a Kantian; and within his limits he succeeds admirably. His conclusion is that Herbart has developed the realistic side of Kant, just as Fichte and the rest developed the idealistic, but that he reached his realism idealistically *via* Fichte. With regard to the comparative merits of Kant and Herbart, he makes the suggestion that there is more truth but less greatness in the work of the latter, and with this closes a volume which will be not only found helpful by the reader in virtue of its contents, but also very satisfactory in the matter of paper and type.

F. C. S. S.

Grundriss der Psychologie. Von WILHELM WUNDT. Leipzig, Wilhelm Engelmann, 1896. — pp. xvi, 392.

Professor Wundt has undertaken in this work to supply to his students a short handbook, and also to give to the public interested in the subject a systematic summary of the most important methods and results of modern psychology. The author points out that in the *Grundzüge der physiologischen Psychologie* he was concerned mainly with the relations of psychological processes to physiological facts, and to show the light which the

results of physiology throw upon the nature of mental phenomena. The *Vorlesungen* gives a more popular account of the nature and purposes of experimental psychology, and deals especially with questions which have a general philosophical interest. In distinction from these works, the book before us confines itself strictly to the psychological standpoint, and attempts to describe, so far as its limits permit, the most important and essential facts of consciousness. Besides an Introduction of thirty-two pages, it has the following main divisions: I. Psychological Elements (pp. 33-105); II. Psychological Formations (*Die psychischen Gebilde*) (pp. 106-237); III. The Connection of Psychological Formations (pp. 238-323); IV. Mental Development (pp. 324-362); V. Mental Causality and its Laws (pp. 363-384). Review will follow.

J. E. C.

Naturphilosophie als exakte Wissenschaft. Mit besonderer Berücksichtigung der mathematischen Physik. Von O. SCHMITZ-DUMONT. Leipzig, Duncker & Humblot, 1895.—pp. xiii, 434.

This book, the author informs us, contains the results of investigations which have extended over a period of twenty-five years. Setting out with the purpose of exhibiting the logical deficiencies in the method of the mathematical sciences, he found himself forced into other fields of inquiry, until, as will appear below, his work includes not only a philosophy of Nature but a philosophy of Mind as well. For, as the author points out, a philosophy of Nature must not neglect the fact that it is always necessary to add to the things and events of external sense-perception, the activity of a thinking individual, before nature can be known at all (p. 4). The purely objective standpoint is just as one-sided as that of mere subjectivism. For a complete world both are necessary, and the subject, "the world-thinking personality," from which the natural sciences abstract, must be restored in a philosophy of Nature. The work falls into the following main divisions: *A.* Topik der Begriffe (pp. 15-99); *B.* Philosophie der mathematischen Wissenschaften (pp. 99-194); *C.* Physikalische Erklärung durch Hypothesen (pp. 195-220); *D.* Logischer Aufbau der Physik (pp. 221-268); *E.* Die Aussenwelt (269-314); *F.* Die Innenwelt (pp. 314-374); *G.* Körper und Geist (pp. 375-413).

J. E. C.

Inductive Logic. By WM. G. BALLANTINE, President of Oberlin College. Boston and London, Ginn & Co., 1896.—pp. viii, 174.

Extensive quotations, illustrative of scientific method, from writers like Herschel, Whewell, Mill, Agassiz, Asa Gray, Darwin, Helmholtz, and others, may be fairly said to be the main feature of this work. In his treatment of the subject the author usually follows Mill. He does not, however, agree with the latter in making causation the sole basis of induction; and insists that the ascertainment of resemblances, and the determination of

coexistences, are proper objects of inductive investigation. He also criticises Mill's general theory of causation. The book is simply and clearly written, and contains much that is interesting. It does not seem to me, however, that it contributes much towards an explanation of the nature of the reasoning process.

J. E. C.

Die Staatslehre Spinozas. Von Dr. JOSEF HOFF. Berlin, S. Calvary & Co., 1895.— pp. 56.

In the first half of this book the author compares the various theories as to the origin and purpose of the State, which were put forward by Spinoza, Hobbes, Machiavelli, and Grotius, respectively. He arrives at the conclusion that Spinoza is in substantial agreement with Hobbes, though his views were undoubtedly modified to some extent by the influence of Grotius and Machiavelli. Spinoza differs from Hobbes mainly on the question of the status of the individual in society. He maintains that a person does not lose his 'natural rights' by becoming a member of a State. The remainder of the book is occupied with an examination of the discussions of the various forms of government, which are to be found in the *Tractatus Theologico-Politicus* and the *Tractatus Politicus*. As Spinoza believed that Monarchy, Aristocracy, and Democracy had each special advantages of its own, he did not consider it important to determine the relative value of these modes of government. He simply showed how the constitution should be drawn up in each case, so that the individual might have the opportunity to develop his own nature. But while he did not institute a systematic inquiry in reference to the point indicated, he incidentally gave expression to his opinion in regard to it. In the *Tractatus Theologico-Politicus* he declared that Democracy is the ideal form of the State, as it is best adapted to guarantee the liberty of the citizen. In the *Tractatus Politicus*, however, he regarded the State as existing primarily for the purpose of affording protection. Hence he was inclined to view the aristocratic form of government as the best, since it was in his opinion the strongest and most stable. This change must be attributed partly to the circumstances of the times and partly to the fact that in his later years Spinoza was more influenced by practical considerations.

DAVID IRONS.

Lehrbuch der allgemeinen Psychologie. By Dr. JOHANNES REHMKE, Professor der Philosophie zu Greifswald. Hamburg and Leipzig, Leopold Voss; New York, G. E. Stechert, 1894.— pp. 582.

The author's point of view is the purely psychological one. It is based on the opinion that the correct explanation of any subject of study can be given only by the subject itself. Professor Rehmke thinks, therefore, that the life of the mind, or 'soul,' should be explained scientifically out of and through itself. While not underrating the value of psycho-physical research, which nowadays monopolizes the attention of so many investigators, he does

not consider it as belonging to the proper domain of psychology, but thinks that, on the contrary, it must of necessity have "general psychology" for its foundation, if it is to make good its claim to constitute a strictly scientific investigation. In this respect he differs radically from those who consider psycho-physical research as the introduction to, and the foundation of, psychological science.

This purely psychological standpoint, which reminds us of that occupied by Reid, Stewart, and Hamilton, is considered by the author as the natural consequence of that law of science, according to which the principles governing any subject of investigation should be determined by the peculiar nature of that subject. For this reason Professor Rehmke's method is analytical, since the analysis of a subject is self-disclosure, which alone introduces one into the secrets of its inmost nature. According to the author's view, only the analysis of the actual life of the soul can have "psychology as a science" for its result. In accordance with this position, he places first among the means of psychological investigation the immediate consciousness on the part of the investigator of his own mental life, *i.e.*, introspection; since all consciousness of mental life other than his own can be only mediate, and must be interpreted by such conceptions as the investigator has first gained through introspection.

The work gives the results of this purely psychological investigation of mental facts in three parts: (1) "Das Seelenwesen," *i.e.*, the *general conception* of the soul as derived from the manifestations of mental life; (2) "Der Seelenaugenblick," or, the union of the different elements forming the *content* of every single moment of our soul-life; (3) "Das Seelenleben," or, the *laws* governing the *changes* within the soul as a "concrete individual." Review will follow.

AUGUSTIN KNOFLACH.

The following books have also been received:—

Agnosticism and Religion. By J. G. SCHURMAN. New York, Charles Scribner's Sons, 1896. — pp. 181.

Regeneration. A Reply to Max Nordau. (Anonymous.) New York, G. P. Putnam's Sons, 1896. — pp. xiii, 311.

The Primary Factors of Organic Evolution. By Professor E. D. COPE. Chicago, The Open Court Publishing Co., 1896. — pp. xvi, 547.

Fundamental Principles of the Metaphysic of Ethics. By IMMANUEL KANT. Translated by T. K. ABBOTT. London and New York, Longmans, Green & Co., 1895. — pp. 102.

Logic. An Introductory Manual. By F. RYLAND, M.A. London, George Bell & Sons, 1896. — pp. xiii, 286.

The Jewish Scriptures. By A. K. FISKE. New York, Charles Scribner's Sons, 1896. — pp. xiv, 390.

The Psychological Index, No. 2. A Bibliography of the Literature of Psychology and Cognate Subjects for 1895. Compiled by L. FARRAND

and H. C. WARREN. New York and London, Macmillan & Co., 1896.—pp. iv, 90.

Association. Monograph Supplement No. 2 of the *Psychological Review*. By M. W. CALKINS. New York and London, Macmillan & Co., 1896.—pp. vii, 56.

Die Lokalisationstheorie angewandt auf psychologische Probleme. Von GEORG HIRTH. Zweite vermehrte Auflage. München, G. Hirth, 1895.—pp. xxiv, 112.

Abhandlungen zur Geschichte der Metaphysik, Psychologie, und Religionsphilosophie in Deutschland seit Leibnitz. Hefte 1, 2, 3, 4. Von LUDWIG STRUMPELL. Leipzig, A. Deichert, 1896.—pp. 91, 64, 134, 71.

Beiträge zur Psychologie und Philosophie. Herausgegeben von Dr. GÖTZ MARTIUS. Erster Band, 1. Heft. Leipzig, Wilhelm Engelmann, 1896.—pp. 159.

Die Lehre von den spezifischen Sinnesenergien. Von Dr. RUDOLF WEINMANN. Hamburg und Leipzig, Leopold Voss, 1895.—pp. 96.

Die Willensfreiheit. Von Dr. PAUL MICHAELIS. Berlin, R. Gaertner, 1896.—pp. 56.

Studien zu Methodenlehre und Erkenntnisskritik. Von FRIEDRICH DREYER. Leipzig, Wilhelm Engelmann, 1895.—pp. xiii, 223.

Grundzüge der wissenschaftlichen und technischen Ethik. Von Dr. F. BON. Leipzig, Wilhelm Engelmann, 1896.—pp. 166.

Le réalisme métaphysique. Par ÉMILE THOUVEREZ. Paris, Alcan, 1894.—pp. 282.

Du fondement de l'induction. Par J. LACHELIER. Deuxième édition. Paris, Alcan, 1896.—pp. 173.

Les caractères et l'éducation morale. Par FRÉDÉRIC QUEYRAT. Paris, Alcan, 1896.—pp. viii, 171.

Les principes du positivisme contemporain. Par Dr. JEAN HALLEUX. Paris, Alcan, 1895.—pp. 351.

Essai sur le libre arbitre. Par G. L. FONSEGRIVE. Deuxième édition. Paris, Alcan, 1896.—pp. 592.

La théorie platonicienne des sciences. Par ÉLIE HALÉVY. Paris, Alcan, 1896.—pp. xl, 379.

NOTES.

The editors of the REVIEW hope that shortly after the appearance of the present number, subscribers will receive Supplement No. 2, containing a further installment of the Kantian Bibliography and complete indexes to the whole work so far published. For the convenience of those who wish to bind the whole into one volume, it has been decided to reprint the portion formerly published as a series of articles in the REVIEW. This may be obtained from the publishers at the rate of \$1.00 per copy. The paging of the reprinted portion has been made continuous with that of the Supplements, so that the whole will form a single volume of more than 600 pages, furnished with complete indexes.

A reprint of Lotze's *Medicinische Psychologie*, which has been for a long time out of print and exceedingly rare, has been announced. It may be ordered from the Dieterich'schen Universitäts-Buchhandlung (L. Horstmann) in Göttingen.

Professor James Seth of Brown University has accepted a call to the chair of Moral Philosophy in Cornell University.

Dr. R. M. Wenley of St. Margaret's College, Glasgow, has been appointed Professor of Philosophy in the University of Michigan.

E. B. Delabarre, Professor of Psychology in Brown University, will have charge of the Harvard Psychological Laboratory during the absence of Professor Münsterberg.

H. C. Warren, M.A., has been appointed Assistant Professor of Experimental Psychology in Princeton University.

Through the efforts of the editors of the *Revue de Métaphysique et de Morale*, a complete edition of Descartes' works is to be published under the auspices of the Minister of Public Instruction in France. The scientific section of the work has been entrusted to M. P. Tannery, and the philosophical part to M. Ch. Adam, professor of philosophy at Dijon. The edition will comprise about ten volumes. The publication will commence in 1896 (the three hundredth anniversary of the birth of Descartes), and two volumes will appear each year until 1900. The regular price of each volume will be twenty-five francs, but subscribers who order through the *Revue de Métaphysique et de Morale* obtain a reduction of ten francs per volume. Those who wish to take advantage of this special offer should communicate with M. Xavier Léon, directeur de la *Revue de Métaphysique et de Morale*, 5, rue de Mézières, Paris.

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THE RELATION OF INTUITIONISM TO THE ETHICAL DOCTRINE OF SELF-REALIZATION.

OF the more recent forms of literary activity within the philosophic world, one of the most prominent is that of the school making Self-realization the end of life. This school draws its formula from Personality, — ‘Be a Person’; and takes Dialectic Evolution as the key to the world’s history, saying that ‘the rational is the real,’ and that the world’s advance has been according to the Logic of the Categories. Within this school, the influence of Hegel is in the ascendant; but more recent developments show the effects of the return upon Kant, giving prominence to ethical thought, — a prominence much more according to the mind of Kant than the mind of Hegel. In the earnestness and eager propaganda of the school, we witness, besides, the influence of the intensely practical bias of British and American thought. The activity of this school has been in a high degree stimulating and inspiring to the younger thinkers on both sides of the Atlantic. Its energy gives it additional value as a factor in modern thought, inasmuch as it is an offset to the rival movement which concentrates on Experimental Psychology, absorbing its disciples in research as to the action of nerve and brain. The Neo-Hegelian school is at the opposite extreme from the Experiential or Sensational school, which in the department of Ethics has its leaders in Mill, Bain, and Sidgwick, and its ethical formula in the maxim, ‘The greatest happiness of the greatest

number.' The latter makes all knowledge depend on experience; the former is idealistic, in its leading type monistic, interpreting all history as the movement and manifestation of the Eternal Mind. Both are opposed to Intuitionism as a theory of knowledge, the one regarding an intuition of truth by the inherent power of the human mind as an unwarranted assumption; the other as an inadequate interpretation of the conditions of human thought. My design here is to consider the relation of the ethical doctrine of Self-realization to Intuitionism as a theory of our knowledge of ethical law, or of the rational conditions of ethical life.

It is desirable at the outset to make clear my standpoint as an Intuitionist, with the view of defining my own responsibility, and affording guidance to critics. The Intuitionist school places the ultimate test of ethical distinctions in Thought, not in Feeling or Emotion, assigning a dependent and subordinate place in morals to Feeling. Nevertheless, the theory offers no objection to the claim that there is Ethical Feeling strictly so called, — "some internal sense or feeling which Nature has made universal in the whole species," as Hume declared. That our ultimate appeal, however, is to Thought, is in a sense admitted on all hands. As the spokesman for the Utilitarians, Sidgwick's statement may be accepted: "Appeals to the reason are an essential part of all moral persuasion, and that part which concerns the moralist or moral philosopher, as distinct from the preacher or moral rhetorician."¹ The Intuitionist goes beyond this, holding that Reason itself supplies the principles of rectitude, which cannot be reached by induction from experience, as all rules of expediency are. Intuition of self-evident truth has been maintained in a variety of forms, the stages of advance in the structure of the theory being well known. The progress of thought can be readily traced through these cursory allusions, — Des Cartes' "innate ideas"; Malebranche's "necessary truths which are immutable by their nature"; Leibnitz' "eternal verities, which are absolutely necessary, and the opposite of which implies a

¹ *Methods of Ethics*, 3d ed., p. 25.

contradiction"; Reid's "first principles of morals, whose truth is immediately perceived without reasoning"; Kant's "Categorical Imperative," of which every man is conscious because "reason is given to man as the governor of his will to constitute it good." These familiar phrases show the common doctrine of the school, and at the same time the changes which have marked its development, as we trace its history from Des Cartes to Kant; from the recognition of innate ideas to the criticism of the conditions of knowledge, distinguishing the *a posteriori* from the *a priori* in consciousness. A glance down the line shows the difference between the objective and subjective; between 'truths,' 'laws,' 'principles,' and the conditions of knowledge, amongst which 'intuitions of the reason' appear as highest in rank. When, then, we speak of lower and higher intuitions, and of the discursive, reflective, or inductive process exercising all its activity between these poles, I take these three features to be essential characteristics of the intellectual activity of man, holding that every scheme of thought is incomplete which dispenses with any one of them; and that it misinterprets our intelligent procedure by disregarding higher intuitions as fundamental to our rational life. This is what I propose to show, without committing myself to the specialties of 'innate ideas,' or of the old Scottish formula as to 'truths which we cannot but believe,' or to the extreme formalism of Kant's Ethics.

Readers may more readily judge of the position I undertake to defend, if some reference is made to Sidgwick's criticism of Intuitionism. This will allow of a brief indication of what is inapplicable to the Intuitionism of the day. Sidgwick has himself so much felt the need of modifying his representation that a reference to the contrast between the first edition of the *Methods of Ethics* and the fifth edition, will pretty well indicate what the Intuitionism of to-day is; and how much Neo-Hegelian critics need to modify their representations, following the good example of our author. If the reader refer to the table of contents in the first edition of Sidgwick's *Methods*, he will find the words: "The fundamental assumption of Intui-

tionism is that we have the power of seeing clearly what actions are in themselves right and reasonable." There is no Intuitionist of to-day who would state the fundamental assumption in such terms, inasmuch as the fundamental assumption is intuitive knowledge of *principles*, or *laws* of conduct, not an immediate perception of the qualities of "actions in themselves reasonable." For the latter, knowledge, statement of rules, reasoning on actions and their relations, are held to be needful. This passage disappears from the third edition. There we read the following : "I employ the term Intuitionism, — in the narrower of two legitimate senses — to distinguish a method in which the rightness of some kinds of action is assumed to be known without consideration of ulterior consequences" (xvii). This also is erroneous, as will appear by the statement of any representative ethical law. Utilitarians, Intuitionists, and Neo-Hegelians are agreed in accepting Justice and Benevolence as examples of ethical law. That these laws determine right conduct "without consideration of ulterior consequences," it is impossible to maintain. All that can be intended is that ethical law carries its own authority, irrespective of exact measurement of the probable or actual amount of advantage accruing. The law which distinguishes action as right or wrong must take account of consequences. Principles of conduct cannot be presented to the mind without reference to the outgoing of personal energy. Nor is Professor Sidgwick successful in his classification of different phases of Intuitional theory as Perceptive, Dogmatical, and Philosophical. Trace the history of the Rational school from Des Cartes to Kant, and attempt to group the names under these heads, and the scheme of classification will fall to pieces. A perceptive intuition of the qualities of action has no representative. Of the dogmatic form, it is said that the fundamental assumption is, "that we can discern certain general rules with really clear and finally valid intuition." But this is not offered as an assumption. Justice and Benevolence are admitted by all men to be laws of our life ; no one undertakes to say that Injustice and Malevolence are right. These are laws con-

fessedly valid. However much men dispute about their application in given circumstances, all these disputes imply their authority. Professor Sidgwick himself grants that "philosophic minds have no disposition to question its general authority," even while he subjects the theory to scrutiny, as to its sufficiency and completeness of scientific form. The positions accepted by the critic are significant. I give only a few examples. "An intuitive operation of the practical reason seems to be somewhere assumed in all moral systems."¹ "The peculiar emotion of moral approbation is, in my experience, inseparably bound up with the conviction, implicit or explicit, that the conduct approved is 'objectively' right — that is, that it cannot without error be disapproved by any other mind."² "There are certain abstract moral principles of real importance, intuitively known."³ "There are certain absolute practical principles, the truth of which, when they are explicitly stated, is manifest."⁴ "I find that I undoubtedly seem to perceive, as clearly and certainly as I see any axiom in arithmetic or geometry, that it is 'right' and 'reasonable' for me to treat others as I should think that I myself ought to be treated under similar conditions."⁵

To all Intuitionists it must be satisfactory to have the validity of their theory of knowledge of moral distinctions admitted by a thinker so competent, who is besides the adherent of an opposite school of thought. There is additional significance in the result, inasmuch as the Neo-Hegelians commonly save themselves the work of criticism, by referring to "an excellent criticism of Intuitionism in Sidgwick's *Methods of Ethics*." The outcome of this criticism is the admission that "an intuitive operation of the practical reason seems to be somewhere assumed in all moral systems."

There is no upholder of Intuitionism who will claim that the theory has been fully worked out, or will deny that many difficulties are to be encountered in attempting its completion. There has not as yet been an adequate psychology of the gen-

¹ *Methods*, 1st ed., p. 26.

³ *Ibid.*, 3d ed., xxvi, in the text.

² *Ibid.*, 3d ed., p. 28.

⁴ *Ibid.*, p. 378.

⁵ *Ibid.*, p. 503.

erally admitted facts that men unanimously recognize moral laws, yet are far from having clear conceptions of their full significance. Thus, all men appeal unreservedly and unhesitatingly to Justice ; nevertheless no man is ready with an adequate statement of its scope. Since the days of Socrates onwards, philosophic thought has been directed on this strange antithesis in the action of rational life, and we have not even now an adequate treatment of the facts. I acquiesce in these words of Professor Sidgwick : "By philosophic minds, the 'Morality of Common Sense' (as we may call it), even when made as precise and orderly as possible, is often found unsatisfactory as a system, although they have no disposition to question its general authority."¹ Nevertheless, as a vindication of the theory, I ask nothing more by way of admission from an opponent than the last clause of this sentence. To this I add only a single quotation from Kant as giving the cue which the student needs in order to follow up the matter : "No doubt the conception of *right*, as employed by a sound understanding, contains all that the most subtle investigation could unfold from it, although, in the ordinary practical use of the word, we are not conscious of the manifold representations comprised in the conception."²

I turn now to consider what advance in the presentation of philosophic results we are offered under the ethical doctrine of Self-realization. How do the adherents of this school propose to deal with Kant's analysis of the notion Duty?³ If we are not to dispose of this notion as an illusion, if we say that Duty implies an ideal, which is a common possession of men, presenting a common end of action, what have the defenders of Self-realization to offer as a philosophy of the facts?

The theory needs to be considered from two standpoints, — the high idealistic position of Hegel, where Green stands without misgiving, though not with "undue assurance" (p. 189),

¹ Sidgwick, *Methods of Ethics*, 3d ed., p. 97.

² Kant's *Critique of Pure Reason*, Meiklejohn's Translation, p. 36.

³ *Groundwork of the Metaphysics of Ethics*, ch. I.

and the more humble position of a rational psychology which some adherents of the school seem to prefer. The higher must include the lower. There cannot be a philosophy of the soul which is not a philosophy of the soul's procedure. Whatever is written in support of a monistic scheme of the universe must seek to account for the facts of experience, and more expressly for the wants and thoughts and struggles of human life. Whatever it be as a metaphysic, the theory must be an ethic, offering some reasonable account of the conception of right, as it appears in consciousness and is applied in conduct.

As a statement of the Self-realization theory in its monistic or idealistic form, I give the following summary from Green's *Prolegomena to Ethics*: "Through certain *media*, and under certain consequent limitations, but with the constant characteristic of self-consciousness and self-objectification, the one divine mind gradually reproduces itself in the human soul. In virtue of this principle in him, man has definite capabilities, the realization of which, since in it alone he can satisfy himself, forms his true good. They are not realized, however, in any life that can be observed, in any life that has been, or is, or (as it would seem) that can be lived by man as we know him; and for this reason we cannot say with any adequacy what the capabilities are. Yet, because the essence of man's spiritual endowment is the consciousness of having it, the idea of his having such capabilities and of a possible better state of himself, consisting in their further realization, is a moving influence in him. . . . Our next step would be to explain further how it is that the idea in man of a possible better state of himself, consisting in a further realization of his capabilities, has been the moralizing agent in human life" (pp. 189-190).

This scheme of the universe, developed in monistic form, makes *the one divine mind* the immediate cause of human conduct, acting "through certain *media* and under certain consequent limitations." To examine this scheme as a whole is quite beyond the purpose of this paper. As a scheme of existence, it is a long way removed from questions concerning intuitive knowledge of moral law. The intuitive theory and

the theory of Self-realization are at one in tracing manifestations of divine attributes in the moral government of this world. They differ in this, that Intuitionism represents man as the author of his own action ; the theory of Self-realization in its monistic form represents "the one divine mind" as the cause of the actions of men. I reject the latter view ; but I do not here argue the matter. I deal only with rival ethical theories.

It will be noted that the Self-realization theory does not seem to gain much in comparative clearness as to the ethical ideal. If Sidgwick charges against Intuitionism that it is not "as precise and orderly" as we could desire in its statement of the rules of conduct, we learn from Green that in making Self-realization an end, "we cannot say with any adequacy" what man's capabilities are. From these two statements we may reasonably conclude that there must be in our common moral conceptions a good deal that is clear, while, at the same time, many reasonable inquiries remain unanswered. In such a case the deficiency charged against the theories may properly be charged against thought itself. In that case, we conclude against the two theories, that neither is as yet fully worked out so as to meet the test of philosophic demands.

My present aim may be served, if I pass now to the psychology of ethics offered by the theory of Self-realization as depending on exercise of human intelligence. There is an awkwardness at the outset, from the fact that Intuitionism is avowedly a theory of our *knowledge* of moral law, including Self-realization as at least a part of ethical life ; whereas the rival theory deals with the *end*, and does not offer as "precise and orderly" an account of our knowledge as seems needful for its own vindication in representing Self-realization as the sole end of a moral life. The only way of escaping from this awkwardness is to test both theories, first by reference to the *knowledge* of ethical law, and next by reference to the ethical *end* to which ethical law directs our efforts.

In prosecuting this criticism, I shall take illustrations and references either from Green, who has been the leader of the English school, or from younger representatives who have been

content to develop a theory of conduct on the basis of the rational life as supplying its own direction. Professor Dewey, in his *Outlines of Ethics*, gives an admirable example of a clear and attractive presentation of the theory, to which reference may be made with advantage. Other examples we have in Muirhead's *Elements of Ethics*, Mackenzie's *Manual of Ethics*, and D'Arcy's *Short Study of Ethics*.

There is no need for formal discussion of the comparative importance of the conception of *law* and the conception of *end*, — of the notion 'right' or 'duty,' and that of the 'good,' or 'chief good' in life. The relations of the two will appear as we advance. I begin here with the notion *right*, or *duty*, which plays so conspicuous a part in life, leading us to contemplate 'duty for duty's sake,' a consideration giving elevation and force to the rational life. On this theme, so eminent a member of the English school as F. H. Bradley, writes admirably in the fourth Essay, in his *Ethical Studies*. He says: "Duty for duty's sake says only, 'Do the right for the sake of the right'; it does not tell us what right is" (p. 143). This is in itself a striking fact, that we all have a notion of doing the right for the right's sake, even without having before us a well-defined idea of what the right is. On the other hand, how true it is, as Bradley declares, that "everybody knows that the only way to do your duty is to do your duties; that general doing good may mean doing no good in particular, and so none at all, but rather perhaps the contrary of good" (p. 138). How, then, do we know our duty, and our duties, and the obligation "to do the right for the sake of the right"?

If we take the high idealism of Green, the answer is that the divine mind "reproduces itself in the human soul." It is a divine principle which accounts for knowledge and progress. How, then, shall we represent this as a theory of moral conduct? If duty is to be done, it must be known; and this knowledge is alleged to be given in course of the operation of the divine mind by an immediate insight. This is an Intuitional theory, resting on a metaphysical basis. It supplies a good illustration

of Sidgwick's statement : "An intuitive operation of the practical reason seems to be somewhere assumed in all moral systems." But the theory is weakened by inevitable references to *desire* and self-gratification, and the generalized position which Green upholds : "Self-satisfaction is the form of every object willed" (p. 161). Rather than this, we should prefer to stand by Kant, when he makes duty independent of all pathological elements, even though this has been largely denounced as 'rigorism,' under considerable misapprehension of Kant's meaning, as I think. If we are contemplating Divine agency, the notion Duty seems incongruous ; if, however, the notion Duty be common to us, if it be natural, if it be typical of the rational life, it is unexplained here. Intuitionists concur in the representation of God as immanent in the universe, and also as directly working for good within the consciousness of man. They are ready to say with Wordsworth that there is

" A motion and a spirit that impels
All thinking things."

They agree with Mr. Arthur J. Balfour, when he says : "I do not believe that, strictly speaking, there is any such thing as 'unassisted reason'";¹ but this is a belief in assistance to human effort, the result being due to "a coöperation between the human soul which assimilates and the Divine power which inspires."² If we are to travel on the path of Idealism, I prefer the leading of Fichte, with his view of the ethical life as the approach to God, rather than the leading of Hegel, representing the Divine mind as the immediate cause of our activity ; I think Fichte nearer the truth in showing how humanity hinders its own progress, than Hegel is in representing a manifestation of Divine agency in the blending of evil with good. There is very widely among thinkers a sympathy with Mill in his sense of relief when escaping the belief that God is the author of Evil, however incoherent the theory on which Mill's thought depends.

Next, I take the scheme as a rational psychology of morals,

¹ *The Foundations of Belief*, p. 327.

² *Ibid.*, p. 329.

apart from the high ideal theory. My object is to consider how far it gives us a psychology of moral thought. Professor Dewey has well said that the business of Ethics is to "detect the element of *obligation* in conduct."¹ Suppose the end to be Self-realization, how do we reach a philosophy of the conception of Duty? Towards an answer, it is not enough to show that "self-satisfaction is the form of every object willed." From the days of Aristotle downwards, it has been admitted that men go wrong in seeking self-satisfaction, some seeking it in pleasure, others in wealth or in fame. If men are to do rightly, the first requisite is to think rightly, and this can be secured only, as Bradley says, by reference to duty and duties, and by contemplating "the right for the sake of the right." Moral agents must know the law of their life; they must, *ex hypothesi*, know and feel that Self-realization is the law of conduct. Only by intelligent effort directed towards the ideal end is it possible to make advance in the task of self-development. In organic life, development is gained by physiological laws under favorable outward conditions. It is not possible with a moral life; not without thought, guiding effort in accordance with laws of conduct, can there be true moral progress. There must be something higher than our likes and dislikes, or our desires; we must have settled for ourselves what the grand ruling desire of man *ought* to be. Hence our continual reference to principles or laws of conduct. "Trigonometry must state the principles by which land is surveyed, and so Ethics must state the end by which conduct is governed."² It is quite as needful to have principles of conduct as to have principles of trigonometry, if the end is to be reached. No theory of conduct can dispense with conceptions of justice and benevolence, whatever the end to be secured. If these are given in our intelligence, as Socrates insisted, this implies intuitive knowledge. The Intuitionist and Neo-Hegelian theories are somehow, and to some extent, equivalent; each is involved in the other, for the Intuitionist also makes Self-realization an end, while Self-realization implies knowledge of the end. On this account it is that

¹ *Outlines of Ethics*, p. 1.

² *Ibid.*, p. 89.

philosophy falls back upon ultimate truths as the basis of personal progress. Hence "an intuitive operation of the practical reason seems to be somewhere assumed in all moral systems." Kant's analysis of the notion Duty retains its classical value; without this notion in the foreground, we have no beginning of moral development; without its persistent influence in consciousness, no steady advance is made towards an ideal life. If the 'good' — the 'chief good' — is to be attained, it must first be known as such, and must be held in view as the end towards which individual effort is being directed. For a philosophy of life, this knowledge must be detected, traced to its source, and its efficiency illustrated. In the attempt to meet this demand, the theory which makes Self-realization the end of life is seen at its weakest. Its expounders are averse to say that they are Intuitionists first, in order to be evolutionists next; they are not disposed to state quite unreservedly what grasp the intelligent agent has of the conditions of advance. The grand end comes into view, but, as it were, only by the fading away of the picture of the primary conditions of common effort. It seems as if the theorist were afraid of the notion 'duty,' — if not quite as averse to the word as Bentham was, — being enamoured of 'the chief good.' It is the difficulty of looking at once behind and before which seems to occasion perplexity to the philosopher as he gets *in medias res*. We are regarded as railway travellers, getting glimpses of scenery as we pass, who have no concern with the preliminary work in getting up steam and providing for our moving along the line. There is 'an objective morality,' we allow; and this means a great deal, probably so much as to induce us to return upon Kant for a philosophy of it. But this is the manner in which the newer theory prefers to describe it: There is "an objective ethical world realized in institutions which afford moral ideals, theatre, and impetus to the individual." "The *prevalent* wish to be better constitutes the better being. Whether or no in any individual case it shall obtain that prevalence depends (to use the most general expression) on the social influences brought to bear on the man." But how is the result to be

attained? "By giving the most adequate account possible of the moral ideal ; by considering the process through which the institutions and rules of life, of which all acknowledge the authority, have arisen out of the effort, however blindly directed, after such an ideal, and have in their several measures contributed to its realization." All philosophic thinkers, certainly all Intuitionists, will agree that such statements as these have so much truth in them that there is little call for criticism. But can we take them as supplying adequate accounts of the facts? Agreeing as far as is possible, the representation is incomplete, being defective in statement of the rational basis of moral progress. We are all agreed that an objective ethical world is realized in institutions, and that social influences greatly affect our life ; but the source of this influence is that which philosophy must seek. The moral ideal must be in the individual in order that it may be in society ; and it must be in social life in order that it may be realized in institutions. Our question is : How have "the institutions and rules of life" been originated ; how is it that we "acknowledge the authority" ; how is it "that conscience in the individual, while owing its education to those institutions and rules, is not properly the mere organ of any or all of them, but may freely and in its own right apprehend the ideal of which they are more or less inadequate expressions" ? Taking the theory on its own terms it is incomplete, and its inadequacy is apparent in the absence of a philosophy of the fundamental conditions of thought. What is wanting is Kant's analysis of the notion Duty. All agree that the "institutions and rules of life" presented by society are "inadequate expressions of the ideal" ; and so must be the theory which leans upon them for its authority. As to an Ethical Philosophy, "its business is to detect the element of obligation in conduct" ; and it is not detected here, for though we admit the "authority" of the institutions and rules, we proclaim their inadequacy, and declare that "conscience in the individual," even while educated by them, regards them as inadequate ; we recognize, as Green further admits, discrepancies "between authorities and an inner law." Equally insufficient is the

reference to "character" as if it were the key to our life, for we criticise our character also by reference to the ideal before whose authority we bow. What is wanting in the theory is a philosophy of our knowledge of "the inner law," without which "institutions and rules," and the "objective ethical world" itself, are inexplicable.

From the incompleteness of the theory of Ethical Knowledge, there arise further difficulties as to the end, described as 'the good,' — 'the supreme good,' — which is alleged to be Self-realization. Properly, the end must be the expression of the law. We may, as suggested, test conduct by the end; but we must judge of the end by reference to the laws of the life. We cannot deal with 'norm, standard, or end' as the same. The standard must be prior to the end, else we cannot say that 'conduct' must have 'a reason,' adding that 'the reason is present to the mind of the agent.' Without this, a theory of rational activity is incomplete. Consciousness must include reason for acting, vision of the end, and determination to seek this end by the effort put forth. These features must reappear unceasingly in thought, — must be sustained persistently, — if the life as a whole is to show moral advance. 'The inner law' must first rule thought in order to rule action. How wide this thought must be, if it is to regulate the possibilities of human activity, taking account of conduct in its entirety, so that "the individual finds and conforms to the law of his social placing"! All agree that 'self-realization' is a conspicuous end in a moral life, the development of self, in the fulfilment of duty, and for still larger achievements in this direction. But the question arises: Does duty end in this? If moral worth must be in the agent, does it therefore follow that the end of all must culminate in his own experience? Must we, then, say: "Self-satisfaction is the form of *every object willed*"?¹ Is it possible to regard this as a statement of the activity of a moral life? Can we interpret justice in this way, as if it were a means only to self-satisfaction? Can we explain benevolence as a roundabout phase of self-regard?

¹ Green, *Prolegomena*, p. 161.

Thought must, indeed, be self-centred as belonging to our consciousness ; government must be concerned with our own activity, carrying with it all the results which naturally follow in our own life-history ; but the law of right conduct, and the motive for well-doing, and the end for which we live, all outstretch self-satisfaction. The grand ideal must figure in nobler guise, justice for justice' sake, a disinterested benevolence, the Right for its own sake, the Right within myself, the Right in relation to all around and in relation to the Supreme Ruler, to whom I owe all obligation. Greatly better than this theory of Self-realization is that of Kant. Criticism may have its way against Kant's abstraction, — the bare form of the law, — but Kant was nearer a philosophy of moral life when he said : “ It is nothing else than the representation of the law itself, which, determining the Will, constitutes that special good we call moral, which resides in the person.”

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THE FOURTH DIMENSION OF SPACE.

MR. SCHILLER'S summary of the discussion on this subject in the March number of this REVIEW indicates very clearly that the advocates of a fourth dimension latterly show a decided tendency to withdraw from some of their original claims, but it omits to notice a matter of very considerable importance in the problem which has received very scant attention on the part of the defenders of the doctrine, and has not been developed by its opponents, whose arguments often imply it. I allude to the purely logical principles at the basis of the matter. That these must first be satisfied, I think, is shown by several facts: (*a*) the tendency to abandon certain arguments in the case; (*b*) the absence of all deductive proof for a fourth dimension; (*c*) the want of data in experience to make the claim inductively rational; (*d*) the dependence upon analogies and symbolic conceptions as evidence.

But I shall waive all proof of the claim here made and allow the discussion itself to show its truth. The first step is to consider the general grounds upon which the doctrine is supposed to rest, as stated by some of its ablest advocates. They are: (*a*) the empirical nature of the Euclidean axioms; (*b*) the relativity of knowledge in general, shutting out a dogmatic denial of the hypothesis; (*c*) the Kantian doctrine of space, which, though it may prove the inconceivability (non-imaginable nature) of a fourth dimension, supports its possibility beyond the limits of experience; (*d*) the necessities of non-Euclidean geometry, especially for pseudo-spherical surfaces.

The first thing to be said regarding these arguments is that, if the laws of logic have first been respected, they may be entitled to some weight, but if these laws have been violated, the arguments can count for nothing. Hence I wish to call attention to certain irrelevancies in them, in order to show how the prior conditions of all intelligible discussion in this problem

are certain logical principles that reveal very clearly where the confusion originates in the controversy. This irrelevancy is that which connects the question with the problems about empiricism, intuitionism, transcendentalism, realism, idealism, etc. These, in fact, have nothing to do with the matter until after we know the logical terms of the problem. In all cases we have to do with certain conceptions which carry with them the same implications *logically*, whether we choose to regard them as real or ideal, objective or subjective, empirical or intuitive. What I have to consider, therefore, is the logical use made of the conceptions 'space,' 'property,' 'dimension,' 'mathematics,' etc., in the attempt to prove a fourth dimension.

Now I shall first state a few simple logical principles upon which I shall proceed, and which determine the limits of legitimate reasoning in this problem. They are perfectly familiar laws to the logician, but seem to be wholly ignored by mathematicians. They are summarized in this one proposition: *The transfer of predicates and implications from one conception to another is limited to a qualitative identity between them.* This can be clearly illustrated by reference to the relation between certain conceptions and certain tendencies in the growth of knowledge.

Concepts express certain definite relations between genus and species, and between different species. We may express this generally by the formula that their extension varies inversely with their intension. In common parlance, this is only to say that the number of individuals denoted by the genus is greater than the number denoted by the species, while the number of qualities denoted by the species is greater than that denoted by the genus. It is not necessary here to assert or defend the *absolute* universality of this rule, but only that it is unquestionable in a certain class of conceptions, and these are the conceptions with which we have to deal in our present discussion. Now the plain simple rule here is that we can never transfer the differential predicates of the species to the genus, and also that general formulas have to be modified to suit the

differentia of the species. For example, I cannot transfer the differential quality expressed by 'Caucasian' over to the concept 'man,' and I cannot express the meaning of 'Caucasian' by stopping with the predicates of the term 'man.' These are simple truisms, but they get great importance in connection with discussions that violate them, owing to the additions made to knowledge by intellectual progress.

The development of knowledge involves two different changes in conceptions. They may be widened or they may be narrowed in their import. These two processes are known to the logician as generalization and specialization. Until the new meaning becomes the only and fixed import of the term, it gives rise to equivocation. In this way an interchange of predicates and implications will occur, and often unconsciously. But this is the illusion for which intelligent men are required to be on the alert. This difficulty, however, is greatly increased by the several ways in which concepts may grow in denotation and meaning. First, concepts may increase or decrease in nothing but quantitative import. Secondly, they may increase or decrease only in qualitative import. Thirdly, quantitative and qualitative import may vary in an inverse ratio with each other. Thus the first of these processes occurs when a new individual or species is added to the genus, or an old one withdrawn, without affecting the conferentia (common qualities) expressed by it. Here the change does not affect the transfer of predicates. It is purely quantitative, and this is the peculiarity of all purely mathematical concepts. In the second process the change occurs when a new quality is added, or an old one withdrawn from a concept, without changing its quantitative import or extension. This change also does not affect the truth or universality of old propositions, and a transfer of predicates will not take place. No equivocation, however, will occur. But it is the third form that causes all the trouble. In this the extension may increase at the expense of the intension and *vice versa*. This occurs when a new species is added to a genus so as to decrease the intension, or a species withdrawn so as to increase the intension. In such cases the transfer of predi-

cates cannot take place. Or, to summarize the discussion, when conceptions change quantitatively, but not qualitatively, the transfer of predicates can be made with perfect logical impunity. When they change qualitatively, but not quantitatively, new predicates are added which are differentially distinct from the old ones, but there is no occasion for a transfer. But when quantitative and qualitative import vary inversely, a transfer of predicates cannot be assumed without proof. Now, since mathematics is limited to the quantitative concepts or qualities, and logic extends to both quantitative and qualitative meanings of terms, it is apparent how they come into relation with each other, and how a habit contracted in the quantitative determinations of mathematics may pass over to cases where the changes are qualitative as well. In mathematics we either do not deal at all with genus and species, but with whole and part, which are qualitatively identical; or, if we call the broader and narrower concepts 'genus' and 'species,' they are still qualitatively of the same import. But in logic, besides whole and part we deal with genus and species, which are qualitatively different from each other. The consequences of this may be brought out by illustration.

The instance is taken from the fluctuations in the conception 'metal.' In physics and chemistry brass and bronze are not metals; in common parlance they are. Now in scientific usage I can say, "All metals are elements"; in common parlance I cannot say it, because brass and bronze are compounds. Here, with the extension of the term 'metal,' I cannot carry the predicate of its narrower import with me. With this increase of extension, 'element' becomes the differentia of a species. Hence in any case where we undertook to define the differential quality of brass and bronze, we should have to call it non-elemental, not having any right to use the term 'element' to describe it, unless it also be generalized. On the other hand, the same process is illustrated by another interesting generalization of the same term. At one time it was assumed that a specific gravity greater than water was an essential property of metals. It was conceived as essential to a metal that it sink in water.

This conception excluded at least three of the alkali metals, potassium, sodium, and lithium. But the discovery that these substances possessed metallic lustre and probably other metallic properties, resulted in extending the class 'metals' to include them while diminishing the conferentia, and this in spite of the fact that their specific gravity is *less* than water. Now we have here a generalization of the term 'metal' in which we cannot carry with us the old proposition, "All metals sink in water." This relation now becomes the differentia of a species, and is no longer a conferentia. If the reverse process had taken place, it would have been necessary to have added a new predicate to the species.

The value of these principles will be apparent in the examination of the argument for a fourth dimension, most especially as it appears in Helmholtz' celebrated articles in *Mind*,¹ which have done more than anything else to make philosophers take the subject seriously. The first illusion of which he and mathematicians generally have been the victims, is not one which comes under the principles just enunciated, but is nevertheless an important weakness in their argument. It is the transference to the conception of space of assumptions and conceptions that are true of material substance. Now the mathematician tells us that geometry deals with the properties of space. Dimension is said to be one of these properties, if not the only one, and as there are admittedly three of these dimensions, the limitations of our empirical knowledge at once suggest the possibility of more of them. The only problem is to produce the facts which will either prove their real existence, or show that they are thinkable and possible. The fact that we know of no limits to the properties of matter, and that discovery constantly shows additions to our knowledge of new properties, forces, or modes of action (the Röntgen rays, for example), or at least new phenomena, stands in good stead to shut off dogmatic denials of other than the known dimensions of space. But it is precisely here that the illusion occurs. The mathematician permits himself to be fooled by words, and pays no

¹ Vol. I, p. 301 ; vol. III, p. 212.

attention to their real import. He assumes without criticism that the relation between space and its dimensions is the same as that between matter or a metaphysical substance and its properties. This assumption may be absolutely denied, and I certainly deny the right to make it. The illusion arises first from the language about the 'properties' of space, and secondly from identifying 'properties' with dimensions, while distinguishing tacitly between space and its 'properties' on the one hand, and space and its dimensions on the other. Metaphysical realities, subjects or substances, like matter, spirit, ether, etc., may have any number of properties, known and unknown. But we have no *a priori* right to carry this possibility over to space, because no one entertains for a moment the supposition that it is a metaphysical substance like matter or other reality. It is qualitatively distinguished from such conceptions. It may be that space possesses an indefinite number of properties, but we can neither assume the fact or possibility from what we hold to be true of matter, mind, and other subjects or substances, nor assume that we can treat the conception of space in the same way. We have to prove on other grounds that the conception of space is subject to the same treatment. What I contend for is, that we cannot logically pass, as the mathematicians do, from one of these conceptions to the other, and that propositions in the two cases, notwithstanding their formal resemblances, do not have the same meaning and implication unless proved on other grounds than this formal identity; so that the very first step in the argument for a fourth dimension is vitiated by presumptions which have no right to exist.

The whole problem of the advocates of a fourth dimension is to find a basis for non-Euclidean geometry. Euclidean geometry is admittedly based upon the three dimensions, and they assume that this new kind of geometry requires a new differential principle. They are at least formally correct, according to the principles established regarding the relation between genus and species or between different species. But we must examine what difference they assume to exist between the two kinds of geometry. If the two are the same, the demand for

a fourth dimension would be absurd, according to their own admission. If they are different, if non-Euclidean geometry is different from Euclidean, the difference must be either quantitative, or qualitative, or both. If it be merely quantitative, the qualitative principle or condition is the same as the Euclidean; if it be qualitatively different, then the new principle must be a new quality, a new property of space, as the fourth dimension is supposed to be. If the difference be both quantitative and qualitative, then the distinction between Euclidean and non-Euclidean geometry is not absolute, but they interpenetrate in the dimensions determining Euclidean geometry. After ascertaining the alternatives between which we are placed, the only question that remains to determine concerns the conceptions of the problem entertained by non-Euclidean mathematicians. The second alternative is the one maintained; and this with its qualitative distinction between the two kinds of geometry, implies that the fourth dimension must be a new quality or property of space, or qualitatively different from the other dimensions. The first alternative is fatal because it limits the difference to quantity, the qualitative principle remaining the same, so that but one rational course is open to the mathematician, which is to affirm a difference of kind. We start, then, with the assumption that non-Euclidean geometry requires a principle for its basis qualitatively distinct from that of Euclidean geometry. What is the consequence of this step?

The basis of geometry is said to be the 'properties of space.' We may ask what is meant by the 'properties' of space, and this question proposes the problem of determining whether 'space' is synonymous with its 'dimensions,' or may include other 'properties' than dimension, and whether its 'properties' are the same as its dimensions. This problem ought first to be solved by the non-Euclidean geometer before he takes any other step. But I know of no attempt to do this. He has two alternatives. He may limit the intension of space to the dimensions, or he may extend it to include other properties than dimension, such as penetrability and divisibility or indivisibility. (I hold that space is absolutely indivisible, though it is

usually spoken of as divisible. In reality it is body that is divisible.) Now if space denote or imply other properties than dimension, we may ask what evidence is there that the so-called 'fourth dimension' is a dimension at all. The non-Euclidean agree that their geometry is based upon the 'properties of space.' This limits them to two alternative conceptions, assuming that the two geometries must be distinguished. Either 'space' denotes other properties than dimension, or in being limited to dimension we must suppose, as they do, that the fourth dimension is qualitatively different from the other three. The supposition that the 'fourth dimension' is different in kind from the other three, and at the same time that space denotes only the three dimensions, would imply that non-Euclidean geometry is non-spatial; that is, not based upon space at all, which is contrary to the original assumption. But, taking the two conceptions just mentioned, it should be noticed that the first may justify us in selecting some other property than dimension for the basis of non-Euclidean geometry. What reason have the non-Euclidean for distinguishing between the fourth dimension and some other property not a dimension at all, especially as they admit that this new 'dimension' cannot be pictured or represented in experience? Taking the second alternative, we find that a generalization either of the term 'space' or of the term 'dimension' has been made. If of the term 'space,' the 'fourth dimension' either becomes a non-dimensional property, or the basis of geometry has been altered in its conception, which might enable us to take any quality of anything as the principle of non-Euclidean geometry.

Let me make the case clearer by another form of statement. If we assume the qualitative difference between Euclidean and non-Euclidean geometry, there are four conceptions of space to be considered, three of them absolutely necessary to satisfy this assumption: (1) Space = three dimensions; (2) space = three plus the fourth dimension or n dimensions; (3) space = three dimensions plus other properties; (4) space = four or n dimensions plus other properties.

Taking space in the first of these three conceptions, the fourth dimension must make non-Euclidean geometry non-spatial, which is contrary to the supposition. On the third conception, the principle of non-Euclidean geometry is not a dimension, but some other property. Assuming the fourth conception, the non-Euclidean geometer must show the distinction to be made between the fourth dimension and other properties, especially that this dimension is qualitatively different from the other three. If not qualitatively different, non-Euclidean geometry falls to the ground as anything more than a modification of Euclidean geometry. This leaves, as the only alternative for the non-Euclidean, the second, which is the conception, and the only conception, of space that can present even a plausible claim in favor of a fourth dimension for the principle of non-Euclidean geometry.

Now, in regard to this second conception of space, the first remark is that it is an extension of the meaning involved in the first. But passing this by as unimportant, though necessary to non-Euclidean geometry, the second remark is that the term 'dimension' is either generalized in its import qualitatively, or it is a name to denote a non-dimensional property. The only other alternative is to hold that the three dimensions and the fourth are not different from each other. I want, therefore, to show the logical consequences to the doctrine from each one of these alternatives.

The assumption is that the fourth dimension is qualitatively different from the other three dimensions. It is, therefore, a species in contradistinction to them as other species. Now, when the term 'dimension' includes all of them, it denotes a common property, the *conferentia*, or genus; and cannot be used to denote the species. This would be in violation of the principle of logical division, which is that the same conception cannot denominate both genus and species. Assuming that it denotes only the genus, or common quality of all the dimensions, we find that both Euclidean and non-Euclidean geometry are based upon the same quality of space, which is contrary to the supposition. On the other hand, if it denote

only a species, it must be limited either to the three dimensions or to the fourth, if a qualitative distinction between them is to be maintained. If limited to the three, then it is not legitimate to call the 'fourth dimension' a dimension at all, and non-Euclidean geometry would be based upon a non-dimensional property, say penetrability or indivisibility, which is contrary to the original supposition. If it be limited to the fourth, then the other three are not 'dimensions' properly considered, and Euclidean geometry would be non-dimensional, which is also contrary to the supposition. The only alternative left is to apply the term equally to all four dimensions. But this identifies them qualitatively and breaks down the distinction between Euclidean and non-Euclidean geometry, which again is contrary to the supposition, unless we go outside of space altogether for the basis of the latter, which again contradicts the first assumption. Such a fatal set of dilemmas could hardly have been suspected on a first glance at the controversy; but they are there as long as we use the word 'dimension' in the case, and distinguish qualitatively between Euclidean and non-Euclidean geometry.

The fundamental fault of the mathematicians has been in extending the meaning of the term 'dimension' by adding a new species and calling it by the same name as the old. This mistake never occurs in the natural sciences. When a new species is discovered, increasing the extension of the genus, a new name must be adopted expressing the differentia by which this species is distinguished from the others. If the fourth dimension be a new species qualitatively different from the others, it should either not be called a dimension at all, or something should be indicated to determine the differentia by which it is presumably differentiated from the others. We may generalize the term 'dimension' if we choose, but we must not carry with it the differentia which separates the species; and we are equally forbidden to employ the same term for the species. The reply to this criticism would be that the differentia is expressed in the number of the dimension, and this reply is formally legitimate. But it is fatal in

two respects to the hypothesis of a new dimension qualitatively determined. First, if number be the differentia of the species, it is purely quantitative, and the basis of non-Euclidean geometry is not qualitatively distinguished from the Euclidean. Secondly, if the conception 'fourth,' *i.e.*, number, determines a qualitative differentia, then the first, second, and third dimensions should be qualitatively different from each other, which is contrary to the supposition of Euclidean geometry. They are assumed to express the same commensurable quality, while their supposed differences are only relations of direction from a given point.

The language easily lends itself to an illusion, because it is formally the same as that in which qualitative differences are actually expressed or implied. But in mathematics our first duty is to remember that our conceptions are primarily quantitative, and that when we go beyond purely quantitative distinctions we are transcending mathematics altogether.

What I have said here about the illusory nature of the language in the case is beautifully illustrated in the expression, "Space has dimension." This proposition resembles the ordinary intensive judgment (such as "Man is wise," where it is possible to have other predicates in the same subject) only when we conceive the subject, space, as possibly having other properties than dimension; but when the term 'space' is made convertible with 'dimension,' as is usually or always the case in mathematics, we should either not assume that "Space *has* dimension," or when using the phrase we should recognize logically its true import, namely, that "Space *is* dimension." For geometry, space and dimension are the same, and hence in reality to assert the existence of a fourth dimension is equivalent to saying that the three dimensions have a fourth or n dimension, or that the three dimensions are four or n dimensions. The absurdity of this is apparent, but it is concealed by the formal correctness of the proposition, "Space has properties," or, "Space has dimension." But the moment we see that, for geometry, space and its dimensions are the same, we are forced to recognize that the fourth dimension becomes a predicate of

the other three dimensions, which is contrary to the supposition of non-Euclidean geometry.

We are now prepared to examine some concrete fallacies and illusions of the same kind committed by Helmholtz in the celebrated articles in *Mind* already referred to, on the "Origin and Meaning of Geometrical Axioms." His argument here is to prove the empirical nature of geometrical axioms, and thus to avail himself of the inference, which the limitations of empiricism justify, that there are possibly other data in existence than the three known dimensions. In order to establish this empiricism, he undertakes to show that the axioms do not have the universal and necessary application which they are supposed to have. In this procedure he is half conscious of the principle that I have here laid down about the impossibility of transferring differential predicates when an increase in the extension of our concepts takes place, and the force of his argument derives all its influence from the truth of this principle. But he immediately violates the principle by equivocations which are due to specializing terms without reckoning with the logical consequences of the act. Let us examine his procedure briefly.

He calls attention to the assumed universality of the axiom about a straight line being the shortest path between two points, only to show that it is not true to a being living on a curved surface, to whom a *curved* line is the shortest distance between two points. This fact is supposed to set aside the universality of the Euclidean axiom. But there is a curious illusion in this claim which can be dispelled in two ways. In the first place, there is an equivocation in the word 'shortest.' Mathematically speaking, the Euclidean axiom still remains true to any being living on a spherical surface, though it may not be *physically* true. Even if it be assumed that such a being could not move directly at all from one point to the other, the distance physically and temporally the shortest to him would be a curved line, but this truth has nothing in it to contradict or modify the Euclidean axiom which still remains true mathematically where we have to do with *pure* space relations and not with qualities other than the spatial. Secondly, if the being

living on the sphere *knew* that this surface was curved, it would recognize the Euclidean axiom, and, if influenced by any economic motives prevalent about walking on the diagonals of street corners, would sigh for the *physical* capacity to conform to mathematical principles. But if it did not know that the surface was a curved one, *it could not draw any distinction between a straight and a curved line*. Its mathematical and physical conceptions of 'shortest' would coincide, so that *straight* and *curved* would mean the same thing, and the Euclidean axiom would still remain. But Helmholtz happens to know the difference between mathematical space and physical body, and by an equivocation in the use of 'shortest' can obtain an apparent limitation to this axiom, when applying it from the standpoint of his own assumed knowledge compared with that of a being supposed to be ignorant of his point of view. But the equivocation does not help the matter, and the ignorance of the other being does not interfere with the truth of the Euclidean axiom.

A long examination of another instance by Helmholtz, impeaching the universality of the proposition that the sum of the angles of a triangle is equal to two right angles, might be given, but it is sufficient to take note of two omissions in order to vitiate the conclusion that he wishes to draw from his result. In the first place, he confuses two different degrees of extension in the use of the term 'triangle,' one limited to plane and the other including spherical triangles, which shows only that the universality of a proposition is never intended to extend beyond its subject. The proposition about the sum of the angles remains forever true within these limits, and Helmholtz forgets that the language, while it may include spherical triangles, is *conceived* by the mathematician concretely to mean plane triangles. He can also obtain a universal proposition for both. Secondly, Helmholtz fails to see that, although a modification of the formula or principle in this proposition is required to meet the conditions of a new species, this modification is purely *quantitative*, not qualitative, and hence the analogy lends no support to the qualitative difference implied or asserted in the fourth dimension as the basis of the relations in

pseudo-spherical surfaces. There is an illusion also in assuming or insinuating that pseudo-spherical surfaces are more than quantitatively different from plane and spherical surfaces, so far as commensurable quality is concerned.

The effect of the equivocation in the use of the word 'dimension' is apparent in another way, to which attention must be called. If there is anything upon which mathematicians and mankind generally are agreed, it is that space has at least three dimensions, Euclidean geometers and most others holding that it has *only* three dimensions. But I think both can be denied, without favoring the contention of non-Euclidean mathematicians that there is a fourth dimension in any sense in which they are understood to affirm it. In denying the existence of three dimensions, we have two alternative affirmative propositions, both of which may be true if we assume two meanings for the term 'dimension.' They are : (1) that space has only *one* dimension ; (2) that it has an indefinite or infinite number of dimensions. This claim is borne out by the fact that, when we speak of space as having 'dimension,' we express a single quality which is divided up into 'three dimensions,' without implying that the species are qualitatively different from their base, but are only relations of the same quality to different points of view. In fact the 'three dimensions' are properly defined and reducible to *commensurable quality* in which the units are always the same in each dimension. The three dimensions, therefore, cannot qualitatively differ from this without losing their commensurable nature. Why, then, are they called 'dimensions,' as if they were species of a genus? The answer to this question must be, either that the term is illegitimate altogether, or that it expresses only certain quantitative relations having mathematical convenience in the mensuration of bodies. Both alternatives are fatal to the supposition of a fourth 'dimension' in a qualitative sense without either going outside the meaning of dimension as denoting commensurable quality, or going outside the conception of space, which are both contrary to the supposition of non-Euclideans.

The supposition that there are three dimensions instead of one, or that there are only three dimensions, is purely arbitrary, though convenient for certain practical purposes. Here the supposition expresses only differences of relation ; that is, *differences of direction from an assumed point*. Thus, what would be said to lie in a plane in one relation, would lie in the third dimension in another. There is no way to determine absolutely what is the first, second, or third dimension. If the plane horizontal to the sensorium be called plane dimension, the plane vertical to it will be called solid, or the third dimension, but a change of position will change the names of these dimensions without involving the slightest qualitative change or difference in meaning. Moreover, we usually select three lines or planes terminating vertically at the same point, the lines connecting the three surfaces of a cube with the same point, as the representatives of what is meant by three dimensions, and reduce all other lines and planes to these. But interesting facts are observable here. (1) If the vertical relation between two lines be necessary for defining a 'dimension,' then all other lines than the specified ones are either not in any dimension at all, or they are outside the three given dimensions. This is denied by all parties, which only shows that a vertical relation to other lines is not necessary to the determination of a dimension. (2) If lines outside the three vertically intersecting lines still lie in dimension, or are reducible to the other dimensions, they may lie in more than one dimension at the same time, which after all is a fact. This only shows that qualitatively all three dimensions are the same, and that any line outside of another can only represent a dimension in the sense of *direction* from a given point or line, and we are entitled to assume as many dimensions as we please, all within the 'three dimensions.'

This mode of treatment shows the source of the illusion about the 'fourth dimension.' The term in its generic import denotes commensurable quality and denotes only one such quality, so that the property supposed to determine non-Euclidean geometry must be qualitatively different from this, if its figures involve the necessary qualitative differentiation

from Euclidean mathematics. But this would shut out the idea of 'dimension' as its basis, which is contrary to the supposition. On the other hand, the term has a specific meaning, which, as different qualitatively from the generic, excludes the right to use the generic term to describe them differentially, but if used only quantitatively, that is, to express *direction*, as it in fact does in these cases, involves the admission of the *actual*, not a supposititious, existence of the fourth dimension, which again is contrary to the supposition of non-Euclidean geometry. Stated briefly, dimension as commensurable quality makes the existence of a fourth dimension a transcendental problem, but as mere direction an empirical problem, and the last conception satisfies all the requirements of the case, because it conforms to the purely quantitative differences which exist between Euclidean and non-Euclidean geometry, as the very language about 'surfaces,' 'triangles,' etc., in spite of the prefix 'pseudo,' necessarily implies. If the difference be made qualitative, neither the conception of direction will satisfy the case, because this is quantitative, nor that of dimension, because the fourth dimension would have to be *non*-dimensional. The simple illusion of Helmholtz lies in the confusion of dimension, now denoting commensurable quality, with direction, now denoting certain quantitative relations, and he merely carries this confusion over to the 'fourth dimension,' with the implications of transcendentalism in its qualitative differentiation from the others.

Why Helmholtz should have been guilty of this confusion it is hard to say, when we remember his own conception of the basis of geometry. In the very article above referred to, he says: "In conclusion, I would again urge that the axioms of geometry are not propositions pertaining only to the pure doctrine of space. As I said before, they are concerned with quantity." If geometry can be based upon the notion of quantity as well as space quality, he ought to have seen at once that his 'fourth dimension' did not require to be a new quality, but only a new quantitative relation of the one quality of space, which it in reality is. Distinguish between 'dimension' as

commensurable quality and the use of the term to denote directional relations, and the problem is solved. The fourth and even n 'dimensions' can be admitted as empirical *facts*, and there will be no necessity for showing the empirical nature of geometrical axioms, in order to obtain an *a priori* presumption, from the limitations and indefinite capacities of experience, in favor of a possible existence for transcendental properties of space.

There is one more illusion growing out of this confusion of 'dimension' with direction. It relates to the movements of points, lines, and figures, assumed by mathematicians in representing the various relations expressed by Euclidean space. The motion of a point is said to produce a line in one dimension; the motion of a line about one end produces a plane, and the motion of a plane about one of its sides will produce a solid, or the third dimension. The 'fourth dimension' is demanded for a certain motion of a solid! But we may say first that, in mathematical parlance, a point cannot be made to move, nor can a line or a plane. Only bodies can move. This may be admitted to be quibbling, but it calls attention to the fact that, if mechanical motion is to determine the matter of dimension, the motion of a 'point,' or 'atom,' must be in more than one 'dimension' at a time. A solid, being in three dimensions, will move in them, and, if it gets out of them, will either not be a solid at all, or, if it is in the 'fourth dimension,' we should require a transcendental physics as the basis of non-Euclidean geometry, and this is not in the contract of the mathematician, but only a new property of space. But to dismiss quibbling, if we accept the fact that the dimensions can be constructively represented as described, why assume that a point can move only in one dimension, a line in two, and a plane in the third? From what has been said about the relative and interchangeable nature of the dimensions, any one being the other according to point of view, and from the fact that the motion of a point must pass *through* what is called the third dimension and also exists in a plane at the same time, it is evident that even a moving point must imply all three dimensions. It cannot move in all three *directions* at the same time, but the whole commensurable

quality of space is implied by the existence of a point, a line, and a plane, as well as a solid. Hence geometry, constructive and symbolic, is based, not upon dimensions as commensurable quality, but upon dimensions as directions, and in this way creates no presumptions in favor of any new commensurable quality. To argue for it is simply one of those equivocations which ought not to deceive a common schoolboy, not to say anything of men with the reputation of Helmholtz and Riemann.

Several other similar illusions might be pointed out, such as Helmholtz' language about *flat space* and *curved space*, but I shall not discuss them here. They are either a confusion of the abstract with the concrete, or of quantitative with qualitative logic ; and after our lengthy exposure of this latter all-pervading fallacy, it is not necessary to do more than to reiterate the one important rule that qualitative differences can never be expressed by the same term, so that all this discussion about a fourth dimension is simply an extended mass of equivocations turning upon the various meanings of the term 'dimension.' This, when once discovered, either makes the controversy ridiculous or the claim for non-Euclidean properties a mere truism, but effectually explodes the logical claim for a new dimensional quality for space, as a piece of mere jugglery in which the juggler is as badly deceived as his spectators. It simply forces mathematics to transcend its own functions as defined and limited by its own advocates, and to assume the prerogatives of metaphysics. With the non-Euclideans it would become a science of quality as well as, or instead of, quantity, and would hardly stop with Helmholtz' empiricism for an argument in favor of its transcendental 'dimension.'

I have intended this exhaustive logical criticism as a precaution against a great deal of crazy metaphysics which might support itself upon the authority of men like Helmholtz and Riemann. Occultism simply revels in the doctrine of a fourth dimension, and is absolved from the duty of proving it *in se* by the authority of presumably sane scientific men ; and while it may be sufficient simply to laugh at the pretensions of the occult-

ist, and while it only dignifies his speculations seriously to consider them, there are some at least quasi-genuine phenomena which throw the reins to madhouse theories, when both parties soberly discuss the claims for a fourth dimension and remain wholly ignorant of the logical principles, which not only vitiate the argument for the existence, or even possibility, of this 'dimension,' but make the talk about it mere child's play. In taking this position, however, it is not necessary to deny the fact of other than the known properties of existence, nor to deny that there is more than is dreamt of in any of our philosophies, but only that the logical terms of the problem take us wholly beyond the limits of geometry and mathematics for our 'meta-dimension.' Not only must we distort and change our conception of space, but we require equally to modify that of geometry and mathematics, so that they cease to deal with mere quantity and are made to share the precarious fortunes of metaphysics. We may take this course if we like, but our science would lose its much boasted certitude by the change, and would very soon turn into a fool's paradise. We cannot limit mathematics by definition to the consideration of pure quantity, and then introduce into our data qualitative differentials which bear no quantitative import but the name. If we do this, the futility of our procedure is only concealed by one of the simplest of illusions, unless it is our distinct purpose to base mathematics upon a system of metaphysics which is as fanciful as wonderland. An equivocation is a poor compass, when we set out on Kant's shoreless ocean in search of a harbor, and, if we discover its character before we make the venture, we shall be all the wiser for it. But without equivocation we can in no case accomplish any more than the man in Mother Goose, who "ran fourteen miles in fifteen days and never looked behind him," only to find in the end that he was just where he had started.

JAMES H. HYSLOP.

MORALITY THE LAST OF DOGMAS.

IF we reflect on the gradual disappearance of those religious dogmas which for so long exercised an undisputed authority both on the reason and on the feelings of mankind, and the very thought of whose extinction aroused the most intense horror in the minds of our predecessors, there seems no presumption in inquiring whether morality be not itself an untenable dogma, a remnant of the old superstition, and, as it were, the last chain of the primitive slavery of man. Nor are we unjustified in questioning the validity of doctrines and sentiments already opposed or denounced by great thinkers of various ages, as in Hume's denial of moral obligation, in the vehement attacks of Helvétius and Bentham on the current ethical ideals, and in the predictions repeated in our own day by Mr. Spencer as to the coming disappearance of duty as a recognized spring of action.

In view of the light thrown by modern science on the nature and probable origin of the moral consciousness, and taking also into account the constant growth and the increasing stability of the feelings of freedom and independence, whose recognition necessarily implies in many cases, as I shall explain further on, a sort of moral indifference and a tendency to place *right* in the foreground and *duty* in the background; I think the conclusion is not unwarranted that, in the course of time, all moral feelings (those, that is, involving such ideas as obligation or compulsion, duty and the like) will disappear from the human mind and cease to have any influence upon the further development of the race. This conclusion may be briefly stated by saying, that *the evolution* (I might better say the *dissolution*) *of morality is from 'duty' towards 'right,' the former diminishing as the latter increases.* In order to make this theory well understood, and to meet some objections often urged against the naturalistic philosophy, I shall remind the

reader of some principles which, while generally admitted, are frequently forgotten or disregarded.

There are two very important psychological laws, which it is necessary to bear in mind in an inquiry concerning the validity and authority of ethical theories : first, that action ultimately depends upon feeling, not upon mere knowledge or judgment ; second, that a feeling which, through the experiences and mental associations of the race or the individual, has become like an organic element of the mind cannot be suddenly eliminated, when it is discovered that its promptings are contrary to reason or opposed to a different mode of acting dictated by new judgments arising from a better acquaintance with, and a sounder interpretation of, the phenomena of nature.

The first proposition is sufficiently obvious, and therefore I shall not dwell on it at length, contenting myself with calling attention to the well-known fact that, although feeling is finally the spring of action, judgment usually plays an important part in the origination of our feelings. Indeed, judgment and feeling react upon each other, and either give rise to, or greatly modify each other. Which one will have the supremacy depends upon circumstances ; but what is here to be emphasized, and what the second of the two laws mentioned above implies, is, that feeling and judgment are very often opposed to each other ; and, where this opposition exists, our actions, obeying the promptings of our feelings, must of necessity be contrary to our judgments, the former apparently giving the lie to the latter, — a condition of affairs made still worse by our fruitless efforts to reconcile the two antagonistic states of the mind, whose supposed unity would be destroyed if we accepted the coexistence in it of what seem to be mutually destructive elements.

Very often a special feeling invariably follows a special judgment ; and, by an 'association of ideas,' the feeling finally comes to be excited by the mere presence of the subject of the judgment, even if the judgment be not actually formed. This happens especially in those cases in which the judgment has been formed often and the corresponding feeling has been very intense : the feeling, which originally required the intermediary

agency of a conscious recognition of its cause, is finally aroused by what may be termed an unconscious recognition, and constitutes one of those emotional states for which seemingly there is no cause. It is to be observed that in all cases of this kind, where the original immediate causes of the emotion have disappeared from consciousness, the feeling is necessarily vague and indistinct; or, in more strict language, its cause is indefinitely apprehended. The child who, on being left alone in the dark, cries for some one to keep him company, saying that he feels afraid, is unable to say what he is afraid of; nevertheless, he is evidently the victim of an indefinite, yet very strong, terror, although he may never have heard of ghosts, apparitions, or other imaginary beings, the belief in which was the main cause of similar feelings in his progenitors. Nor is this all. These inherited feelings, further developed and strengthened by the tales of nurses and ignorant parents, may never leave him during his life, however much he may improve his knowledge and correct his judgments. The reason is very obvious: a constant recurrence of the same feeling through a series of generations, or even through a long period of individual life, produces organic alterations in the nervous centres, which it requires the reaction of an opposite feeling or of a correcting judgment, during, if not an equal, at least a very long, time to retransform. While the process of reorganization is going on, judgment will be overruled by feeling, and by a feeling the legitimacy of whose authority is denied by the very subject who experiences and obeys it. But it is evident that, in the end, a feeling will be organized corresponding to the judgment, and the opposite feeling will disappear.

The application of the foregoing conclusions to the 'moral problem' I take to be of the utmost theoretical importance; for they partly lead to, and partly justify, the further probable conclusion that morality, with its machinery of obligation, conscience, and duty, being based on feelings originated in superstition and slavery, and in an inadequate and unscientific conception of the world in general, and of man in particular, is doomed to vanish under the pressure of enlightened

reason, which will cease to consider it either necessary or profitable. While a declaration of this sort may seem startling and cynical to some, and repulsive to others, it must be remembered that it is the privilege of the student to place himself at the point of view of an impartial spectator, who, by observing the path man has followed in the past and the direction in which he is moving at present, endeavors to discover, not what the future condition of the race ought to be, or what condition would be most desirable, but what actually will be the condition in question. If the picture appear shocking, it is only because of our inherited, but unreasonable, habit of judging nature by the standard of our sentiments. But, once we have objectized man and included him in the great universal whole, as but one of the infinite cosmical phenomena, we shall cease to be 'morally' shocked or disgusted. What is apprehended as necessary, as 'natural,' can never give rise to indignation, contempt, or hatred; and, as we pass no moral or condemnatory judgments on the bloody struggles of our animal and savage progenitors, reflection might lead us to look with equanimity upon the probable *amoral* (if I may coin this word) condition of our remote descendants, however revolting this condition may be to our present modes of feeling.

Before proceeding with my exposition, I wish to remark that, in the course of this discussion, I take the evolutionary, monistic, and utilitarian theories for granted, at least to a certain extent; but, unlike some distinguished advocates of these views, I do not think that morality can be identified with hygiene, dietetics, gymnastics, and other sciences and arts, which, although of great importance and utility, are not in themselves branches of what is ordinarily termed ethics. Dr. Bain, I believe, has said that there can be no ethics without *moral disapprobation*, which implies the idea of duty, and those feelings known as conscience (what Bain calls the "slavish conscience") and obligation. What remains after these have been removed, may be termed the science of useful or pleasant conduct, but not the science of *moral* conduct — ethics, morality. And, considering what disturbing effects

one single word can introduce into a philosophic system, and how it can oppose the progress of an otherwise commendable doctrine, it were advisable not to make use of such terms as 'ethical,' 'moral,' 'ethics,' 'morality,' except where strictly necessary. Where no one would dispute that it is better for a man to eat rice pudding than apple pie, a controversy would be sure to arise as soon as that proposition was announced as a fundamental 'principle of ethics.'

The characteristic feature of the moral consciousness I take to be the idea or feeling of 'duty,' first manifesting itself in the individual in the form of that feeling or sensibility known as 'conscience.' But it is necessary to distinguish the truly moral element in conscience from other concrete elements, which, although usually associated with it, and often included under the same name, are really of a different kind from moral feelings properly so called, and must not, strictly speaking, be considered as either identical with, or as components of, the moral conscience.¹ Such, for instance, are the feelings of shame and regret, both of which are frequently found acting independently of, and even in opposition to, our moral feelings. The boy who, although convinced that it is his duty to say his prayers, feels ashamed to do so before his unbelieving school-mates, and the timid young man who against his conscience indulges in intemperance and breaks his vows or resolutions of chastity in the presence of his less scrupulous companions, are illustrations of the truth that while the sense of concrete shame is no doubt a powerful deterrent from wrong-doing, it is not to be identified with conscience proper.² Likewise the feeling of regret, often present with remorse, is not seldom experienced outside of all sense of duty; and it is well known that a person

¹ By a *concrete* feeling I understand one which is referred, either directly or by a mental representation, to a particular, specific cause: *e.g.*, fear of a particular individual or of punishment of some kind inflicted by a known agent. An *abstract* feeling is not accompanied by a mental representation of its cause: *e.g.*, superstitious fear of the dead; shame experienced by an over-chaste woman at beholding her own nude body; fear of a child in the dark, etc. The latter feelings owe their origin to an association of ideas.

² See Leslie Stephen's *Science of Ethics*, ch. VIII, §§ 12, 14.

sometimes regrets having done a good action. The thief may repent of having neglected an opportunity to steal, and the miser may reproach himself for having inadvertently yielded to a charitable impulse. Similar remarks apply to all other concrete feelings, such as fear of punishment; and the general principle may be established, that the moment conscience assumes the form of a concrete feeling, it ceases to be a moral feeling.

Conscience, I apprehend, in the strictly moral sense of the word, is mainly an abstract feeling of fear of punishment most vividly exhibited in the feeling of remorse following the commission of an immoral act; to which it must be added, that it is exclusively an egoistic feeling, inasmuch as it is a painful state experienced by the individual on his own account, and not a sympathetic or altruistic sentiment. The genesis of this feeling has been well explained by Dr. Bain, Mr. Spencer, and others, although, I believe, they sometimes include in the moral consciousness elements which might be otherwise classified.¹ Here I shall deal with the matter in a general manner, and only in so far as is necessary for the complete understanding of my subject.

In the early stages of human development, man is accustomed to look upon nature as on an aggregate of superhuman beings, having an irresistible influence upon his life, whose operations he cannot change at will, and to whose rules he must submit. Together with these views is found the belief that the chief of the tribe has a divine authority over all his subjects, and that his decisions are the decisions of a superior power, from whose decrees there is no possible way of escaping; the latter circumstance giving rise to a feeling of absolute, slavish, and unconditional submission, and to a recognition of the necessary obligatoriness—that is, unavoidableness—of all acts of obedience. All modes of conduct violating the commands of the chief are usually followed by severe punishment and threats of further punishment to be administered by invisible rulers.

¹ See, for instance, Bain's *Emotions and Will*, pt. I, ch. XV, § 22, and pt. II, ch. X, § 8; Spencer's *Data of Ethics*, ch. VII.

Without mentioning the fear of individual revenge consequent upon aggression, nor the fear of the disapprobation of fellow-beings (the latter feeling being probably a transformation of the former), we have two very powerful sanctions, the sanction of despotism and the sanction of superstition. By a process of association, easy to understand, the feeling of fear gradually comes to accompany the commission of forbidden acts, even if the idea of punishment be not actually present in consciousness. In thus passing from the concrete or definite to the abstract or indefinite, those primitive, animal emotions originally recognizable as the offspring of despotism and superstition, are changed into the more respectable feelings constituting the conscience. The sense of external authority and coercion survives in the form of moral obligation; while the dread of an unavoidable punishment inflicted on the disobedient subject survives in the form of remorse. Of the fact that the 'pangs' and 'recriminations' of a 'guilty conscience' are in reality an abstract feeling of fear, we may convince ourselves by observing the actions of a man acting against what he considers his duty. At the moment of perpetrating a crime, the criminal, however certain he may be of the absence of all witnesses, instinctively looks around him with anxiety, as if afraid of something or somebody; after perpetrating it, he is continually haunted by the threatening image of his victim; and, in civilized countries, the terrors of remorse usually present themselves in the form of policemen, detectives, and executioners. Not that these concrete feelings in themselves constitute conscience; but conscience, in passing from the abstract form to the concrete, very plainly betrays its origin.

Notwithstanding the great stress laid by sentimentalists and intuitionists on the freedom of the will and the responsibility of man as a moral agent, they also recognize the *externality* of the sanction giving conscience its authoritative and imperative character. Far from seeing in it a purely subjective state, disconnected from all external causes, except in so far as it judges the acts of the individual, they see in it the manifestation of an outside power; something which is not the will, since to

it the will yields and obeys ; which is not the work of the mind, for experience shows that the mind is impotent either to destroy or to create it ; something irresistible, to which we must submit, and do submit ; in short, something which is not *self*, but above and more powerful than *self*. Taking this feeling of externality as an irrefragable testimony given by conscience as to its own origin from a higher source than the individual, and interpreting it by saying that conscience itself declares its authority to be 'delegated,' they have found in this 'faculty' one of their favorite demonstrations of the existence of a Supreme Being.¹ The feeling in question may, however, be explained on a more probable, if less flattering, hypothesis.

I think I can now derive the consequences which I believe follow from the above doctrines, and from others of similar import, as well as from a new order of feelings tending more and more to displace the old moral feelings.

There exists in man an ever growing tendency to assert his own independence, in so far as that independence is consistent with his well-being ; to admit no restrictions as legitimate but those to which he voluntarily submits in view of his own interest ; and to repudiate, as unwarranted and unjustifiable oppression, all external authority whose credentials have not been previously approved by his unfettered judgment and recognized as conducive to his happiness and security. While a feeling of revolt against all kinds of despotism develops, a corresponding judgment is formed — that feelings implying unconditional and blind obedience are to be rejected, their authority being denied both by reason and (at least partially) by a strong sense of freedom, with which the sense of duty is obviously inconsistent. Conscience, in whose elements of moral obligation and remorse we have discovered the traces of slavish and superstitious subjection, is not likely to survive very long the naturalistic conception of its origin, nor to resist the opposing influence of new feelings and rectified judgments disputing its place in consciousness. 'Right' is constantly taking some ground from

¹ See Martineau's *Types of Ethical Theory*, 2d ed., vol. II, pp. 104-5 ; also Flint's *Theism*, Lecture VII.

the domain of 'duty,' and the indications seem to be that, in the future development of the race, the 'moral sense,' becoming rudimentary, will end by leaving the mind entirely. For, to my way of thinking, it is as improbable that conscience and the allied feelings will continue after their illusory foundation has been exposed, as it is that superstition will continue after its nature has been understood, and its claims found to conflict with new conceptions, as to whose validity we entertain no doubts.

Man exists as a natural and necessary product of universal forces, and, like all other organic beings, obeys the law of self-preservation, so emphatically maintained by Spinoza. To use the somewhat ambiguous yet forcible expression of this philosopher, man exists by the supreme right of nature; that is, he has a right to live and to preserve his being by following those subjective guides ("sovereign masters," as Bentham calls them) which, in the form of pleasure and pain, lead him to the performance of acts which promote his well-being and develop his life, and deter him from the performance of acts tending to impair his vital energies. When I refer to these conditions as 'rights,' I mean that they must be accepted as facts that, being of a necessary character, cannot be reprobated on any rational grounds. It is also a matter of fact that, in pursuing its own interests, every organism constantly finds itself in the presence of other organisms whose interests and welfare cannot but conflict with its own; whence results a struggle wherein the inferior organism must succumb and the superior organism survive and propagate. Whether this condition of affairs be repulsive or shocking, and whether it 'ought' to be different from what it is, are questions no longer to be asked, once we have discarded the old idea of an arbitrary will governing the phenomena of nature. In the above order of facts we have the law of natural 'justice' (to employ a very objectionable term), so well expounded by Darwin and Spencer, but whose application to human justice is only partially made by the latter, who, notwithstanding the sternness of his philosophy, sometimes yields (unconsciously, no doubt) to the promptings

of traditional sentimentality in favor of one class or another. And here comes the final and most important of all questions : Is there any warrant for substituting in place of natural justice those artificial systems embraced under the appellation of morality ?

Having formulated the question in this blunt manner, I am very liable to be misunderstood and prejudged at the outset ; and for this reason I wish to say, before proceeding, that my objections are not to the usual modes of *acting*, but to the usual modes of *feeling* and of *judging*. While I do not doubt that he who murders another may with propriety be executed or imprisoned, I dispute the propriety of saying that he has violated the 'moral law,' or that he has performed a 'wrong' action, taking the word 'wrong' in its subjective or intuitionist sense (and this I hold to be *the* moral sense of the term). This will appear more plainly in the course of my exposition.

Suppose that, being hungry, I meet a man carrying some food, draw out my dagger, kill him, and satisfy my hunger. You say I have acted against my duty, against my moral obligation, and that I ought not to murder my fellow-being, because that is not right. But what is the import of these expressions ? In old times it was believed — instinctively believed — that the community had an indisputable claim upon the individual ; that his acts must conform to the will of chiefs and gods ; that injury inflicted by him upon his fellows was followed by divine punishment here and hereafter ; and that it was necessary for him to sacrifice his welfare to the whims of a despot invested by the gods with supernatural authority. These, and similar experiences, slowly grew into the further belief that the interests of others were to be looked after by every individual in preference to his own, and, by a very natural extension of the principle, that he was not performing his part — or doing his 'duty' — when simply endeavoring to further his own well-being, but that, on the contrary, self-sacrifice was what was expected of him ; and when to such feelings was added the fear of the various sanctions, a state of mind arose from which the moral feelings — conscience, moral obligation, etc. — gradually

evolved. It is true that we still have these feelings, and act in accordance with them; it is true that, in the above case, you may appeal to *my* feelings, and that, controlled by them, I may concur in your view of the matter, sharing your indignation and your horror. But you cannot, I believe, appeal to my understanding, nor will you be able to find in your understanding any justification of your own feelings on the subject. The genesis of these feelings shows us that their authority is based on erroneous judgments, implicit or explicit, and, although they have been organized in our system and cannot be suddenly displaced, they must vanish under the continual action of rectified judgments. For these judgments tell us that we do not depend upon any supernatural beings; that our lives are not governed by the arbitrary dictates of a free will, not even our own; that the community has no *de jure* claim upon us, although it may have a *de facto* claim; that the only limit to our actions is set by our own interests, of whatever kind; that the individual is not an instrument of the gods or of the community, but rather the community is an instrument of the individual in the pursuance of his own happiness; and that, finally, the only legitimate appeal that according to reason we can make, is to the individual's own interests. He is not destined by any higher power to promote the happiness of others, to sacrifice his well-being to the well-being of others; nor do I see any reason why he should lend blind and unconditional obedience to the dictates of others. Reverting to the above example, I may say that I am an organized being possessed of certain desires, having certain wants, and actuated by certain feelings. Your wants are different from mine, and you gratify them in your own way; I gratify mine in my way, that is, according to the peculiarities of my organization. Can you point out anything abnormal in my way of acting? Not unless you beg the question by saying that your way of acting is the only normal way. I do not say my way of acting is *the* right way; I simply satisfy my wants, as you satisfy yours. You may say I have injured my fellow-man, you may imprison or execute me; but beyond these matters of fact (with which

the feeling of sympathy may consist), you cannot go; reason refuses to sanction your despotic sense of duty, which you attempt to impose upon me. Can you tell me why it is my duty to act according to your feelings, while it is not your duty to act according to mine?

The abstract moral ideas and feelings have, indeed, been repeatedly denounced by eminent philosophers as empty words devoid of all meaning. The charge is, no doubt, exaggerated, inasmuch as the moral feelings are real facts, whose very existence cannot be denied. But, I believe, the charge can be substantiated that such feelings arise from original erroneous judgments, implicit or explicit, and from too narrow a view of the phenomena under consideration. For, if I place myself on the ground of what may with propriety be termed 'pure reason,' I do not see why I should expect others to feel as I feel and act as I do, or would, act. This would be assuming a uniformity in human nature which is not countenanced by experience and observation. All I am justified in saying is that, under given circumstances, *I* would act thus or thus; that he who acts otherwise thinks and feels in a different manner from me, and that his organization must be different from mine; and while I may be displeased with his conduct, I cannot, or shall not — if I have thoroughly realized that he is not I, and that his motives are not, and cannot be, my motives — experience any feeling of *moral* disapprobation in connection with my judgment of the matter. I may dislike the act in question as I dislike a homely picture, and I may say that, in my opinion, the man is ignorant or foolish, as I say the painter is a poor artist; any further judgment takes for granted what cannot be taken for granted — that the other man's actions are to be regulated by my feelings. Nor can I find any plausible reason why he should sacrifice his well-being to the well-being of others, for this would be to deny him the absolute freedom which every being possesses, in so far as that freedom is considered as the natural power with which every being is endowed. I have no claim on him, and if I am to appeal to him I must do so through his feelings, not my own; for it would be

absurd to expect that he should act in opposition to his springs of action, and it would be equally absurd to say that it is his 'duty' to do what *I* would do, *i.e.*, what would please *me* but not *him*, or that he 'ought' to do what he really cannot do, not having the will to do it, or lacking the necessary motives to determine his will in the desired direction.

If, passing from the consideration of others to myself, I examine my own feelings, I shall find that, as I recognize the freedom of others (in the understanding, of course, that I am equally free not to allow them to injure me, and to oppose my freedom to theirs whenever I am so disposed), there is no reason why they should not recognize my own freedom; that, as I have no claims upon them, nor are their actions to be regulated by my likings, they have no claims on me, nor are my actions to be regulated by their likings. If I consult and scrutinize my conscience, I find that it is a sort of ghost whose authority is derived from the servility and slavery of my ancestors, and whose 'imperative dictates' are the echoes of a state of oppression and superstition against which my present feelings of freedom protest and revolt. I recognize no claims of others on me, no conscience, no obligation — I am my own master. Whatever your claims or pretensions may be, they are nothing to me, except in so far as they please or displease me. If you have a 'right' to do your pleasure, it is my 'right' to do my own pleasure; nor does it follow from the nature of things that I must consult your interests regardless of my interests. If I have any regard for your welfare, it must come from my being pleased with your welfare, not from your being displeased with my conduct. In plainer terms, if I voluntarily do what is agreeable to you, I am exercising a right, and not discharging a duty; I do it because I wish to do it, not because I am 'morally obliged' to do it.

It may be said that 'reason' cannot be severed from feeling, and that it is absurd to endeavor to reason our feelings out of existence; that feelings, being ultimate facts, must be received as the motives of all human conduct, and that, however incomprehensible they may be in themselves, they have to be taken

into account in all investigations and discussions relating to the doings of men and their mutual relations ; and that, therefore, the moral feelings, no matter what they may be in their ultimate nature, are to be accepted as real and very powerful springs of action, no less than hunger and thirst. To this the answer is, that the moral feelings differ from mere sensations and from other feelings and emotions in that they, being of an abstract nature and implying some more or less definite judgments (as, for instance, that something will punish me, that something compels me, etc.), can easily be eliminated by rectified judgments based on a more adequate conception of the position of man in the universe and of his relations to other organized beings ; although it must be borne in mind that the elimination cannot take place suddenly, but only gradually.

I know that some objections may be raised against the present view. It is unnecessary, however, to examine them separately, considering that there is a final and—to my mind—unanswerable argument in the doctrine of determinism, so strongly held by Spinoza, and before whose logical consequences he had, as a rule, the courage to stand without flinching, although experiencing, perhaps, a sort of ‘sublime horror’ at seeing the apparent contradiction between the traditional feelings of mankind and the dictates of reason ; between those states of mind created by an anthropomorphic and anthropocentric conception of the world, and those judgments ensuing from the conception of the universe as an eternal flow of inexorable phenomena, comprising not only the material frame of man but the operations of his understanding as well. Towards this conception, modified and confirmed by modern science, the intellect of our age seems to be moving with irresistible force. Man has finally been included in the realm of nature ; his origin and development are believed to be due to the same processes and laws which govern the formation and transformations of all other bodies and systems of bodies ; his present condition, as well as his present conduct, are considered as fatal effects of his preceding conduct and states, the latter having been reached through a slow and continuous growth under the influence of physical forces.

Although incomprehensible in itself, mind is at least known, so far as experience can teach, to be the necessary concomitant of a special molecular organization whose laws are the laws of physics and of chemistry, and whose modifications must depend upon the transformations of existing forces. It is also admitted that the material system constituting the organism cannot produce by itself, without cause, any change in the arrangement or proportion of its component elements, and that all mental phenomena, volition included, must follow the universal law of causation. This law, conceived to-day, not simply as a relation of succession, but as a dynamical process in which every fact is the continuation of a preceding fact ; this law, which is ultimately nothing but the law of inertia, by virtue of which whatever is continues to be, and nothing *begins* but *becomes*, leaves no room for sudden and mysterious interventions either from 'within' or from 'without.' Every organism is accepted to be a laboratory whose chemical reactions appear in consciousness as mental states ; and the laws of general physics are finally the laws, if not of thought as such, at least of the indispensable conditions of its existence.

From a system of philosophy based on these fundamental principles and holding that all phenomena, both past and future, are capable of being expressed by an algebraic equation, the belief in the so-called freedom of the will vanishes at once. And it seems evident to me that, if we reflect on the subject, all our moral feelings must disappear when we have become certain that human beings do not possess any personal independence ; that their actions are the actions or the processes of nature ; that their conduct is ruled by their organization, their organization by inheritance and environment, inheritance and environment by the eternal properties of matter and force. In judging a man we have to remember that we are not in the presence of a self-acting, 'responsible' being : we are facing the last aspect of the infinite succession of transformations of an eternal energy, whose last form cannot be conceived as non-existent without annihilating all its preceding forms and its very existence. His acts are 'modes' of this energy, and to attach

any moral blame to them would be to condemn that eternal energy, *i.e.*, to condemn existence because it exists. No man's conduct is *his* conduct; it is simply a manifestation of the way in which the universe exists and moves. There is, then, no vice, no virtue, no duty, no obligation, no good or evil, in the sense we usually give to these terms; and morality, as traditionally understood — or, to speak more plainly, *morality*, without any further qualification — must be confessed to derive its authority from superstitious feelings corresponding to inadequate conceptions as to the nature of man and the universe of which he forms part.

The above conclusions are not new, but they have seldom, if ever, been admitted by the advocates of the naturalistic and utilitarian philosophies, who — strange to say — establish the premises as indisputable, and shrink before their logical consequences. Their opponents urge these consequences very strongly as destructive arguments, taking it for granted that, the consequences being unjustifiable, so must be the premises from which they are derived. A few examples will give an insight into the nature of these objections, and show that, although they are based on facts and logically worked out, the use made of them betrays a complete disregard of the two psychological laws I stated at the outset.

Against the more or less plausible theories advanced by J. S. Mill, Bain, and Spencer, Guyau argues that, once a feeling has been discovered to refer to an illusory cause, it must disappear, for when we become certain that “this or that belief is groundless,” we can no longer entertain it; that association becomes powerless the moment it is recognized as such; that “all pain which has not a real cause in the external world, or an intelligible reason in the internal world” ceases on the recognition of the fictitiousness of its cause; that the more we are aware that our motive is but an illusion, the less we are inclined to act agreeably to its promptings; that, if this be the nature of the moral feelings, they have to be declared devoid of all rational grounds; and that utilitarians and evolutionists, by defending the moral feelings, which they also as well as others

experience, plainly demonstrate that they are not in reality convinced of the truth of their doctrines.¹

Furthermore, against the doctrine of determinism the objection has been raised that it destroys the foundation of society; namely, the distinction between crime and virtue. This delicate subject, intimately connected with the most excitable emotions and with very powerful passions, is naturally adapted to the rapturous pathos of eloquence and poetry; nor has the artillery of fanaticism and intolerance failed to find in Spinoza and his modern successors a most prominent and desirable target. To-day, however, although a true philosopher may still speak of the "awful chimera" of the Jewish thinker, few will follow Malebranche in bestowing upon him the contemptuous and contemptible epithet *misérable*; and his sentimental critics content themselves with appealing to those traditions of mankind whose authority was shaken to its very foundations by the great writer of the *Ethics*. What pure and noble soul, asks M. Saisset, does not feel horrified at the thoroughgoing denials of Spinoza regarding the liberty of man and even of the Supreme Being? If everything is necessary, if everything is what it must be, what warrant have we to speak of merit and demerit, virtue and vice, good and bad actions, of the moral order, of the responsibility of human beings? If nothing exists but what has to exist, if it is a mistake to expect that things should be different from what they are, what becomes of human and divine justice, of the belief in a future life, of religion and our trust in God? In short, is it not obvious that the consequence of Spinozism is "that the most shameful vices, the most abominable crimes are in themselves perfectly innocent, not containing the smallest imperfection, and seeming contrary to order only because we have but an indistinct idea of things"?² Nor are these, perhaps, the most disastrous consequences; for not only the destruction of

¹ See *Morale anglaise contemporaine*, 2^{me} éd., pp. 294-7, 299, 341; ch. IV of bk. III; Conclusion, sec. IV.

² E. Saisset, *Introduction critique aux Œuvres de Spinoza*, in his edition of Spinoza's *Œuvres*, t. I, pp. 157, 159, 362.

morality, but even the annihilation of knowledge, of truth, and of science has been claimed as an undeniable corollary of determinism¹. With the last-mentioned claims, however, I shall not concern myself at present, as that would carry me beyond the limits of this article.

The Rev. J. L. Davies, in some criticisms of Mr. Spencer's doctrines,² very properly calls attention to the anomaly in "the use of ethical terms by one who professes only to describe natural and necessary phenomena," and quotes the very weighty dictum of Kant, which may be taken as the most concise statement of the whole argument:—"If we fix our eyes simply upon the course of nature, the *ought* has no meaning whatever. It is as absurd to ask what nature ought to be as to ask what sort of properties a circle ought to have. The only question we can properly ask is, What comes to pass in nature? just as we can only ask, What actually are the properties of a circle?"

It is to be observed that all the above objections (which I should venture to call 'pious' arguments) take it for granted that vice and virtue (in a moral sense), duty, good, and evil exist and must continue to exist; and, starting from this proposition as from an axiomatic truth, the critics proceed to show its incompatibility with the consequences logically derived from the fundamental doctrines they wish to refute, thus proving, by a *reductio ad absurdum*, that the latter doctrines are untenable. Here I may refer to a most instructive parallel case in the history of religious controversies. In the golden age of the Christian Church, when the records of the Hebrews, as commented and explained by the venerable Fathers, were supposed to contain the ultimate truth of every science, it sufficed, in order to silence an investigator and annihilate his theories, together with his character and reputation, to say to him: "Your teaching is contrary to the teachings of the Christian religion. If your conclusions are correct, then Joshua did

¹ See the curious articles by J. Delbœuf in *Revue philosophique*, Mai, Juin, Juillet, 1882: "Déterminisme et liberté: la liberté démontrée par la mécanique."

² See Spencer's *Justice*, Appendix C. Mr. Spencer's answers, I regret to say, are very little to the point.

not stop the sun, the first man was not perfect, and the Holy Scriptures are a work of fiction." Few dared to defy the authority or doubt the exactness of the inspired writers, and, rather than incur the odium of the Church and public, the horrified and perplexed truth-seeker wasted his time and exhausted his ingenuity in fruitless endeavors to reconcile the irreconcilable. Nor was the judgment of others all he feared; his own conscience whispered to him that he was marching on the road to perdition; for he himself, notwithstanding his discoveries, *felt* certain that the sacred books were of divine origin and had a superior authority, which it was criminal and dangerous to question, even in the secret depths of his consciousness. It was also assumed (and it is still assumed by some pious persons) that, if religion and theology lost their hold on the human mind, society would become a confused and anarchic mass, governed by instincts and appetites no higher than the brute's, and that humanity, ceasing to exist as such, would sink to the level of wild beasts. Gradually, however, the truths of science became more and more apparent; they spread by degrees and took possession of the general consciousness; slowly, but surely, the continued action of new conceptions destroyed the old views, which had been organized as feelings—blind feelings; and finally came the bold declaration: "Yes, the new discoveries are opposed to religion and its books; but the new discoveries are facts, and, as such, must stand; religion and its books must go, or a new religion with new books be produced." We all know the outcome of this struggle, and the stupendous change which has been taking place during the last three or four centuries; a feature of the change being that the new books have not been made at once, but have slowly been evolving, still preserving the old names and form, but with a new reading, which the learned divines are pleased to style *interpretation*. Nor does it seem improbable, although the very thought may be appalling, that this most effective organ of defence will disappear by atrophy (or, not unlikely, by hypertrophy), leaving the theological species to die in the claws of its voracious rival.

We have here the key to the solution of the difficulties mentioned above with respect to the moral question. The objections referred to derive all their cogency from the fact that the advocates of naturalism do not act in accordance with the necessary consequences of their doctrines ; whence it is concluded that, although they may be sincere in their arguments, they are, at the best, the victims of a self-deception, inasmuch as their conduct and their practical rules are a perpetual denial of their theories. Utilitarians and evolutionists often try to meet these attacks by vain efforts to deny the logical and scientific validity of the conclusions drawn from their premises by their opponents. These efforts, I believe, have always been, and are doomed to be, entirely fruitless. But it will be asked : If you accept the consequences, why do you not *act* accordingly? This is the real point at issue, and the real essence of all the 'pious' arguments.

The answer is, I think, to be found in those psychological laws I have repeatedly referred to, and on which I must now dwell a little more at length. Far from being an indivisible unity, mind is the function of a complex material system, capable of responding in different manners to the action of different stimuli, and whose plasticity makes it susceptible of being variously moulded and thus becoming more or less adapted to special reactions. The repetition of a particular reaction causing a particular mental state finally brings about a permanent change of organization, and may be said to form a new and stable mechanism, which, at the same time that it responds more easily, sometimes 'automatically,' or unconsciously, to the action of the organizing stimulus, displays the further peculiarity, which may be called psychological inertia, of opposing, or being non-responsive to, stimuli of an opposite nature. In order to make the organism invariably responsive to other kinds of stimuli, the nervous system must be remoulded ; and it is obvious that this remoulding requires more or less time, according as the change wrought before has become more or less stable or permanent, — this stability being, as a general rule, proportional to the strength and duration, or frequency, of the reaction

from which it arose. It is to be noticed that a stimulus which originally caused a judgment and a corresponding feeling, finally ends by producing the feeling directly, even if the judgment no longer rises in consciousness. In this case the organized feeling is said to owe its origin to an association of ideas. But it by no means follows that, on discovering this association, and on forming new judgments tending to produce a different feeling, we have the power to annihilate the old feeling at once, or that the old feeling will suddenly disappear; for a feeling which has become organized in the nervous centres can only be displaced by a contrary feeling, and, although the latter may temporarily be experienced, and will finally conquer the former, the old feeling will be the victor at first, owing to its greater stability; and, before it is definitively displaced, the new feeling itself must be permanently organized. We may thus have two different and conflicting 'mental areas.' While we are removed from the impressions produced by a certain order of facts, we may judge in a certain manner, and feel accordingly; but once we are brought to the test, and submitted to the direct action of those agents to which our system is accustomed to respond in a peculiar manner, our judgment, in many cases, forsakes us, and the old feelings, inevitably excited, reassert themselves. It is not, however, that we change our opinions or our views, or that our doctrines are surrendered and the legitimacy of the opposite doctrines recognized; the real fact is that judgment and discrimination cease, and are, so to speak, eclipsed by the strong rays of the old flame. Of this we have familiar instances in what theologians call 'yielding to temptation'; and, as we are able, in some cases, to resist the allurements of 'temptation,' so are we capable of controlling our *feelings* (besides our *actions*), when they are not very intense. If, by what is termed 'an effort of the will,' we keep our theoretical conclusions present in consciousness, we may succeed, even if only momentarily, in looking with moral indifference on the most heinous crimes (I speak from a determinist point of view); and, were it possible to persist in this strained state of mind, the current moral feeling

would not assert itself. The effort, however, owing to the instability of all new psychical states (and this instability itself is what constitutes the effort), cannot usually be maintained; there is something like exhaustion brought about by the exceptional tension of the mind; the system relapses into its habitual condition, and the habitual emotion ensues of necessity. But we may be certain that, by the continued application of this process, the feelings corresponding to the new judgments will finally cause a radical change in the nervous system, and, by becoming organized, take the place of the antagonistic feelings.

It is not necessary for me to dwell at length on the obvious application of these principles to the moral feelings. While he who holds the naturalistic or monistic view of the universe, and who recognizes the fatalism of all human actions, and the selfish instincts as their final spring, must accept the undeniable consequences of his philosophy, he may with truth say that these consequences, although theoretically correct, cannot, as a general rule, be expected to become ordinary practice in the course of a lifetime, or even of a few generations, because of the automatical protests of an organism framed by the ignorance and superstition of the past, and which we are unable to remould and reform at pleasure. But, on the other hand, he is bound to admit, I believe, that, as the world moves on, all moral feelings, being in opposition to scientific truths and philosophical conceptions, must vanish from consciousness, and conduct be governed by the simple feelings of pleasure and pain, of whatever kind; *i.e.*, by the likes and dislikes of every individual (among which, of course, are to be included love, sympathy, fear of punishment, etc.). This change will probably not be produced exclusively by reasoning and distinct judgment, but to a great extent unconsciously, as almost all great changes occur, although reason does not fail, especially in the later stages of human development, to act as a very potent factor.

There is one final remark I should like to make. The growing sentiment of tolerance in religious and political matters is

in reality a sort of movement towards what, in a certain sense, may be called moral indifference. And the important fact here to be noticed is, that tolerance comes from a recognition, although as yet imperfect, of the law of natural causation in the direction of mental phenomena—a recognition requiring, as observed by Mr. Lecky,¹ a highly developed intellect capable of placing itself, while judging, at the point of view taken by the individual judged. When I condemn a man for acting in a certain manner or entertaining a certain opinion, I implicitly take it for granted that his mental capacities and conditions are, and must be, the same, or almost the same, as mine. Instead of placing myself in his case, I place him in my case, and my judgment of him finally takes the form: “I would not act or think as he does.” But further reflection will show that, his constitution not being identical with mine, his education and his habits having been different, and his motives of action being therefore different from mine, it is unreasonable to expect him to act or think otherwise than he does. To require that he should have feelings and ideas for whose existence there is no ground or material in his organism, would be to ask for an effect where the cause is wanting. This very obvious mode of reasoning has already produced its effects in the field of political and religious affairs, as I have before said; and it can scarcely fail to produce similar effects in the field of ethics; but, from the very nature of the question, this implies the disappearance of such feelings and conceptions as those of moral obligation, duty, and the like; for, so long as these exist, there cannot be *internal* tolerance, although there may be *external* tolerance,—internal tolerance being nothing but a state of moral indifference.² As long as I believe my Mohammedan neighbor to be a monster of iniquity, revelling in the unspeakable depravity of a soul in open war

¹ *History of European Morals*, vol. I, ch. I, pp. 134–6 (Appleton’s edition, 1889).

² We may accept Mr. Lecky’s formula, “Men gain much in charity, but they lose something in zeal,” substituting ‘tolerance’ for ‘charity,’ and ‘morality,’ or ‘moral feeling,’ for ‘zeal.’ The intolerance and imperativeness of the moral feelings is, indeed, of a nature very similar to that of religious ‘zeal,’ which, with the increase of ‘charity,’ seems to be seriously threatened.

with its Creator, I am a religious bigot, whatever my external acts may be. In the realm of ethics, most of us are still bigots ; but it seems probable that our successors will not be animated by moral piety, nor bow in obedience before the imperative commands of the moral dogma.

ANTONIO LLANO.

DISCUSSIONS.

TWO CRITICAL POINTS IN PROFESSOR ROYCE'S PAPER ON "SELF-CONSCIOUSNESS, SOCIAL CONSCIOUSNESS, AND NATURE."

IN the very able and suggestive paper of Professor Royce, published in this REVIEW of September and November, 1895, there are two points which especially drew my attention, and upon which I venture some criticisms of the author's position. I refer to the proof that there is other human experience than my own, and that Nature is other reality than human experience.

The proof which Professor Royce offers in support of his thesis, that there are finite beings like myself, other human experience than my own experience, is the following. "A man becomes self-conscious only in the most intimate connection with the growth of his social consciousness. These two forms of consciousness are not separable and opposed regions of a man's life; they are thoroughly interdependent. Take away the conscious *Alter*, and the conscious *Ego*, so far as in this world we know it, languishes, and languishing dies. . . . Hence I am not first self-conscious and then secondarily conscious of my fellows. On the contrary, I am conscious of myself, on the whole, as in relation to some real or ideal fellow; and apart from my consciousness of my fellows I have only secondary and derived states and habits of self-consciousness" (p. 468). "In us men there is no self-consciousness apart from some more or less derived form of social consciousness. I am I in relation to some sort of a *non-Ego*" (p. 470). "It is by virtue of this very contrast (*i.e.*, that between our own inner life and what we regard as the inner life of our fellows) that we become self-conscious" (p. 471). "A man is conscious of himself as this finite being only in so far as he contrasts himself with what he takes to be the life and, in fact, the conscious life of some other finite being — unless, indeed, he modifies his natural self-consciousness by contrasting his own life with the conceived fulness of the life of God. But except by virtue of some such contrast one cannot become self-conscious, and the result is that, as a matter of simple and necessary meaning, if any metaphysical argument is to prove that I am I, *viz.*, this finite being, then, at the same time this argument will prove that there is other conscious life besides mine. For otherwise my own finite life can-

not be defined or conceived" (pp. 471-2). "Without knowledge that the other experience is, there can be no meaning in saying that the presented experience itself is" (p. 481). "That there is some experience not individually mine, is an assertion precisely as sure as the assertion that my own experience is; for neither assertion has meaning apart from the other" (p. 483). Hence one ought not to say, as Descartes does, "*Cogito, ergo sum*"; but, "I think; therefore other beings like myself exist also."

The argument is to this effect. The existence of other human experience is so connected with my own existence both in its genesis and its meaning, so far as it is known and definable to myself, that whatever reasons there are for affirming that I am, are equally valid for affirming that other human beings are. Looking at my self-consciousness psychogenetically, I must say that, in its origin and development, my consciousness of self is so bound up with my social consciousness that, but for that social consciousness, there is no reason to suppose that I should possess any self at all. At all events I could not have the self-consciousness I now have, were there not other selves with whom I have been in communication from the beginning of my conscious life. I have "rounded to the separate mind" I now am, and my "isolation has grown defined," only in consequence of that social environment in which my experience has been set from the beginning.

Again, looking at my self-consciousness epistemologically, the knowledge of myself, the meaning of my experience, is possible, is explicable, only if there are other experiences not mine. "My actual inner life is then always contrasted with experience other than is now mine" (p. 479). "Whichever way I turn, I am definable to myself only in terms of a contrast with other experiences" (p. 480). Another characteristic of my experience demands the same explanation, viz., systematic continuity and persistency. For instance, the existence for me of such an object as the valley of the Upper Nile is explicable only if there are other beings, other experience than mine. "When I conceive the Upper Nile Valley, there are presented to my inner life words, images, map-experience, and the like; and these I know as meaning something to me, in so far as I contrast these relatively immediate data with the conceived contents of the experience of other men who more directly verify what I only conceive as to that region" (p. 479).

To the objection that the other experience than mine need not be an actual one, but only a conceived one or a possible one, the suffi-

cient reply is that any such conceived other experience, whether rightly conceived or not, must have "relation to a real experience which is other than my presentation" (pp. 482, 483); and any possible experience for me, if that is to mean anything, must presuppose some actual experience not mine. "Possibilities need actualities to give them meaning." "Bare possibilities to which no actualities correspond are meaningless" (p. 483).

But now is this reasoning really to the point, and is it conclusive? We do not think so. And first, in reference to the genesis and development of self-consciousness, admitting the correctness of Professor Royce's view, we can hardly suppose that he would make the psychological history of my experience a proof that there is other experience than mine, unless it is to be assumed that genesis carries with it validity. All that this account of self-consciousness proves is that I have always believed in the reality of other experience than my own. But, from the standpoint of epistemology, the question is a legitimate one: Is that belief true or well founded? My self-consciousness might conceivably have had such a genesis, if in reality there were no social fellows and my belief in their existence were an illusion. It is only upon epistemological grounds that the fundamental question which Professor Royce raises can be answered, namely, What warrant have I, philosophically speaking, for assuming that there is any other experience than mine at all (p. 481)?

And, in fact, the argument upon which Professor Royce relies is the argument from knowledge, or rather from my own experience as known and definable to myself. The epistemological argument which we have reproduced, does, we think, prove the proposition that there must be other reality of some sort than my own existence, — other experience of some kind than my own experience; but what the content of that experience is, whether it is or embraces other finite experiences like my own — my social fellows — or is the "conceived fulness of the life of God" as the absolute experience, the reasoning so far does not determine.

Up to this point the existence of other human minds has not been proved. The only proof on this point which Professor Royce offers, is in the passage on page 484, where he undertakes to explain how "we get information about the contents of experience not our own." This information we get "when we communicate socially with our fellows, and the essence of social communication is this. My fellow does something in a certain situation, — deals with his environment so and so. He uses tools, utters words, makes gestures."

These expressive acts of my fellow "get a meaning to me as the suggestion of his concrete inner life, just in so far as I am able to imitate these deeds of his by bodily acts of my own, brought to pass under conditions like those in which he, my fellow, acts. For, when I definitely repeat a bodily act that expresses any human meaning, the act, as I repeat it under definite conditions, gets for me an inner meaning, which I could never grasp so long as I merely observed such an act from without, as an event in my perceived phenomenal world. But this inner meaning which the act gets when I repeat it, becomes for me the objective meaning of the act as my fellow performs it. And thus the meaning of the imitated act, interpreted for me at the moment of my imitation, gets conceived as the real meaning, the inner experience of my fellow, at the moment when he performs the act which is my model."

The argument contained in this passage is really the argument from analogy; and it presupposes, as something already known or established, the objective reality of my body. It is only as I first know that I have a body which sustains certain definite and constant relations to my inner experience, that I can know that there are any other inner experiences like my own; and my inference to the reality of such inner experiences is based solely upon an assumed identity of relations, viz., the relations I know to exist between my body and my inner experience, and the relations between what I take to be the like body of my fellow and his inner experience. I reach, then, the minds of my social fellows only through the medium of a body common to us both. I reach an inner human experience, not mine, only through a something which is not human experience; and this must mean, not the mere fact that I get more definite information about the content of my fellow's inner experience which I have already proved exists in reality, but the fact of *there being* such inner experience other than mine.

Now, unless it is first established that there is common to me and my assumed fellows such a reality as I mean by my body, it has not, we think, been proved that there is a world of human experience other than my own. But my body is a physical object, a part of nature; it is a nature-object; and the order of proof which Professor Royce follows is from human beings to non-human beings. He teaches that, both in the order of psychological growth and logical proof, the existence of nature is dependent upon self and social consciousness.

Turning now to the proof that there is non-human experience which he calls nature, or nature-objects, we find this proof is based

upon the fact of social communication — the social consciousness. The fact of communication between human experiences proves there is body, my body and the bodies of my fellows, which are the necessary media of our communicable experiences; and, since body is indissolubly connected with the totality of those phenomena we call Nature, the argument from continuity establishes the reality of nature-objects whose content is non-human experience.

We think, however, this argument is open to two rather serious criticisms. In the first place, unless it assumes without proof that there are social fellows, in communication with each other, the proof that there are other human experiences than my own presupposes the existence of just those nature-objects which it is the aim of this argument to establish. In a word, the argument either rests upon an unproved assumption, or the proof moves in a circle. Our position is that, without the previous assumption that body exists common to me and my fellows, Professor Royce has not proved that we have social fellows; and without the assumption of such human experiences in communication with each other, there is no proof that bodies as extra-human experiences exist. But even supposing it had been established that other human minds than mine exist, this argument does not prove what it undertakes to prove, viz., that there must be some non-human experience, or that nature is such experience.

There are, as Professor Royce says, two possible hypotheses respecting nature. According to the one view, nature is "the sum-total of those facts of our various experiences concerning which our conceptual experiences seem most easily to agree" (p. 581); that is, nature-objects are merely agreeing human experiences. The other conception is that, while the content of nature is experience, that experience is other than human, *i.e.*, nature-objects are non-human experiences.

Now Professor Royce rejects the first hypothesis and maintains the second; for "there is," he says, "one class of nature-objects in case of which just this negative and sceptical hypothesis cannot be carried out without destroying the very basis of our social consciousness itself" (p. 581). This class of objects is our bodies, phenomena which are "definable as the expressive movements, the gestures, words, deeds of our fellows." The argument here is, that the fact of communication between human minds is inexplicable, if nature-objects are only agreeing experiences; such a fact can be explained only if there is an experience not human and

of identical meaning for all minds in communication. The fact of communication between our inner experiences is therefore an exception, fatal to the hypothesis which makes nature a merely human experience, and it is to be explained only by the hypothesis that our bodies at least are nature-objects, whose contents are extra-human experience. Professor Royce takes the concrete case of a desk in the lecture-room and myself communicating with my fellows. In reference to the desk, he asserts: "You could say that if this desk were here alone, you could indeed so far talk sceptically of phenomenal experiences in various observers, which only seemed to be experiences relating to the same object, but which as a fact do not demand the real sameness of their object. But it is no longer so if, in terms of the social consciousness, you consider not the desk but me as your nature-object; for I am to you not only nature-phenomenon represented in you by comparable and merely similar perceptual experiences of your various private worlds; but I am, as communicating fellow-man, the same outer object for all of you" (p. 582).

Now we maintain that this proof is not cogent. All that the argument proves is, that there must be some content in our human experiences, which is so far common to them all, that it can be a medium of communication between them. The argument does not prove that this common or identical element must be something which transcends our experiences; or, if some extra-human reality is established, that reality certainly need not be what Professor Royce maintains, viz., our bodies as he conceives them.

Why not in reference to our bodies, as well as other nature-objects, keep within our human experience, and explain this fact of communication by a supposition of this sort: Within my experience there is a certain group of elements or events, relatively stable, uniform, and persistent, which I call my body; this content possesses the peculiarity of being regularly connected with those more internal experiences I call ideas, feelings, emotions, volitions; and what is true of myself, I assume to be the case with my social fellows.

Now, if I find on certain occasions, that events or phenomena occur within my experience, which closely resemble those I know as my body, though of course not identical with them, I shall interpret them to mean the existence at that time of experiences in my fellows, which correspond to my own more internal experiences, and which are of like character. Now, if this supposition is inadmissible, and we must transcend our human experiences, why not set up the Berke-

leyan hypothesis of an Infinite Spirit operative in our finite spirits, and the actual medium of communication between them?

Our conclusion is that Professor Royce has not established the two most important theses in his paper. He has not proved that other finite minds like my own must exist, nor has he proved that nature-objects must be finite, non-human experiences.

JOHN E. RUSSELL.

MR. BALFOUR AND TRANSCENDENTAL IDEALISM.

In the January number of this REVIEW, Professor Daniels calls Mr. Balfour to account for "his mistaken portrayal of one of the fundamental tenets of Transcendental Idealism." He wishes it understood that his criticism is not written in the interests of Idealism, but rather in the interests of logical consistency, which he supposes Mr. Balfour to have violated. That a mistaken portrayal is to be found in his own account of Mr. Balfour's position, is, I believe, the true state of the case. Let me then present reasons for so thinking, not as one arguing a case for or against Idealism, but rather as one who, like Professor Daniels, has a human interest in logical consistency.

His criticism of Mr. Balfour seems to me to rest partly upon a misapprehension of the scope and purpose of the chapter which is attacked. Mr. Balfour's purpose is to translate briefly into popular language the essence of Green's theory. To this end he singles out Green's data and method, and seeks to drive them to their logical issue. He is therefore not concerned so much with inconsistencies of expression as with inconsistencies of thought. Whether he is right in charging Green's metaphysics with bringing us "face to face . . . with a mind which is conscious of itself and a world of which that mind may, without metaphor, be described as the creator," is a question to be settled by an immanent criticism of Green's system; it cannot be settled by an external appeal to tabulated citations. To use the latter method would be to return from philosophy to mere talk. Professor Daniels asserts that "Mr. Balfour attacks Idealism for postulating the 'causal or *quasi*-causal activity' of the thinking Self or Subject." Now this is precisely what Mr. Balfour does not do. Professor Daniels refutes himself as soon as he quotes the passage in which he seems to find that assertion. To say that Idealism postulates such activity is surely a very different thing from saying that Green has illogically invested one of the Idealistic

postulates with that activity; yet it is this latter thought alone for which Mr. Balfour can be held responsible. That a misrepresentation has been made, may readily be seen by turning to page 147 of the *Foundations of Belief*. May we not say, then, that when Mr. Balfour *seems* to ignore the passages which Professor Daniels has cited, he does so because that logic, on the basis of which Professor Daniels makes his appeal, tells him that they are an illogical superinduction on Green's system? For, in the passage quoted from section 36 of the *Prolegomena*, we find the following: "Does this, then, imply the absurdity that nature comes into existence in the process by which this person or that begins to think? Not at all, unless it is necessary to suppose that intelligence first comes into existence when this person or that begins to understand." But suppose doubt can be thrown on the 'eternally complete consciousness,'¹ — suppose it be claimed, as Balfour does claim, that the Idealist's "analysis or criticism of the essential elements of experience" is a criticism which "must for each of us be necessarily of his own experience, for of no other experience can he know anything, except indirectly and by way of inference from his own." "What then," as Balfour urges, "is this criticism supposed to establish (say) for me? Is it that experience depends upon the unification, by a self-conscious 'I,' of a world constituted by relations? In strictness, No. It can only establish that *my* experience depends upon a unification, by my self-conscious 'I,' of a world of relations present to *me* and to me alone."² All other selves — not excluding the supposed 'infinite and eternal consciousness' — must be known as all other objects are known, by being enmeshed in the network of the categories.

According to Green, the objective world does not come into existence when *A*, *B*, or *C* begins to think; its existence during the vast periods of geological time, before the human animal appeared on the planet, is vouched for by the eternal consciousness. Suppose now, as I said before, there be no logical justification on Green's data and method for believing in such a consciousness, then does it not turn out that the relation which I sustain to the universe is tantamount to creation? For existence is only as it is thought, and 'thinking it' means reducing it to relations, and relations find their *fons et origo* in the mind. May not Mr. Balfour, indeed, say of Green, as Green has said of John Caird: "As a follower of Hegel he must and does

¹ *Mind*, 1891, p. 249; see also Seth's *Hegelianism and Personality*, pp. 59-60.

² *Foundations of Belief*, pp. 153-4.

hold that the objective world in its actual totality is thought, and that the processes of our intelligence are but reflections of that real thought under the conditions of a limited animal nature. But he does not sustain himself at this point of view. It may be that no one can; but till it is done our Idealism, though we may wish it to be absolute, remains merely subjective"?¹ Adopting Professor Daniel's way of interpreting a philosopher, Green would have no right to pass this judgment, for Caird has explicitly repudiated subjective Idealism, on page 148 of his *Philosophy of Religion*. That philosophical criticism has the right to suppress illogical assertions, however explicit they may be, Green himself thus admits. The wonder is that such a right should ever have been questioned.

Mr. Balfour, then, is not charging the transcendental analysis of experience with the solipsism which his examination finds in Green's pages; on the contrary, he shows it to be the result of a desertion of the immanent point of view and of an unwarrantable emphasis on one of the organic elements of experience. He has explained elsewhere² at greater length some of his objections to Green's type of Idealism, and these explanations should be examined by one who wishes to get a complete insight into his mind. It would then be seen how far he has or has not taken account of those assertions of Green, to which Professor Daniels has directed attention.

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ROGER BRUCE JOHNSON.

THE INTENSIVE STATEMENT OF PARTICULAR AND NEGATIVE PROPOSITIONS.

In the late Professor Jevons' *Studies in Deductive Logic* (chapter XIV), we find perhaps as careful a discussion as is anywhere readily accessible of "Propositions and Syllogisms in Intension." The author justly estimates, at the beginning of this chapter, the importance of the subject and deprecates the scant attention it has received; but an attempt to carry out fully the rules which he himself subsequently states, leads to so much confusion that doubt is cast upon Jevons' own thoroughness in dealing with the question.

The difficulty arises when one tries to follow the author's suggestions with reference to the intensive equivalents of particular propositions. "Can we," he asks, "exhibit particular and negative

¹ Green's *Works*, vol. III, p. 143.

² *Mind*, 1884, pp. 76, 83.

propositions in the intensive form? This question has not, I think, been much investigated by logicians, and the remarks to be found in the works of Hamilton and other logicians apply only to the universal affirmative proposition. Taking the particular affirmative, 'Some crystals are opaque,' it asserts that 'One or more crystals are among opaque things.' It follows, no doubt, that the quality 'opaqueness' is among the qualities of one or more crystals, namely, *the particular crystals* referred to in the extensive proposition. Thus *I* may be treated intensively much as *A* is treated" (p. 128). A proposition in *A*, 'All *A*'s are *B*'s,' would be, intensively expressed, 'All the properties of *B* are properties of *A*.' A proposition in *I*, we gather from the above, would be stated in intension thus: 'All the properties of *B* are properties of some *A*.' As regards the universal negative, Jevons points out that, from the proposition, 'No iron bars are transparent,' we cannot infer that 'No properties of transparent objects are properties of iron bars.' "This inference," he declares, "would be quite false, for there may be many properties, such as gravity, inertia, indestructibility, extension, etc., which are possessed alike by transparent objects and iron bars. All we can infer is that 'Not all the properties of transparent things are in iron bars,' or, 'Some of the properties of transparent things are not in iron bars.' Entire separation in extension involves only partial separation in intension, or an extensive assertion in *E* gives an intensive assertion in *O*. . . . We may in a somewhat similar way treat the particular negative, say, 'Some crystals are not symmetrical.' We cannot infer that 'All the common properties of symmetrical things are absent from some crystals,' but only *some* of those properties." We may conclude, then, that *A*, *I*, *E*, and *O* will be, expressed intensively, as follows: All the properties of *B* are properties of *A*; All the properties of *B* are properties of some *A*; Some properties of *B* are not properties of *A*; Some properties of *B* are not properties of some *A*.

But it is worth noticing that, while 'No *A*'s are *B*'s' is the same as 'Some properties of *B* are not properties of *A*,' the latter proposition cannot always be translated into the former, and the two are therefore not true equivalents. When the intension of *B* is greater than the intension of *A*, we shall find that Jevons' intensive form for *E* really corresponds also to *I*. For instance, let *A* equal 'plants' and *B* 'exogens.' It is true that 'Some properties of *B* are not properties of *A*' — the *differentia* of 'exogens' does not belong to the class 'plants.' But it certainly is not true that 'No plants are

exogens.' The extensive proposition that holds good in this case is, 'Some plants are exogens,' for which, according to Jevons' rule, the intensive equivalent would be, 'All the properties of exogens are properties of some plants.' For the class of propositions in *I*, where the predicate has greater intension than the subject, then, we find that Professor Jevons' intensive equivalents for both *I* and *E* are true.

The fact is that a particular proposition has no special significance in intension. There are three conceivable ways in which two terms may be related as regards their intension. (1) They may entirely coincide in intension. In this case of course they will be identical, and will coincide in extension also. (2) They may be partially separate in intension. This case would be represented by the proposition, 'Some properties of *B* are not properties of *A*,' which Jevons takes as equivalent to an extensive proposition in *E*. That it has no such definite reference is evident. Partial separation in intension may mean that the intension of one term is contained in that of the other, as the intension of 'plant' in that of 'exogen.' Here the extensive proposition, *A*, or its converse by limitation, *I*, holds good. Or the subject and predicate may be of about equal intension, as the terms 'stockholders' and 'bondholders' in Venn's well-known problem. Here *E* may be true or *I*, indifferently: whether 'No stockholders are bondholders,' or 'Some stockholders are bondholders' is immaterial, so far as the intensive relations between the two classes are concerned. The particular proposition, then, may be true for the same intensive relation between its terms as allows either *A* or *E* to be true. (3) The third conceivable relation between the intension of two terms, namely, that they shall be entirely separate in intension, need not concern us, even if it were a possible case. It is evident, first, that Professor Jevons' suggested equivalent proposition in intension for a universal negative may in some cases be equivalent to a particular affirmative instead; and second, that it is useless to try to find an intensive equivalent for the particular proposition. That some *A*'s happen to be *B*'s is a matter of pure accident as regards the relations of *A* and *B* in intension. As for the proposition, 'All properties of *B* are properties of some *A*,' the expression 'some *A*' is inadmissible, for, when intensively regarded, a class is an indivisible unit and there can be no question as to its extension.

MARGARET WASHBURN.

REVIEWS OF BOOKS.

Philosophy of Theism, being the Gifford Lectures delivered before the University of Edinburgh in 1894-95. First Series. By ALEXANDER CAMPBELL FRASER, LL.D., Hon. D.C.L. Oxford, Emeritus Professor of Logic and Metaphysics in the University of Edinburgh. Imported by Charles Scribner's Sons, New York, 1895. — pp. 303.

This volume is one of the best products of the Gifford Lectureship. The author's name is a sufficient guarantee of its philosophic importance, as well as of its literary excellence. It contains the ripest reflections of this distinguished and scholarly thinker upon the ultimate metaphysical questions. In his previous contributions to philosophical literature, Professor Fraser has deliberately chosen to present the thoughts of the elder British school in the new light of a sympathetic and penetrating understanding of their historical significance. His rehabilitation of the actual philosophy of Locke and of Berkeley has implied a lifelong, self-obliterating communion with these spirits of the past; and his fine delicacy of perception has restrained him from obtruding himself between the reader and the subject of his interpretation. But his old pupils have always known that Professor Fraser was more than an expositor of other men's thoughts, and a contributor to the history of philosophy; and intelligent readers of his expository and critical studies in British philosophy must have been convinced that the insight which these studies showed was not possible without some considerable gift of speculative originality. Indeed, with all his scholarly and artistic reticence, it has not seldom been possible to read within the lines of the author's exposition the suggestion of a pretty definite philosophy of his own. This mingling of reticence with hints of a philosophical message which he preferred to deliver in such an indirect and impersonal way, has produced in the minds of Professor Fraser's readers an expectation of even better things to come — better because more distinctively his own — which the present volume (and doubtless its successor, which is immediately to follow) cannot fail, in large measure at least, to satisfy. Professor Fraser is still, even in this work, the keen and sympathetic student of the philosophic past. Some of

his best insights have evidently been reached, as his own statement of them suggests, by sitting at the feet of Bacon, and Locke, and Hume, and, above all, of his own beloved Berkeley; and to read the book is to get a new conception of the inexhaustible educational possibilities of the history of philosophy. But we also find stated in it, with a definiteness and articulateness not met with in its predecessors, though with a modesty and a tentativeness as characteristic of it as of them, the content of the author's own philosophical belief.

Professor Fraser understands by 'Natural Theology' (the subject of the Gifford Lectureship) "the Philosophy of Theism, not the Natural History of the religious phenomena presented by mankind." "Lecturers on the Gifford Foundation, in this and the other Scottish Universities, have hitherto, I think, mostly inclined to the historical treatment of their high problem. Deeply interesting as that is, it leaves in the background the supreme human question, — Are religious beliefs, or any of them, *true*? Is religious worship and faith and hope the transitory illusion of certain stages in history, or is all this a permanent attitude of feeling and will, consistent with reason; and if so, by what criteria may its reasonableness, and its best intellectual form in human consciousness, be determined? Is truth in such matters — and if not, in any other matter — capable of being, either naturally or supernaturally, realized in the mind of man?" (p. 36). So understood, the problem of Natural Theology is identical with the problem of Philosophy itself; and Professor Fraser has throughout interpreted his task in this large sense.

The plan of the course is simple and excellent; it illustrates the author's well-known skill in the perspicuous and orderly statement of a process of philosophic thought. The exposition of "the Final Problem" (Lecture I), and its articulation into the three contained problems of "the Ego, Matter, and God" (Lecture II), exemplify the important contribution which, in philosophy as in science, a good statement of the question makes to its answer. The nature of the ultimate question is found to imply three possible answers, each representing a different "Monist point of view," *viz.*: Panmaterialism, Panegoism, and Pantheism, or the reduction of the multiplicity of real existence in turn to Matter, to the Ego, and to God. Lectures III–VI are occupied with the discussion of these three answers, or points of view, special attention being given to the third, or Pantheistic. The conclusion reached is that "supreme regard for reasonableness obliges us to dismiss them all," since, although each contains an element of truth which the others overlook, it is found, in

its turn, to overlook an element of truth which the others emphasize. The alternative of "Universal Nescience," or Agnosticism, is next considered, and refused on the ground that scientific Agnosticism is inconsistent with itself. "The agnosticism that retains physical science is not really a protest against faith; it is only an arrest of faith at the point at which faith advances from a purely physical to the moral and religious interpretation of life and the universe" (p. 219), and an arrest of faith at this point is not "justified by reason, or by the experience of mankind." Finally, in Lectures VIII-X, the remaining alternative is discussed and accepted: after finding ourselves "expelled from Monism in its three forms," and forbidden to take refuge in Universal Nescience, we "return to reason, in the form of faith in the three commonly postulated existences, through a deeper and truer interpretation" of each. Thus the movement of the author's thought is first destructive, then constructive, or reconstructive; "first sceptical of monist systems of philosophy, then finally analytic of experience." And its outcome is that, in Bacon's words, "depth in philosophy bringeth men's minds about to religion," if a little "inclineth them to atheism"; or, in Berkeley's, that "the principles which at first view lead to scepticism, pursued to a certain point, bring men back to common sense."

Perhaps the earlier, or critical part of the book, is the more valuable, as it is certainly the more persuasive. This may be because the author's temperament and habit is to discuss the value of positions taken by others, rather than directly to formulate a position of his own; it is also doubtless due to the nature of the position he adopts, which is essentially tentative and unsystematic, and the result of an intense appreciation of the sceptical difficulties which beset the entire metaphysical question. On the other hand, the value of his criticism of the several "monistic systems of philosophy" is the consequence of the very justice of his appreciation of them; a less sympathetic critic would have been less formidable. The reader is compelled to acknowledge that the author has himself felt the force of the different theories, and has earned the right to criticise them by experimentally testing their metaphysical validity. The resulting impression is that these various systems, when rightly understood,—from within, and not from without, by a sympathetic adoption of the standpoint from which each is constructed,—are real alternatives of philosophical thought, and not gratuitous hypotheses or capricious fictions of individual philosophers. The philosophical question itself, we are taught to see, invites and makes inevitable just these answers.

With such skill is the discussion carried through, each theory being permitted to exhaust itself, as it were, and give rise to its rival, that the book might well be used as an "introduction" to metaphysical theory in general.

The *reductio ad absurdum* of Materialism is particularly fresh and striking; the argument is *ad hominem*. "A merely human science is discredited in the degradation of the beings by whom it is made into accidents of the universal flux" (p. 112). "For what is called intellect, with its product science, as well as what is called conscience, with morality as its product, come to be conceived as only transitory natural outcomes of certain molecular conditions. The very thinking and observing processes themselves, those processes through which the materialist finds that conscious mind in all its processes is virtually molecules in motion, are themselves a part of the molecular process. Human intelligence, as well as human conscience, is only one among the many sorts of ephemeral phenomena to which the molecular universe, in its eternal flux of molecules and aggregates of motions, is supposed to be continually giving birth. Its verified inferences, as well as its unproved hypotheses, are all alike transitory" (p. 103). Thus, "the supposed discovery that the whole is ultimately only continuous mechanical motion of atoms, without guarantee in a divine-natural order, discredits the discovery itself. Unless there is that in man which is more than physical evolution of matter into organism,—if 'matter' means only what is given in sense or understanding measured by sense,—there can be no valid science, and no valid materialistic philosophy. . . . Universal molecularism is intellectual suicide" (p. 113).

As an ardent admirer of Berkeley, Professor Fraser naturally finds that Panegoism, or Universal Immaterialism, "has more to say for itself than Universal Materialism" (p. 133). "Hypothetically accepted, it forms at least a *reductio ad absurdum* of exclusive materialism. It presents the only reality of the materialist as empty negation, when the light and life of percipient consciousness is entirely withdrawn" (p. 143). Yet, "the exclusive ego, in the last resort—as well as the exclusive molecules, in the last resort—reduces human experience of reality to an absurdity, if not to a contradiction" (p. 133). "This individual egoism is self-destructive: it shuts up each person in a suicidal isolation, because the postulates of reason, which connect individual persons with the outward and with the infinite, are, on its narrow basis, dissolved in the one postulate of an individual personality" (p. 143).

To the consideration of a Pantheistic Monism two lectures are devoted, special attention being given to the Spinozistic form of the theory. The outcome of the discussion is the following dilemma: "Either we reduce the universe of individual things and persons to shadows of reality, and then the undetermined substance or Deity of Spinoza comes in as an abstract featureless unity; or we must assume that the presented data of our temporal experience are real, so far as they go, and that God is signified, not modified, in the finite universe" (pp. 183, 184). Our choice between these alternatives must be determined by the facts of experience; Spinozistic theology is only verbal consistency with definitions (p. 185). And "it is in the moral experience of remorse and responsibility that an insurmountable obstruction to pantheistic necessity seems to present itself. A logical pantheism is inconsistent with ideals of unattained good, and with the entrance of real evil into existence" (p. 184). The fact of moral evil "involves a disruption of Spinoza's divine unity and necessity. . . . In the universe there exists that of which God cannot be the substance, unless either God is evil, or evil only one of the illusions of human imagination" (pp. 184, 185). Abandoning the effort to see all things *sub specie aeternitatis*, "we must employ instead the less pretentious but surer method, and inquire what the real universe that is in a small measure revealed in our experience of the temporal succession therein shows itself to be, physically and morally." We must "exchange the abstract necessity and undifferentiated unity of pantheism for the tentative experience that seems more suited to man, in his place in the hierarchy of existence, intermediate between the merely sensuous animal and Divine Omniscience. For the alternative seems to be *Homo mensura*, in some interpretation of this formula, or *Nulla mensura*" (p. 189).

By reading a little 'within the lines' of Hume, Professor Fraser discovers in the *Treatise of Human Nature* the "substitution of the concrete *homo mensura* for the abstract *Divina Mensura* principle of Spinoza" (p. 214). "A recognition of the practical trustworthiness of the universe . . . is, according to Hume's theory, a natural issue of the fact that real events outside our minds follow one another in steady order. The past natural history of our surroundings occasions faith in the continuance of their natural order,—that is to say, in their interpretability. But whatever the occasion of the rise in us of this faith may be, the matter of relevant concern is that the faith *does* naturally come into exercise, and that the expectation which it involves finds a response in our experience of surrounding

reality. The universe, in short, is so far comprehended, when it is found in fact to correspond to the expectant judgments of man: man and his universe are united in an experienced harmony" (p. 212).

This Humian faith in the "preëstablished harmony between our thoughts and the course of nature" becomes the basis of the author's own reconstruction. It becomes for him a faith in the divinity of nature, in the sense, not of its creation by God, but of its eternal dependence upon the Divine Mind. The order of nature "may, it seems to me, be unbeginning, and yet throughout forever dependent, — an eternally dependent cosmos, an eternally supernatural evolution" (p. 233). "The natural history of the material world, so read, is a history of instrumental, subordinate, or secondary causes, which are only metaphorically called *agents*. They are virtually *signs* of their so-called effects — signs in which the Divine Reality is continually revealing order, meaning, and purpose to the percipient beings that have risen into conscious perception, on this planet, in the course of the natural evolution. . . . Natural causation is really sense symbolism" (pp. 234, 235). This "idea of natural causation being essentially divine," is, Professor Fraser reminds us, "not new to me. It pervades the thought which I have given to the world in the last five-and-twenty years, for it is implied in six volumes of which Berkeley was the text, and in three in which I have essayed a critical reconstruction of Locke" (p. 249).

Yet it is in the moral self-consciousness of man that he finds "the key to this deeper or more spiritual interpretation of nature. Apart from this, the outer world, with all its laws and ends, is darkness; for external nature in itself, or apart from the contents of moral life in man, conceals the God whom it nevertheless reveals when it is looked at in the light of spiritual consciousness" (p. 247). "The only ultimate or originative power that enters into human experience seems to be moral or spiritual" (p. 269). "The final meaning of cause is thus reached through conscience, and in the ethical conception of the universe we seem to have a deeper and truer hold of reality than when it is treated only as a scientifically interpretable system of sense signs" (p. 270). "The macrocosm in analogy with the microcosm, — the supreme Power in nature in analogy with what is highest in man, the *homo mensura*, when the *homo* means the moral and spiritual, as well as the merely sensuous man, — in this analogy, for which the contents of consciousness supply the materials, we seem to have the best light within man's reach for the true philosophy of the universe" (p. 271).

This philosophy must, however, remain, in Bacon's phrase, 'abrupt'; it can never become a perfectly intelligible unity. "The highest human philosophy takes the form of a reasonable faith that man will not be put to confusion in the end, by indulgence either in scientific prevision or in ethical and religious hope." In such words we recognize the characteristic spirit of British philosophy. The book, indeed, is a product of that spirit; it represents the ripest development of the moral and 'common-sense' philosophy of Locke and Reid. Professor Fraser's obvious intention has been, in this as in preceding volumes, to recall the minds of his countrymen to a better appreciation of their own national standpoint. A more skilful plea for the Philosophy of Faith were hardly possible.

JAMES SETH.

Lehrbuch der allgemeinen Psychologie. VON DR. JOHANNES REHMKE, Professor der Philosophie zu Greifswald. Hamburg and Leipzig, Leopold Voss, 1894. — pp. 582.

Professor Rehmke divides his subject into three parts. The first deals with the nature of the soul (*das Seelenwesen*), the second with the individual phenomena of consciousness (*der Seelenaugenblick*), and the third with the life of the soul, under which last he includes the consciousness of time, memory, imagination. The section on the nature of the soul begins with the history of the concept. He distinguishes four doctrines of the soul: (1) the ancient materialistic view, which takes the soul to be a material thing; (2) the spiritualistic view, according to which the soul is indeed an immaterial substance, but not distinguished by any positive spiritual attributes; (3) the modern materialistic doctrine, which regards the soul as a function of the brain; (4) the Spinozistic doctrine, which takes the soul to be one side of the man, of which the other side is the body. Before passing judgment on these views, he defines his own position. There are two quite distinct kinds of concrete things, souls and material things. It is important to notice his definition of concrete things. The concrete is that which is capable of change; the abstract that which is not capable of change. One would hardly recognize here the familiar distinction of thing and attribute — which is really what he means by concrete and abstract. Our conventional metaphysic would probably say that the attribute changes while the thing remains the same, which is exactly the reverse of Professor Rehmke's position. In his vocabulary — for it is mainly a matter of vocabulary — the individual attribute is what it is and cannot change.

Change can be predicated only of that unity in diversity which is the *thing*. Hence the abstract is unchangeable and the concrete is capable of change.

Concrete consciousness differs from concrete material things by the presence of the ego or "subject-moment." The consciousness of each individual moment contains the "subject-moment" as an actual and present fact. Things (using 'things' with the writer to denote exclusively material things) have no such abiding "moment." No one of their "moments" can be called the subject, and the concreteness of the thing consists entirely of the unity, according to some principle, of attributes contained in the several states of consciousness. Every characteristic of a thing may change in the course of its history while the thing remains the same. This it does in virtue of the relation of its attributes.

The subject of consciousness is not, however, an inner core, separable from its determinations and eternal while they are temporal. On the contrary, consciousness *is* subject *and* determination. Every subject must be subject of some determinate consciousness, and all consciousness is the consciousness belonging to a subject. Neither element is anything without the other — and herein lies the error of all historical conceptions of the soul. Either they have ignored the "subject-moment," in which case the phenomena of consciousness become a series of mere feelings which no one feels, and are attributed to the brain as its functions; or they ignore the particular determinations of consciousness. The real soul becomes then something quite distinct from consciousness and not to be distinguished from material things.

In the sections that follow we learn the consequences of this doctrine. If we cannot have consciousness without self, nor self without consciousness, then unconscious consciousness must be an absurdity. This gives us the spirit and aim of the whole volume. It is a reiteration of the common-sense conception of an interaction of soul and body as distinct entities, against the Spinozistic conception of a single substance of which they are parallel manifestations, the consequence of which is the doctrine of unconscious consciousness. It is not too much to say that the refutation of this doctrine, and the attack upon Höfding as its representative, absorbs the writer almost to the exclusion of any positive doctrines of his own. All erroneous theories, he thinks, are due to the fact that they lead ultimately to the doctrine of unconscious consciousness.

Section 16 contains his own view of the relation of mind and

body. The law of inertia, that no change takes place without an immediate cause, is true for both mind and body. In order that a change may occur in any concrete thing, another thing must be present. This gives all the needed conditions for action, and it is not necessary that the different members of a causal series be homogeneous. By the conjunction of mind and body, therefore, all the conditions for interaction are fulfilled. The common conception of the passing of influence from one to the other is a superstition. The fact is simply that, with a given relation of concrete things a given result follows. Nor does this explanation conflict with the law of the conservation of energy. It is true that any action of the mind which increased or diminished the amount of energy in existence would contradict the most general law of the material world. But the mind does not act in this way. It does not add to the amount of energy, but merely converts potential energy of the brain into kinetic energy (p. 111).

I cannot see that this assumption removes the difficulty. The law of Conservation of Energy is formulated to express the exact and reciprocal relations existing between various physical phenomena, notably between heat and motion. It means that a change in any one of these phenomena must be accompanied by an exactly corresponding change in the others, and the exactness of this relation is expressed by the assumption of a constant quantity of what is called 'energy.' If then any change occurs, in the motor system for instance, which is not *exactly* accounted for by the character and nourishment of the brain and the excitation of the sensory nerves,—that is to say, if any physical change occurs which is not exactly accounted for by other physical changes,—the law of conservation of energy is contradicted. It does not help matters to say that the mind converts potential into kinetic energy. Potential energy is energy held in check by some resistance, mechanical or molecular. If this resistance is removed, motion of some kind takes place, and the sum of energy in the material system is changed. The interaction of soul and body remains, therefore, still to be explained.

Two more topics complete the first and most interesting part of the book. The possibility of knowledge and the origin of the soul are treated in a manner which reminds one strongly of Bishop Berkeley. As stated before, the burden of this division is the refutation of the doctrine of unconscious consciousness, and a word about this is necessary before we leave it. His argument, in its last analysis, rests upon the assumption that no state of consciousness

exists without the subject, that consciousness without subject is an absurdity. Whether this is true or not — and I am not prepared to say that it is not — it has no weight unless the subject be in all cases the *same*. Unconscious consciousness may still have its subject, which may, like the subject in secondary states of consciousness, not come into relation with the main subject. Professor Rehmke never shows that the subject of successive states must be identical. He even gives us no hint of what he would mean by an identical subject. The law of continuity, he asserts, does not apply to mind. That is, a subject may be, cease to be, and be again, remaining always the same subject. Two persons, he tells us, differ not in the peculiarity of the subject, but in the particularity of their states of consciousness. This looks as if the subject had nothing to do with personal identity, and yet we are told that it is the basis of it. Moreover, he is not clear about what he means by ‘consciousness.’ He makes a distinction between attentive consciousness and inattentive consciousness, and speaks somewhere of the focus (*Blickpunkt*) of consciousness. Surely we should be told in what sense we are conscious of something not in the focus of consciousness. He should also be ready to prove that things perceived, but not immediately noticed, are perceived by the same subject which notices them. But I cannot find any mention of these questions. Just this difficulty — the difficulty of explaining what we mean by the same person which remains the same in spite of apparent lapses, so to speak, into non-existence — is what the doctrine of unconscious consciousness attempts to explain. As a provisional formula to bring order into the world of mind, I believe that it stands on the same footing as the doctrine of the continuity of matter, and the logic which accepts the one cannot reject the other.

The second part of the book deals with the individual phenomena of mind (*der Seelenaugenblick*). The treatment is based upon the traditional division into thought, feeling, and will. The consciousness of every instant is a unit and not capable of further division, though it may have a diversity of *content*. Sensation and idea (*Vorstellung*) are both directly conditioned by brain states. Ideas, that is to say, are not *directly* conditioned by previous sensations. They are distinguished from sensations by the fact that the brain movements corresponding to the latter are caused by external stimuli. An idea is conditioned in two ways: (1) by a previous perception determining its content; (2) by a present perception bringing it into existence. A content identical with the present perception must with

the previous determining perception have formed at some former time one state of consciousness. But the conditions of an idea are not directly psychical. The immediate conditions are the repetition of a former brain movement and a second brain movement of peripheral origin. The theory of the unity of consciousness and that of the conditions of an idea, are both based upon the inherent absurdity of unconscious consciousness. If a state which seems to be unitary is actually complex, then the individual elements as such and the act of combining are under the threshold of consciousness. If ideas are *directly* conditioned by previous percepts, those percepts have existed somewhere in the meantime as unconscious states. There is therefore no direct causal relation between mental phenomena of different moments of time; all such relations are in the nervous system.

On an equal footing with sensation, we have space as an original determination of consciousness. Space is neither prior to the things in space nor subsequently developed out of them, but appears simultaneously with them. The 'original' space perception is that of simple undetermined space. This comes only in quite simple states of consciousness. We can form an approximate notion of it when we think of boundless space of one color, *e.g.*, gray. With developed consciousness comes the simple determination of space or the feeling of the separateness of different points, and finally the fully determined space perception. One peculiarity of the theory should be noticed: space is entirely visual, and one born blind has no conception of it.

Passing over the section on feeling, we come to that on will. Will, like the subject-moment, is simple, unanalyzable; it appears only in presentation, and cannot be represented in an idea. Will is an abstract determination of consciousness, and is to be distinguished from action. It is the concrete individual, the soul, that acts, and action is determined jointly by the moments of perception, feeling, and will. The will is determined by the "practical contradiction" between a present less desirable state and a possible, ideal, more desirable state. The contradiction between necessity and freedom is removed by the fact that causal and determinate relations exist only between abstract determinations (to use the author's vocabulary), and not between concrete things. The will is determined by the "practical contradiction," and so far the doctrine of determinism is correct. But the concrete soul is free; that is, the soul is determined only by itself. The doctrines of freedom and determinism are, therefore, within their separate spheres both true.

This doctrine is substantially the same as that which Immanuel Kant proposed a century ago — with this difference, that Kant did not pretend to do more than construct a theory, whereas Professor Rehmke is giving us a description of facts (p. 435). “Choose your examples where you will,” he says, “you will find this proposition always confirmed. Freedom is asserted only of the concrete, necessity is justly applied only to the abstract, that is, to the determination of the concrete.” Four pages later we learn that the soul alone is a concrete thing in the sense here meant — in the sense of an indivisible concrete — and that freedom cannot be asserted of material things. I need not say that this strips the appeal to facts of its whole meaning.

Without discussing the theory in general, we may ask how it is connected with the doctrine of the interaction of soul and body. We are told that the presence of two concrete things, soul and body, is the necessary condition of action. Change in the one concrete seems to be determined by the presence of the other. But the will is determined by the cognitive consciousness. This is determined by the brain-state. Nevertheless the individual is free, that is, is determined only by himself. I do not find that Professor Rehmke anywhere shows how these statements are to be brought into harmony.

The volume closes with a section on the life of the soul, in which such topics are treated as the consciousness of time, memory, and imagination. Many chapters are missing that one would expect to find in a text-book on psychology. All the material collected by experimental psychology is rejected as belonging to physiology, while logic and epistemology have deprived us of other chapters. The general aim of the book is to show that the traditional views of the mind can, with the aid of Kantian and Berkeleyan metaphysic, be made reasonable and harmonious. I do not think the attempt has proved in any way successful. On the other hand, the criticisms of the more modern views are frequently keen and go to the roots of things, and one can hardly read the book without being stimulated to greater caution and more careful analysis.

W. FITE.

Outlines of Psychology. By OSWALD KÜLPE. Translated by EDWARD BRADFORD TITCHENER. London, Swan Sonnenschein & Co., 1895. — pp. xi, 462.

To the translator of this book great credit is due for the smooth and readable English in which he has rehabilitated the German

original. A slight tendency to employ unusual and almost archaic expressions, to avoid trifling circumlocutions, constitutes the only ground upon which the most scrupulous reader can offer criticism. Unfortunately, the good English is offset by a considerable number of distressing typographical errors.¹

Dr. Titchener has not been simply a translator, however. He is, in a modest way, joint editor. Külpe himself has made a few insignificant changes in the text, to which under his direction the translator adds a few paragraphs. Many cross references are filled in, an index of names is added, and Külpe's own experiments are printed in small type — an unpleasant method of designation, for the type is nowhere too large for comfort. It would have been a welcome departure from the usage of the original, if Dr. Titchener had seen fit to add to the bibliography, with reference especially to students who do not read German readily. It is true we have no considerable amount of good experimental literature in English, but this is simply additional reason for giving the student some acquaintance with what there is. Taken all in all, however, the translation is a decidedly more useful book than the German edition.

The psychological public is already familiar with the more salient characteristics of the book, which was widely, and in the main favorably, reviewed upon its appearance in 1893. Although no such purpose is explicitly avowed, the present translation has its principal *raison d'être* as a text-book. In any event it is certain to be used as such, and it is therefore desirable to supplement the previous reviews by some discussion of the book from this general standpoint — not merely from the mechanical point of view, as regards its fitness for American class-room use, but also with reference to the wider question of the general trend of psychological thinking upon which it is based and to which it leads.

Concerning the first of these matters I must admit, as the result of some little experience with the book, both in its German and English form, that students find considerable difficulty in following the exceedingly concise, compact statements so often made. This militates against the successful use of the work, save by decidedly advanced students. A further difficulty attaching to the use of the book by American students, arises from the fact that most of them have already in mind the standpoint and method of some one or

¹ This is in some measure excusable because of the conditions under which the book was published, translator and printer being on opposite sides of the Atlantic. A list of corrected errata has already been issued.

more English authors, and with these it is no easy matter to reconcile Külpe's form of treatment. With intelligent supervision, however, this fact can of course be utilized to give the student a much more masterly and complete grip of his subject than has hitherto been feasible, while familiarizing him at the same time with something of the spirit and flesh of the experimental methods. Were the objections to the book on these general grounds twice as serious as they are, I for one should still be exceedingly grateful to both author and translator for enabling me to give my classes a work which, however much one may differ from its doctrines, constitutes a reasonably complete statement of human psychic processes in the light of experimental observations. No student is likely to use the book without gaining a stimulating admiration and respect for the broad scholarship of the author, and for the tireless energy and patience with which he has so obviously labored.

In taking up the second of the two points above mentioned, I shall attempt to discuss only one or two aspects of the problem involved. As will be remembered, feeling and sensation, according to Külpe, are the elements of conscious processes from which all other mental products are formed, either by 'fusion,' in which the constituent elements suffer loss of distinctness, or by 'colligation,' in which the combined elements gain in distinctness. Will, so far as it is at all possible to differentiate a distinct mental content thereby, is characterized simply by groups of particular sensations, among which sensations of strain are especially prominent. As a logical scheme for psychological classification, this method of treatment is perfectly defensible and unambiguous; as to how far the author succeeds in manipulating it, opinion will probably differ. One cannot help feeling that the detail has not been quite fully worked out, when it becomes necessary to discuss side by side in the same chapter the facts concerning simple reactions and those of the contrasts of brightness and color. The question regarding the real elements of consciousness is of course merely one of fact, concerning which each investigator must for the present satisfy himself by the deliverances of his own consciousness. Meantime it must be observed that, while Külpe's principle of classification is logically sound and on the whole substantiated by the trend of experimental work, it can by no means supersede such a method as that employed, for example, by James. Külpe practically begins to write where James leaves off. The elements with which the former begins, are not, as the latter so keenly points out, ever given ready-made into our hands. They represent

the last results of painstaking analysis. Once the analysis is made, and thoroughly made with the assistance of experimentation, it is then legitimate to go ahead and construct one's synthetic account of the processes involved, exactly as does any writer on physics. In short, all that James claims for his method of procedure is true, in so far as it relates to investigation. When it comes to orderly presentation the procedure of Külpe,¹ which is the common method, certainly has many, if not paramount, advantages. As so often happens in such cases, the truth includes the contentions of both parties. If it be true that a synthesis without an analysis is impossible, it is equally and inevitably true that an analysis without a synthesis is useless.

We may go the whole way with Külpe and several other contemporary writers in denying that Will as such can be differentiated, save in so far as it consists in certain groups of sensations, while we still protest that the general attitude which he maintains toward mental activities is, if not erroneous in actual fact, at least misleading in its tendency and implication. Leave alone the merely theoretical sides of the matter, the practical results of the recently increasing emphasis upon consciousness as activity demand peculiarly cogent reasons, if one is to neglect this phase of mental life. If it were merely a matter of terminology, one would urge no objection because only twenty-two pages are devoted to the chapters on attention, and only five pages to that upon will, both of them being designated as "general aspects" of consciousness. It is rather because so little importance is throughout the book attached to activity as such, that the reviewer is inclined to feel that something of the living organism has been lost in the analyses, that we have been given only the anatomy and not the physiology of the mind. Wundt has been severely enough criticised for his doctrine of apperception, but the constant reference which he makes to it, in so far as it is a reference to the activities of consciousness, is far more hopeful, both in its immediate and remote applications, than the more or less static conceptions which Külpe gives us. The explicit support given to this Wundtian creation, in a paragraph near the end of Külpe's book, only serves to lend additional emphasis to the essential neglect of the

¹ Certain omissions in the text are rather startling to readers brought up on English psychology. They are doubtless purposeful and made for cause, but one doubts if they can be wholly justified. Thus one misses any treatment of conception and of belief, and any adequate account of reasoning, in the common English sense of the word.

doctrine throughout the rest of the work.¹ A psychology which fails to give a satisfactory account of conscious activities as activities, or at least to provide a place for such an account, has certainly left untouched one large portion of its proper field, and denied itself the opportunity of being most helpful to ethics and pedagogy.

Külpe confines himself so rigorously to the exposition of his psychology, and diverges so rarely to explain or defend the principles on which his procedure rests, that the reviewer is constantly in doubt as to whether he is criticising justly. With something of this doubt, I have commented on what seem to me some weaknesses in the book. The better the book, the more necessary it is to do this. Of its many striking merits I cannot speak in detail. The masterly treatment of sensation and the methods of mensuration applicable to it; the lucid accounts of a score of methods of experimentation upon various psychological processes; the carefully evaluated digests of the results of such experimentation; the suggestive criticisms upon current psychological doctrine — all these and many other valuable characteristics of the book have been dwelt on by other reviewers. Better than all else, perhaps, is the bracing atmosphere of finished scholarship which pervades it. It certainly deserves to rank among the best of our psychologies.

JAMES ROWLAND ANGELL.

¹ The very inadequate treatment of impulse, and the too brief, though excellent, account of emotion, are illustrations of the general tendency to which I refer.

SUMMARIES OF ARTICLES.

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

LOGICAL.

The Logic of Geometry. B. A. W. RUSSELL. *Mind*, No. 17, pp. 1-23.

Three points are discussed in this article: (1) The Axiom of Congruence, (2) The Axiom of Dimensions, (3) The Straight Line. Since geometry deals with the comparison and relations of spatial magnitude, and a definition of spatial magnitude reduces itself to a definition of spatial equality, we require at the outset some criterion of spatial equality. Euclid gives the requisite axiom in the form, 'Magnitudes which exactly coincide are equal'; but he really means that the two magnitudes have to be *brought* into coincidence by the motion of one or both of them. This criterion implies the Axiom of Congruence, namely, that mere motion cannot alter shapes; for it is evident that, if spatial magnitudes could not be moved without distortion, this test of equality would break down. The denial of this axiom involves the notion, philosophically absurd, that mere space *per se* can act on things; and geometry, if it refused to accept this axiom, would have to set up another far more arbitrary assumption, namely, that shapes varied during motion in accordance with a definite law. — The Axiom of Dimensions is that space must have a finite integral number of dimensions. The proof is that position, being relative, must be defined by some definite number of relations, and each of these relations constitutes a dimension. The limitation of dimensions to three is empirical; nevertheless, since *small* errors are out of the question, it is not so liable to the inaccuracy and uncertainty which usually belong to empirical knowledge. — If points are

defined simply by relations to other points, or if all position is relative, every point must have to every other point one, and only one, relation independent of the rest of space. This relation is the distance between the two points. It must be measured by some curve which joins the two points, and, if it is to have a unique value, it must be measured by a curve which these two points completely define. But such a curve is a straight line, for a straight line is the only curve determined by any two of its points. Hence, if two points are to have to each other a determinate relation without reference to any other point or figure in space, space must allow of straight lines.

DAVID IRONS.

Sense, Meaning, and Interpretation. V. WELBY. *Mind*, No. 17, pp. 24-37; No. 18, pp. 186-202.

Although the disadvantages and dangers arising from the present failure of language to express more than roughly what is termed Meaning or Sense are generally recognized, no systematic attempt to attack these at their root has hitherto been made. Neither the process of interpretation nor the conception of Meaning have so far received adequate treatment. This leads to the loss of distinctions valuable for thought, and to a low average of interpreting power. Attention is here called to (1) the neglect, especially in education, of any careful study of the conditions of Meaning and its interpretation, and (2) the advantages which must accrue from such study. Much is lost by the present dearth of means of expression, and of training in their use. There is not even a word to express what happens when a given excitation suggests something other than itself, thus becoming a 'sign' and acquiring 'sense.' The word 'sensify' is proposed for this. Works on science and philosophy, and especially on logic and psychology, supply ample witness — both conscious and unconscious — to the need for a special study of Meaning, which might be called Sensifics, as no term already in use covers enough ground. Such a study, so far from being impossible, seems indicated and called for on every side, and might be made not only practical but attractive even to the youngest child. At present language betrays, largely from the absence of such a training, a disastrous lack of power to adapt itself to the growing needs of experience. But this power would soon be generally acquired as the result of the training here suggested, and would even to a certain extent follow a general awakening to the importance of the question. Definition,

though useful in its own sphere, must not be regarded as a solution of the difficulty. Ambiguity is an inherent characteristic of language, as of other forms of organic function. Thought may suffer from a too mechanical precision in speech. Meaning is sensitive to psychological 'climate.' Both philosophers and scientists complain bitterly of the evils arising from an inadequate nomenclature and terminology. We all alike, in fact, suffer and lose by this, and by the endless disputation it entails. It rests with education to initiate the needed 'fresh start.' It is incumbent upon English teachers and thinkers to lead the way, since our language is admitted even by foreigners to have peculiar facilities for inquiries and studies of this kind. Meanwhile, it will be something to realize at once more clearly some potent causes of present obscurity and confusion, and the directions in which we may hope for efficient practical remedy.

AUTHOR'S SUMMARY.

PSYCHOLOGICAL.

Mémoire et reconnaissance. H. BERGSON. Rev. Ph., XXI, 3, pp. 225-248; XXI, 4, pp. 380-399.

Memory has two functions, and the failure to distinguish between them has been the source of much confusion. *Pure* memory is retention—the mere record of an event set in its proper place in the 'past.' The second function of memory appears in the formation of a habit by repetition. Pure memory emerges in the form of images which represent events in the individual's history. By repetition the image loses its individuality as a past event, and becomes a tendency to action in the organism. In the simplest forms of recognition it produces a motor reaction to the presentation, and this reaction gives the feeling of familiarity. Thus a motor habit due to repetition is the basis of recognition. Here no centrally aroused image is necessary. Only the presentation occupies the mind. (An example of this is the dog's recognition of his master.) It requires an advanced stage of mental development to abstract from the present and to attend to a representation of the past. The most simple kind of recognition is of objects useful to the organism. If, now, abstraction is made from the utility of an object, and its *nature* is considered, images which form conscious fringes arise and

unite with the elements of the presentation. We now have attentive perception. In the state of attention a circuit is formed between the mind and the object. There is a constant succession of afferent currents and returning centrifugal currents, the latter bearing constant reënforcement from the central stores to the periphery along centrifugal sensory tracts. As attention increases, the elements of the presentation are more and more emphasized, and images more and more remote are called up. The images sometimes coalesce so completely with the perception that they are not distinguished from the thing presented. For example, in reading, only occasional letters are really seen, the central images supplying the gaps. — Recognition and attention are best studied in hearing. Sounds and their interpretation furnish all stages of attentive perception. The confused buzz of an unknown language becomes intelligible speech by a coördinated motor accompaniment. This latter may furnish only a *scheme*, a mere outline, given by muscular reaction, possible even in motor aphasia. It is a bodily attitude. The order of disappearance of word-classes in motor aphasia (names, common nouns, verbs) indicates that imitative bodily activity accompanies words expressive of action. These are longest retained. — Attentive perception, then, is only realized by the coalescence of sensations, accompanied by a “motor scheme,” with images of the memory. These two factors are represented by two currents — a centripetal and a centrifugal — which form a closed circuit in the state of attention. The sensory centres are excited from two sides — by impressions of sense from one side, and by central excitations from the other. Where the central excitants are lacking, as in psychical deafness, there is no arousal of images. Pure memory is no more a repository of ‘images’ than the sense organs are of real objects. Instead of one central organ of apperception, there are organs of *perception virtuelle* influenced by the memory, as the peripheral organs of sense are influenced by objects. This theory is substantiated by the phenomena of aphasia. The process characteristic of recognition is not from the perception to the idea, but centrifugal — from the idea to the perception.

I. M. BENTLEY.

Zur Kritik des Seelenbegriffs: einige Bemerkungen beim Studium der Wundt'schen Psychologie. ALLEN VANNÉRUS. Ar. f. sys. Ph., I, 3, pp. 363-400.

It is hard to say precisely what theory of the nature of the soul is held by Wundt. On the one hand, he vigorously opposes the

doctrine of a substance behind conscious states, and in so doing seems to ignore the permanent factor in consciousness. He makes the soul-life an immediate reality, whose essence is activity; but he emphasizes the activity so strongly that it seems to pass over into mere change. On the other hand, in his criticisms of the associational psychology, he approaches closely to the substance theory. The author's own position is that, although there is no substance behind soul-life, yet the soul-life itself is substance—in the sense that it has a constant factor, which cannot be found in the psychic manifold, but is the original psychic element.

ELLEN B. TALBOT.

Some Observations on the Anomalies of Self-Consciousness.

JOSIAH ROYCE. Psych. Rev., II, 5, pp. 433-457; II, 6, pp. 574-584.

Self-conscious functions are all, in their primary aspect, social functions arising from human intercourse. They involve a contrast between Ego and non-Ego: primarily that between self-experience and an experience attributed to another, secondarily that between one's inner states and represented external realities. In the former case, the Ego includes modifications of the common sensibility and "feelings of the sense of control"; the non-Ego is colder, more localized, and less controllable. Emotional states and modifications of the common sensibility, which uniformly accompany social reflexes, become associated with memories and ideas of social situations, and always, when repeated, recall them. Self-consciousness may arise from remembered or imagined social situations involving particular contrasts of Ego and non-Ego, and is colored by emotional suggestions of such situations. Reflective self-consciousness may arise from any passing content involving contrasts which recall the social contrast between Ego and non-Ego, or which excite to acts involving social habits. A case involving anomalies of self-consciousness is described by Professor Royce in great detail. He reaches the conclusion that these anomalies are (1) such primary alterations of conscious content as suggest anomalous social situations, contrasts, or functions; or (2) primary anomalies in social habits.

C. S. PARRISH.

Die Aufmerksamkeit und die Funktion der Sinnesorgane. W.

HEINRICH. Z. f. Ps. u. Phys. d. Sinn., IX, 5 and 6, pp. 342-388.

This article is the first of a series in which the author is to present his theory of attention, in accordance with the principles and methods stated at the close of his recently published pamphlet, *Die moderne physiologische Psychologie in Deutschland*.¹ The first part of the present article is a restatement of the position taken in the earlier publication, with a brief reference to the points in which the author most strongly objects to the theories of attention advanced by Wundt, Külpe, Ziehen, and Münsterberg. This problem can be solved only in the following way. Before the investigation begins all external influences must be carefully noted; then we must know all the objective changes occasioned by these influences; and finally, the testimony of the individual observed must be taken into account. The second part of the paper is an account of experiments performed in Exner's laboratory in Vienna to show the relation between the accommodation of the eye and attention. Helmholtz had maintained that attention was independent of such accommodation. His instance of the possibility of fixing the eye upon a point, and yet of directing the attention to an object on one side of the field of vision, has often been quoted, and has been accepted on the authority of Helmholtz' name. Heinrich's experiments, however, show that the eye does change if the attention is directed to one side of the field of vision, or if it is occupied with some mental problem. The changes in curvature and in the diameter of the pupil were carefully measured, and the tabulated results show a certain constancy of optical conditions, according as attention is directed to the centre or side of the field of vision, or to some mental problem. In the third and last division the oscillations of attention are discussed. The author agrees with Münsterberg in maintaining that the oscillations are due to peripheral changes, but he admits that Münsterberg was mistaken in assigning as the chief cause changes in the respiratory muscles. Heinrich asserts that the oscillations are caused by changes in the accommodation of the lens.

ALICE J. HAMLIN.

Idees concrètes et images sensibles. L. WEBER. Rev. de Mét., IV, 1, pp. 34-61.

The difference between sense images and ideas is usually considered from the standpoint of abstract general concepts. The differ-

¹ Cf. notice of this work in the present number of the REVIEW, p. 440.

ence comes out much more clearly when we take a concrete idea, or, better still, the so-called 'singular idea' as denoted by a proper name. A number of people are discussing an absent person, M. Each person has, besides the name, some sort of a sense image of M, an image probably differing from the images which other persons have. But the object each one *means* must be identical, otherwise the discussion would be impossible. This common object of *thought* is not, then, a sensible image; it is ideal. But what is an idea in this sense? It is the common attitude, the common *mode of activity* involved in all these different images. While the images *as such* may differ for each person, each one involves a system of connections, a mode of habitual activity. This is the idea, the object, of which objective existence, truth, or falsity can be affirmed.— This mode of activity becomes fixed upon and abstracted by attention only under social conditions. The idea as objective logical existence, is a function of communication; hence is essentially social. It is true or false according as, when carried into action, social harmony or discord results. Truth and falsity have no meaning except as applied to this function of the idea in its social aspect.— Metaphysically considered, the idea presents the social phase of reality, viz., that of objective, logical existence, the reality of discursive thought. Both self and the external world are ideas, and belong to this reality. Both are equally objective and equally real. That this thought realm is only one phase of reality is evident from the emotional, moral, and aesthetic experiences in which the self and the world, ideas as such, drop out. The Unknowable cannot be said, except by contradiction in terms, to belong to this phase of reality. The only Unknowable is the sensible in consciousness upon which ideation has not "imposed the logical form of existence." A. W. MOORE.

Consciousness and Time. C. A. STRONG. Psych. Rev., III, 2, pp. 149-157.

In opposition to the theory of Professor James that there is "literally no such datum" as present time, the author maintains that reality, as we know it, may in fact be said to be nothing but one ever-changing present. A changing consciousness is not the same thing as a consciousness of change. Past and present and future must be included in one unitary state in order to be known at all. Our consciousness of the past, however near or remote, is representative; our consciousness of the present is direct, intuitive.

We may speak of a continuity, but not of a unity, of successive states. The only unity is the unity of that which is in consciousness at once.

Alice J. Hamlin.

A Study of Visual and Aural Memory Processes. L. G. WHITEHEAD. Psych. Rev., III, 3, pp. 258-269.

The experimenter tested the validity of the Ebbinghaus-Müller-Schumann method with reference to three questions, and arrived at the following answers: (1) Most of the subjects memorized the nonsense syllables more rapidly from visual than from auditory representations. (2) Matter memorized aurally seemed to be more easily retained. (3) When syllables were memorized by means of one sense, and then presented a week later to another sense, there was an evident diminution in the time required to memorize them.

Alice J. Hamlin.

Reaction Time: A Study in Attention and Habit. J. R. ANGELL and A. W. MOORE. Psych. Rev., III, 3, pp. 245-258.

The interpretation of the results of these experiments, on the basis of the interrelation of habit and attention, is an attempt to reconcile the main points in dispute between the Leipzig school and Professor Baldwin, in regard to reaction types. In both 'motor' and 'sensory' reactions, the act of attention is the coördinating of the two groups of stimuli coming from both hand and ear. The focus of the attention upon the more habitual phase of the process means its resolution into elements. Hence we should expect the reaction to be shortest when attention is upon that part of the process which is least habitual. The ear adjustment is more stable than that of the hand, so that the motor form is likely to have the faster time.

Alice J. Hamlin.

ETHICAL.

The Ethics of Religious Conformity. HENRY SIDGWICK. Int. J. E., VI, 3, pp. 273-290.

What is the duty of the progressive, or — to use a neutral term — the deviating, element in a religious community with regard to the expression of their convictions? This question is important,

since it concerns our attitude toward the Church, the great moralizing agency of our society. It is at present especially insistent, since the spirit of tolerance is leaving room for laxity of principle, and the progress of scientific knowledge is constantly furnishing us with new views which are not yet thought out, thus leading us to open and careless inconsistency. Rejecting extreme positions, we conclude that "while we should yield full sympathy and respect to the motives that prompt a man to cling to a religious community whose influence he values, even though he has ceased to hold beliefs which the community has formally declared to be essential; and while we should concede broadly the legitimacy of such adhesion, still all such concessions must be strictly limited by the obligations of veracity and good faith." This general principle is to be justified from the Utilitarian standpoint, since the day of teaching by means of deception is passing away.

ALEX. MEIKLEJOHN.

The Morality that Is. ALFRED HODDER. Int. J. E., VI, 3, pp. 338-356.

In society, individuals (or minorities) are usually compelled to do those things, the doing of which brings more of good to society than of harm to the individual, and to leave undone those things, the doing of which brings more of harm to society than of good to the individual. Wrong conduct is conduct by which the individual intends to profit himself at the expense of society; right conduct is that by which the individual intends to sacrifice himself for the benefit of society (*i.e.*, the majority or the ruling minority). Apart from social interference, a man tends naturally to profit by the wrong he does and to suffer by the right. Moral rules are binding on us, because we as individuals are within the scope of social seizure and punishment. There are of course as many actual codes of morality (Morality that Are), as there are societies. No matter what the society is, whether it is a camping party, or a band of robbers, or a nation, its rules and prohibitions constitute a moral code. The logical outcome of all this is, that there is almost nothing from the standpoint of Morality that Is, or rather from the standpoint of the Morality that Are, that is not at once both right and wrong. The Rationalist finds in the Morality that Is, as in the Morality that Ought to Be, an utter conflict of obligations and ideals, and no *rational* ground of decision between them. One object, no matter how abominable, is in the eyes of logic as good as any other to the man

who values it as highly. There is no central superior standard of conduct or morality; there is only greater inclination — and superior force.

J. F. BROWN.

The Conflict between the Old and the New: A Retrospect and a Prospect. HARALD HÖFFDING. Int. J. E., VI, 3, pp. 322-338.

Admitting evolution as a fact, the question yet remains whether the changes which have occurred have been a gain or a loss to the race. Is there persistence, not only of energy, but of value, in the domain of thought? Modern psychology has shown the possibility of the persistence, under new forms, of the energy manifested in the earlier stages of mental life, but there is no certainty that the value of the new form is equal to that of the old. The time when instinct and authority give way to clear thinking marks an important period in mental development; and the question arises whether the energy at work under the old order will persist with equal value under the new. Rousseau, Lessing, and Kant recognized the problem. While mercilessly criticising the old forms they did not attempt to live on criticism alone. They expected, each in his own way, a "third kingdom" that should unite the old spirit of authority with the new spirit of criticism. This was Kant's greatest work. The schools of Romanticism and Positivism are both Kantian in spirit. Fichte, Saint-Simon, Hegel, Comte, and Carlyle, all look toward the establishment of the "third kingdom," thus indicating their belief in continuous evolution. It would seem, however, that there are some who do not desire this, *e.g.*, those who blindly support old church creeds, or those who rejoice at the dissolution which criticism is working. But even here there is more change going on than can be recognized by one in the midst of it. As to the special nature of the new era, there is of course a wide difference of opinion. Only its general features may be indicated, *viz.*, the union of concentrated force and wide diversity, of firm faith and free criticism, of social organization and individual liberty. The solution of our problem may be suggested by the fact, that whatever has filled an essential place in mental life cannot drop out without compensation. The power and nature of personality are not well understood, but it is through marked individual variations that each successive "third kingdom" is to be discovered and established. The philosopher has to examine the value of both the old and the new, and out of both to construct a new thought-life.

J. F. BROWN.

HISTORICAL.

Une nouvelle hypothèse sur Anaximandre. P. TANNERY. Ar. f. G. Ph., VIII, 4, pp. 443-448.

This article opens with a criticism of Burnet's contention (in *Early Greek Philosophy*) that the first Greek philosophers used the word ἀήρ, as Homer did, to signify mist or vapor; and that Empedocles was the first to discover that what we now call 'air' is corporeal, and is not identical with empty space. This view deserves serious consideration, as it contains in any case part of a new truth. In refusing to accept Burnet's opinion unreservedly, Tannery maintains that, even before the time of the Physiologers, the Greeks did not regard as the void that which was apparently empty. Homer conceived the seeming void as occupied either by vapor, more or less transparent, or by breaths of wind. Further, while it is true that Empedocles uses αἰθήρ instead of ἀήρ, to denote the matter which fills the seeming void, this merely proves that the current use of ἀήρ was the same as in Homeric times. It does not prove that Anaximenes had not already used ἀήρ to mean the invisible air. The author then quotes certain passages which make it clear, he thinks, that Anaximenes used the word in this sense. From the point of view thus gained, he then inquires how Anaximenes, in giving a material form to the indeterminate Unlimited of Anaximander, came to choose a form whose real existence would not have been admitted by his contemporaries. This question can be easily answered if we admit that the invisible 'Air' of Anaximenes and the Unlimited of Anaximander are one and the same thing. It is easy to understand why the latter did not call his principle ἀήρ, for the word in his time signified something visible. This theory would establish a hitherto un hoped-for continuity between Anaximander, Anaximenes, and the earliest of the Pythagoreans. Tannery then explains how the first-mentioned thinker must have conceived the origin of the universe. In mid-air, when the atmosphere is clear and undisturbed (*i.e.*, in the seeming void), we sometimes see a light mist form and gradually take definite shape. It seems to separate itself from the being of the limitless space from which it springs. In some such way as this, "Anaximander pictured the beginning of things.

DAVID IRONS.

Der λόγος Σωκρατικός. KARL JOËL. *Ar. f. G. Ph.*, VIII, 4, pp. 466-483.

The author maintains that there is no good reason for marking off the earlier Platonic dialogues as 'Socratic.' Such an arrangement is purely arbitrary, and partakes of the nature of a half-hearted compromise. As a matter of fact, the Greek writings in which Socrates figures were not meant to give a historically accurate account of Socrates' disputations or general attitude. They must be regarded as imitations rather than reproductions. The Socratic form was merely the conventional way in which the authors expressed their own opinions. Joël criticises Zeller, and cites in support of his position a passage from the *Poetics* (1147 b), in which Aristotle places under the head of 'imitation' the kind of writing referred to. But if this is so, Joël concludes, we cannot, without any more ado, deduce anything as to the true character of Socrates from statements of different Socratic writers which happen to agree. His own opinion is that Socrates was preëminently a dialectician, and should be called 'the founder of logic' rather than 'the founder of ethics.'

DAVID IRONS.

Plato's Earlier Theory of Ideas. R. P. HARDIE. *Mind*, No. 18, pp. 167-185.

In this article an attempt is made to approach Plato's theory of Ideas through his logic. For this purpose a careful study is made of a passage in the *Republic* (504 D-534 E). Some of the points brought out — which must not, however, be taken as formal conclusions in regard to the general nature of the doctrine of Ideas — are the following: (1) The Idea is the metaphysical equivalent of a definition (*εἶδος* = *λόγος*), 'definition' being for Plato a general formula of scientific thought. The earlier form of the doctrine of Ideas seems to overestimate the importance of the meaning of a term in connotation, as distinguished from its meaning in denotation. (2) The particulars are sometimes spoken of as *resembling* the Idea, and sometimes as *sharing* in it. (3) The nature of the individual is not explained. Two contrary Ideas have nothing in common, and yet an individual may partake of both. Again, we are not told how the particular is differentiated from the Idea that it resembles.

ELLEN B. TALBOT.

The Conception of Immortality in Spinoza's "Ethics." A. E. TAYLOR. *Mind*, No. 18, pp. 145-166.

While Spinoza certainly does not believe in personal immortality, there are several reasons for holding that his doctrine of an eternal element in the mind refers to some kind of existence after death. (1) Although 'eternity' means, not indefinite duration, but scientific necessity, still endless duration is a *consequence* of eternity. (2) Adequate thinking frees us from the fear of death. (3) Spinoza speaks of "the duration of the mind without relation to the body." The author explains his conception of Spinoza's doctrine of immortality as follows. In a sense everything is eternal; but the mind alone *knows* its eternity, *i.e.*, views things in their systematic connections. The only mental activities which survive after death are adequate knowledge and the intellectual love called forth by it. All the personal and individual elements of the mind die with the body; but, when an adequate idea has once been thought, it becomes a permanent addition to the world's scientific knowledge.

ELLEN B. TALBOT.

Leibnitz and Protestant Theology. JOHN WATSON. *New World*, No. 17, pp. 102-122.

This article is an exposition and criticism of the defence of theology in the *Théodicée*. Leibnitz' distinction between contingent and necessary truths cannot be accepted, since whatever is true is necessary. His theory that the world was chosen by God from an infinite number of possible worlds is also untenable, because for an infinite mind the possible would be the actual. But, though imperfectly formulated, the doctrine contains an important truth: to say that the world is essentially imperfect is to deny its complete rationality; and an irrational universe is a contradiction in terms.

ELLEN B. TALBOT.

Friedrich Nietzsche, eine moral-philosophische Silhouette. G. SIMMEL. *Z. f. Ph.*, CVII, 2, pp. 202-215.

The ethical views of Nietzsche have been unduly neglected by professional philosophers because of their aphoristic and poetical form. They can, however, easily be represented as a coherent whole, to which a place must be assigned in the history of ethics. The revolutionary

and 'Copernican' feat N. accomplished, was to invert ethical standards. Whereas, formerly, the individual and individual development and welfare were regarded as means to the end of the general development of mankind, N. conversely regards the welfare of the masses as justifiable and desirable, only as means to the production of a great, powerful, and aesthetically complete personality. Instead of the individual deriving his moral value from his social function, we here have the moral value of society estimated by the great men it is able to produce. The change is so fundamental that there can be no question of 'refuting' N. on the basis of the ordinary ethics. It is, moreover, a misapprehension to regard him as a cynic or an epicurean, for, however ruthless the great man is in his treatment of others, he sacrifices himself also for the sake of the ideal he strives to realize. Simmel regards N. as having worn himself out in the attempt practically to realize this conception of the "over-man."

F. C. S. S.

NOTICES OF NEW BOOKS.

Regeneration: a Reply to Max Nordau. With an Introduction by NICHOLAS MURRAY BUTLER. New York, G. P. Putnam's Sons; London, Archibald Constable, 1896. — pp. xiv, 311.

In spite of his Germanophobia the anonymous British author of this volume goes about his task of refuting the journalistic exaggerations of Nordau's *Degeneration* with a truly Teutonic thoroughness. It is true that Professor Butler's excellent little introduction drives home the only two points that perhaps needed to be made, viz., that Nordau is on his own showing a woeful specimen of 'degeneracy' and that he is totally devoid of a sense of humor; but as a whole the fault of the book is that it takes Nordau too seriously. If any serious refutation were needed of a writer who shows that he himself is posing, by the very care with which he avoids suggesting that very obvious explanation of the antics of so many of the writers he condemns, it should surely confine itself to pointing out the thoroughly pseudo-scientific character of his manipulation of his catchword 'degeneration.' Nothing more certainly betrays the pseudo-scientific humbug than the habit of taking up some prevalent technical term and making a great stir by giving to it a vague and indefinite extension of meaning. This is precisely what Nordau has done. In biology the term 'degeneration' has a definite reference to the past history of an organism, and indicates that organs and structures which it formerly possessed have decayed or disappeared. Or, morphologically, 'degeneration' may be used to designate any change in the direction of less complexity, when progression has been defined as a process tending towards greater complexity. But in neither case is any slur cast on the organism as a whole by saying that in some respects it is degenerate. It is very rarely that progression in some respects does not need to be purchased at the cost of degeneration in others. Thus, *e.g.*, the whole history of the development of language is a history of phonetic decay. Similarly, it would be absurd to argue that man is degenerate generally, because he has lost his ancestral fur and tail, and can no longer wag his ears; or to contend that he is mentally effete because the blood-thirstiness of his instincts has been mitigated. Hence it is pseudo-scientific nonsense to speak about degeneration without specifying in what respect the degeneration is said to exist, and without showing that degeneration in one point is not the concomitant of progression in others. But this is just what Nordau continually does. In etymology, again, 'degeneration' means declension from a type. Clearly then the type must be stated, from which the degenerate have declined. This is what Nordau sedulously avoids doing — lest it should appear that 'degeneration' in some form or other is coeval with

humanity itself, and that the 'type' to which his reasoning logically conducts him must be some providentially extinct form of ape. By such procedures he is enabled to find degeneration everywhere, and the keenness of his scent for morbidity is not even as wonderful as that of a pig for truffles, seeing that any sort of fungus will serve his purpose. In other words, Nordau's denunciations of degeneracy prove nothing except his desire for notoriety; and the only scientific benefit of which they can be, is that they may draw much-needed attention to the scandalous ease with which popular scientific terms like 'evolution,' 'degeneration,' and 'progress,' etc., lend themselves to abuse.

F. C. S. S.

Nature versus Natural Selection: an Essay on Organic Evolution. By CHARLES CLEMENT COE. London, Swan Sonnenschein & Co., 1895.—pp. xiii, 591.

The thesis maintained in Mr. Coe's portly and handsome volume is a negative one, viz., that the transmutation of species in the course of organic evolution has not been brought about by Natural Selection. This he tries to establish by marshalling a long array of facts and opinions quoted from the scientific writers on the subject, and though he adduces no new arguments, he certainly succeeds in producing the impression that many difficulties remain to be cleared up, and much deplorably vague thinking to be defined, before it can be said to be demonstrated that Natural Selection has been the sole and exclusive cause of organic evolution. But then all this had long been familiar to those who were not content merely to follow the fashion in opinions, and had kept their ears open to the other side of questions, and Mr. Coe will doubtless discover that it is as useless to argue against the fashions in science as in dressmaking. In both cases the voice of reason is not listened to, until the fashion has run its course and the *περιπέτεια* comes, when it is suddenly admitted that all the 'evidence' for the old view was inconclusive. Just now Natural Selection is far too intelligible and convenient a working assumption to be argued against, and for this reason alone it is likely to hold the field until it can be superseded by another theory which seems equally serviceable. It is possible that Mr. Coe's arguments will hasten this result, but it seems rather doubtful whether so entirely negative a criticism is likely to be effective. He appears to be ready to urge any argument, provided it can be made to tell against Natural Selection, and is little concerned about the question whether his various pleas are compatible with each other. The biologist, however, will decline to yield up Natural Selection except in exchange for another theory of equal methodological value. Mr. Coe writes pleasantly and provides an index, so that one does not remember in his case the saying, *μέγα βιβλίον μέγα κακόν*. But a book which is so largely made up of excerpts would have been improved by greater emphasis on the thread of the argument and an occasional recapitulation.

F. C. S. S.

The Unity of Fichte's Doctrine of Knowledge. By ANNA BOYNTON THOMPSON. With an Introduction by JOSIAH ROYCE, Ph.D. Boston, Ginn & Co., 1895. — pp. xx, 215.

This work is published as No. 7 of the Radcliffe College Monographs. It was read before the Graduate Philosophical Seminary of Harvard University, and as it takes issue with the usual opinions on the subject, it is published at once (although an unfinished study), that the author may have the benefit of criticism before publishing a more extended work on the subject. The monograph contains an outline exposition of the Fichtean system, and its avowed purpose is to refute three charges: (1) that Fichte sets forth "a dogmatic, fanciful, and contradictory doctrine of self-creation by the Ego"; (2) that his doctrine is that of "subjective idealism or solipsism"; (3) that he "has not one system but two, that in the Jena period the Ego was all in all for his philosophy, but that later he taught that God is the only reality, and the Ego his passive image." The attempt is made to answer these charges severally by showing: (1) that the system is not a process but an organic thought which must be grasped as a whole; (2) that the Ego is the *universal* consciousness of which the individual is only a member, and that the latter does not create but only finds the world of fixed fact; (3) that the same general outline of his system is discernible in each of Fichte's treatises, the apparent difference being due to the fact that the different works are written to emphasize different points of view. After a few words concerning Fichte's temperament and his early deterministic views, the author proceeds to the exposition of the system with successive reference to the different points of view from which it is to be regarded. Of these may be mentioned: the Ego as Absolute and therefore free, the Ego as subject to Law, the Reconciliation of a free and a limited Ego as Holy Will or a God of Love, Faith, the Sense World, and the Moral World. The first step in the system is reflection, the observation of self. We cannot think a *Ding an sich*. We can conceive of the existence of an object only in consciousness, *i.e.*, in the Ego, as product of its free activity. The Ego is activity, free activity, therefore it is the Absolute and free. But the second step in the development of the system finds this free activity of the Ego proceeding according to Law, that is to say, it is determined. This is the 'antithesis' of the above 'thesis,' that the Ego is free. It now remains to discover the 'synthesis' of these contradictory statements. This is found in the fact that the Ego as Absolute and free activity voluntarily chooses to act according to Law. In so far as it is fundamentally and essentially freedom, with the power to act or not to act, it is free; but in so far as it acts according to law it is determined. This fundamentally free activity voluntarily submitting itself to law is Will, Holy Will, or God. We must ever keep in mind the fact that this is only a logical conclusion, and that the entire system is one of thought and thought relations. Freedom and Law are not to be conceived as existing separately. Each involves the other as the condition of its own existence. Freedom voluntarily submitting

itself to Law, forms a sphere of potential existence whose relation to the sphere of actual existence is that of cause to effect. The phenomenal world is Will objectified. God is the world, and the world is God in reflection. Consciousness involves both potential and real existence at once. Time and space are mere forms in which things appear. The individual and the sense world are but the means of making manifest the law of morality, *i.e.*, Freedom. They are both manifestations of the Ego, Consciousness, God. The individual is God come to consciousness and looking at himself from a particular point of view. Individual merit lies in expressing to the utmost the spirit of Freedom, the God-nature of which the individual partakes. Belief in this conclusion is Faith, Faith in reason, of which Fichte makes much in his system. God and the individual are both thought, free activity, nothing else; and in so far they are identical. The steps to a rational faith in God are four. (1) "Reason says there is no *Ding an sich*. (2) 'Reality' is a concept which the natural man attaches to the Sense-world. (3) But reason shows us that the cause of the Sense-world is God. (4) Hence man should sever the concept of 'reality' from the Sense-world and attach it to God." — Pages 78–92 are occupied with an attempt to answer the admittedly subtle charges that the *Wissenschaftslehre* cannot be the final philosophy, for it fails to satisfy human needs in at least these several directions: (1) it recognizes no value in human emotions; (2) it precludes the possibility of help in vital matters; (3) it denies to God universal consciousness; (4) it relieves the individual of moral responsibility and shifts his sin upon God. The answers to these charges may be summarized thus: (1) life would lose nothing, but gain much, by constantly following the dictates of reason without regard to the solicitations of unreasoning emotions; (2) mutual human aid can be given through knowledge, first, by personal example, and second, by instruction in the truth; (3) Fichte's God, though without universal consciousness, is as full of inspiration, when rightly understood, as any orthodox notion; (4) the individual as a component part of the whole Will is free, and responsible for the expression of the whole Will, so far as lies within his power. — Pages 93–215 are occupied with references to Fichte's works and brief extracts from them, showing the apparently contradictory statements concerning the particular subject under consideration, and the way in which these statements are to be harmonized. Among the themes so treated are: *Freedom, Necessity, Holy Will, God, The Absolute, Seyn, Anschauen und Denken, Leben und Endzweck, Begriff, Genesis*. This is a very valuable part of the work. The most frequent references are to the *Nachgelassene Werke*, and indeed the entire paper is written with a view to the interpretation of the earlier works in the light of the later. The author has made a good case. All in all, this Study (by no means unworthy in itself) is the promise of a valuable work. The Introduction by Professor Royce is suggestive and inspiring, especially that part which contains the statement of the fundamental principles of the Fichtean system. J. F. BROWN.

Die moderne physiologische Psychologie in Deutschland. Eine historisch-kritische Untersuchung mit besonderer Berücksichtigung des Problems der Aufmerksamkeit. Von Dr. W. HEINRICH. Zurich, E. Speidel, 1895.— pp. 232.

The author states in his preface that the work grew out of his desire to seek for the basis of a new theory of attention. This critique of previous theories prepares the way for the true appreciation of his own, in the development of which he hopes to meet all the objections raised against the theories of his predecessors. The "objective measure," by which the work of others is estimated, is the law of psycho-physical parallelism.

Scientific psychology is said to begin with Herbart. The second chapter describes the transition from *Psychologie mit Seele* to *Psychologie ohne Seele*, beginning with Herbart and ending with Lotze. The next chapter refers to Fechner and Helmholtz as pioneers in the modern psychological movement. The metaphysical mode of thought of the Herbartians disappears, and Fechner assumes, in accordance with the law of the conservation of energy, a psycho-physical parallelism as the fundamental postulate for any science of psychology. The chapter includes a brief review of the different interpretations of Weber's Law. Fechner's work extends over a wide field, and is necessarily too vague and general. Helmholtz, approaching the subject from an empirical standpoint, makes more definite and precise contributions to the science. After Müller and Pilzeker have been dealt with, a long chapter is devoted to Wundt. The author attacks the theory of apperception, and the idea of a 'feeling of activity' in the process of attention. He frankly recognizes the fact that all his criticisms grow out of his opposition to Wundt's estimate of the relative value of physiological data and psychological analysis. Heinrich would make the former supreme, and would value psychological analysis only in so far as it confirms conclusions derived from the study of physiology. The same criticism is passed upon Külpe. His work is described as "rationalistic," and "without scientific importance." In his theory of attention the ambiguous use of the term 'motive' is especially criticised. Külpe nowhere states what he means by the word, and yet 'motive' has an extremely important place in his theory.

The chapter on Münsterberg opens with extravagant praise of the genius who, "armed with the selfsame weapon with which Wundt believed he had so victoriously defeated all opponents, stepped forth into the field of battle." And so great has been his success that Heinrich believes that "the number of Wundt's disciples is constantly diminishing." After much more of this kind of praise, one is rather surprised to find that very few actual contributions to the science are ascribed to Münsterberg by his admirer. "His great strength is his criticism of other systems." His explanation of the oscillations of attention is recognized to be unsatisfactory, and he is excused from any further effort to construct a theory of attention, because Ribot has worked out a theory from the same standpoint. The last two chapters

review the work of Ziehen and Avenarius. Ziehen is condemned because his principal standpoint is false, since he often contradicts the postulate of physiological psychology, and introduces psychical members into the physical causal series. Avenarius is highly commended, for although his subject is epistemological rather than psychological, he indicates the true and only way in which psychological problems can be solved. Even Münsterberg has directed his attention more to subjective events than to objective processes. The concluding chapter is an elaboration of the principles and methods which the author proposes to adopt in the theory of attention which he promises to the world.¹

The book, as a whole, has an unmistakably partisan tone. But it is a clear and definite statement of the fundamental differences between the author's standpoint and that of the school of Wundt. It is also of value as affording a concise summary of several theories of attention, though unfortunately this value is much lessened by the scarcity of references, and by the fact that the author introduces his own comments into the summaries, without distinguishing them in any way as his own. The most important chapters are those on Wundt, Külpe, Münsterberg, and the last chapter on Psycho-physical Parallelism.

Alice J. Hamlin.

Étude sur l'espace et le temps. Par GEORGES LECHALAS. Paris, Félix Alcan, 1896. —pp. 201.

This book contains a series of desultory discussions on such subjects as the foundations of geometry, the relations of Euclidean and general geometry, the 'problem of similar worlds,' the difficulties to be found in the conceptions of the Infinite and the Continuous, the nature of time and its relation to divine immutability, etc. These questions have been much debated in recent French philosophical literature, and the author shows himself fully familiar with this, and especially with the articles that have appeared in the *Revue Philosophique*, *Revue de Métaphysique et de Morale*, etc. But though he often makes interesting remarks, the book as a whole is characterized by a lack of systematic order, firmness of logical texture, conclusiveness of argumentation, and definiteness and correlation of its results. This is doubtless in a measure due to the fact that more topics are taken up than can be discussed thoroughly within the compass of the work, but the total impression produced is decidedly amateurish. His notion also that he finally works round into agreement with Kant, on the subject of Time, seems something of a delusion. For, whereas (p. 192) he regards Time as the subjective distortion in a finite intellect of the timeless relation of cause and effect, Kant conversely regards causation as the rule of succession in time, and holds that no cause can produce its effect instantaneously. Thus M. Lechalas tries to explain Time by Causation, while

¹ The theory here promised by Dr. Heinrich is now being published in Ebbinghaus' *Zeitschrift*, and an abstract of its first chapter may be found in vol. V, no. 4, p. 427, of this REVIEW.

Kant explained Causation by Time. That either view has its peculiar difficulties the student of philosophy need not be told. F. C. S. S.

Plato's Republic. The Greek text, edited, with notes and essays, by the late B. JOWETT, M.A., Master of Balliol College, Regius Professor of Greek in the University of Oxford, and LEWIS CAMPBELL, M.A., LL.D., Honorary Fellow of Balliol College, Emeritus Professor of Greek in the University of St. Andrews. In three volumes. Oxford, at the Clarendon Press, 1894. — pp. xv + 490 + 356 + 512.

Over forty years ago the late Master of Balliol planned the publication of a commentary on the Republic; and these three volumes, only a small part of which is from his hand, are the tardy realization of that plan. Soon after his appointment to the Chair of Greek in 1855, as Campbell tells us in his preface, Jowett projected a scheme for an Oxford edition of the chief dialogues of Plato. The dialogues had been assigned to various scholars, — Poste, Campbell, Riddell, Grant, and others, — and from the first three named we have long since had the *Philebus*, *Theaetetus*, *Sophistes*, *Politicus*, and the *Apology*. Jowett himself was to prepare the edition of the Republic on which his first course of lectures in the University had been delivered. But while preparing the commentary he was diverted from his task by the publication of *Essays and Reviews*, etc.; and by 1865 he had conceived the new plan of translating, not only the Republic, but the whole of the Platonic canon. This occupied him from 1865 to 1870. The translation issued from the press with introductions in 1871, a year after Jowett had been made Master of Balliol. Thus, while the plan of a commentary on the Republic was kept in abeyance, English literature was enriched and the interests of Platonic studies advanced by the masterly version familiar to all American and British students of philosophy. Under such circumstances one cannot much lament the postponement of the commentary. The plan of annotating the Republic was not, however, abandoned, but in 1875 Jowett took Campbell into partnership. The commentary now passed between them several times; essays were arranged for; the text was printed after the conservative Jowett had examined the proofs; the revision was almost finished in the summer before he died; and in the autumn of 1893 the completion of the plan was finally entrusted to the hands of Campbell. Much the greater part of the work is due to the surviving editor, although something of Jowett's spirit pervades all three volumes. The student of philosophy will naturally turn, not to the text (vol. I), nor to the commentary (vol. III), but to the volume of essays (vol. II); and in this he will surely be disappointed. For Campbell's work is mainly philological, and Jowett's contribution to this volume is very meagre, consisting of thirty-four pages in four fragments: (1) On the Text of Greek Authors, — mostly sound generalities but of no considerable working value; (2) The Kingdom of Evil; (3) The State and the Individual; (4) Veracity. Nothing is offered

here which the student will find new or helpful. The remaining part of the volume of essays is by Campbell, and is occupied with matter mostly philological. The three essays which occupy the main space are, "On the Structure of Plato's Republic, and its relation to other Dialogues," "On the Text of this Edition," "On Plato's Use of Language." Campbell considers the Republic an artistic whole, having an unmistakable unity of design, and regards the theory of Krohn that the Republic is a patchwork of several dialogues, written before any of the other works had been composed, as untenable. There is no space here for reproducing the arguments of Campbell. It is of interest to note further that Campbell regards the Parmenides, Theaetetus, Sophistes, Politicus, Philebus, Timaeus, Critias, and Laws as the latest in composition, and written probably in the order named; while the Republic he regards as belonging to a different and earlier group. In the fifty pages given to the explanation of philosophical terms (in the essay "On Plato's Use of Language") not much is to be gleaned by the student of philosophy. The terms *εἶδος*, *ἰδέα*, *οὐσία*, *τὸ ὄν*, *φύσις*, *αἴσθησις*, *δόξα*, etc., are not defined in such a way as to be of much service to any one whose main interest is in philosophy, although one is ready to admit that these terms are employed in a vague, misleading, and changeable way by Plato, so that the fault is not altogether that of the commentator. These objections and complaints are brought from the standpoint of the philosophical reader, and not from that of the student of literature or philology. By the latter class of readers the work will doubtless be regarded in a very different light. Apart from the desideratum of essays explanatory of Plato's philosophic thought, the work admirably supplies the need of a reliable, conservative text, and a practically exhaustive grammatical and historical commentary for the chief of the Platonic dialogues.

W. A. H.

Allgemeinheit und Einheit des sittlichen Bewusstseins. VON DR. WILHELM SCHNEIDER, Dompropst und Professor der Theologie in Paderborn. Köln, J. P. Bachem, 1895. — pp. 132.

The thesis which the author has set out to prove is the familiar one, that the ethical codes of all peoples are in complete agreement as far as fundamental principles are concerned, and that the well-known divergence in moral judgments and in customs supposed to mirror such judgments is confined, wherever verifiable as fact, to subordinate details or to the application of the principles to the changing conditions of life. This established, our author hopes to have taken the ground from under the feet of the "gottlose und jenseitslose, auf rein irdische und fleischliche Grundsätze gestützte Sittlichkeit," represented by such boon companions as Höffding, Max Stirner, Paulsen, Nietzsche, and Wundt. A formal list of the ethical axioms is unfortunately nowhere supplied us, but from occasional statements we gather that it would not differ materially in type from those made familiar

by Scotch Intuitionism. Whatever may be said of the probable fate of a structure built on a very narrow foundation of facts, no one can deny that much has been done to make it at least attractive. For it has been tastefully decorated at appropriate points with slurs and thrusts directed against the unfortunate Society for Ethical Culture, the equally unfortunate Social Democrats, the French, the English, and "den habgierigen Yankee, der sich eben so ungern daran erinnern lässt, das sein Land früher [den Rothhäuten] gehört hat, als an die Thatsache dass seine Vorfahren als Verbrecher von England nach Amerika geschickt worden sind"!

Of the various arguments adduced in support of his position, only two are worthy of serious consideration, and these are purely negative in character. We are clearly shown the impossibility of drawing inferences, as to the absence of ethical conceptions and ideals, from the absence of the corresponding words in the languages of the peoples in question. It is furthermore demonstrated that many of the so-called atrocities practised by savage races are blameless, or sometimes even positively praiseworthy, when judged in the light of the beliefs — religious and otherwise — to which they owe their origin. With these two points — in themselves, of course, neither new nor startling — the value of the book as a contribution to the subject is exhausted. No very serious attempt is made to deal with such facts as refuse to be disposed of by these explanations. They are either 'explained away' in the sophistical fashion more popular thirty years ago than to-day, or else they are treated as fairy tales, or finally, when most convenient, they are ignored altogether. The difficulty involved in the existence of the double ethical code of tribal morality, is dealt with in a fashion so simple that we wonder it has not occurred to any one before. The plan adopted is the one well known in the law courts: "No case, abuse the plaintiff's attorney." A succession of pages is accordingly filled with violent attacks upon the English, Americans, and Spaniards, for their treatment of the weaker native races with which they have come in contact. So far does the writer allow himself to be carried by his indignation, that he actually devotes three entire lines to a hint — couched in terms, of course, calculated to spare the feelings of his fellow-countrymen as much as possible — that perhaps even the Germans, in their dealings with their new subjects in Africa, have not displayed all the delicate consideration for the rights of the latter which would naturally have been expected of them.

Our author has unquestionably chosen a theme with regard to which many exaggerated notions prevail, and on which much good work still remains to be done. We can but hope that his successors in this field may display less biliousness, a less intimate acquaintance with the arts of the advocate, and a higher conception of the nature of evidence.

FRANK CHAPMAN SHARP.

Die Freiheit des Menschen. Von Dr. V. von STRAUSS und TORNAV.
Leipzig, Georg Böhme, 1892. — pp. 55.

The word 'freedom' as used in this title must be understood to mean freedom from the condemnation of conscience, from physical pain, and from the fear of death. Man, created in the image of God, fell from his high estate in the persons of our first parents, as is related in the opening chapters of Genesis. Thenceforth he is no longer free, but bond, till he is saved from his slavery by faith in Christ. The nature and the method of this liberation supply the problems which this work attempts to solve. The answer to all questions is sought in the teachings of the Bible as interpreted by orthodox Lutheranism. They may, therefore, be anticipated by all readers who are familiar with the doctrines of Evangelical Christianity. Practically no attempt is made to deal with the more strictly philosophical problems that arise in connection with the views presented. We are, indeed, assured that certain difficulties disappear as soon as we recognize the impossibility of conceiving of God's existence under the form of temporal succession. But what help this discovery affords us is not made clear, and we are compelled in the end to content ourselves with the mere assertion. A thoroughgoing determinism is implicitly maintained throughout, but whether the author is explicitly conscious of his attitude towards this question does not appear from the text.

FRANK CHAPMAN SHARP.

Von der menschlichen Freiheit. Von Dr. H. ACHTER. Leipzig,
W. ENGELMANN, 1895. — pp. 49.

Dr. Achter has presented us, in what is evidently his doctor-dissertation, with a well-written account of the nature and the development of 'freedom' as this term is used by Paulsen. The writer introduces himself as a disciple of Wundt and Paulsen, and in his preliminary account of the nature of the world, and of man in particular, as well as in the discussion of freedom that follows, we find nothing that cannot be traced to one of these two authorities. The title of the book to recognition lies in the manner of presentation. In directness of style and clearness of thought it reminds us of the great Berlin teacher himself. As a result, we have an exceedingly creditable piece of exposition.

FRANK CHAPMAN SHARP.

Spinozas erste Einwirkungen auf Deutschland. Von Dr. LEO BÄCK.
Berlin, Mayer & Müller, 1895. — pp. 91.

The author gives a vivid account of the storm of opposition which the publication of Spinoza's works aroused in Germany. He points out, however, that the circumstances of the times were such that only the enemies of the new doctrine could express their opinions with freedom. He quotes statements made by these writers themselves, which prove that there were

many persons in Germany at that period who, for cogent reasons, did not openly proclaim their sympathy with Spinoza's teaching. Still there were thinkers bold enough to declare themselves, and Dr. Bäck proves this by a detailed examination of the works of Stosch, Lau, and Wachter. About 1720 the Leibnizian philosophy came into prominence, and for fifty years after this date few traces of the influence of Spinoza are to be found. Towards the end of the eighteenth century, however, the power of Rationalism began to decline, and Spinozism once more gained the ascendancy.

The author contents himself with showing that certain thinkers adopted Spinoza's point of view, and does not give any account of the effects of this on the intellectual life of Germany. It may be added that he has not consulted the convenience of the reader to any great extent, as the book is not supplied with index, table of contents, or preface.

DAVID IRONS.

Der Apperceptionsbegriff bei Leibniz und dessen Nachfolgern. Eine terminologische Untersuchung. Von Dr. J. CAPESIUS. Hermannstadt, Ludwig Michaelis, 1894. — pp. 25.

This is a popular exposition of the Leibnizian doctrine of apperception. The author gives a clear statement of the meaning of the concept in Leibniz, and mentions the reasons which led to the adoption of the term. In the second chapter he discusses, on the basis of Dr. Staude's treatise, the changes in the application of the term in the later systems, particular attention being paid to the different uses of the word in the Herbartian and Wundtian schools of psychology.

W. B. PILLSBURY.

The following books have also been received :

The Theory of Knowledge. By L. T. HOBHOUSE. London and New York, Macmillan & Co., 1896. — pp. xx, 627.

Studies of Childhood. By Professor JAMES SULLY. New York, D. Appleton & Co., 1896. — pp. viii, 527.

The Principles of Sociology. By F. H. GIDDINGS, Professor of Sociology in Columbia University. London and New York, Macmillan & Co., 1896. — pp. xvi, 476.

Comte's Positive Philosophy. Translated and condensed by HARRIET MARTINEAU, with an Introduction by FREDERIC HARRISON. In three volumes. London, George Bell & Sons, 1896. — pp. xlv + 385 + 333 + 419.

Outlines of Logic and Metaphysics. By JOHANN EDUARD ERDMANN. Translated from the fourth (revised) edition, with Prefatory Essay, by B. C. BURT, Ph.D. London, Swan Sonnenschein & Co.; New York Macmillan & Co., 1896. — pp. xviii, 253.

The Psychology of Attention. By Th. RIBOT. Authorized Translation (Third revised edition). Chicago, The Open Court Publishing Co., 1896. — pp. viii, 120.

Psychology and Psychic Culture. By R. P. HALLECK, A.B. New York, American Book Co., 1896. — pp. 368.

Some Prolegomena to a Philosophy of Medicine. By GILES F. GOLDSBROUGH, M.D. London, John Bale & Sons, 1896. — pp. 66.

On Germinal Selection. By AUGUST WEISMANN. Chicago, The Open Court Publishing Co., 1896. — pp. xii, 57.

The Ideal of Universities. By ADOLF BRODBECK, Ph.D. Translated from the German by the author, and much enlarged. New York, The Metaphysical Publishing Co., 1896. — pp. 103.

Voluntary Socialism. By F. DASHWOOD TANDY. Denver, Colorado, F. D. Tandy, 1896. — pp. 228.

Les types intellectuels. Esprits logiques et esprits faux. Par Fr. PAULHAN. Paris, Félix Alcan, 1896. — pp. 362.

Voltaire et le Voltairianisme. Par NOURRISSON, membre de l'Institut. Paris, P. Lethielleux, 1896. — pp. 671.

L'année philosophique. Publiée sous la direction de F. PILLON. Sixième année, 1895. Paris, Félix Alcan, 1896. — pp. 316.

De la croyance. Par JULES PAYOT. Paris, Félix Alcan, 1896. — pp. xiv, 251.

L'école saint-simonienne. Par GEORGES WEILL. Paris, Félix Alcan, 1896. — pp. 319.

La morale des philosophes chinois. Par J. L. DE LANESSAN. Paris, Félix Alcan, 1896. — pp. 124.

Wirklichkeitsstandpunkt. Eine erkenntnistheoretische Skizze. Von Dr. RUDOLF WEINMANN. Hamburg und Leipzig, Leopold Voss, 1896. — pp. 37.

Grundlegung des Systems aller möglichen Erfahrung. Von Dr. GEORG ULRICH. Berlin, Hermann Heyfelder, 1896. — pp. 26.

Die Psychologie im Dienste der Grammatik und Interpretation. Vortrag. Von Professor W. JERUSALEM. Wien, Alfred Hölder, 1896. — pp. 23.

NOTES.

THE Royal Academy at Berlin has decided to undertake the preparation of a complete edition of Kant's Works. The honor of originating the idea belongs to Professor Dilthey, and it has been mainly through his efforts that the Berlin Academy has consented to assume the responsibility of the undertaking. The editorial committee consists of the Herren Dilthey, Diels, Stumpf, Vahlen, and Weinhold; and the coöperation of such other well-known Kant scholars as Reicke, Heinze, and Adickes, has already been secured. The committee will spare no pains to make the edition complete and definitive in every respect, and a model for all future undertakings of this kind. It is proposed to utilize and evaluate all the hitherto unpublished manuscripts, fragments of letters, and other remains of Kant; and librarians, autograph collectors, and others who may have such papers in their possession are requested to communicate with the Secretary of the Academy of Sciences, Universitätsstrasse 8, Berlin, N.W.

Macmillan & Co. will publish a *Dictionary of Philosophy and Psychology* under the editorship of Professor J. Mark Baldwin, of Princeton University. It will contain concise definitions of all the terms, historical references in regard to their use, and full bibliographies. The following names have already been placed on the list of contributors: A. Seth, J. Dewey, J. Royce, R. Adamson, W. R. Sorley, J. M. Cattell, G. F. Stout, W. E. Johnson, E. B. Titchener, J. M. Baldwin, J. Jastrow, Lloyd Morgan, B. Rand.

Professor Titchener's *Outline of Psychology* (published by Macmillan & Co.) will be issued from the press in July.

Professor Titchener has made arrangements for the translation of Wundt's *Ethik* and *Physiologische Psychologie*. The first volume of the *Physiologische Psychologie* will be ready in September, 1897. The *Ethik* will be translated by Professor Julia H. Gulliver of Rockford College, Ill., and Professor Margaret Washburn of Wells College, N. Y. The first volume will probably appear in September, 1896, and the second in January, 1897. Professor Titchener will also coöperate with W. B. Pillsbury of Cornell University in the translation of Külpe's *Einleitung in die Philosophie*, and it is expected that the work will be published in January, 1897.

C. M. Bakewell, A.M., has been appointed Instructor in Psychology at Harvard University, and J. E. Lough, A.M., has been elected to the instructorship of Experimental Psychology in the same university.

Charles H. Judd, Ph.D., has been appointed Instructor in Psychology at Wesleyan University. Dr. Judd is at present engaged in translating Wundt's *Grundriss der Psychologie*, under the direction and with the coöperation of the author.

THE
PHILOSOPHICAL REVIEW.

IS MORALITY WITHOUT RELIGION POSSIBLE
AND DESIRABLE?

AT the present time the advisability of separating ethics from religion has become a burning question, since Societies for Ethical Culture are everywhere being formed independent of religious organizations. The latter, it is said, are no longer competent to undertake the moral education of the people; for although they have in the past played a part in the moral development of mankind, the world has reached the stage at which this aid is no longer required. Indeed, when the leading-strings of religion are dispensed with, a nobler and more firmly rooted morality will be established. Under present conditions religion is not only unable to afford any assistance in the development of a sound morality, but is a positive obstacle in the way.

We shall in the first place state and examine the objections which are urged against founding ethics on religion, and then seek to determine the value of the substitute which is offered. Should it prove to be the case (1) that the objections rest on misunderstanding (particularly on a confusion between the true essence of religion and its imperfectly developed forms), and (2) that the proffered substitute cannot afford a basis for a genuine and enduring morality, it would be evident that it is not necessary to separate religion and morality,—indeed that this is not possible. Finally, it must be pointed out that since the suggested ethical reform is proposed by men of high moral char-

acter, it is not without its kernel of truth, which has only to be realized in another form. It is obvious that within the limits of the present article the question cannot be exhaustively treated, and that only the most important points can be indicated.

I.

The chief objections which are urged against those who maintain that religion should be the basis of morality may be briefly summarized as follows. Religion, it is said, makes man dependent on the will of the divine law-giver ; it insists on a blind obedience to the divine law, not because this is seen to have a reason and value, but simply because it is the law of God. Hence it deprives man of freedom, makes him the slave of a foreign will, and robs him of true human dignity and ethical autonomy, or rational self-determination in accordance with his own knowledge and insight. It leads him to depend upon divine rewards and punishments in this world and the next, and introduces fear and hope as motives into ethical action. Hence it gives a heteronomous and eudaemonistic tone to morality, whereas the ethical end should be pursued for its own sake alone. Further, it causes man to rely, not on his own moral strength, but on the help and favor of the Deity. Indeed, it goes so far as to declare that he is utterly unable to be morally good without the supernatural aid derived from the means of grace which the church affords. Hence it destroys moral courage and self-confidence, and renders impossible an earnest striving towards the Good. A further result is that it makes human beings moral cowards, who are unable to offer resistance to the evil which it is their duty to contend with. And at the same time it directs their hopes and wishes so exclusively upon heavenly blessedness that the present life loses its value for them, and they become unfit for the affairs of practical life, seeing that their attention is diverted from the duties which this world presents and the good which can be realized in it.

It is easy to content ourselves with a simple denial of the truth of these representations, but this is a method of procedure

which produces no effect on the individuals whose opinions we reject. We ought rather to show that the imperfections indicated above belong merely to the lower levels of religious development, which stand in a close causal relation to the stages of ethical evolution which are cotemporaneous with them, and which like the latter are inevitably necessary. In this way we can prove that the things which must be condemned from the point of view of a later period, were not only unavoidable in their time, but had a value as means for the advancement of the race. The history of religion, and particularly that of Christianity, makes manifest with sufficient clearness that the evils referred to do not spring from the nature of religion as such, and hence need not always be associated with it. In the early days of Christianity, and later at the time of the Reformation, the theocratic form of religion was destroyed, and the freedom of the children of God set up as the ideal of true religion. We can maintain, therefore, that religion and the ethical ideal, so far from being in conflict, stand in as close a relation to each other as underlying reality and appearance, as root and tree.

It is true that the ideal of religion, like all ideals, is not completely realized; that the ecclesiastical organizations necessarily fail to meet the requirements of the ethical ideal. In these institutions it is evident that old points of view have survived and coexist with the new, or at all events still have an influence upon them. The consequence is that the ethical shortcomings which are associated with the earlier stages of religious development still in part remain, and act as disturbing factors in the higher stages, with which they are evidently no longer in harmony. No impartial observer will feel inclined to deny that this is the case with all religions, including Christianity in its various forms. But we cannot infer from this that religion is altogether worthless, and that its influence on morality, undeniable in the past, will in the future wholly disappear. To draw this conclusion would be just as foolish as to declare that, since in all political communities the ideal of Right is not fully realized, therefore the state institutions for the maintenance of rights in society must

be abolished. This radicalism, whether it concerns Right and the state, or Religion and the church, is in every case to be regarded as the consequence of immature thought, which fails to comprehend the historical conditions of the development of the human spirit, and accordingly is incapable of estimating aright the true value of existing institutions. It is undoubtedly true that the religion of the church is imperfect ; but the task of improving it requires a clearer and more thorough understanding of religious matters than the supporters of a morality without religion can boast of.

Morality stands or falls with the absolute obligatoriness of the consciousness of duty, which renders the general laws and purposes of society binding on the individual, and with the certainty that the ethical end can be attained in this world. Some basis or sanction for the unconditional authority of duty must therefore be found, and this cannot be discovered in the will of the individual or in that of a number of individuals. Still less can it be derived from that which is lower in the scale of existence than man, namely, nature. Natural laws and impulses by no means correspond exactly with those of morality, and indeed must be subordinated to the latter, and gain a moral character from them. Hence the moral sanction must have a transcendental ground ; it must have as its basis some absolute or super-subjective rational will, *i.e.*, God. And in like manner the possibility of realizing ethical ends is guaranteed only by the assumption that the world is adapted to the purpose of realizing these ends, and that the good-will accordingly is not only the law of our action, but the power that governs the world. In short, that ethical ends are attainable involves the presupposition that God exists. The divine consciousness, therefore, must be postulated as the necessary condition of the existence of the moral law and of the possibility of its realization. History is a witness to the truth of this assertion, for it shows how the rudimentary moral institutions and concepts grew out of religious ideas, and developed *pari passu* with them. On the other hand, the development of the ethical consciousness has in turn influenced religious conceptions, and it

is for this reason that the Deity has come to be regarded as a moral agency, and that nature and society alike have been recognized as parts of an all-embracing and overruling divine world-order. When the two lines of development, the ethical and the religious, came together in such a way that the conception of an unconditional moral law was united with that of a world-ruling Providence, the 'theocratic' form of religious morality came into being. At this stage the moral agent is not free, but is subject to a foreign will. He obeys the will of God, without judging for himself, and without being convinced of the rationality of his mode of action. This will rules him as an absolute and incomprehensible authority, which he obeys, just as he submits to an earthly power, from the mingled motives of fear and hope. Such a religion and morality are of course imperfect, but the natural imperfection of the minor still requires the discipline of the law, since he has not yet attained to freedom, and is incapable of determining his actions by a rational comprehension of the nature of the Good.¹ This stage is so inevitable in the development of the ethical life that it is repeated in the life history of every individual as well as in that of every community. For reason was not implanted in man, as naïve rationalism imagines, in the form of a ready-made faculty or the actual power to attain all that is Good and True. On the contrary, it must gradually free itself from its original connection with sense. Hence at the outset, the rational Ought, the ethical standard which is universally valid, stands in consciousness over against the natural self-will as a law imposed from without. And, since it confronts our own wills with an unconditional demand for obedience, nothing is more natural than that it should be regarded as the expression of a superior will external to us, and accordingly identified with the idea of a Deity exalted far above this world and ruling it, like an omnipotent sovereign, from another sphere. The abstract transcendence of the religious conception of God, and the abstract dualism of the ethical law, correspond and mutually condition one another, so that one might as well assert that an

¹ Cf. St. Paul, Gal. iv, 1 ff.

imperfect conception of God results from defective moral insight as the reverse. It is absurd, however, to make a charge against religion on the ground that it was associated in the childhood of the race, and must always be associated, with this external morality. It was rather through the influence of religion that "when the time was fulfilled" this imperfect stage of morality was left behind and moral freedom attained. The advance, it is true, was not in the direction of a freedom without God, or a *merely* human autonomy, but to a freedom *in* God, a divine-human autonomy. For this is just the significance of the Christian consciousness of divine sonship—that man, while dependent on God, yet knows himself to be free. Man doubtless recognizes the will of God as unconditionally binding upon him, but this will is no longer that of a foreign master ruling by force. It is that of a father, and hence is felt as essentially one with the individual's own true will,—with his good, perfection, and happiness. Hence his surrender, in obedience and love, to the Good willed by God is no longer the service of a slave, but free activity and the realization of his own true good. Self-determination and obedience to God thus become one, and external authority and irrational caprice are alike excluded. The present generation ought not to find it difficult to understand this, for it is the central doctrine of the Gospel,¹ and the conception which gave rise to the Reformation. In view of the present conflict between socialism and individualism, the present age, more than any other, has reason to remember that history shows us (think, *e.g.*, of Rousseau and the Revolution) that abstract autonomy is always on the point of passing over into mob rule, which involves the worst kind of slavery, and that freedom in God can alone avail to steer us safely between the Scylla of ochlocracy and the Charybdis of individual caprice.

In a similar way the objection can be met that religion obscures the true nature of the moral life, by introducing as motives the fear of punishment and hope of reward, and thus giving a eudaemonistic tone to morality. These motives are necessarily associated with the early stages of moral develop-

¹ *Cf.* Cor. i, 9, 21.

ment, for, when the Good appears in the form of an external law, it can only influence the individual by means of hope and fear. And, as a matter of fact, the latter have played a most important and useful part in the education of the race. But the children of God who have reached the years of discretion and are free, no longer require to be enticed to certain actions by rewards, or deterred from others by fear. Hence, as experience teaches, these motives gradually lose their power, and in their place appears, as the Gospel of St. John tells us, the idea of "eternal life." At this stage the individual has the present certainty of the inestimable value and endless content of his life, in virtue of his oneness with God; knows himself to be beyond the changes and chances of this temporal existence; and expects nothing in the future except the further development of the intrinsic richness of his nature — "the manifestation of the glory of the children of God," as St. Paul puts it.¹ The religious belief in an overruling Providence, the conviction that the world must coöperate with the children of God and aid them to fulfil their vocation,² so far from being an impediment to ethical activity, is rather its indispensable support. For the will to act morally must be weakened, if there is any cause to fear that the universe is either indifferent or hostile to the realization of ethical ends, or that the world, as the dualists imagine, is the work, not of God, but of the devil. On the other hand, the moral agent can be of good courage if he has the certainty that the universe is subject to the will of God, and adapted for the establishment of his kingdom, and yet that the efforts of God's creatures can contribute to bring about this result. The doctrine of the grace of God may also at times be falsely interpreted in a quietistic mystic sense, but this is certainly not its true meaning. It does not imply that an omnipotent power exercises a direct influence on individuals, destroying thereby their own initiative. What it does mean is that the believer in God has the consciousness that he receives from God all he has, and particularly his religious and ethical strength, but that these have been given only for the pur-

¹ Rom. viii, 18 ff.

² *Ibid.*, 28.

pose of being exercised and used. This consciousness, therefore, is not a hindrance to activity, but rather a powerful motive impelling the individual to employ in the service of God the divine strength which he has received. Humility and strength are here bound up together. Did Paul, Augustine, Luther, Knox, and other religious heroes, who regarded themselves as the chosen instruments of God, become listless and indolent quietists? Was not, rather, this very consciousness the source of their strength and activity?

But, it may be asked, do not the tendency to despise mere earthly goods, and the pious regard for the things beyond this world, have of necessity an injurious effect on morality? It cannot be denied that this has sometimes been the case, but this one-sided transcendental tendency is always a mere temporary phase in the development of religion, just as at certain times the youth is afflicted with an attack of sentimentality and world-weariness. The impulse to withdraw from the world does not belong to the essence of the Christian religion. For Christianity proclaims the coming of the kingdom of God on earth; its aim is to make our body the temple of God, and our daily life a continuous and rational devotion to His service. It directs attention, therefore, not away from the world, but to the world, to the transformation of man as a natural non-spiritual existence into a divine-spiritual being. It was inevitable that the negative side of this process should at first have been most strongly emphasized. This error was corrected by the Reformation, which restored family, state, worldly occupation, science, and other natural and ethical institutions to their true position as manifestations of the kingdom of God upon earth, and as means by which that kingdom is to be more perfectly realized: For Protestants, the denial of self and the renunciation of the world are no longer everything; they are but a 'moment' in religious morality. They form the necessary condition for the complete perfection of self and the world, and in this respect are of permanent worth. We must not interpret the statement, 'Die to live,' either in an ascetic or in a naturalistic sense. The former involves neglect

of the second part of the injunction ; the latter overlooks the first. The ethical ideal must not be brought down to the level of the merely existent, nor raised above all ordinary reality and placed in some other world. The individual of the present day is sufficiently protected from one of these dangers by the practical bias and realism of the age ; but all the more is it necessary to find some means of preserving him from the other, and of counteracting his tendency to devote himself exclusively to the unsatisfying pursuit of finite ends. Religion supplies the necessary corrective, for it perpetually reminds him of the things which are essential, and brings him out of the clamor and strife of the world to calm reflection, so that instead of losing himself he finds himself in God. The ideal, which recedes ever more and more from the gaze of those who are immersed in worldly affairs, becomes in the act of religious devotion an actual present reconciliation of 'what is' and 'what ought to be'; what in ethical action is only an ideal to be attained, is in religious exaltation a truth that is experienced. Religion supplies not only the basis of morality, but also its completion and the consciousness of its realization. Out of the chaos of particulars it makes a whole, for it views Becoming *sub specie aeternitatis* as Being, and in its intuitive belief presupposes the actual present realization of the ideal.

II.

From the side of the church the charge is not unfrequently made, against the supporters of a morality without religion, that there is no depth or earnestness in their ethical convictions—indeed, that at bottom they are not less immoral than irreligious. This kind of polemic, however, will hardly convince any one, since it always impresses those who are impartial as being unjust. If we are to come to a clear understanding on this weighty matter, we must above everything be just, especially in judging of our opponents ; and it must therefore be admitted that among those who are estranged from religion are to be found many persons of high moral

character, who labor zealously and conscientiously for the good of their fellow-men. On the other hand, however, one must be careful not to draw too hastily, from a few cases of this sort, a general conclusion with regard to the normal relation between religion and morality. Least of all should one forget that the ethical principles and tendencies of such men did not develop of their own accord, but are the product of their education in a Christian community, which led them in youth by precept and example to regard the Good as the only thing of absolute value, and also implanted in them ideas and ideals, the feelings of reverence and of duty, devotion and love towards ethical authorities and institutions. Whether we are conscious of the fact or not, we owe all that is best in our moral convictions and character to our upbringing in a Christian society. Now it is an undoubted fact that such a community rests on a religious basis, and that its ethical trend results from its religious beliefs. In it the Good is regarded as the only thing of absolute worth, not for utilitarian reasons, but because it is the content of the holy will of God ; and its hope of the victory of the Good in this world rests, not on inductions from experience, but on the faith that the world is God's, and that all which offers resistance to His will must be overthrown. This intimate relation between ethical convictions and the religious view of the world may not hold good in the case of a few isolated individuals who have rejected Christianity. Nevertheless it is a fact that cannot be disputed, and one that is engrained in the consciousness of the community. Would the ethical convictions remain and be equally potent if the religious basis were rejected, not only by a few individuals, but by whole generations ? History does not seem to give any warrant for an affirmative answer to this question, but shows, rather, that, when religious faith is lost and scepticism and unbelief prevail, the moral consciousness of the masses declines or is totally subverted.

One can easily understand why this should be the case. What the supporters of an independent system of morality offer in place of the religious basis is essentially inadequate,

and, whether they proceed on empirical or idealistic lines, the result is the same. Those who start from the empirical standpoint—which is always the most obvious mode of explanation—attempt to show that, in order to satisfy his natural longing for happiness, man must restrain his momentary desires and take account of the happiness of others, which is closely connected with his own. In this way, when he rightly understands what best subserves his own interests, he comes to adopt the maxim: ‘Strive for the greatest possible happiness of the greatest possible number.’ But in all this two questions, on which everything turns, have been disregarded: (1) What is the content of the conception ‘happiness’? (2) Why should I seek the happiness of others at all, and not confine my attention exclusively to my own? The term ‘happiness’ in ordinary usage has no definite meaning, for what it denotes depends entirely on the individual concerned. How, then, is it possible to say in what the ‘common’ or ‘greatest possible’ happiness of human beings consists? Is the matter to be put to the vote, or settled in some similar fashion? And would the result of an inquiry of this sort be that the true lovers of mankind would be inclined to accept its verdict as the absolute standard of moral conduct? Would they not rather say that the all-important thing is to educate men up to the point at which they would be able to make right judgments in reference to their well-being, and recognize what ‘true happiness’ is? But the hedonistic principle, on which as a rule the morality of naturalism is based, would thereby be virtually transcended, for the mode of procedure indicated above involves an appeal to some absolute criterion of truth, which stands above and is superior to the subjective feelings of pleasure and pain; and, once invoked, this criterion would assert its inalienable sovereign right to direct human conduct without any regard for hedonistic motives.

One must also bear in mind that those who base morality on the natural desire of the individual for his happiness, should show cause why a regard for the happiness of others, should be demanded. The representatives of this line of thought treat this question—the Achilles’ heel of every system of utilitari-

anism — in a very summary fashion. They simply assume that the general happiness includes that of individuals, and that the latter, in striving for the welfare of others, are adopting the best means for securing their own. But the matter is not quite so simple as this would seem to imply. Experience, rather, shows that the well-being of others, of a society, or a nation, quite frequently involves the destruction of individual happiness, renunciation of personal interests, and even in certain circumstances the sacrifice of the individual's life. On the utilitarian standpoint what ground can be adduced to justify this self-sacrificing conduct? From the fundamental principle that each individual should seek his own happiness, this mode of behavior cannot be proved to be obligatory. On the contrary, one would think that self-abnegation for the benefit of others, so far as it is at variance with this principle, should be condemned as immoral. Utilitarians are seldom resolute enough to draw these deductions from their premisses; they seek to avoid the difficulty by laying stress on the numerous artificial motives whereby society impels the individual to act for the common good, and restrains him from actions that are hurtful to the community,—fear of civil punishment or of disgrace, hope of honor or of other social rewards. But, in the first place, it is clear that these motives, drawn from the external consequences of action, can neither account for the outward action or its inhibition, nor for the internal disposition which preceded it; they might give rise to legally just, but never to truly moral, actions. Hence the principle of utilitarianism is not fitted to be the basal principle of morality, for that is most concerned with the spirit in which the action is performed. The principle of Utility could at most be only the principle of a system of law. But even this is doubtful. For, if the agent is moved to action merely by a consideration of the useful or injurious consequences of his actions to himself, what is to prevent him from pursuing his own advantage at the expense of others without the slightest scruple, when he can do so without fear of suffering any serious results? The Utilitarian could not blame the egoist

who was clever enough to use others for his own ends, without coming into conflict with the law or incurring social odium. Even the criminal who understood how to escape legal penalties could not be censured. It is clear, however, that in a community where such views were prevalent even the legal system could not continue to exist, and would dissolve, leaving nothing but chaos, *bellum omnium contra omnes*.

But if the Hedonists bring into account the internal as well as the external consequences of action (conscience, self-respect, or self-contempt, etc.), they borrow surreptitiously from the idealistic principles which they have rejected. It is incumbent on them to make clear how the ethical feelings in question could ever have come into being, if their standpoint is the true one. While it is certain that man is governed by the sense of duty, and avoids the bad as the source of all unhappiness, one cannot use this feeling, which depends on the consciousness of duty and thus presupposes the absolute authority of the Good as such, as the ground of this very consciousness and the basis of morality. If you once teach the individual that his natural striving after happiness is the supreme principle of action, you cannot prohibit him from seeking his happiness in the satisfaction of the particular impulses which are for him the most powerful. If these happen to be sensuous and selfish, you may pity him for his poor taste, but you cannot charge him with the violation of any ethical principle. You may remind him of the undesirable inward consequences of his conduct, the pain of a bad conscience or of self-contempt; but this will have little effect, for you appeal to feelings which ought not on your principle to exist, feelings to which he is perfectly indifferent, or which he repels with contempt since they prevent him from seeking and enjoying his own happiness in his own way. You cannot gather grapes from thorns. Once make the sense of subjective well-being the principle of morality, and no dialectic skill will ever succeed in deducing from it the sacredness of duty, the unconditional authority of the Good and its independence of the inclinations of the individual.

It must be pointed out, in addition, that eudaemonism is self-

destructive by reason of the inherent contradictions which it contains. It ends in pessimism and a resigned submission to the course of events, as both ancient and modern history testify. While the Cyrenaics made positive pleasure the end, the Epicureans contented themselves with ataraxia—a state of inward tranquillity independent of outward circumstances, which was to be gained, not by the restless pursuit of enjoyment, but through contentment and placidity, that is, through a renunciation of passionate desires and a restraint or partial suppression of natural impulses. The whole history of ancient times shows the continual repetition of a process which always remains essentially the same: at first there is a naïve delight in the world of sense and the expectation of unlimited enjoyment in the pleasures which it offers, but in the end the sensuous world is despised as a vain and fleeting show, and comes to be regarded as a source of disappointment and the origin of all evil. The same thing is observable in modern times. John Stuart Mill shared with the English Utilitarians the opinion that the supreme principle of conduct is the desire for happiness,—in the last resort, desire for one's own happiness. His own experience convinced him, however, that pleasure eluded his grasp so long as he made it the direct end of action, and that it could only be attained in an incidental way when something else was aimed at, not as a mere means to pleasure, but as an ideal end.¹ And it is not by chance that an age in which naturalism and eudaemonism flourish, is followed by an era of pessimism (which may be called 'negative eudaemonism'). The judgment which pessimism passes on the world depends upon the answer to the question: Does man obtain that happiness which he thinks his due? It finds that this question must be answered in the negative, and therefore concludes that it would be better if the world did not exist. Its historical significance consists in this, therefore, that it proclaims the bankruptcy of positive eudaemonism, which finds the truth of morality in the affirmation of the impulses of the natural human being as such, and in the striving to satisfy these to the greatest possible

¹ Cf. *Autobiography*, p. 142.

extent. Pessimism is undoubtedly right up to a certain point, for it is clearly impossible that man, who as a rational being is impelled to seek unconditional perfection, should find complete satisfaction in any finite ends or in any sum of them. These can never afford him anything more than a relative satisfaction or happiness. Pessimism errs only in stopping short after having refuted natural eudaemonism, instead of advancing to a positive and higher principle.

The idealistic moralists of ancient and modern times (Plato, the Stoics, etc.) have found this principle in Reason, which, acting independently of desire and inclination, determines solely from its own nature the law of ethical conduct. Kant, the classical representative of idealistic morality, presupposed an absolute opposition between the law-giving reason, which he regarded as purely formal thought, and the natural desires of man, from which all the content of action was derived. Hence morality became a perpetual and fruitless conflict, and required an individual to deny all his inclinations and obey duty for duty's sake, without any prospect of realising an end of any value, or of attaining the Good in any way. Such a morality must necessarily result in a pessimistic submission to things as they are. Kant was enabled to avoid this only by introducing a religious postulate, which harmonized but ill with the uncompromising moral autonomy with which he set out. By means of this addition the opposition between reason and nature, virtue and happiness, formerly regarded as absolute, was overcome in some unexplained manner by the omnipotence of God, and happiness was connected with virtue as its reward. The inconsistency of this procedure has been frequently pointed out, and it is evident that, if we ourselves ought not to strive after goods of some sort, it is not legitimate to demand of the Deity a guarantee for the attainment of the *summum bonum*. But, however certain it is that the postulate of a subsequent reconciliation through divine agency of the dualism between nature and reason is not consistent with the Rigorism of Kant's theory, it is equally certain that only by its means did his system escape shipwreck on the rock of pessimism.

Fichte rejected this postulate, since he saw that it involved a relapse into the eudaemonism formerly repudiated. Two courses therefore remained open: either to assert a transcendental unity behind the empirical opposites, reason and will, and thus return through the moral order to a religious basis of morality; or to regard the opposition in question as original and absolute, and so come to view the world as the irrational product of a blind Will. Schopenhauer, as is well known, chose the latter alternative, while in Fichte's system the Kantian idealism began to throw off its exclusive subjectivity and to take an objective form, which had as a further result a deepening of the religious consciousness. According to Fichte and Schiller the reconciliation of the opposition between reason and will, which Kant looked forward to as the result of the intervention of the Deity, is realized in the inner experience of man when he adopts the Good as the law of his life, and thus, instead of viewing it as the mere command of a transcendental law-giver, feels it as the life-giving power of the Divine Spirit. In this way the opposition between subjective morality and religion, which still remained in Kant's system, was overcome, and the necessary relation of the two was recognized. Herder, Jacobi, and Schleiermacher also sought to develop Kant's system of morality along the same lines. While they approved of his rejection of utilitarianism, they could not accept his view of the irreconcilable opposition between reason and nature, duty and inclination. They were convinced that these opposing factors could be harmonized in a higher morality, where duty and inclination were at one, and the good was associated with happiness. They designated this ideal in different ways; they called it Humanity, Moral Beauty, Freedom, Piety, Love; but they were all agreed in this, that it was the divine in man which raised him beyond the narrow limits of self and brought him into relation with the original source of all Good. The development of idealism thus resulted in the establishment of a religious morality, which, though it might be at variance with the beliefs of the church, was in all essential points in harmony with Christian ethics. And this relation was never denied by the poets

and thinkers referred to. Although holding themselves aloof from church and creed, they knew history too well not to recognize that the human sympathy and education of the heart which they regarded as the ethical ideal, were fruits that had ripened on the tree of Christianity.

Their successors about the middle of the present century, Feuerbach, Mill, Comte, etc., were the first who began to emphasize the distinction between worldly morality and the ethics of Christianity. But at the same time their ethical systems became naturalistic instead of idealistic, or wavered inconsistently between the two conflicting standpoints. An important factor in bringing about this result was the application of the natural science theory of Evolution to the explanation of the facts of the moral consciousness. From the incontestable fact that morality, like everything human, developed from small beginnings under the influence of various causes, the hasty conclusion was drawn that morality is based on no transcendental *a priori* principle; that it is simply the product of natural, and indeed material, conditions, under which man has been evolved from the brute; and that the notion of the unconditional authority of duty must therefore be explained as one of the illusions for which habit and heredity are responsible. This naturalism, if logically carried out, obviously leads to unrestrained egoism and the warfare of every one against every one else. It stands in strange contrast, therefore, with the strong feeling of human sympathy which prompts the evolutionist writers to establish an ideal of common weal as the standard by which conditions that are the result of natural processes are to be judged,—an ideal which is claimed to have universal validity, and which demands the complete renunciation of self. While it is true that the content of this social ideal never, as a rule, rises above the hedonistic level, yet the idealistic standpoint has been adopted when ideals are set up which have a higher claim upon us than the actually existent. It is one of the most striking inconsistencies of an inconsistent age that the naturalistic evolutionary tendency, which logically excludes any recognition of the authority of

ideals and the supremacy of the Ought over the Is, should coexist with the idealistic tendency already noted. When we remember, moreover, that empirical and idealistic systems of morality have this in common, that they are both independent of religion, we may regard this mixture of naturalistic and idealistic elements as a sign that morality when cut loose from religion has lost its regulative principle. For religion alone can mediate between the conflicting claims of that which has become and that which is in process of becoming, and harmonize the rights of the individual with those of society.

The humanitarian tendencies of our time deserve respect, and are specially valuable as practical means for counteracting the theoretical materialism of the age. But it cannot be denied that those who emphasize these tendencies are under the sway of a naïve optimism, which can scarcely survive in the light of the actual facts. When love for mankind in general is no longer the result of religious belief, as it is with Christians, but rather a substitute for it, it is a serious question whether human beings as we actually find them are so amiable that we can continue to love them, and devote all our energies to their service. When the philanthropist is rewarded by bitter ingratitude, and his noblest endeavors are frustrated by man's dulness and wickedness, will not his courage fail and his enthusiasm be quenched if he is not inspired by a belief in the divine power of the Good which transcends this world of appearance? One can maintain a love towards all men only if one believes that a manifestation of the Deity is concealed behind the outward appearance; but how can one believe in the divine *in* man, if one does not believe in a Divinity above and prior to man? It is always possible, of course, that the feeling of duty may be sufficiently strong to be permanently effective after the philanthropic enthusiasm has died away. Experience frequently proves that there are beings stoical enough to cling undismayed to duty for duty's sake, though they have no good feeling towards their fellow-men, and may even regard them with open and avowed contempt. To preserve their self-respect they obey, consistently or inconsistently, the law which they

believe to be prescribed by their reason. Such individuals may command respect, but seldom inspire affection. We may admire the strength which enables them to defy the world, but we have little confidence that this strength will avail to overcome it. The hardihood which they require to maintain their attitude to the universe is fatal to those more tender feelings which link men to the world, and touch the hearts of their fellow-men. This harsh and stern virtue is not kindly and attractive, but cold and repellent. It isolates the individual, and therefore destroys the influence he might otherwise exert on society. The sense of isolation, moreover, is but too apt to produce a pessimistic feeling of bitterness and a contempt for the mass of mankind. This is frequently the fate of those strong spirits who would replace the humble and trustful morality of the pious by a proud morality of reason and autonomy. And for weaker spirits, it is greatly to be feared, this respect for the free law of reason is an inadequate substitute for the support which religion can yield to the moral agent in his struggle with the trials and temptations of life. 'T is true that the belief in particular dogmas may often disappear without detriment to morality, for they are but artificial and fallible interpretations of religious experience; but when belief in religion as such has vanished, and with it the conviction that the course of the world is subservient to the purposes of God, what can shield the ethical consciousness from the blight of scepticism? If the Good is not the power that rules the world, why should *I* recognize it as the absolute law of my conduct? If I find myself in a world where self-seeking in numberless forms and disguises reigns and thrives, why should I be different from others and sacrifice my own interests and inclinations to that which I have been taught to regard as my 'duty'? The sceptical understanding will prompt the inquiry, why duty should have a higher authority than my selfish desires. If it is but a creation of my own mind, why should I not be lord over my own thoughts? If it is a rule of conduct which I have voluntarily adopted, why should I not free myself from it when it has become irksome to me? And if it is a law which others

have invented and prescribed, why should I obey others who were no better than I am, and who simply acted for their own interests? If there is nothing but selfishness everywhere, why should the self-seeking of others have a higher sanction than my own? Do not my own interests concern me most intimately? Am I not justified, then, in making them the sole guiding principle of my conduct?

It is not easy for those who repudiate the religious basis of morality to cope successfully with these sceptical objections. Where shall we find the basis and sanction of duty if not in the absolute rational Will, which must be assumed as the common ground and unifying principle behind the opposition of self and the world, of individual and society? Only because all individuals are conscious of their union with the super-subjective divine Will, which is at once the common ground of their being and the unconditional law of all action, do they feel that they are related to one another as parts of one organism, that they share in the same life, and are governed by the same law. Only in this transcendental union, which is Religion, does the consciousness of duty as something above all individual caprice have its roots. From the same source is derived the guarantee for the inalienable rights which each member of the organism possesses in virtue of his nature as a moral and rational being. When founded on religion, human society is an ethical organism in which each individual feels himself related to the others by mutual rights and duties; torn from its religious basis it becomes a chaos in which each one wars against the others, and the others war against him.

III.

The futility of the attempt to construct a morality without religion would be more evident than is usually the case, if those who essayed the task consistently carried out the principles with which they started. But, as a rule, the true state of affairs is concealed by the fact that motives are introduced which are in reality of religious origin, and whose ethical validity is dependent on the fact that they are derived from a super-subjective

and transcendental source. One might even go so far as to maintain that the repudiation of religion is more apparent than real on the part of those who would establish a morality independent of religion, and particularly in the case of the most serious representatives of this theory. They reject the definite dogmatic and ecclesiastical form of religion with which they are acquainted. Does it follow that they are strangers to religious belief and to piety in every sense? It is hard to believe this in the case of those who are endowed with a genuinely moral disposition. The upright man who is concerned, not merely with the outward appearance of the Good, the legal and the respectable, but with the Good itself, cannot avoid attributing the highest right to that which he recognizes as having the highest value. In other words, he must hold that the successful maintenance and realization of the Good is a necessary demand of reason. Profoundly convinced of the legitimacy of this demand, he will believe that the Good is the victorious power above reality, *i.e.*, that the world is so constituted that the Good can and must be realized in it. This conviction is already religious belief; it is the religion of Fichte, Matthew Arnold, and many idealistic moralists. One might urge, of course, that such a belief is vague and indeterminate. Its significance, however, is not to be underestimated, and it contains the germ of a fruitful development. Fichte, it will be remembered, soon passed from a belief in the moral world-order to a faith in God, as the original source of all that is Good and True. In fact, if the Good is the End of the world, it is an obvious consequence that it is also its Ground; and if it is both Ground and End, it must be the power which has guided and governed the course of the world from the beginning, and will continue to do so in the future. But to recognize this is to adopt the Christian faith in God, as Fichte's later writings on the philosophy of religion made evident. We are justified in supposing, therefore, that many of those who imagine that they uphold a morality without religion, are really more religious than they know of and admit. At all events, we can say of many of them, in the words of the gospel: "This man is not far from the kingdom of God."

The motives which keep such men back from a closer and more conscious relation to religion are not always blameworthy. They know religion only in its churchly form, with its hard and fast traditional dogmas and devotional ceremonies. Much of this they find repellent, because it is in their opinion unworthy of belief and valueless, or even positively harmful to morality. This regard for the truth, which prevents them from believing what is unworthy of credence merely because it has been handed down from past ages, is assuredly deserving of respect. Indeed we may hold it to be an ethical virtue, which as a rule is not valued highly enough by the adherents of the morality of the church. We must even go further, and admit that some of the charges which have been made against the religion of the church are not without a basis in fact; for, while religion as such can never be a hindrance to morality, the concrete form in which the historical religion is embodied may frequently prove a stumbling-block. And this is the justification of the attempt to separate ethics from religion : it preserves morality from the danger of being influenced in a one-sided and injurious way by religion as embodied in ecclesiastical organizations. This influence must not always be attributed to selfish motives on the part of the rulers of the church. It is an inevitable result whenever the church, instead of confining its attention to the development of the true religio-ethical disposition, and striving to awaken and strengthen the feeling of duty, of love, and confiding hope, attempts by direct interference and prescription to guide and control the character of external actions. Moral conduct can nowhere be healthy and normal unless it adjusts itself to the character of the objects to be treated. It therefore always requires to be guided by correct technical knowledge of the natural laws of cause and effect which obtain within the particular field. Hence any interference with action which ignores this real objective point of view, can only produce confusion in the ethical life and be an impediment to its development. A system of law or government under ecclesiastical direction would be, irrespective of the motives which prompted this intervention, as harmful to the life of a nation as the art

of medicine under similar conditions would be to the sick, or a system of education to the young, or a science of nature or history to the attainment of truth. If the interference be prompted by selfish motives, as has frequently been the case, the mischief will, as a matter of course, be correspondingly greater. The chief source of harm, however, does not lie so much in the blameworthy motives of the representatives of ecclesiastical authority as in the contradiction which is involved when the church, despite its abstract point of view, arrogates the right of directing conduct which depends upon the nature of concrete conditions. In the case of a priestly hierarchy which aims at worldly supremacy, there is an inevitable tendency to assume control of ethical conduct; and accordingly the Roman Catholic Church calls forth the strongest reaction on the part of those who maintain that morality should be separated from religion. This tendency, however, is common to all churches, and can be observed in all the Protestant denominations, especially in those that are most perfectly organized. In opposition to this, the morality without religion finds its justification in that it combats this attempt of the church to meddle with worldly affairs, and thus leaves room for that mode of action, on the part of the community, which is prescribed by reason and is in harmony with the actual constitution of the world. Its error consists in this, that it excludes at the same time the salutary influence of religion on the moral disposition of man, and thereby does away with those ideal motives without which morality cannot permanently retain its purity and strength. For while morality as a subjective disposition on the part of the moral agent requires the ideal principle of religion, as concrete action it is dependent on concrete natural conditions, and is thus independent of the religion of ecclesiastical institutions.

Finally, the question may be raised whether it is not possible for those who strive to establish an independent system of morality to so distinguish between a legitimate polemic against ecclesiastical intervention and an unjustifiable attack on religion as such, that they will be able to repudiate the former alone and retain the latter as the basis of morality. The difficulty arises

from the fact that religion is under the care of the very organization whose influence is so objectionable. The result is that an attack on the church is almost invariably harmful to the religious life of the community, and so indirectly injurious to morality. This danger can only be avoided, if those members of the church who make a clear distinction between the essence of religion and ecclesiastical dogmatism strive perpetually to bring about such a reformation in the church that the former will become more and more prominent, and the latter come to be recognized as merely the symbol and vehicle of religious and ethical conceptions. The church, as the organization of the religion of the community, is so powerful that it cannot be affected by any attacks and attempts at rivalry that proceed from non-religious sources, and are undertaken in behalf of merely worldly interests. If one would enter the field, with some hope of success, against churchly dogmatism and ecclesiastical supremacy, one must enlist the aid of religion itself, and employ against the narrow and obscure conceptions of the church dogmas the ideal of a morally pure and undefiled religion. In short, one must strive for the reformation of the church in the name of the eternal religio-ethical Idea. This can only be done from within, along the line of historical development. Hence it can only be accomplished with the help of a scientific theology. Societies for Ethical Culture, which despise these methods, are as helpless and impotent against the church as a band of robbers before a strongly defended fortress. The only result of their efforts will be that the religious sentiment of the community will suffer. Either there will be a loss of religious and ethical convictions, and a consequent ethical retrogression, or their efforts will indirectly contribute to promote a reaction, having as its consequence a relapse into dogmatism and ecclesiasticism. In both cases the effect will be contrary to what they really desire. It is evident, therefore, that those who are in earnest in demanding a truly ideal morality and a truly ethical community must labor, not for a morality outside of the church, but for a reformation within the church.

OTTO PFLEIDERER.

THE IDEALISM OF SPINOZA.

TO those acquainted with the literature of Spinozism it is well known that there are extremely divergent interpretations of the system. While some critics find in it a decided Idealism, for others it seems to represent the universe as merely a purposeless, and therefore ultimately unintelligible, evolution of the infinite substance, — a necessary modification of the attributes in which its essence is expressed. On this view, Spinoza appears to interpret the processes of nature rather by the laws of unintelligent causation than by those of purposive intelligence. The controversy between the antagonistic critics has run into minute details in the interpretation of Spinoza's writings. In these details it seems to be at times forgotten that a philosophical system must be interpreted, not by comparatively brief passages in its exposition isolated from the qualifications of their context, but by the essential drift of the exposition as a whole. The most indefatigable thinker is apt to flag at times in the course of a lengthy exposition, and to drop into inconsistencies of detail, which mar the logical perfection of a system. This it is peculiarly necessary to remember in the study of Spinoza's *Ethics*, as the work might have received important modifications before publication, if the author had lived to edit it himself.¹ Something may be gained towards the true interpretation of Spinozism, if an attempt is made to construe the system as a whole in the light of what appears to be its essential drift. Now, whatever difficulties may be found in the interpretation of particular expressions, — and these will be noticed as we proceed, — it does seem as if

¹ There are some instances of superficial inconsistency even in language, which Spinoza would surely have corrected. Thus, while his essential doctrine is that an *affectus* may be either an *actio* or a *passio* (III, 58 and 59), for the whole process of moral evolution is interpreted as supplanting passive emotions by those that are active, yet he occasionally makes a slip by using *affectus* as if it were equivalent to *passio* (III, 11, schol.).

there could be no consistent interpretation of Spinoza's great work, except as an exposition of the doctrine that the universe, under all its varied phases, is essentially an evolution of intelligence.

The universe of known existence appears to be viewed by Spinoza as composed of two concurrent series of phenomena. These are, it is true, conceived as merely different modes of one and the same substance. But they are modes of two attributes so totally distinct as to be exclusive of each other ; and the substance, in which they are united, seems to be nothing more than the bare concept of being, and, therefore, to supply no fuller bond of union than the common predicate, that they *are*. But Spinoza is evidently in earnest about the substantial union of mind and matter. He is so much in earnest as to insist that the series of all phenomena, though infinite, are yet so organically united as to form one individual.¹ It is of interest, therefore, to trace the process by which this organic or substantial union is reached.

To begin, then, it must be admitted that the unifying concept of substance seems nothing but the empty concept of being. In fact, in the sixth definition of the first part, *substantia* and *ens* are used as convertible. But Spinoza does not rest here. As if conscious of its inadequacy, he proceeds at once to explain that the indifferent concept of substance, or being, becomes differentiated into attributes. He does not, indeed, make any attempt, like Hegel's, to unfold the logical process by which this differentiation takes place. For him the attributes appear simply as differentiations of the infinite substance that are empirically gathered from the modifications in which they are revealed to our knowledge. In this uncritical assumption, however, of the universal categories of known existence, Spinoza does not by any means stand alone. Not to go back upon older speculations on the categories, his position is obviously that of the old Scottish School. They, too, accepted certain categories or principles of 'common sense,' as necessary facts of knowledge in general, without any critical

¹ See part II, prop. 13, lemma 7, and schol.

scrutiny of their origin or authority. Even Kant, though he sees clearly the defect of the Scottish method, has not succeeded in avoiding it altogether. In his Transcendental Deduction, he endeavors indeed to show how the original unity of self-consciousness becomes differentiated into categories corresponding to the forms of judgment; yet he closes the elaborate exposition with the admission: "Of this peculiar property of our understanding—the property of realizing *a priori* unity of apperception only by means of the categories, and precisely through such and so many of these—it is just as impossible to adduce any further ground, as to explain why we have precisely these and no other functions of judgment, or why Time and Space are the only forms of intuition possible for us."¹ Still it is but fair to note that the attributes are regarded by Spinoza as necessary differentiations of substance, and therefore as expressing its essential nature; so that, in this respect, he approaches the old theistic Occasionalists more nearly than those modern Agnostics, for whom the essential nature of substance or reality is never indicated in any phenomena either of matter or of mind.

But not only does Spinoza feel that substance is an empty concept, apart from the attributes that express its essential nature; even the attribute itself is recognized as an empty abstraction which, to become a reality, must be differentiated into concrete modes, just as, in Kant's doctrine, the categories are empty forms of thought till they receive a content from sensible experience.

Reality, therefore, for Spinoza, is not substance by itself, nor yet substance as defined by attributes, but substance as realized and manifested in the innumerable modes into which its attributes are 'modified.' And, therefore, though isolated expressions may seem to represent each series of modes as running in parallel lines, never coming into any real connection, yet the entire drift and significance of the *Ethics* forbid us from taking that view; otherwise, Spinoza's meaning cannot be grasped. There is, specially, no meaning in the conception

¹ *Kritik der reinen Vernunft*, § 21.

of all modes being organically united as if they formed one individual.

What, then, is the only possible connection? Here the first impression might be that the concept of substance is the only connective principle, or at least the only one explicitly recognized by Spinoza. But, running through his whole exposition, there is another principle which is assumed implicitly, at least, not only in the general outline, but often even in minute details, — assumed in laying the foundation, as well as in every part of the superstructure.

A. The *foundation* of Spinoza's philosophy is determined by the method he has adopted. That method is geometrical; and, therefore, like the geometer, he is obliged to found on axioms, definitions, and postulates. It is not necessary to inquire into the general conditions of contemporary thought, or the special idiosyncrasies of Spinoza's mind, which may have led him to the adoption of this method. It is sufficient for us that the method was adopted; and, in view of this fact, it becomes obvious that our interpretation of Spinoza must always keep in mind the necessities which the method imposed on his own exposition of his system.

The adoption of a method peculiar to any of the special sciences must always impede the intellectual procedure by which Philosophy seeks to reach the solution of its problems. It does not matter whether the method adopted be the demonstrative method of mathematical science, or the inductive method of experimental science. The extension of such methods to Philosophy overlooks the fact that Philosophy is an inquiry into the validity of these methods themselves. Such an inquiry, however, must obviously go beyond the methods inquired into, and cannot, to begin with, assume these methods as valid for its own direction. Underlying all experience — all experiential science — there must be some truth which forms the criterion and foundation of experience itself; but that primordial truth cannot be merely a fact found in experience, that is, found by the method of experiential science. In like manner the demonstrative method of geometry assumes, not

only the validity of the process of demonstration, but certain data to form the premisses or starting-point of the process. Here again, however, the task of Philosophy is to get beyond the presuppositions of science, — to find what right the mathematician has to assume the data with which he starts, or to assume that demonstration is a conclusive method of reaching truth. This Spinoza unfortunately overlooks; and we find him, accordingly, trying to start with definitions and axioms and postulates, after the fashion of a geometer, without any critical inquiry into their origin or foundation.

But does Spinoza make no effort to obviate this objection to his method? On a superficial interpretation of his system, he makes none. On such an interpretation his data are simply assumed, like those of any special science, without any critique of their validity. But a critical examination of Spinoza's statement of his data makes such an interpretation impossible. These data are stated in such a manner that the critical vindication of their authority is in general clearly indicated. The statements imply that the data are assumed on the ground of their being necessary to intelligibility; in other words, because without them — not only could there be no intelligible system of Philosophy, but there would be no intelligible universe, of which Philosophy could be called to give an account. This is specially clear with regard to the three fundamental definitions of substance, attribute, and mode.

Take first the definition of *substance*: “*Id quod in se est et per se concipitur; hoc est id, cujus conceptus non indiget conceptu alterius rei, a quo formari debeat.*” On the first blush, as already stated, it looks as if this were merely the bare concept of being in the abstract, assumed without any investigation of its validity, or even of its meaning. But a more careful study of Spinoza's language proves at once that it goes a long way beyond that. Substance is defined to be, not merely that which *is* in itself, but also that which *is conceived* by itself; and, to make the meaning perfectly explicit, this latter predicate is more fully expanded into “that of which the concept does not require the concept of anything else, by which it has to be

formed." Substance is, therefore, not an empirical idea taken up simply as something which happens to be found among the natural furniture of our minds. It is a necessary concept of reason. For it will be observed that substance is defined, not as a concept of any individual reason, nor even as a concept of human reason in general. It is to reason universally — to reason simply as reason — that the definition appeals. It draws attention to the fact that reason must conceive something *per se*, just as we shall see presently, it must also conceive some things *per aliud*. Substance is thus a necessary concept of pure reason. Without it there could be no reasonable thinking at all.

The same conclusion is forced upon us by an examination of the definition of *attribute*. As already stated, Spinoza appears to realize that mere substance or being is an empty abstraction. To predicate being alone, is to predicate nothing at all; to give predicative thought any content, you must at least predicate *what* is. That is to say, substance must be defined by some predicate of a more determinate character than the bare fact of its being; else there is no definition of what it really is. It is determined to be something, to be a reality; in other words, it is determined to *be*, only in virtue of its attributes. And therefore attribute is defined to be "that which intellect perceives in regard to a substance as constituting its essence." Here, again, it might appear as if a concept were taken up, without critical scrutiny, simply as an idea accidentally discovered in the mind. This appearance is mainly due to the fact already noticed, that Spinoza makes no attempt to explain the process by which intellect perceives attributes as constituting the essence of substance. But it is evident that he did not regard attribute as a fact given to intellect from some extra-intellectual source. For him, rather, attribute is that without which substance or being is incapable of being conceived by the intellect at all. It is, therefore, like substance itself, a necessary concept of pure reason.

All this applies, with equal clearness, to the definition of *mode*. Attribute itself is seen to be an unreal abstraction; it

does not become a reality till it assumes a concrete form,—a particular *modification*, as we should say.¹ Mode is defined in the first instance rather tautologically as an *affection* of substance, and then more explicitly as that which exists, not *in se*, but *in alio*, and is also conceived *per aliud*. The *aliud*, in which mode *is*, might be taken to be substance; but, as it is also that by means of which mode is conceived, it must be attribute, or (what is the same) substance as expressed in some attribute.

B. All through these definitions, therefore, it is evident that their critical vindication is founded on their being necessary concepts of intellect, insuperable conditions of intelligibility. But not only do the foundations of Spinoza's system thus assume the idealistic point of view; we are raised to the same point of view at almost every step in the erection of the superstructure. This superstructure of course is an attempt to explain the whole process of nature—the process by which the infinite attributes of substance are evolved into an infinite variety of modes. This process is, therefore, an evolution of the concept of attribute and the concept of mode.

I. Though the attributes of substance are said to be numerically infinite, yet there are only two of which we know and partake, *viz.*, thought (*cogitatio*) and extension. Now these attributes, and all others of course as well, are apparently made coördinate by Spinoza. But the coördination is merely apparent. For all attributes are defined to be what they are in themselves by what intellect conceives them essentially to be. That is to say, they are defined by their relation to thought; and thus thought becomes the supreme attribute or category, by relation to which all else must be interpreted.

In fact, Spinoza himself seems anxious to avoid a representation of the two attributes, as if they were absolutely discrete, or mutually independent. In the first place, he connects them, as we have seen, on the ground of their belonging in common to one and the same substance; and he is at pains to explain

¹ Spinoza himself uses *modificatio* at times as an equivalent for *modus*. See, *e.g.*, I, 7, schol. 2.

that there is no absurdity in supposing a substance to possess several different attributes (I, 10, schol.). But there is another connection between the two attributes of thought and extension. Thought is conscious of itself, but it is conscious of extension as well. Inferentially we may add that thought must be conscious of all the attributes of substance. The modes of extension, as well as of other attributes, whatever these may be, are thus made modes of thought; and the whole infinitude of attributes in all their infinite modes are ultimately interpreted in terms of the one attribute of thought. The connective concept, therefore, which gives unity of system to the infinite variety of nature, turns out to be not the bare abstraction of being or substance. That abstraction itself, as we have seen, is valid only as a necessary concept of reason; and it is by relation to rational thought that substance, with its infinite attributes, receives an intelligible unity.

II. But the same interpretation is forced upon us when we proceed to consider how Spinoza conceives the attributes of thought and extension evolved into the infinite variety of their modes. Here, again, it appears as if the two series of modes were made exactly coördinate with one another. But here again, too, the coördination is merely apparent. It is, indeed, more than once explicitly stated by Spinoza. It forms, in fact, the distinct subject of a well-known special proposition: "Ordo et connexio idearum idem est ac ordo et connexio rerum" (II, 7). But the teaching of such statements must be interpreted in harmony with other doctrines that are essential factors of Spinoza's system.

(1) For example, his doctrine of causality controls the whole conception of the process by which the modes of an attribute are evolved. According to this doctrine, every mode of an attribute is, in a certain sense, caused by antecedent modes of the same attribute "as its *proximate* causes," and these again by other modes antecedent to them, and so on, till the causal process finds its complete explanation in the nature of the divine attribute, which is "the *prime* cause" of all its modes (II, 7, schol.). Now, though Spinoza takes care to explain

that modes can, in this sense, be caused only by modes of the same attribute, and never by concurrent modes of another attribute, yet this explanation receives its real significance from the peculiar position of the attribute of thought. For that position, as we have seen, implies that all attributes are ultimately interpretable in terms of thought; and this fact determines Spinoza's conception of causality. It makes the process of causation a process of thought. Nor is this a strained inference from a merely incidental remark in the course of Spinoza's exposition. It is his own avowed teaching when he takes up the subject deliberately for the purpose of explanation; and it is a teaching necessitated by the essential drift of his whole system. Thus he explicitly defines cause to be not merely a temporal antecedent, but a logical antecedent which in its very conception involves, and therefore, of necessity, evolves its effect as its logical consequent (I, ax. 4; I, 16, dem.). Accordingly *ratio* is used as convertible with *causa* (I, 11, second dem.); and, to make the doctrine unmistakable, the nature of the causal sequence is illustrated by the logical sequence, by which from the very concept of triangle it follows that its three angles must be together equal to two right angles (I, 17, schol.). From this of course it follows that all the processes of natural causation, in matter as well as in mind, are in their essence processes of thought evolving its logical implications.

(2) But there is another important qualification of the proposition that "ordo et connexio idearum idem est ac ordo et connexio rerum." For, in spite of this, Spinoza explicitly points out that the two series of modes are not simply concurrent, each mode of one attribute being represented by a corresponding mode of the other. In the phenomena of mental life, he recognizes, indeed, an association of ideas which corresponds to the order of external nature; but he asserts that over and above this there is a "concatenatio idearum," which does not correspond to that order at all. This concatenation of ideas "is formed in accordance with *the order of intellect*, in which the mind perceives things by means of their first causes" (II,

18, schol.). This obviously implies that the order and connection of ideas are not simply parallel with the order and connection of sensible things. And this, we shall find, is confirmed by its development into a theory of knowledge to be noticed presently.

The recognition of such an intellectual combination of ideas, diverging from a purely natural order, is a fact of the highest import both for the Psychology of Spinoza and for his theory of the moral life.

(a) It neutralizes, in the first place, any appearance of psychological Sensationalism, which the *Ethics* may otherwise present. There are, as already indicated, certain passages which have been interpreted as meaning that the human mind is to be conceived as merely a temporal association of ideas, that is, sensations, corresponding to concurrent changes in the body. Indeed, memory is explicitly interpreted from the physiological point of view (II, 18, schol.); and so far as it is interpreted from the psychological point of view, it is, in the spirit of Sensational Empiricism, reduced to the one law of temporal association (II, 18). This Sensationalistic aspect of Spinoza's Psychology may seem to be confirmed by the fact that even self-consciousness is made to depend on sensation (II, 23). But, all this to the contrary notwithstanding, the concatenation of ideas in accordance with a purely intellectual order, implies that there is in the human mind something more than a temporal association of ideas concurrent with the temporal succession of phenomena in space. This is more fully developed in a prominent feature of Spinoza's Psychology, which becomes of essential significance in his moral theory.

The feature referred to is Spinoza's theory of knowledge. In this theory three distinct kinds of knowledge are recognized. The first is what he calls *opinio*, or *imaginatio*, and is referred to two sources. It may, in the first place, be derived from sensation. This seems to be the only kind of knowledge in which our ideas are supposed to run parallel to the succession of sensible things; for it is described as a "representation of individual things through the senses in a manner mutilated

and confused, and without relation to intellectual order." Moreover, in his explanation, Spinoza refers to II, 29, cor., where he had shown that the mind obtains only a confused and mutilated knowledge by a "perception of things derived from the common order of nature." The second source to which *opinio* or *imaginatio* is referred, is language; that is, the signs by which things are recalled to the mind. Here again, perhaps, Spinoza intends to represent the course of ideas as concurrent with the course of physical events, for in his explanation he refers to the passage noticed above (II, 18, schol.), where he accounts for memory by a physiological theory.

But the main point to be observed is the fact, that on Spinoza's theory all inadequate ideas, and therefore all errors, come from this first kind of knowledge. Accordingly, to attain truth, we must seek knowledge of the other two kinds. The former of these is generalizing reason, which penetrates beyond individual differences to the common properties of things; and by this means we may attain ideas that are adequate (II, 38 and 39). But this kind of knowledge is merely a step to a higher, in which knowledge attains completion. This is demonstrative science, *scientia intuitiva*. Here we start from an adequate idea of the formal essence of any of the divine attributes, and proceed to deduce from that an adequate knowledge of the essence of things.

(b) But the psychological import of this doctrine of Spinoza is confirmed and extended in its ethical implications; for it is irreconcilable with the theory of moral life which has been commonly associated with Sensationalism in Psychology. Even the emotional impulses or tendencies (*conatus*) of the mind, which form the natural basis of morality, are described in a manner totally inconsistent with Sensational Ethics. Whatever scientific criticism may have to say about Spinoza's theory on the subject, it is at least a very unequivocal indication of the radical tendency of his mind to seek the ultimate interpretation of all facts in terms of thought. There is, according to him, an universal tendency in things, which is intrinsic, because involved in the very conception of their essential nature. For, by its

very definition or essence, everything, whether mental or bodily, posits itself ; there is nothing in it to negate or destroy it. The tendency, therefore, to continue in existence is the very essence of a thing (III, 4-7). This tendency in the mind is called 'will' (*voluntas*); in mind and body together, it is appetite; and when appetite rises into consciousness of itself, it becomes desire (*cupiditas*).

It is not necessary to follow into detail the classification of emotions, growing out of this theory of their origin ; but there is one outgrowth that has a peculiar ethical significance. For it is evident that the fundamental impulse or craving of the human mind must take a direction indicated by Spinoza's theory of knowledge. According to that theory, the essential nature of mind is realized, not in that succession of ideas which represents merely the order of nature, but in that concatenation of ideas—that inductive and deductive science—which represents the order of mind or intellect itself. Now, if the fundamental tendency of everything is to maintain its own existence, then this tendency becomes in the human mind an impulse to attain, not those inadequate ideas which are imposed upon it by the extrinsic order of external things, but those adequate ideas which are formed by the laws of its own intellectual order. For, as Spinoza is careful to explain, an idea is not made adequate by its agreement with its object. Such agreement is an extrinsic circumstance which has nothing to do with the essential character of the idea itself, and therefore the adequacy of the idea depends only on its own intrinsic character (II, def. 4). Consequently the mind posits its own reality, conserves its own existence, only in so far as it attains to adequate ideas of things. This, in fact, forms the basis of Spinoza's theory of immortality. For ideas, formed in accordance with a purely intellectual order, are not merely the counterparts of sensible things, but exist independently of these ; and, therefore, in so far as the human mind forms general ideas, it lives a life that is not imperilled by the destruction of the body. This may, of course, be interpreted as not necessarily implying the immortality of the individual person ; but it is quite incom-

patible with Sensationalism or Nominalism. It has rather an appearance of affinity with mediaeval Realism, as giving an independent reality to general ideas, even though that may be their eternal existence in the consciousness of God.

The full significance of all this is still more clearly unfolded in its practical or ethical applications. To understand these, a few definitions require special notice. Among them is the definition of adequate and inadequate causes,—a definition which, it will be observed, obtrudes very prominently the conception of causation as essentially a logical process. According to this definition, when an effect can be completely understood by means of a cause, then the cause is adequate. Otherwise—that is, if the effect can be but partially comprehended by a given cause—the cause is inadequate. From this it follows that a man can be said to perform an *action*, in the strict sense of the term, only when an event occurs of which he is the adequate cause; while he is subject to *passion* when anything occurs in his life of which he is only an inadequate cause (III, def. 1 and 2). It is an obvious corollary of these definitions, that the mind is active only in so far as it forms adequate ideas of things, but passive in so far as its ideas are inadequate (III, 1). We can, therefore, understand how will, the active power in man, is identified by Spinoza with intellect, the power of cognition (II, 49, cor.).

But Spinoza's theory of knowledge leads to a further explanation of his meaning. From that theory it follows that an adequate idea represents the third kind of knowledge; and consequently, not only does the knowledge of man in its highest form belong to an order of the intellect which is not determined by the order of nature, but the voluntary actions of men are now seen to claim an equal freedom from the necessitation of natural causes. Of course man is, in a certain aspect, a part of nature; so that the events of his life are partly resultants of external causation (IV, 2). To that extent he is subject to passion (IV, 4, cor.). But in so far as his life is regulated by adequate knowledge, he is spontaneously active, obeying an order that is totally distinct from the order of nature. It is

quite true that passages may be cited from the *Ethics* which seem explicitly enough to deny man any real freedom, and to represent the phenomena of his mind as being necessary modifications of the divine attribute of thought in the same way as the phenomena of his body are necessary modifications of the divine attribute of extension. But whatever explanation these passages may receive, it still remains an essential feature of Spinoza's philosophy, that the modes of thought are not determined by the modes of extension, and that the order of intellect is not simply concurrent with, but radically different from, the order of nature.

It is surely, therefore, significant that in spite of all the apparent necessitarianism of his occasional teaching, Spinoza should find in the power of intellect a genuine freedom for man. The concluding part of the *Ethics* bears the suggestive title, *De Potestate Intellectus seu de Libertate Humana*. No wonder that this part has always formed, and will undoubtedly continue to form, one of the chief fascinations of the work. Here the reader finds an almost exultant relief from the terrible oppression of the rigid mathematical Pantheism of the earlier parts, in which all individuality of existence and activity had vanished. Here, in fact, Spinoza follows Plato in his ascent to those serene heights of mental life in which genuine knowledge is illuminated with a moral splendor, by being identified with genuine love; while the fierce light of geometrical demonstration, which seemed to fuse all existences into a violent mechanical union, becomes mellowed into a glorious haze in which the finite spirit feels as if all its harsh self-assertion faded away into a mystical communion of love with the Infinite Spirit, in whom all live, and move, and have their being.

For, as we have seen, knowledge becomes adequate, only when its object is viewed "sub quadam aeternitatis specie," as a logical derivative from one of the attributes of God. Such knowledge is thus essentially a knowledge of God as He reveals Himself in the innumerable modes of His attributes. But this intellectual process of knowing God has also an emotional

phase. For, according to the theory of Spinoza, all pleasure consists in an advance from a lesser to a greater perfection (III, 11, schol.); and, as he identifies perfection with reality (IV, Preface), the soul of man is conceived as capable of pleasure only by attaining a higher realization of its essential nature. It is evident that such an advance to completer realization or perfection must be made by every step towards that adequate knowledge which is always essentially a knowledge of God. Such an advance in knowledge is therefore by its very nature a joy. But when an object is conceived as the cause of joy, the joy takes the form of love for the object which is its cause (III, 13, schol.); and, consequently, the joy derived from that knowledge of God which is the highest activity of intellectual life, becomes an intellectual love of God (V, 32, with cor.). The emotional state thus identified with the highest intellectual activity is the purest of all joys. It is blessedness (*beatitudo*); and blessedness is defined to be the joy that is reached when the soul is not merely promoted to a greater perfection, but is endowed with perfection itself, or, in other words, attains a complete realization of its essential nature (V, 33, schol.). But the complete realization of its own nature is complete emancipation from all subjection to extraneous agencies; and therefore blessedness is freedom (V, 36, schol.). Spinoza would unhesitatingly say that it delivers men from the bondage of corruption into the glorious liberty of the children of God. Man is thus, in fact, elevated into something more than the likeness of a filial relation to God. He is described as assimilated to God in language such as can be paralleled only in the excesses of the literature of Mysticism. Here again, indeed, one is perplexed by expressions which seem to imply an Agnosticism that excludes any veritable communion between the human spirit and the divine. This perplexity is increased by a vacillation of language, in which intellect and will are denied to God (I, 17, schol.; I, 31; I, 32, cor. 2), while the human mind is spoken of as part of the infinite intellect of God (II, 11), and elsewhere intellect is ascribed to God, though with the qualification that it resembles the intellect of man only in name

(II, 17, schol.). But such expressions cannot alter the fact that the whole drift of Spinoza's ethical teaching assumes, as an essential principle, that man is capable of a real knowledge of God, and a real love of God based on that knowledge. This intellectual love of God is the radical impulse (*conatus*), which man shares in common with all things, to conserve himself; it is the spontaneous activity in which he posits his freedom from all enslaving or destructive agencies; it is the supreme virtue, in which alone blessedness can be found (V, 25). Spinoza, therefore, may well say in the noble proposition with which his great work closes, that "blessedness is not a reward of virtue, but virtue itself; nor do we gain the pleasure of blessedness because we control our passions, but, on the contrary, we gain the power of controlling our passions because we find pleasure in this blessedness."

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ON THE RELATIONS OF PSYCHOLOGY TO OTHER SCIENCES.

AS has been pointed out by Herbert Spencer, the growth of scientific knowledge is no exception to the laws of evolution. Human sciences, as well as human industries, have undergone a continuous differentiation. To the mind of primitive man the shock of an electric discharge and the ravages of cerebral disease were alike manifestations of spiritistic volition. Even when the hypothesis of animism had for centuries been abandoned by philosophic observers, Lucretius sought in one work to expound the theory of all known phenomena.¹ But in recent years the increase of knowledge has brought with it a host of 'ologies,' the specialist in any one of which is often quite ignorant of all others.

Nowhere has this differentiation of the sciences been shown more clearly than in psycho-physical problems. The work now done in psychological laboratories was begun by physicists and physiologists. A physicist made the first known measurement of the least noticeable difference of light,² and an astronomer discovered the personal equation.³

When the laboratory at Leipzig was founded, the ground was broken for the separation of psychological problems from those purely physical and physiological. Apparently not feeling sure of his position, Wundt called the new science 'physiological psychology,' and devoted the first volume, in which its exposition was undertaken, principally to physiological questions. But though at first an unwelcome appendage to physiology and physics, the new psychology has now asserted her right to recognition as a science separate and distinct from other sciences, and that too at times with such vigor as to disclaim all relationship to them. Thus Professor Titchener objects to the use in psy-

¹ *De Rerum Natura*.

² J. H. Lambert, *Photometria*, 1760.

³ According to Wundt, Bessel (*Physiolog. Psychologie*, 4. Aufl., Bd. II, p. 320).

chology of anthropometric methods,¹ and Professor Fullerton pleads for the complete separation of psychology and physiology.²

It would, however, be misleading to consider the relations of the sciences only from this point of view. The progress of science is marked not only by increasing specialization, but also by a corresponding unification.

Physiology is largely dependent on physics for the laws of arterial pressure and electrotonus; and secretion and metabolism are on their face complex chemical processes. Optics, acoustics, and the other branches of physics were in Newton's time quite independent of one another; they are now united in the endeavor to explain all phenomena as transformations of energy. Chemical reactions can no longer be considered merely transformations of matter, for the principle of conservation of energy has been applied to atomic combinations as well as to molar and molecular phenomena. A few years ago botany, zoölogy, and physiology had little in common; they are now taught as branches of biology.

In psychology, perhaps, more than in any other science, this unifying tendency is manifest. In spite of the increasing recognition of the new science, psychological literature bristles with technical terms of physics and physiology. If we survey the problems now under investigation, we shall find that even when the aims and methods of psychological research are *sui generis*, the theoretical interpretation of its results is often in terms of the biological sciences. When psychological methods are inadequate, the student of mind is often driven to biology for the explanation of mental phenomena. The study of the range and quality of sensations leads inevitably to the physics and physiology of nerve stimulation; fatigue is a function of consciousness, but it is also a function of muscle and nerve; space perception may be due to psychic synthesis, but such synthesis would be impossible without sensory data, and these data depend upon the motor mechanism of the eye; association can no longer be considered an ultimate psychic

¹ Titchener, *PHILOSOPHICAL REVIEW*, March, 1893.

² Fullerton, *Psychological Review*, January, 1896.

function, now that pathology has demonstrated its neural basis ; attention is either another ultimate activity of mind, or else an associative reflex phenomenon ; volition and movement cannot be separated from the automatism of all living matter ; psychogenesis can now be studied only from the biological standpoint ; mental diseases are no longer explained on the purely psychological theory of obsession ; the superstitions of the illiterate can be interpreted only by anthropological methods ; and even those that adopt the psychological theory of suggestion to explain hypnotic phenomena, feel called upon to deduce their theory from physiological principles.¹

The laws of mental phenomena thus seem to be so entangled with those of living matter, that it would seem impossible to say where one science ends, and the other begins. But does the converse relation hold? Is physiology similarly dependent on psychology? Let us consider the history of the science. In its early development physiology was as independent of physics and chemistry as psychology was independent of physiology. But since the application to vital phenomena of the principle of conservation of energy and the successful preparation by synthesis of organic compounds, a knowledge of physics and chemistry has been essential to the physiologist. It is yet to be seen whether physiology will be equally indebted to mental science ; but, inasmuch as mental phenomena accompany human life as certainly as do chemico-physical phenomena, we may infer that they also may be found to be necessary links in the physiological chain of causation. But apart from the question of the ultimate relation of mind and body, the physiologist has been, and is now, dependent upon psychology for one important method of investigation ; for but a small part of what little is known of the functions of the brain and sense organs is got without the use of introspective methods.²

Thus, in the present ignorance of cerebral processes, the physiologist is by his use of psychological methods forced to

¹ Cf. Lehmann, *Die Hypnose*.

² Cf. Fullerton, *op. cit.*, for an analysis of Foster's *Physiology* from this point of view.

become also a psychologist; for the facts he has to observe are psychical facts. As we know nothing of the ultimate relations of mind and body, the only resource left the philosophical investigator is the observation of the phenomena of organic life in their totality. Since conscious processes are inseparable from human life, the physiologist cannot but consider these processes as parts of a connected whole. He has no right to assume that any one group of organic phenomena has no connection with other organic phenomena.

I even see no good reason why conscious phenomena should not be admitted provisionally as causes and effects of bodily processes. If a sensation follows the excitation of a nerve, or if a muscular contraction follows a volition, the state of consciousness may be assumed to be part of the causal chain. It matters not whether there are other unknown links in the chain. The states of consciousness, being in whole or in part antecedents or consequents of physiological processes, must be considered in a comprehensive view of such phenomena. It may be argued that the concept of cause and effect cannot be applied in this way. But since the time of Hume, science has had no right to speak of cause and effect with ontological implications. To deny to the physiologist the right to introduce sensations and volitions into his causal series, would be to deny to the psychologist the right to assume material processes as causes of sensation; yet this he is obliged to do, since we know nothing of a mental counterpart of the stimulus. The mental counterpart may exist, but experience gives us no clue of its existence. Consequently science, being the systematization of experience, must neglect it until there is other than a metaphysical reason for admitting it in the causal series. Even the advocates of parallelism assume the physical causation of sensation implicitly, if not explicitly. Fechner holds that all matter has a psychical substratum, but speaks of the "bodily causes of sensations."¹ Wundt,² Bain,³ and others use

¹ Fechner, *Elemente der Psycho-Physik*, 2. Aufl., Bd. I, p. 18.

² Wundt, *op. cit.*, vol. I, p. 334.

³ Bain, *The Senses and the Intellect*, 4th ed., p. 101.

similar expressions. Külpe distinguishes between the cause of a physiological process and the condition of a psychical process, but admits that the physiological concept of cause includes the psychological concept of condition.¹ Höffding, it is true, criticises the doctrine of physical causation of psychic states, but fails to tell us what mental processes take the place of the physical stimulus.² They are, therefore, an unknown hypothetical factor. But that is to give them up for purposes of scientific explanation.

I have spoken especially of physiology, but we may easily extend our conclusions to the other biological sciences. Physiology, the science of function, and morphology, the science of structure, are but parts of a connected whole. The structures of plants and animals have been determined by evolution, and the process of evolution is a physiological process. It may seem absurd to conclude that psychology and anatomy overlap, but the Lamarckian theory assumes consciousness as a determining cause. As mental phenomena undoubtedly occur in the lower animals and are clearly related to those of man, the zoölogist cannot avoid trespassing on psychological ground. Even botany cannot be wholly separated from mental science, for who can draw the line between plant and animal? Protoplasm was discovered in vegetable cells, and botanists are acquainted with many cases of instinct in plants.

That the methods of psychology are often those of anthropology, and conversely, is well known. If the psychologist would know the phenomena of mind, he cannot content himself with observing simply those of his own individual mind. That great errors and misunderstandings may arise from the failure to use the anthropological method is known to all who are acquainted with the fact of individual differences in mental imagery. Yet the first exact examination of this fact was made by an anthropologist.³ It has even been claimed that great systems of epistemology owe their character to these individual peculiarities.⁴ Anthropometric methods are not

¹ Külpe, *Psychologie*, p. 81.

² Höffding, *Outlines of Psychology*, English translation, p. 65.

³ Galton. ⁴ Fraser, *American Journal of Psychology*, IV, p. 2.

always as exact as those of a psychological laboratory; but these methods are the only ones by which a vast range of psychological problems may be investigated. One crying need of the psychology of to-day is a more definite knowledge of individual constants and their relations.

Even in the present embryonic stage of the development of psychology, it has many points of contact with the inorganic sciences. In his study of sensation the psychologist has to call upon the physicist, for the relations of stimulus and sensation can be understood only when we know what the stimulus is. It is to physical science that we owe the demonstration to a high degree of probability of that stupendous truth that sensations and their stimuli are qualitatively different, and that there exists a whole series of physical phenomena that have no counterpart in consciousness.¹

That the physicist is in his turn forced to become psychologist is shown by his discussion of color theories, after images, contrast, and space perception.² Though starting with the assumption of common-sense realism, the physicist is forced to conclude that the assumed correspondence of sensation to stimulus is illusory. As his aim is knowledge of objective phenomena, he cannot but consider the relation of such phenomena to his perceptions. The investigation of such relations is a physical as well as a psychological problem. The physicist studies the effects of certain physical phenomena, whereas the psychologist has for his problem the physical causes of these psychic effects. Thus, psychology and physics unite in psycho-physics.

The debt of physics to mental science may even be greater. The more physical science has reduced objective phenomena to transformations of matter and energy, the greater the difficulties in the mechanical interpretation of nature.³ All such phenomena were once ascribed to matter and its properties, but now we are told that *energy* is an objective reality, and, like matter, indestructible. Energy is transmitted through the ether, a

¹ I refer, of course, to different forms of ether waves, actinic and electromagnetic. The Röntgen rays might here be included.

² Cf. Ganot's *Physics*, pp. 605 *et seq.*; Barker's *Physics*, pp. 472-6.

³ Cf. Stallo, *The Concepts and Theories of Modern Physics*, 1885.

second immaterial reality. As electricity is not energy, but is indestructible, it is considered a third immaterial reality.¹ Matter is reduced to atoms, but these atoms are such stumbling-blocks that some would deny their existence altogether,² and others consider them to be vortex rings of ether.³ But this ether, on which science lays so heavy a burden, has properties that seem to be contradictory, and is therefore, it may be argued, inconceivable. But if the objective universe should prove unintelligible on the mechanical theory, it is not improbable that physical science may have to abandon its time-honored realism and assume mind as the final reality. That such a supposition has some basis of fact is shown by the attitude of such men as Balfour Stewart,⁴ Tait,⁴ and Lodge.⁵ According to the reports of the Society for Psychical Research, we may have to admit the existence of phenomena subject to laws apparently contradictory of the axioms of mechanics, and determined by conscious processes.⁶

We have seen that psychology and her sister sciences are often greatly indebted to one another for results as well as for methods. But is this integration of the sciences limited to an assimilation of methods and results? At first sight it would seem that the differentiation of problems has increased in proportion to this assimilation of methods and results. In physics, for example, the problems seem quite distinct from those of other sciences, since the physicist, as physicist, studies only transformations of energy. But if mental processes should be found to be conditions of physical phenomena, the explanation of such phenomena would be psychological as well as physical.

In biological science we find many problems that are identical with problems of psychology. The nature and origin of instinct, mental evolution, and heredity are obviously psychological

¹ This appears to be the most recent view. Cf. Barker, *Physics*, p. 538.

² Ostwald, quoted by Remsen, *Science*, III, p. 59.

³ Sir William Thomson. See Clerk Maxwell, Article "Atom," *Encycl. Brit.*

⁴ Stewart and Tait, *The Unseen Universe*, London, 1895.

⁵ See Lodge and Richet in *Journal of the Society for Psychical Research*, March and April, 1895.

⁶ Cf. Myers, "The Experiences of W. Stanton Moses," *Proceedings of the S. P. R.*, pt. XXV, vol. IX, and pt. XXVII, vol. XI.

problems. They are, however, but parts of a larger whole, but special cases of more general problems that belong to biology. Again, the relations of mind and body are problems of psychology, but they are also problems of physiology and pathology. This is evident if the conclusions be admitted as to the right of the physiologist to consider conscious processes as causally related to other activities of living matter. That the problems of psychology and pathology are sometimes identical, is known to all who are interested in what is called 'abnormal psychology,' but which is after all but a branch of pathology. The mental phenomena of disease and degeneration are but parts of the psychic totality, which it is the business of psychology as the science of mind to systematize and explain. Moreover, what is termed the 'normal mind' is but an ideal of popular psychology. The weaknesses and eccentricities of the normal man are qualitatively akin to the morbid feelings and impulses of mania, and the delusions of paranoia. Alienists cannot draw the line between sanity and insanity; much less can psychologists draw the line between the normal and the abnormal. But if we cannot distinguish between the normal and the abnormal, we certainly cannot differentiate the problems of 'normal' and 'abnormal' psychology.

That the problems of anthropology and those of psychology are often the same, may also be shown. Many of the most common mental phenomena, from the feelings and beliefs of civilized man to the play activities of the civilized child, can be interpreted only as survivals from prehistoric ages. The explanation of such or any other mental phenomena is of course a problem of psychology; but it is also a problem of anthropology, since that science has to do with all activities of man as a member of the human race. Language and religion, social customs and ethical ideals, — all had their being only by virtue of psychological laws. Their explanation is therefore a psychological problem. That this problem also comes within the province of anthropology is shown by the space given to it in treatises on the science. In fact, comparative psychology might well be called 'psychological anthropology.'

I have now discussed the relations of psychology and other sciences from the historical or *a posteriori* point of view. We have found that their problems as well as their methods are often the same. We turn now to a brief *a priori* examination of the question. As the relations of mental and physical phenomena are included in those of mind and body, I shall only discuss the theories of these relations. But first I shall endeavor to show that these relations must be considered in all branches of theoretical psychology.

The purpose of psychological investigation may be considered to be the knowledge, first, of the qualities or attributes of mental phenomena ; secondly, of the relations of such phenomena to one another ; and thirdly, of their relations to conditions which are apparently not mental. The method of investigating the first of these groups of problems is primarily introspection. Such knowledge may be quite independent of the objective world. But knowledge of individual facts, uncoordinated and unrelated, is not science. Only by understanding the relations of phenomena can we make those predictions of phenomena which should form the ideal aim of science. The investigation of such relations leads, it may be shown, to the relations of mind and body. For, when the psychologist fails to find in any purely mental law the explanation of any phenomenon, he is justified in looking for an explanation in the properties of living matter. The other relations of mental phenomena are either to the body or to the environment. The relations to the environment cannot be interpreted apart from bodily processes. Thus *psycho-physics* leads to *psycho-physiology*. In all branches, therefore, of theoretical psychology we may be confronted by the problems of mind and body.

According to the theory of parallelism, as generally understood, mental phenomena form an independent series superimposed upon a purely mechanical series. Even on the assumption that the activities of the body may be explained on mechanical principles, it is doubtful if psychology and other sciences could remain independent. If there be complete parallelism, the relations of the series would require investigation. But who,

if not the psychologist, should investigate these relations? As science is but classified knowledge, the knowledge of these relations must come under the scope of *some* science. No one, I think, would hesitate to call Fechner's law a psychological law, or deny that it has a place in a text-book of mental science. Yet, as formulated by Fechner, the law gives the relation of these very physical and psychical series. Then, too, if there be complete parallelism, this parallelism must extend into the inorganic world. If so, it is probable that the two series are, as Spinoza believed, but modes of one and the same reality. In fact, on the theory of parallelism it is difficult to hold to any dualistic ontology. If the ultimate reality is mind, it is quite possible that the physicist will some day look to psychology for the solution of problems that his science fails to give. For physical and biological science would then be, theoretically at least, branches of psychology. If, on the other hand, the final reality be matter, or other non-mental substance, it is clear that psychological laws are not ultimate, but would have to be deduced from physical laws. In that case, psychology and all the biological sciences would be subordinated to physics and chemistry. The differentiation of the sciences would be a differentiation for convenience, not a logical necessity.

It is generally assumed in speaking of parallelism that all physiological processes are mechanical, but of this we have no proof. The most recent biological theories do not favor a mechanical interpretation of life. Even if consciousness be epiphenomenal, it is quite possible that the complete explanation of vital phenomena will include other than mechanical causes. We may therefore assume, as one form of the automaton theory, that parallel series of mental and material phenomena occur only in organic matter. Such parallelism may hold for all activities of organic matter, or only for certain ones of these activities. If the parallelism hold for all terms of the two series, the conditions would be the same as those just discussed; the relations of the series would require investigation and these relations would be both psychological and biological. Hence psychology and biology would have the same problems.

If the parallelism be incomplete, the psychologist and physiologist will seek to know at what point the mental series begins and at what point it ends. Such knowledge would, however, only open up the question why the mental series began or ended at one point rather than at another, — a question both physiological and psychological.

On the Cartesian theory we may assume matter and consciousness to be causally related, or matter and mind, conscious and unconscious. In either case psychology and the biological sciences would overlap. We may even admit that the field could be divided up so that the biologist and the psychologist should each investigate his own series, the material or the mental. But what of the point where they meet? The investigation of this borderland would be physical, biological, and psychological. But there may be in organic phenomena no independent mechanical series; all cellular activity may be intelligible only from the subjective standpoint. In this case the provinces of psychology and biology would be logically undistinguishable.

From this examination of the hypothetical relations of mind and body we conclude, then, that we cannot, by assuming any one of these hypotheses, define the province of psychology as distinct from those of other sciences. To attempt any arbitrary division of the ground that is properly psychological and that which is not, would from this point of view be absurd. Obviously, just how far the domain of psychology extends into that of biology and other sciences, depends upon the unknown relations of mental and other processes.

The conclusions to which we are led are largely negative. They may, however, be put into positive form: the problems of psychology and other sciences may coincide; the unity of all science is not simply a unity of methods and results. The extent of this unity cannot, however, be determined except by experience. *A priori* reasoning leads to different results, according as we make different ontological assumptions.

But, it may be said, are not these conclusions at variance with our generalization as to the progressive differentiation of

science? This differentiation will continue if Spencer's formula of evolution is even an approximation to the truth. But the differentiation will, I hold, be a differentiation with reference to particular objects of cognition, rather than to the subjective classification of our cognitions, or to the methods which we employ. We will, perhaps, have a science of *color* rather than three or four sciences that treat of the subject from different points of view. The practical advantage, even now, of thus examining a phenomenon from every point of view is shown by the remarkable discoveries of Helmholtz in sciences before considered quite independent.¹ Had Helmholtz not been a great physicist he would not have been the physiologist and psychologist that he was; nor, had he avoided problems other than physical, would he have solved the mystery of timbre.

It may be claimed that the common ground of psychology and other sciences is in many cases pure philosophy; that the relation of mind and matter, for example, is a problem for philosophy, not for science. But no one doubts that we have some scientific knowledge of the relations of mind and matter. Just how far such problems may be solved we cannot say.

Then it is open to question whether the sharp Kantian distinction between science and philosophy will be sustained. Even now, with all his dislike of 'guesswork,' the man of science cannot steer clear of metaphysical rocks. Thus physics, the queen of sciences, has for its foundation-stone a highly metaphysical principle. The speculations of modern mathematicians on the fourth dimension are essentially metaphysical. In biology the origin of terrestrial life and the evolution of man are wrapped in such mystery that some would invoke transcendental causes.² In mental science space perception, association, and other processes are quite entangled with the problems of epistemology; and, if Myers³ is right and retro-

¹ An interesting exposition of Helmholtz' services to psychology is given by Stumpf, *Archiv f. Geschichte d. Phil.*, Bd. VIII, Heft 3, 1895.

² Wallace, for example.

³ Myers, *Proceedings of the S. P. R.*, pt. XXIX, vol. XI.

cognition and precognition are facts, science may yet have to consider the hypothesis of an immanent world-soul. Thus, objective science has to face the problem of ontology, and subjective science also that of epistemology. And this is but what we might expect. After all, the scientist and philosopher have the same object ; both seek truth, though they seek it by different paths.

HAROLD GRIFFING.

THE CAUSE AND FUNCTION OF CONSCIENCE.

IT is usual to define Ethics as a 'teleological' or as a 'normative' science, and doubtless this is sufficiently accurate. I suspect, however, that such definitions do not help much to clarify anybody's ideas. For the fact is that we are more familiar with moral and immoral actions than we are with the end and the norm. Besides, when ethical theories are surveyed without prejudice, it is evident that pure Ethics has attempted to answer the questions, "What constitutes morality? What immorality? What non-morality?" while applied Ethics has in like manner asked, "What actions are moral, immoral, and non-moral respectively?" Giving an account of actual practice, and without begging the question as to the relative importance of end and criterion, a definition framed on these lines would avoid elucidating by means of the more obscure, and would be objective instead of subjective. Bearing in mind that explanation is the ultimate aim of every science, I therefore propose to define Ethics as the science that investigates morality, immorality, and non-morality with a view to their definition and explanation. The order is intended to indicate that definition is in this field so difficult and liable to error that scientific method is requisite, and that explanation must needs be a subsequent undertaking.

Definition is necessarily a circular process which only becomes scientific when it proceeds by successive approximations. The object being to discover the true connotation of a term, each investigator identifies the things denoted by means of his subjective connotation or intention,¹ and then, by comparing these things, picks out the common properties that constitute the 'true' connotation. The reliability of the result depends upon the accuracy of the subjective connotation, the number and especially the variety of the examined facts, and the care and keenness with which they are compared. When these

¹ Cf. Keynes, *Formal Logic*, 1st ed., § 13.

requirements are not adequately complied with, the 'true' connotation must in turn be used as a subjective connotation, and the process repeated.

Now ethical investigators are too little aware of the subjective connotation with which they set out in their quest for definitions. Each investigator's conscience, as is evident, serves as such connotation for him. The conscience of one who speaks with authority in matters ethical is a highly artificial achievement, the latest approximation reached as the result of often-repeated, highly complicated, and far too unmethodical investigations of moral facts and opinions passed upon them. An authoritative writer is likely, among other things, to have investigated moral predicates as they appear in different languages, to have acquainted himself with the leading theories, to have observed living morality, each with more or less care and method. The conscience with which he writes his *magnum opus* is very different from the conscience with which he began his investigation or speculation. Moreover, it has grown from one into the other, and has passed through many phases. Yet at each stage, whether words, facts, or opinions are under consideration, their pertinence as data of ethics and their value as moral phenomena must be determined, and this can be done only by the actual conscience of the author at the time. Hedonists and evolutionist writers are apt to look upon themselves as exceptions; but not only, as Professor Sidgwick has shown in the case of the former, do these two methods get what justification they have in the last resort from the intuitions of conscience,—the theories in question are also in fact the ripe product of their proposers' consciences, as these latter would clearly see, were they not blinded by the 'psychologist's fallacy.' In short, whether particular actions, general principles, or ethical theories are under consideration, the question of morality must ultimately, from the nature of the case, be decided by some conscience.

This being the case, any elucidation of conscience and its deliverances must be valuable for ethics. I am aware that the discussion of conscience is unfashionable, and that past discus-

sions have been disappointingly sterile. But while these considerations should make writers modest in estimating their results, and critics moderate in their expectations, I maintain that they offer no sufficient reason for ceasing from effort. More difficult problems have been solved.

There are, speaking generally, two modes of attacking the problem of conscience: from without and from within. The difference is one of emphasis, but yet is sufficiently clear. Centering the attention on the objects morally assessed, we may ask what actions conscience approves¹ and what actions it disapproves. More specifically we may ask, what actions either all men, or the majority, or the experts, approve and disapprove. After the same fashion positive morality may be examined with a view to discovering the effective elements of conscience. Either inquiry may be limited in space and time to suit convenience, or by reason of necessity. Under the same limitations the objects of moral estimation or positive morality may be investigated from the evolutionary point of view. These few among many possible investigations after the first manner may serve as samples of what is meant.

On the other hand, conscience may be analyzed and explained as a psychic phenomenon. In addition to analysis this involves discovering its psychological cause, as well as the part it plays among other active functions of its possessor. This inquiry is naturally prior, is less difficult, and will, I venture to think, throw some light on the authority of conscience, and permit a not improbable conjecture as to the direction of its development. At all events, wisely or not, this is the inquiry of the present article.

In what precedes, 'conscience' is used to denote every approval and disapproval, from the slightest impulse or feeling to the most articulate and wide-awake judgment. It may be objected that this denotation is too broad, that conscience passes judgment on the agent's actions, and on them only. It cannot be denied that both popular and learned usage support this narrower meaning. It must also be admitted, however, that

¹ A convenient tautology.

both sanction the broader denotation as well. Learned usage, to mention that only, as represented by Martineau and, judging from reviews, Elsenhans, among others, holds that conscience denotes all approvals and disapprovals; while Wundt and, more recently, Mackenzie may be mentioned as declaring for the narrower usage. Usage being thus indecisive, choice is open, and convenience the highest test. I here employ the broader denotation because it is convenient to have one word for all moral attitudes. Besides, their generic resemblances are more vitally important than any specific differences.

Confusion will be lessened if the familiar fact is borne in mind that conscience may arise either in the form of feeling or of judgment, or of both together. It is well to point out further that conscience is also active, since it generally either encourages or restrains some impulse. As we conscientiously feel or judge, so have we an impulse to act or check action. Conscience, then, comprises elements falling under intellect, feeling, and will, any one or even two of which may be nearly if not quite absent.

In bringing preliminaries to a close, let me suggest that the great variety and constant variations of consciences cannot safely be forgotten. The fact is familiar, but the artificial simplification due to ethical theories as well as general unfamiliarity with the morality of other classes, races, and ages, lead to its neglect.

Properly considered, this fact points to two things: the complexity of conscience, and the complexity of its cause and conditions. Conscience cannot be a simple indivisible fact or faculty, for the reason that simple facts are identically the same where and whenever found. Moreover, the various forms which a complex fact assumes can only be explained and understood when discovery is made of its cause, with the latter's escort of shifting and varying conditions.

I.

The relation of moral judgment, or conscience, as here used, to voluntary actions is well known. Only actions, willing and willed, are morally judged. Approvals and disapprovals of good and bad habits, feelings, perceptions, and even thoughts are apparent exceptions, — merely apparent. Only as these are conceived, rightly or wrongly, as at the time consented to or even encouraged, or as the results of past effort or consent, which would not have been achieved or would have been curbed by a volition of the opposite kind, — only when thus conceived are they morally judged. A conclusive case has often been made on this point, and the discussion need not be repeated here. Conscience passes judgment on actions and their representatives, and on nothing else.

Now this important fact has commonly been cast aside in unapplied uselessness. Yet, with one proviso to be discussed immediately, this fact can be used to elucidate the nature of conscience and its charges, and in no small measure to exhibit its significance, authority, and unconsciously supreme ideal. All this can be done if it can be shown conversely that all voluntary actions awaken conscience in one or more of its three forms. *For in that case voluntary action is the psychological cause of conscience.* Now this position can, I think, be made out, although, as far as I am aware, no attempt of the kind has yet been made by psychology or ethics. Ethical writers, to be sure, discuss whether all voluntary action should be morally judged, and tend to answer affirmatively, but that is a distinct question.

It must be immediately admitted that voluntary actions — or let me say actions simply, since all true actions are voluntary — are not, as objective facts, all morally judged. Many are scarcely noticed; many others are not apprehended by the onlooker or even realized by the agent as voluntary; while, on the other hand, the intentions of many actions are misconceived, and many involuntary procedures are misapprehended as actions. Accordingly, when I suggest that all actions are

morally judged, I would be understood to speak of *actions* of one's own or of others *apprehended as such*. And this, I take it, can be shown to be at least normally the case.

Although the sense of agency, characterized by consciousness of effort or consent (not necessarily as such), is a sufficient mark of apprehended action, it will be best to take up the plainer cases of deliberation. That some of these awaken conscience and some do not, and which do each, is instructive. For in intellectual and aesthetic deliberation conscience is not aroused, and in all genuine instances of these it is that we are most carried away by the subject-matter, that we have least sense of agency. One can engage in intellectual work, considering and deciding complex problems, with practically no interruption for one or even several days, and yet have no moment of conscience. But once become aware that one has *done* this, or has done nothing else, and conscience at once appears, at least as feeling. And the same thing occurs if we ask beforehand whether we will act this way for the next week. To shift from intellectual or aesthetic deliberation into a moral attitude, it is only necessary to realize that we are in fact at the time acting.

Finer distinctions are called for in the case of prudential deliberations, for there apparently the question is what to do. But it is not sophistical to say that we know what we are going to do, namely, to follow our interest or preference. Will is not deliberated upon. The outer aspect of the action, not its inner core, is attended to, as can easily be realized if the sense of agency is aroused by emphasizing the personal pronoun in a prudential question. "Shall *I* spend my vacation at the seaside or in Europe?" becomes a moral question.¹

I shall cite no further evidence, as the theory can best be tested in its applications, the pointing out of which is the business of the rest of this paper, and by its success in meeting objections raised by others. Besides, the whole course of ethical theory makes it sufficiently probable for a working hypothesis, to which further refinements may be made later. Assum-

¹ Some prudential deliberations are undertaken conscientiously.

ing that apprehended action is at least the normal stimulus of conscience, I shall proceed to apply the theory.

II.

The view that conscience has apprehended action as its psychological cause, brings it under the general dynamic law that every event must have an effect, and also, more specifically, under the corollary, that different events must have different effects. For clear cases of apprehended actions are distinctive psychoses, and accordingly it is to be expected that they should stimulate to decidedly peculiar reactions. In fact, the active treatment of an apprehended action is notably different from that accorded other psychoses. The same is true of their intellectual treatment. The universe of discourse is distinct. But probably the moral emotions have been looked upon as quite the most mysterious of ethical facts, and, if my theory is true, it is only natural that actions so apprehended should have a characteristic emotional treatment; that approbation, obligation, responsibility, remorse, should differ from all other feelings. *All* emotions as brute facts are mysterious. But once specify their excitants, and emotions become amenable to biological explanation, as the large measure of success achieved by Darwin, James, and their followers plainly shows. At least we know where to look for explanations. I shall return to the subject immediately.

Further elucidation will be accomplished if the complexity of action is remembered. For this entails important differences among actions and their shading off gradually into non-actions. Taking up the former first, it will be admitted that actions differ essentially with their performer. On that basis they fall into three groups: the individual's own actions, those of others, and general ways of acting.

Our doings, neglects, and self-indulgences are entirely unique to each of us. Nothing in the whole world is at all comparable to them. Now the theory would require our reactions on them to be facts quite as distinctive, and this requirement they meet

so well that some authors have segregated them from all others to constitute a class by themselves, to which they wish the unique name 'conscience' to be limited. Further, let one's contemplated action be past, and the feeling varies all the way from shame and remorse, through more coldly intellectual forms, to proud self-satisfaction; let it be present or future, and responsibility, obligation, and other moral feelings appear more or less distinctly. All these emotions are no more impossible — and no less difficult — to explain than fear, anger, or hate.

The actions of others awaken in us, besides judgments and active tendencies, the moral or quasi-moral feelings of contempt, resentment, disapproval, regret, or even responsibility and their opposites; but never, as merely such, remorse or obligation. Also, in spite of weighty authority to the contrary, I venture to hold that general ways of acting awaken moral judgment.¹ The pronouncement of the Hebrew lawgiver, 'Thou shalt not take the name of the Lord thy God in vain,' and all genuine and earnest announcements, or even apprehensions, of moral ways of not acting or acting, are undoubtedly conscientious. Some announcements of moral law merely state quite intellectually the conclusion of a practical syllogism.

The fact that apprehended action is highly complex, and the consequent facts that some or all of its elements may fade away insensibly, even to the point of disappearance into subconsciousness or further, and that foreign elements admitted into the psychosis may wax to the extent of practically overshadowing and obliterating components essential to its apprehension as action, yield a ready explanation of the difficulties that have been experienced in separating conscience in denotation from non-conscience, and in tracing the growth of the former out of the latter. As long as conscience is conceived to be a sharply defined group of facts, we must hold that it, like wisdom, was born full-fledged. But if its cause shades off imperceptibly into other forms, it, too, must do the same. The old conception, then, that puts an impossible logical barrier between conscience and non-conscience is not accurate and scientific, but

¹ Weighty authority is of course also on the side here taken.

the very opposite. For, to distinguish with feigned accuracy vaguely bounded groups of facts, is to be inaccurate. If, then, the theory here defended is tenable, conscience is a growth out of the non-moral, a growth so gradual, at least in race history, that it will be impossible to draw a sharp line separating its absence from its presence.

The wide variability, already mentioned as characteristic of conscience, likewise finds a ready explanation from the point of view under discussion. For the presence of conscience, and its form when present, will depend on the apprehension, and the mode of apprehending actions. Now what actions shall be apprehended, and what elements of these shall be emphasized, is a question of interests, of habits of attention; and these differ widely from race to race, and from individual to individual, and, moreover, vary in each from time to time. Conscience, then, must show concomitant variations. At times it is sensitive, at others callous; now one aspect of an action is attended to, and it is approved; again another, and disapprobation is aroused. Analogously, in intellectual moods and persons, moral *judgment* appears, while in the impulsive it is responsive moral *action* that is aroused. Neglects, errors, and perversions of conscience can be explained by inattention to this or that kind of action, and by misapprehension of actions and misemphasis of their elements. For instance, animistic beliefs found in the early history of the race, and in children among us even now, are responsible for inept conscientious judgments; quite analogously, the attribution of bad motives when they do not exist, leads to many unjust condemnations passed with entire honesty; and over-scrutiny of one's own actions as such, to the neglect of their consequences and broader bearings generally, often results in a morbid conscientiousness that may land the victim in the madhouse.

III.

A chief merit of the theory here advocated is that it points out the facts to be observed in order to an understanding of the history of conscience. This history in detail can of course

be pieced together only after many long series of investigations. Its outline, however, can be reached deductively, and besides will serve to suggest relatively independent fields for investigation.

There are two chief and relatively independent means for securing a species' survival, great fertility and fine adjustment to its environment,—the first quantitative, the second qualitative. If the quantity of offspring be only sufficient, the greatest possible array of hostile chances cannot but allow a certain number to reproduce copiously in turn. Such a state of things does not concern us here. Where the second means is employed, a species' survival depends upon all sorts of active commerce with its environment, and also upon an even greater variety of abstinences. Now, in the lower species, possibly in all sub-human species, survival is accomplished without the aid of volition. With man, if no sooner, voluntary action appears, and with it dangers as great as its possibilities.

A higher organism, being more complex and having more needs, is more vulnerable at the hands of its environment. Otherwise put, more elements of its environment are hostile to a highly organized being. And for this reason, and for others that will readily suggest themselves, this more imposing hostile array must be met with a more united front by the much threatened species, if it is to survive. Each individual is largely dependent on others, and individuals must be more or less sacrificed at frequent intervals in the interest of the group. Among animals such self-sacrifice (never consciously such, of course) is frequent, and is there provided for wholly by instinct, a fatally sure method! A large minority, if not more, of the instincts of the higher animals see to it that sooner or later many individuals shall forego much, and suffer pain and death, that the race may live.

But man, who has inherited from these most of his nature and needs, has eaten of the forbidden fruit. Animals do not foresee the pleasure and pain they instinctively neglect and bring upon themselves, and their ignorance keeps them generous. But men do foresee these things in many cases, and their

apprehension arouses counter reactions, at times strong enough to down the race-preserving instincts, at others to precipitate states of deliberation whose issue is very doubtful. From all this it is safe to conclude that with the appearance of action with foresight — for present purposes a sufficient description of voluntary action — the hard-won body of instincts that make for the preservation of the highest species are put in jeopardy. Nay, more, as foresight increases to the point of full realization of theretofore unforeseen pleasant and painful consequences, the instincts mentioned are bound, *if other conditions remain constant*, to be subdued one by one and rendered inoperative by crescent volition. *As long as foresight is limited and infrequent, the race can be preserved by blind instincts that sacrifice the individual; with growing foresight that device becomes less and less effective.*

Doubtless it would be found, were the facts obtained, that certain races in which other conditions did remain practically constant, became extinct because of the suppression by unopposed volition of essential instincts. When this did not occur, Nature must have availed herself of one or both of the two possible resources: either the attraction of pleasure and aversion to pain and death must have suffered diminution, or else some counter-check on voluntary action must have made its appearance. The first device has certainly been used to a greater or less degree; for instance, some savage tribes to-day show a greater natural stoicism than even the highest brutes. But the device is of limited applicability; pleasure and pain cannot be greatly diminished, since they only can be relied on to encourage actions and enforce abstinences alike indispensable to individual survival. Besides, their diminished influence is practically always in part, and generally in the main, due to the counter-check suggested.

Now, if the theory advanced is sound, our name for the entire body of counter-checks on apprehended voluntary action is 'conscience.' Foresight has certainly done much to maintain and refine useful tendencies, where group and individual interests coincide; but prudence, when unaided, is dangerously hos-

tile to mainly social instincts, and conscience is left over as the sole great force that has repelled the onslaught of volition when hostile, and has made for the persistence—and also, because of its intellectual element, for the improvement—of the social instincts and habits. Of its service in improving conditions, a word later, under IV.

It is of course improper to argue from the existence of this counter-check to its usefulness and adequacy in all cases. We note the weakness and blunders of conscience in countless cases, and the life history of races now extinct offers many times as many. So much, however, is surely to be admitted: that the race must perish if volition be not in large measure restrained from repressing self-forgetful and self-sacrificing instincts, and that conscience is the one counter-force available to hold within safe limits this too radical and rationalistic iconoclasm of volition.¹ Moreover, if Clifford is right, as I believe he is substantially, in denominating conscience the voice of his tribe within the individual man, there is a rare aptness in devising just this instrument to take the place of the race preservative instincts which are so easily circumvented.²

I do not of course wish to assert that the instincts mentioned have entirely disappeared. On the contrary, a strong body of such family, political, and religious instincts still remain to assist conscience. It is plain to thoughtful men, however, that the present century has seen the rise of many causes which are seriously weakening these instincts, even to the danger-point. As education increases, the fundamental family instinct may be observed to wane, especially among women; and at times and

¹ These considerations offer at once obvious support and also criticism to the impressive central thesis of Mr. Kidd's *Social Evolution*, that man's private interests are anti-social, and that it is the religious sanctions that have prevented his serving them exclusively. But Mr. Kidd forgets among other things that man now has a conscience, and that his morality is an actual and strong private interest involving much else, and that religion, the greatest maybe, is not the only deep-seated moral force available.

² It seems highly probable that conscience has developed out of the very instincts whose task it takes up, at least in some instances. I doubt, however, whether shame can bear as much of the burden of explanation as is commonly laid upon it; more evidence is needed here.

places it seems as if spontaneous obedience, and what may be termed respect for experts, were on the point of extinction. Fortunately the serious-minded are awakening to the fact and are urging remedial measures. It is seen that our educational system, at home and at school, is too exclusively intellectual. If the churches of to-day are institutions ill adapted for supplementing these agencies, they must be transformed, or some other institution must be established as the organ of morality. Conscience must no longer be starved. Morality is entirely as indispensable as knowledge, and to neither is there a royal road.

As has been already indicated, conscience, in no man perfect, is at first a very clumsy instrument. But, fortunately, Nature has her own effective way of putting such instruments through the fire, and welding them into some sort of serviceable shape. In man many valuable traits present in animals have been neglected, and voluntary action becomes, if not his only, at least his most important resource for insuring survival. Any serious maladjustment on its part to man's environment will lead to speedy disaster. Consciences accordingly which discourage, or indeed which do not encourage beneficial actions, and which do not discourage or encourage injurious actions, will in the long run select themselves out of existence by contributing to the extinction of those possessing them. This has certainly been the fate of many.¹ Others, for a time well adjusted, have been unteachable and have succumbed before new conditions. Still others, owing to a favorable environment, to fortunate fortuitous variations, or to a happy balance of conservatism and liberalism, one or all have survived up to the present. Such may be assumed, aside from recent rapid change of conditions, to be measurably contributory to survival.

It is but a step from general considerations to less general considerations. For instance, not only must the useful conscience

¹ Considerations which cannot be here discussed would make it plain that such consciences are not necessarily bad; rather, that some are among the noblest, the monastic, for instance. The lease of life enjoyed by a conscience does not sufficiently determine its rank. The reach and importance of its achievements are more weighty considerations. Much the same standard applies to class and to individual consciences in this respect.

progressively adapt itself to conditions in general, but especially it must determine its own range, and assess nicely actions that improve its species as well as those that directly insure the latter's survival. That not all actions in self or others are best when apprehended as actions, and accordingly judged, is plain. Which need be and which should not be morally appraised, is not an easy question in detail, nor yet an unimportant one. A too broad conscience is more rare than a too narrow one, though both are to be found. It is of course only gradually, and in the main unreflectively, that conscience has found and kept a useful range, divergences therefrom, when too great, leading to adverse selection.¹

Quite analogously, actions in the departments of art, science, religion, as well as of morality itself, do and must appropriately awaken conscience. If these do not directly make for survival, they achieve something more important : they accumulate a capital of resources and capacities potent above all else in furthering race-preservation. At least they can do so, and the conscience that survives tends to assist them to accomplish this. In many other ways besides those indicated, conscience has been gradually moulded out of less into more useful shape.

In several respects, on the other hand, conscience is well fitted for its *rôle*. For conscience as active and emotional is conservative ; as rational it is progressive. Plainly the characteristics indicated are in general those indispensable to a counter-check on voluntary action. Some of the conditions in which races find themselves are practically permanent, and the abstinences and actions best adjusted to these, once acquired, must be firmly maintained. The corresponding prohibitive and enjoining elements of conscience must in the majority at least be put out of the way of harm in the form of inherited instincts, and races that have survived, for that very reason, display such under investigation. Other conditions, while not permanent, have existed for many generations, and successful races owe their

¹ This fact, that the range of conscience is itself a phenomenon on which natural selection (as well as other forces mentioned under IV) acts, renders relatively unimportant the question as to whether *all* apprehended actions arouse conscience.

success in large measure to the establishment of traditional moral attitudes towards the reactions directed upon these conditions, attitudes which education impresses upon rising generations in the form of moral habits. Finally, the residual lot of conditions — some of them by no means neglectable — are shifting quickly, and call for a flexibly sensitive and yet judiciously poised element in conscience that will respond to novel variations. Conscience surely contains reactions falling under each of the three headings. Moreover, under each — as inherited, as habitual, and as adjustable — it calls for much investigation, which in each case might well be relatively independent. I hope to offer some facts bearing on the second at no distant date.

The upshot of the matter is this. With foresight and volition, and without conscience, the human race would only have appeared to perish from off the earth, leaving it uncontested to the dominion of the brutes. Or, if that be an exaggerated statement, so much at least is sure: without conscience any human group with sufficient intelligence to rise above savagery must needs have fallen apart, and have been disrupted by dissensions, its isolated individuals disappearing before the united attack of their environment. History offers ample confirmation of this view: I mention two periods only, characterized by the highest intellectual life, by the seriously weakened hold of religion and morality, and by race decay and subsequent dissolution, — Greece after the Peloponnesian war, and Rome during the Empire. France at the time of the Revolution might be added, though the period was shorter, and dissolution has been avoided so far. If such results follow from weakened conscience, what would its disappearance entail?

IV.

In conclusion, let us consider two more distinctly ethical questions. There is a tendency, still widespread, to look upon investigations of origin as irrelevant to ethics. Whatever morality may have been, say many, and however insignificant when it first appeared, it now is what it is, and on that

depends its authority for us.¹ True enough ; but what it now is, is most difficult to determine. For the question, if it means anything significant, obviously means : What is the present function of conscience, what does it stand for? Let the mind-stuff of which it consists be what it will, and let it feel as sublime as one chooses ; these are subjective facts and have little bearing on its objective worth, as the many morbid cases amply show. Strictly speaking, the present function of conscience can only be discerned after conscientious action has taken place and the results are open to observation, that is, in the future. Inferences from the past to the future must be used, and, though usual, it is quite arbitrary to stop at the immediate past in collecting data. Plainly, the more data collected, the sounder the judgment. With its complete history accessible it would be not only possible to determine the worth, and consequently the authority, of conscience, but more specifically to estimate the varying value of its varying manifestations in different individuals and races, and the relative importance of the many reactions of which it consists. Of course, the estimate would be made by the present conscience, as is inevitable ; but at least it would be made on the basis of the amplest possible historical array of pertinent facts, none being arbitrarily excluded.

In what precedes, I have based on an analysis of conscience the barest and scantiest sketch of such a history, confessedly in need of amplification, and no doubt of correction. If, however, the conclusions reached are substantially sound, conscience made possible civilization with all that that implies ; and, by implication, if conscience weakens, civilization must deteriorate, and if it atrophies, civilization must disappear. With full proof that the preservation and improvement of civilization is the function of conscience, its authority will be firmly established.

¹ Others state the same feeling in this form : do not judge the mature by the embryonic with its undeveloped possibilities, but rather the incipient by its fulfilment where its purpose is patent to the view. But, on consideration, it becomes evident that one extreme is as one-sided as the other. A man's worth is best assessed, neither at his cradle nor at his death-bed, but rather after the fullest possible review of his entire life. Just so with morality.

Finally, some light is thrown by the theory advanced on the problem of the morally supreme end.¹ In so far as men have been critically moral each has striven to make his morality self-consistent; and in so far as they have been morally reasonable the morality of each has come more and more into harmony with the morality of others. Moreover, Clifford's insight that conscience voices the demands of his tribe on the individual—reënforced as it has recently been by the results obtained by Professors Royce, Baldwin, and others from a study of imitation—indicates, more specifically, that the interest of the 'tribe,' so far as understood, has been the supreme moral end and criterion. Other considerations also support this view.

Three different factors coöperate to make the conscience of descendants different from that of their forebears: spontaneous variation, inheritance of acquired characters (probably), and changes in moral customs which subject the former to influences that did not operate on the latter. Add to this that even those elements of conscience and custom that persist unchanged, function in a changed environment, and it is plain, if we remember further how prominent a mark morality is for natural selection, that later generations are rendered more or less fitted to survive than earlier ones by these changes in their morality and environment. The conscience of a subsequent generation may contribute more or less than that of its predecessor to the survival of the race. Now it is, of course, a commonplace that by punishments varying in degree the higher races succeed in accomplishing what all races attempt: they weaken the power and influence of those who lower the average of morality too seriously, in extreme cases executing the debasing individuals. Further, where the machinery of punishment is inefficient, races do not prosper, but degenerate, or become extinct; and that, as already indicated, in spite of or even because of highly

¹ The morally supreme end should be clearly distinguished from the actually supreme end. In spite of many and persistent attempts, the latter has never been defined, and, I believe, cannot be. What all men, or even what one man, invariably, either consciously or even unconsciously, prefers over everything else, is incapable of formulation in a consistent conception. Witness the failures of Hedonism and Egoism. Preferences are essentially capricious and inconsistent.

developed rationality. In short, punishment is the more available but more uncertain force ; selection the fatally sure one that keeps conscience potent for race efficiency.

With these two forces alone, however, the process is very wasteful. After consciences are allowed to grow up rank, as the haphazard interplay of heredity and moral environment¹ may determine, certain of them are found to diverge too widely from the race type ; and their possessors, many of them in other respects highly efficient men, are accordingly variously mishandled and restrained from free exercise of their capacities. The loss of the assistance which could be given by such efficient but immoral members, as well as the positive injury they do, would in many cases be avoided by a community which adopted some machinery for moulding the consciences of its members, especially during the plastic period of their youth, into serviceable shape. Communities which have undertaken the moral education of the rising generation — and many have in fact done so, chiefly under the inspiration of religion — have thereby won a great advantage over their competitors.

But just as the appearance of conscience, a disposition to guide action, did not necessarily entail wise guidance, just so conscientious supervision and direction of conscience was not born wise. Here as there, however, nature is a firmly effective educator. Intermittent at first, moral education is also an opportunist, hit-or-miss procedure, informed by no one supreme principle. But little by little this chaos is reduced to some semblance of order. Here monotheistic religion plays an imposing rôle. Such a religion almost inevitably lays down a supreme moral principle,² and nations so guided have generally in the long run a marked advantage over their less fortunate rivals.³ Furthermore, as the different leading nations come to be ruled more completely each by its distinctive supreme end, their conflicts grow sharper and more clearly defined. Each system is

¹ Used in the widest sense — anything in environment that affects conscience.

² Witness, "The first and great commandment" [v. Matt. xxii, 33]. Note also the place of obedience in the catalogue of virtues of the early Roman Church.

³ Consider, however, the overthrow of the Jews by the Romans.

put to a more conclusive test, and slight differences are more potent for national weal or woe.

Passing now to the limit, it is evident, is in fact little short of a truism, that the greatest advantage would be reaped by that nation which firmly and intelligently upheld national vitality as its supreme end. The supreme injunction, which would be used chiefly in educating, but also in regulating, consciences might be expressed thus : As far as possible shape consciences so that they will tend to repress actions that lessen national vitality and to encourage actions that preserve and increase national vitality. (A nation is possessed of vitality, as here meant, in proportion as it has such control of natural agencies, and is endowed with such capacities, as together constitute a permanent fund of resources that make for survival.)¹

Very high authorities, it may be pointed out, practically agree in their accounts of the actual supreme moral end. Moreover, the designation here suggested, 'preservation and increase of national vitality,' might without violence be used to describe their results. Compare, among others, Stephen's 'social health,' Alexander's 'social vitality,'² Paulsen's 'human welfare,' Wundt's 'spiritual efficiency.' It goes without saying that the deliberate testimony of such expert observers that all normal consciences are in agreement on this important point, is of the greatest weight. If I could accept their conclusion I would win strong support for the definition of the moral end here advanced ; and, incidentally, verification of that conclusion would strengthen the inductions regarding the nature of conscience on which it rests, and which constitute the substance of this paper. But much the same facts as forbid the substitution of

¹ It may be further suggested that, if the ruling nations ever adopt human efficiency as the supreme end, they will greatly increase human welfare by using the energy, now wasted in mutual contentions, in united and organized exaction of tribute from their non-human environment. The moral and intellectual level of the masses is probably too low at present to allow any one nation to promote human vitality most by consciously accepting it as the supreme end on all occasions.

² I cannot make out to my entire satisfaction whether Stephen and Alexander declare that consciences do universally hold to this end, or that in consistency they should so hold. The former is the question under discussion here.

human for social efficiency also forbid the unqualified assertion of the latter as the supreme end. Elements of conscience cluster about institutions, and humanity is too recent an institution to have crystallized about it any considerable body of strong conscientious reactions. Analogously, the state, while *de facto* supreme now and for a couple of centuries past, is not admitted by all to be *de jure* sovereign. Accordingly, as might be expected, many religious consciences, — notably when the conception of God does not contain the idea of any vital relation to the state (or humanity), — family consciences where strong, and even friendship consciences, in my judgment offer adverse instances which forbid the induction to national vitality as the universally accepted supreme end.

So much, however, I believe can be maintained : that national vitality¹ is accepted with closer approximation, *and especially with deeper insight*, by the more advanced nations, and that its increased acceptance and comprehension by any nation is one of the factors productive of any substantial national advance. Will ethics, on the basis of the facts advanced, sanction the inference to national or to human vitality as the supreme moral end? Possibly, but only after the presentation of further facts and discussions, something which cannot be undertaken here.

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¹ There are obvious objections to this word. The definition of 'vitality' was intended to remove some of these. The capacities there referred to include art, culture, science, religion, government, morality itself. I attempt to prevent a similar misunderstanding by the italics above. Genuine insight is very much more important than blind devotion to the end. Witness Sparta, among numerous other instances. The last hundred years has taught the nations that national vitality rests upon individual efficiency — 1000 zeros equals zero — and that a large measure of freedom is indispensable for the latter.

REVIEWS OF BOOKS.

La théorie platonicienne des sciences. Par Élie Halévy. Paris, Félix Alcan, 1896. — pp. xl, 379.

M. Élie Halévy's *Théorie platonicienne des sciences* deserves something more than the conventional phrases in which a thoughtful reviewer is compelled to dissimulate his sense of the perfect futility of the great mass of recent Platonic literature. It is perhaps the most serious contribution to the interpretation of Plato yet produced in France. The characteristic weaknesses of French Platonism are not lacking. The scholarship is by no means impeccable. The treatment is purely dialectical. There is no recognition of the secondary ethical and emotional intentions of the phrases ingeniously tessellated as mere symbols of abstract ideas. The point of view is often Aristotelian rather than Platonic. The writer sometimes seems to forget that Plotinus, Kant, and Hegel were not contemporaries of Plato. And the plausible symmetry which helps to make the book readable is sometimes obtained at the cost of strained interpretations.

But, despite these reservations, the book is the outcome of a genuine attempt to rethink the entire body of Platonic doctrine from an independent, if not absolutely original, point of view. I propose here to give a summary of the main argument, calling attention by the way to what seem to me some defects of the method, and pointing out some anticipations of the thought, which are of interest to the reviewer, if not to others.

M. Halévy's main thesis is that the Platonic writings fall into two strongly marked divisions, the one representing a critical analytic effort, the other constructive and dogmatic. The former, to which he gives the name 'Regressive Dialectic,' discloses the inconsistency and inherent self-contradiction of all the concepts of experience, and forces us back to the absolute and unrelated being of the ideas as the only issue from such contradictions. Its principle is self-consistency, or the law of non-contradiction. The constructive dialectic, which M. Halévy terms 'Progressive,' proceeds to demonstrate the practical necessity, and therefore the relative validity, of the concepts that underlie the arts and sciences. It is found chiefly in the *Republic*, *Laws*, *Sophist*, *Timaeus*, and *Philebus*. Its funda-

mental principle is that the sciences are given and we must justify them, which in this form is perhaps rather a Kantian than a Platonic dictum.

There is nothing absolutely new in all this. The contrast between the critical or sceptical and the dogmatic side of Platonism has been frequently remarked. And the present reviewer has repeatedly argued that Plato's positive answer to the destructive criticism of the theory of ideas, in the first half of the *Parmenides*, is based solely on *ex necessitate* arguments, — on the necessity, that is, of certain affirmations as a pre-condition of a practicable working logic.¹ M. Halévy, however, applies these ideas, not merely to the border-land of metaphysic and logic, but to the entire field of Platonic speculation, discovering everywhere a certain Hegelian symmetry of contradictions, latent, developed, and transcended.

His start is unfortunate. Seeking, in his Introduction, for a Platonic expression of the principle that the task of dialectic is to justify all the sciences, both pure and empiric, he finds it in *Philebus* (58 A), and *Politicus* (284 D). In the former passage it is said that dialectic is the science ἡ πᾶσαν τήν γε νῦν λεγομένην γνῶσιν, which he translates and explains: "la connaissance de toutes les sciences auparavant énumérées qui sont toutes les sciences sans exception, pratiques et théoriques, empiriques et exactes." But a careful reading of the preceding page will show that τήν γε νῦν λεγομένην means the upper, pure, and ideal half in the bipartite division of the sciences which has just been laid down, — τήν περὶ τὸ ὄν καὶ τὸ ὄντως, namely, as the next line explicitly declares. Still more unlucky is his interpretation of the passage in the *Politicus*. Plato there says that the very existence of all the sciences stands or falls with the conception of a μέτριον: ὡς ἄρα ἡγητέον ὁμοίως τὰς τέχνας πάσας εἶναι καὶ μείζον τε ἅμα καὶ ἕλαττον μετρεῖσθαι, etc. M. Halévy quotes as far as εἶναι, and actually gives as the rendering, "qu'il faut poser toutes les sciences comme également existantes." As if this were not enough, he proceeds to interpret Aristotle's phrase (*Met.* 990, b 12) τοὺς λόγους τοὺς ἐκ τῶν ἐπιστημῶν as the "argument from the sciences," in the special sense which he is advocating; while the expression οἱ ἀκριβέστεροι τῶν λόγων (*ibid.*, 990 b 15) is taken to mean "arguments based on the principle of non-contradiction." I need hardly say that this is utterly without foundation. The λόγοι ἐκ τῶν ἐπιστημῶν are arguments for the existence of the ideas as the only possible

¹ Cf. *De Platonis Idearum Doctrina*, München, 1884, p. 39; *American Journal of Philology*, vol. IX, p. 280.

objects of real knowledge (*cf.* Zeller, 4th ed., II, 1, p. 653), while οἱ ἀκριβέστεροι τῶν λόγων probably refers to the severer or more scientific dialogues, as for example, the Parmenides (*cf.*, however, Bonitz, *ad loc.*).

But we can afford to waive M. Halévy's failure to find in Plato or Aristotle the exact formula of his principle, and proceed at once to its applications.

Chapter I, on Regressive Dialectic, is an ingenious combination of passages that treat of the distinction between νοητόν and αἰσθητόν and those that compare or contrast the therapeutics of the body and the soul. The author associates somewhat arbitrarily the reluctant admission of the imperfect materialist (Sophist, 247 C, D), that justice and virtue are immaterial entities, with the deduction of the distinction between αἰσθητόν and νοητόν (Rep. 523 C *et seq.*) from the antithesis of an individual substance (a finger, *e.g.*) and its attributes. The latter, he says, is the antithesis of the logical subject and its attributes expressed as the opposition of material and immaterial. Possibly—in our analysis, but surely not in Plato's intention. For Plato the idea of finger is immaterial equally with the idea of its qualities. The difference is that the one has a practically adequate embodiment in the concrete finger, while the others have no such fixed representative in the world of sense. Accordingly the 'substance' (in the Aristotelian sense) is not provocative of philosophic wonder and stimulative to thought; the attribute is, and so its contradictory manifestations put us upon the inquiry as to its abstract essence or definition, and suggest the distinction of νοητόν and αἰσθητόν. M. Halévy next proceeds to the discussion of the 'flowing' philosophy in the Theaetetus, which, despite the pervading tone of persiflage, he accepts as the expression of Plato's real opinion. The result of the Theaetetus, he says, is that we must suppress the notion of material substance, and for the point of view of fixed substance substitute the point of view of an immaterial, psychic *devenir* or process of becoming. In other words, he takes the Theaetetus for the statement of a genuine Platonic doctrine of sensational idealism. Its outcome is the suppression of the notion of material substance as self-contradictory. But we need the conception of the body for the distinction between the sciences of the mind and the sciences of the body. The remainder of the chapter, then, reinstates the body and the sciences that minister to it, in a relative validity as parallels and lower analogues of the mind and the sciences of mind. It is thus, like the closing pages of the

other chapters of the first part, an apparent anticipation of the Progressive Dialectic, which the author is unable to isolate as completely as the symmetry of his design requires.

The next chapter, on the State and the Individual, is in the main an analysis of Plato's ethico-political doctrine, — first on its critical side, as bringing out the self-contradictory character of political justice, conceived merely as penal repression, and, secondly, justifying even the lower conception of justice as a symbol and instrument of the higher ideal of the state as educator. The analyses of the Republic and Gorgias are not without merit, though occasionally marred by false subtlety. For example, it is quite inadmissible to extract “*dépassé le point de vue de l'apparence*” out of *ἀφαιρετόν δὴ τὸ δοκεῖν* (Rep. 361 B).

In chapter III, “*La science pratique et la science théorique*,” M. Halévy strings together on a somewhat fanciful thread of association, passages touching the distinction between empiricism and pure science, the discussion of *ψευδῆς δόξα* in the Theaetetus, the two contrasted rhetorics of the Gorgias and the Phaedrus, and the divided line of the Republic. Hegelian symmetry is again the guide. Practical science is shown to be contradictory. It is science and not science. The concept is suppressed by that of pure science, and then partially rehabilitated as its symbol and as a postulate of experience. To bear out this interpretation some violence is done to the natural meaning of the passages cited. For example, the antithesis of the rhetoric of the Gorgias and that of the Phaedrus can hardly be set down as a necessary antinomy of experience (p. 77); it is merely the contrast of the rule-of-thumb rhetoric of the Sophists with the more scientific rhetoric conceived by Plato. Again, the sentence (p. 81), “*Il y a jugement sensible (δόξα μετ' αἰσθήσεως ἀλόγου) lorsque l'âme, déployant son énergie interne (ὅταν αὐτὴ καθ' αὐτὴν πραγματεύηται) applique aux impressions sensibles ces formes générales de la pensée qui les systématisent*,” misrepresents the real thought of the passages cited to justify it. The *δόξα μετ' αἰσθήσεως* of Timaeus 28 A is sense perception *contrasted* with pure thought. The *δοξάζειν* of Theaetetus 187 A is a loose synonym of the activity of pure thought *contrasted* with sense perception. It is not permissible to combine the two to M. Halévy's Kantian result.

The larger part of chapter IV deals with the philosophic education of the Republic as opposed to the empirical encyclopaedic education of the Sophists, and analyzes incidentally the minor ethical dialogues, the Lysis, Charmides, and Laches, together with parts of the Protago-

ras, Philebus, and Symposium. The last pages of this chapter and chapter V, on the problem of Participation, take us into the centre of the Platonic metaphysics. The essence of the matter, as I have endeavored to show elsewhere, is that Plato first hypostatizes all general concepts, making of them noumena unconditioned by space and time, and then, in order to establish a working logic, postulates *ex necessitate* certain relations of these incommunicable absolutes both towards each other and towards the world of sense. These relations he describes by metaphors, being from the nature of the case unable to express them directly. The contradictions inherent in the conception of relative being that is conditioned by space and time, he accepts as necessities of intelligible speech, while hinting that they disappear from the point of view of absolute being, which latter, however, refuses to enter into the ordinary forms of logic. This is also, I think, in substance M. Halévy's interpretation (pp. 268-9). But he has subtilized and Hegelianized it almost beyond recognition. To begin with, he approaches the ideas, not by a direct hypostatization, but by rising from "the self-contradictory point of view of the judgment" or sense perception, to that of the soul or *devenir psychique*, and then in turn abandoning this as self-contradictory for the point of view of the pure idea. But this trinity of sense, soul, and idea savors of Plotinus rather than of Plato. In explaining how we transcend the point of view of the judgment, M. Halévy as often translates his Plato into the language of Kant, "À propos d'un objet donné, je puis affirmer tour à tour qu'il est petit, et qu'il est grand; mais la forme constitutive (εἶδος) d'une pareille affirmation, l'opposition du grand et du petit, est immuable" (p. 136). What, again, can he mean by saying that in Timaeus 51 C, Plato "définit sa philosophie comme une philosophie de l'εἶδος par opposition à la philosophie du λόγος? Surely he must be aware that the words τὸ δ' οὐδὲν ἄρ' ἦν ἄλλο πλὴν λόγος mean simply, 'it was after all mere talk' (to affirm ideas); and are virtually a repetition of the μάτην ἐκάστοτε εἶναι τέ φαμεν εἶδος that precedes. In transcending the point of view of the *devenir psychique*, M. Halévy argues that the conception of knowledge, as a pure idea unconditioned by space or time, suppresses the antithesis between the cognition and its object momentarily singled out and arrested on the stream of change, and thus *la science*, having no object left save itself, becomes *science de la science*. The 'necessity' of this is not to be found in Plato, but in the traditional preoccupation of French Platonists with Aristotle's νόσις νοήσεως. M. Halévy finds this notion of *science de la science* suggested as a problem in Charmides (165 B *et seq.*),

and Rep. (505 B, C), and further confirmed in Philebus (58 A and 63 B, C). His erroneous interpretation of Philebus 58 A has already been considered. In Philebus 63 B, C, the 'pleasures' are asked whether they are willing to be mixed with the 'knowledges' in the *summum bonum*. They reply in substance (there is some doubt of the text but none of the meaning) that pleasures cannot subsist alone, and that by far the best associate for them is the knowledge that knows both other things and themselves (the pleasures, namely). There is no suggestion in the passage of the identity of the cognition and its object, or of a science of science. Self-thinking thought is an Aristotelian, not a Platonic, device for escaping the contradictions involved in the notion of an absolute mind.

The Problem of Interpretation (chapter V) deals mainly with the puzzle of the One and the Many as presented in the Parmenides and the introduction of the Philebus. There are so many good summaries of the Parmenides already in print that it is unnecessary to follow M. Halévy's analysis in detail. He rightly holds that the contradictions of the Parmenides are the contradictions *du devenir*. They arise from the assumption that 'being' means being in space and time. The predicates which analysis strips from absolute being may be restored to it—in a non-natural, Pickwickian, non-spatial, non-temporal sense. And the contradictory predicates that attach to relative being belong to it in different spatial and temporal relations.¹ On one or two points, however, I cannot accept his interpretations. It is an error to cite Philebus 15 A in support of the statement that to escape the antinomies of the One and the Many it is sufficient "de renoncer à classer l'un parmi les choses qui se développent et s'évanouissent (p. 177). Plato in the Philebus does not offer a solution of the difficulty regarding the communion of the One and the Many in pure ideas. He merely (1) says that the problem is too trivial for consideration, excepting in relation to pure ideas; (2) and then suggesting that it is, perhaps, largely verbal (*πάθος τῶν λόγων ἐν ἡμῖν*), he bids us practically ignore it, assume ideal monads, or unities, when we need them, and apply the good old method of division, classification, and definition to the void and formless infinities of experience. Secondly, I cannot concur with M. Halévy in thinking that the negative hypotheses of the Parmenides teach us more about ideal existence than the positive. Relative non-being is neither more nor less contradictory than relative being. If absolute non-being, both in the Parmenides and Sophist, is apparently more myste-

¹ Cf. *De Platonis Idearum Doctrina*, pp. 46-8.

rious than absolute being, it is merely because absolute being is given some semblance of meaning outside of the conditions of space and time, while no such evasion is possible in the case of absolute non-being.¹

The upshot of it all for M. Halévy is that the Parmenides has proved the intercommunion of the ideas *with each other* to involve no contradiction, provided it be viewed as pure relation and not as connection in space and time. The possible communion of the ideas with existence in space has not been considered. At this point Progressive Dialectic intervenes and inquires, (1) Can the logically possible intercommunion of the ideas with each other be dialectically deduced and so proved actual? (2) Can the communion of the ideas with spatial things be also established as a practical postulate of intelligible discourse and reasoning? In substance, I think this sound, though I doubt if Plato consciously refined so far. He merely postulated both kinds of communion as a necessity of dialectic.

The first chapter of Progressive Dialectic, after giving a brief account of the five categories or *μέγιστα γένη* of the Sophist, is mainly occupied with the 'deduction' of number. It is impossible to resign ourselves, the author says, to the disappearance of so essential an element of the Platonic philosophy. And accordingly he endeavors, with the aid of the Aristotelian notices, to restore the true Platonic doctrine of number. I have elsewhere given in full my reasons for distrusting all Aristotle's statements on this head, and I must leave the vain subtleties of this chapter to those who believe in the "indeterminate dyad," or the other absurdities fathered on Plato by the pedants of the Academy, whose mechanical manipulation of his metaphors the old master must have contemplated with a smile of melancholy, indulgent irony. I shall merely note in passing that addition is certainly employed for the deduction of numbers in the Parmenides (143 D), and that if Plato could 'deduce' them by adding two and one he would probably have been equal to the task of deducing five and seven. M. Halévy's ingenious proof that multiplication, not addition, is the fundamental arithmetical operation is therefore deprived of its foundation. It is pure galimatias to aver that the generation of the number three permits us to infer that prime numbers "suppose the duality of the number preceding each of

¹ Cf. *De Platonis Id. Doc.*, p. 49. The sentence of Zeller (3d ed., p. 547) there objected to is silently omitted in the fourth edition (pp. 650 *et seq.*), and the entire passage rewritten,—with no recognition, however, of the criticism which obviously caused the change.

them, conditioned by the unity of that number taken by itself as a distinct nature." The Parmenides, as I have said, simply adds one and two. It is not true that the presence of the idea of two (*per se*) doubles, and that therefore the idea of two is identical with multiplication by two. The presence of the idea of two makes things two, as the idea of heat makes them hot. The idea 'twice' may 'accompany' the idea 'two' and be extracted from it for dialectical uses, as the idea of heat accompanies the idea of fire (Phaedo), but the two ideas are not identical (*cf.* Ar., Met. 987 a, 25). But indeed, the whole subject of ideas and numbers in Plato is an unprofitable farrago of spurious erudition.

From the deduction of number and the pure conceptions of geometry, Progressive Dialectic advances in chapter II to the science of movement. Plato in one passage (Sophist, 284 C, D) appears to deduce motion from the very idea of psychic activity in cognition, but his real concern in upholding motion against the *στασιῶται τοῦ ὄλου* is not to 'deduce' it, but to clear the ground of the fallacies of absolutism and reestablish the point of view of common sense, as appears plainly from the following passage in the Sophist (249 D) : *ἀλλὰ κατὰ τὴν τῶν παίδων εὐχὴν, ὅσα ἀκίνητα καὶ κεκινημένα, τὸ ὄν τε καὶ τὸ πᾶν ξυναμφότερα λέγειν*. This, however, is too simple for M. Halévy. There is no space to follow his ingenious analysis in detail. I can only give a few typical illustrations of what seem to me the false subtleties of this chapter. In Philebus 24 D (*προχωρεῖ γὰρ καὶ οὐ μένει τότε θερμότερον*, etc.) words of motion are used to express the inherent instability of the *ἄπειρον*, but it is a mistake to read a deduction of motion into the passage. Again the words *ἄλλοτ' ἐν ἄλλοις εἶδεσι γιγνομένη* (Phaedrus 246 B) are an innocent expression of the doctrine of transmigration, and it is utterly fantastic to see in them the thought that soul is movement or transition from one idea to another. The word *εἶδος* here simply means form of animal life. Where in Plato does M. Halévy find that the soul belongs to the category of difference (p. 254), or that it is an *εἰκόν* of the idea (p. 255)? In Philebus 56 D, E, *Ἡ ἀριθμητικὴ τῶν φιλοσοφούντων* is simply the higher pure arithmetic, as distinguished from empiric reckoning *τοῦ καπηλεύειν ἔνεκα*. It is an error to interpret it : "C'est à dire ceux qui cherchent la science mais qui ne sont pas encore dialecticiens." The discussion of the *αὐτὸ ζῶον* of the Timaeus is full of misconceptions. As I have elsewhere said,¹ Plato with Aristophanic vividness of imagination makes the Demiurgus create that great animal the

¹ *American Journal of Philology*, vol. IX, p. 294.

world on the pattern of the ideal or universal animal. The ζῶον is simply the general class concept 'animal,' including four great subclasses. It is not the idea of life, and M. Halévy's identification of it with the αὐτὸ τὸ τῆς ζωῆς εἶδος, of Phaedo 106 D, confounds two utterly disparate trains of thought. Nor does the ζῶον differ from other Platonic Ideas in the manner affirmed by our author. Like other ideas, though in itself one, it may be represented in the world of sense by many copies. But, since Plato prefers to assert the unity of the world, he somewhat fantastically argues that this particular and most perfect copy of the ideal ζῶον resembled its model in the further respect of being solely singular in its kind. Lastly, with the ζῶον of the Timaeus, the ironical doubt expressed in the Phaedrus (246), as to the justification of the concept God as an ἀθάνατον ζῶον, has nothing to do. The author's further deduction of the sciences of motion in the Timaeus and Republic must be omitted here.

The central thought of the final chapter (*La science politique*) is contained in the sentence on page 312: "La philosophie platonicienne . . . interprète l'opposition, en apparence irréductible, du nécessaire et du bien comme se réduisant à la distinction relative du moyen et de la fin : le nécessaire est nécessaire en vue du bien." This principle I once expressed (A. J. P., vol. X, 1, p.) in the words "the ἀναγκαῖον is contrasted with the ἀγαθόν in Plato as the *conditio sine qua non* of a desired end." M. Halévy applies it in detail to the interpretation of the teleological side of the Platonic philosophy, to his theodicy, and to his constructive ethics and politics. This chapter is perhaps the most readable of the book, and is comparatively free from the strained interpretations of Platonic passages that mar many of the others. It is hardly exact, however, to say, "L'idée du bien comprend donc, avec le plaisir pur, les plaisirs impurs, dont la naissance a pour condition la douleur" (p. 319). Plato would doubtless have been forced to admit that impure pleasures are a necessity of our present life. But they are expressly excluded from the supreme good in Philebus 66 C, though 67 E seems to leave the matter in doubt.

In conclusion I must express the fear that I have not done full justice to M. Halévy. The value of his book lies in the subtlety and dialectical precision of his analyses. Unable to reproduce them in detail, I have confined myself to stating his main positions, and indicating what I conceive to be some of the errors that inevitably result from the method of weaving together Platonic passages in disregard of the color and atmosphere of the context.

PAUL SHOREY.

Histoire de la philosophie atomistique. Par LÉOPOLD MABILLEAU, Ancien Membre de l'École française de Rome, Professeur de Philosophie à la Faculté des Lettres de Caen. Ouvrage couronné par l'Académie des sciences morales et politiques. Paris, Imprimerie Nationale. Ancienne Librairie Germer Baillière et Cie., Félix Alcan, Éditeur; 1895. — pp. vii, 560.

Lange's classic work on the History of Materialism contains a somewhat general account of the rise and development of the atomic theory. From Willmann we have the history (two volumes of which have already appeared from the press) of another special direction of philosophy — idealism; and Plumtree has given a rather popular History of Pantheism. Lasswitz published twenty years ago a very full and well-arranged statement of the development of the atomistic philosophy, from the beginning of the contest of modern science with scholastic physics down to the time of Newton, or to the conversion of kinetic into dynamic atomism. Mabileau, in the above-named history of the atomic doctrine, sets forth in considerable detail the evolution of this particular type of materialistic thought, from its conception amongst the Hindus down to the form it has received amongst the scientists of to-day. It covers more ground than the work of Lasswitz, is well systematized, clearly and interestingly written, and should find a large circle of readers amongst men occupied with science and philosophy. It is the sort of work to which one would naturally look nowadays for some real contribution to the history of speculative thought. We have an abundance of general histories of the subject, and where the mass of literature is so great as it is here, it is well-nigh impossible that one man should thoroughly master the many ramifications of philosophical doctrines for purposes of historical exposition. Zeller is the one notable exception in the last half-century. Besides the fact that any given writer has a better equipment in some specific direction of thought than in several, and should therefore be a more trustworthy expounder of that specific subject, there is the additional advantage to the reader that he has before him the continuous narrative of the development of a single theory. This is better than to pick one's tedious and confused way amongst a mass of biographical notes, and pragmatic statements of the doctrines of a dozen schools of thought, in a general history of philosophy. The reader sees in a work of this kind the rise and growth of one of the leading theories of the nature of reality and of the structure of Being, the various changes and distortions it has undergone to meet individual or racial predilections; and by watching this development from century

to century in its uninterrupted progress, he comes to know more intimately than in any other way the historical and scientific meaning of the doctrine. The study of separate problems and theories in their historical continuity, it seems to me, is the best way to get hold of the history of philosophy. It was evidently some such feeling as this that induced Windelband to write his history with reference to the evolution of problems rather than to the chronological succession of philosophers. I do not, however, mean to belittle the interest, the charm, and the inspiration that is to be derived from the study of the characters of the great personal agents that have been conspicuous in philosophical movements. But the reader certainly gets in this connected pursuit of special problems or theories a clearer and more definite conception of the meaning of a cardinal and epoch-making idea, when he thus sees it in its genesis, watches how it is propagated from place to place and from age to age, notes what obstacles it encounters, and observes in general the *rôle* it plays in the continuous stream of human consciousness. This is what Mabileau has enabled us to do in reference to the atomic philosophy. His work received in 1894, by vote of the Academy of Moral and Political Sciences, the Victor Cousin prize, and was printed gratuitously by authority of the government at the National Press. M. Félix Ravaisson, in his report on the work to the Academy, commended it especially for "la clarté de l'exposition." It thus comes to us with the highest sanction and commendation that France could bestow on it. It presents a very full account of the progress of the idea of the 'unity of matter' (which is the mother-idea of atomism), from the philosophy of Kanâda amongst the Hindus and from the early Ionians amongst the Greeks, down to the atomic theory in our latest chemistry.

Philosophical reflection began with the rise of the idea of substance. The observation lay near at hand that things do not change their substantial nature by changing their physical condition or expression, *e.g.*, water as ice or as vapor has not changed its essential nature. From the sight of the most striking mutations of matter (rock into metal, wood into ashes, sand into glass, etc.), the minds of the early Hindus and Greeks were stimulated to the philosophical reflection of the 'unity of matter.' Underlying the diversity of sensible appearance there is unity for thought. This is the very first step in the history of metaphysics. The Hindus and Ionians referred all phenomenal things to different aggregations of certain primordial elements, and so they initiated the series of hypotheses which culminate in the mechanism of Democritus. The two important things

to notice are (1) the conception that there are ultimate or primordial elements, and (2) the laws of their combination. Mabileau thinks that in these two respects, viz., in positing primordial or atomic elements and in expounding the laws of their combination, the Hindus produced the first atomic philosophy. I doubt very much whether the soutras of Kanâda will bear such a commentary. Of the six learned systems currently received among the Hindu pundits, that of the Vaiçeshika (*i.e.*, the 'particular'), the authorship of which is referred to Kanâda, has ordinarily been described as atomistic. The Nyâya of Gautama, although mainly employed with logic, is also characterized as an atomistic system wherever it touches physics. With the Nyâya, however, Mabileau does not concern himself, but confines his discussion to the Vaiçeshika, notwithstanding the fact that materials of considerable interest and importance might have been drawn from this source. Röer (whom Mabileau persistently but wrongly calls Roër) says that "the Nyâya is vastly superior to Democritus' theory."¹ "With Leucippus and Democritus atoms have some, though imperceptible, extent, and also different figures and motions, while the Nyâya held them to be absolute units of space without any dimensions and motions, that is, mathematical points as regards space."²

Further, the doctrine of five primitive elements (fire, earth, air, water, and aether), which figures prominently in Greek philosophy, is one of the most ancient hypotheses of Indian thought. It is found in the Upanishads, and probably antedates even the doctrine of the soul. It is not merely the extreme antiquity of the doctrine of ultimate material elements that is interesting to note, but the Hindu form of this doctrine has the further interest that it takes an important place in the body of arguments which attempt to show the derivation of Greek thought from oriental sources. Besides, the Nyâya offers a great many striking resemblances to Greek dialectic and logic, though the consideration of most of these analogies falls beyond the scope of Mabileau's book. The five elements of Aristotle are the ultimate material principles of the Vaiçeshika of Kanâda,³ and his categories are substance, quality, action, community, particularity, and inherence, to which in later times a seventh was added, viz., negation.⁴ It seems to me, as I have suggested above, that

¹ *Categories of the Nyâya Philosophy*, edited and translated by Röer, p. xi.

² *Ibid.*, p. x.

³ *Zeitsch. der deutschen morgenländ. Gesellschaft*, Bd. XXI, p. 315.

⁴ Deussen, *Allg. Gesch. der Phil.*, I, i, p. 55.

Mabilleau is obliged to force his interpretation of Kanâda in order to classify him with the Ionian hylozoists or with the Abderitic school of atomists. In the first place, the Vaiçeshika philosophy is theistically and dualistically conceived, and in the second place the so-called atoms (Tanmâtra) are much more like the *ὁμοιομέρειαι* of Anaxagoras than the *ἄτομα* of Democritus. The ultimates of Kanâda are qualitatively different from each other; the ultimates of Democritus are qualitatively alike. Besides, mind is not conceived of materialistically; it is not corporeal, though it is a substance and is the substrate of qualities. This is very different from the materialism of the Greek atomistic school. When Kanâda speaks of the creative will of God as a force bringing these particles together into concrete masses and systematic construction,¹ one cannot but see that the spirit of the Vaiçeshika philosopher is much nearer that of the Stoics than it is to that of Democritus. The active and passive principles of Kanâda are the *τὸ ποιοῦν* and *τὸ πάσχον* of the Stoics, which in turn are the Stoic translation of the formal and material causes of Aristotle. The categories of the Stoics are substance, quality, relation, and relative quality. Although Stoicism is generally called materialism, it is dualistically conceived, that is, it is a double materialism: *ψυχή* as substance is totally distinct from *σῶμα*. The system is in reality a dualism. So it is with Kanâda. Mabilleau, however, (pp. 45 *seq.*) regards the philosophy of Kanâda as atheistical, and makes out a plausible defence for his position. But Rœer,² who has his knowledge at first hand and is the foremost authority on the subject, says: "The Nyâya is essentially theistical. According to it God is personal. . . . He is not the supreme soul of the Vedânta, which is the whole universe, but distinguished as well from the world as from finite spirits. . . . The deity is the creator of the world as to its form, not as to its matter." And Colebrooke³ says that the Nyâya and Vaiçeshika are parts of one system, supplying each other's deficiencies. Now, if Colebrooke is correct, we could hardly find a more dogmatic and definite statement of the dualistic and theistic character of the philosophy of Kanâda than the above. I do not mean to suggest by the foregoing that there is any historical relationship or interdependence between the Vaiçeshika and Stoicism, but I do maintain that in conception the former is much more akin to Stoicism than it is to the atomism of Democritus. And while it is not pantheistic, as is the

¹ Colebrooke, *Essays*, vol. I, p. 278.

² *Categories of the Nyâya Philosophy*, p. xv.

³ *Essays*, vol. I, p. 261.

Vedânta and the system of the Stoics, yet the operation of psychical forces on the material elements as their efficient causes is more akin to the *λόγοι σπερματικοί* of the latter than to the Democritean theory of weight and mechanism. It is the aether of Aristotle, taken in conjunction with the *λόγοι σπερματικοί* of the Stoics, that is the forerunner of the *spiritus mundi* of the alchemists and natural philosophers from the end of the 15th century on. This aether was converted into the three fundamental substances of Paracelsus, and amongst other philosophers continued in the most diverse forms to be the universal directive and animating agency of nature. It takes refuge with Gassendi and Boyle behind the term 'material effluvia,' takes on a purely hylozoistic form with Henry More, is clothed in a mathematical garb by Newton in his doctrine of action at a distance, in which form it still holds sway over modern physics. This energy of the world-aether, which is a direct descendant of the cosmical fire of Heraclitus, is the expression for that much-sought principle whereby one wishes to make nature's transformations intelligible.¹ While I admit that the philosophy of the Nyâya and Vaiçeshika is only partially analogous to that of the Stoics, it seems to me that Mabileau does violence to the soutras in interpreting them as enunciating a system of mechanism analogous to that of Democritus.

He rightly regards (a position, however, in which he will scarcely find any one nowadays to differ from him) the Chinese, Phoenicians, Persians, and Egyptians as having no claim to be considered as the progenitors of Greek philosophical doctrines. I also think he is right in laying greater emphasis on Hindu speculation than is usually done. There had been in India from a period long antedating Thales in Ionia a profound metaphysical genius, which has expressed itself in various systems more or less independent of religious dogma, but which unfortunately have not yet been critically and philosophically interpreted. When this is once done, and we know something of the early history and foreign relations of the Hindus (which, however, seems rather hopeless, for Indian scholars tell us the Hindus are poor historians), we may be in a better position to discuss the immensely difficult but interesting problem of the derivation of Greek philosophy from Hindu sources. On this question Mabileau takes a somewhat non-committal view, inclining, however, to the belief that the Hindus exercised a greater influence on Greek philosophical life than is usually ascribed to them. He is very severe in his censure of Renouvier (*Manuel de la philosophie ancienne*) for the

¹ Lasswitz, *Gesch. d. Atom*, I, p. 268.

summary way in which he dismisses the subject of Hindu philosophy, and I think there is good ground for his complaint.

In the careful and scholarly discussion which Mabileau devotes to the antecedents of atomism in Greece, he places the influence of the Pythagoreans in the most important place. This is due to the somewhat unusual interpretation he puts upon the Pythagorean doctrine. He regards the Pythagorean monad as a material element, which view is as old as the Pythagorean Ecphantus of Syracuse, a contemporary of Democritus (p. 107). On account of the fact that the Pythagorean monads may possibly be interpreted in this materialistic way, and as a matter of fact were so interpreted in the Pythagorean school itself, Mabileau regards Pythagoreanism as the most important factor amongst the determining influences of atomism. While I do not admit that the materialistic construction which was put upon Pythagoreanism by Ecphantus (who attempted to combine an atomistic philosophy with a world-soul) was either a current one or a logically legitimate one to put upon that doctrine, I am fully convinced that it did exert an immediate and profound influence on Democritus. Amongst other forces which were operative in the production of the atomic doctrine, Mabileau discusses the theories of the Eleatics, the Ionians, Heraclitus, and Empedocles. Surely Anaxagoras belongs here rather than in a separate chapter after Leucippus and Democritus, as Mabileau has placed him.

Under the dominion of alchemy and the Greek philosophy the Arabs (with whom all philosophy is exotic and post-Mahometan, *i.e.*, after the 6th century) developed an interesting atomic movement. The logical and outright materialistic system of Democritus and Epicurus, which the Arabs knew through the full account of it by Aristotle, becomes in the hands of the Mutakallimun a theistic philosophy, as all the Semitic (Arab and Jewish) philosophies are dominated by a theological bias. The discussion of this movement furnishes one of the most interesting chapters in the volume. The remaining three chapters are occupied with "Atomism and Alchemy," "Atomism in Modern Philosophy," and "Atomism in Science," and each of them is worthy of the most attentive study.

WM. A. HAMMOND.

Die Urtheilsfunction. Von WILHELM JERUSALEM. Wien und Leipzig, W. Braumüller, 1895. — pp. xiv, 269.

Herr Jerusalem tells us that he has for a number of years been convinced that the nature of Judgment is a fundamental problem of

philosophy, and that its solution would contribute much toward a satisfactory metaphysical theory. "In Judgment we have before us a real principle of the cognitive activity, which is daily experienced by every one, and which is nevertheless of universal validity. If we can show that Judgment is the form which is developed in every man according to necessary psychological laws, and that this form must be applied to everything given to consciousness in order that this matter may really become a conscious content and mental possession, we shall thereby have approached the solution of metaphysical questions. The concepts 'God' and 'Mind' may receive new light, and it will also be easier to answer the question whether it is possible to prove the existence of a course of events which is independent of us, and beyond our consciousness" (pp. 34, 35).

That the nature of Judgment is one of the central problems of philosophy is, of course, no new doctrine, since Kant pointed out that all the acts of the understanding can be reduced to this form of functioning. The author, however, claims that his method is superior to that of Kant, inasmuch as the latter deals with preëmpirical categories which can never be found in experience, while his investigation is to stand on psychological ground and to use the method of psychological analysis (p. 34). The introductory part of the work seems to promise that the logical *function* of Judgment is to be deduced and explained from a psychological *analysis* of the elements which enter into it. "Not until it has become clear by thorough psychological analysis of what known elements the act of Judgment is composed, and what relations obtain between it and other psychical processes, will the necessary basis be gained for the logical and epistemological meaning of our forms of thought" (p. 2). It will be impossible to discuss this in detail, but the programme has not, I think, been carried through. The logical question (What does Judgment do?) is indeed introduced and answered in the sections which profess to analyze the Judgment process (pp. 78-96), but the necessary connection between the ideational, affective, and conative elements discovered by analysis, and the cognitive function which Judgment performs, are not made clear.

The second division of the book (pp. 36-77) is devoted to an historical sketch of the various discussions of Judgment in ancient, mediæval, and modern philosophy, including a section dealing with the theories of the most prominent writers of the present time. It is evident that in this brief compass only a very summary account of the various doctrines is possible. The author's statements are,

however, clear, and his criticisms acute. In dealing with the school of Brentano one cannot but feel that his judgments are harsh, and there is an *animus* displayed which is happily strange to philosophical criticism in this country. The references to Mr. Bradley, both in this chapter and later (p. 186), seem to show that the author has either read no further than the first chapter of *The Principles of Logic*, or that for some reason he has failed to understand the former's position. Of Mr. Bosanquet's work he makes no mention.

In the third and fourth divisions of the work, *Ursprung und Elemente der Urtheilsfunktion*, and *Entwicklung der Urtheilsfunktion*, we have the statement and development of the author's theory. What really takes place, Herr Jerusalem asks, when we make a simple judgment like 'The tree blooms'? The answer is that by means of the judgment the entire ideational complex is ordered and systematized (*wird geformt und gegliedert*) in such a way that the tree is represented as a unitary being possessed of a force whose manifestation is the bloom. Along with this there goes what the English call 'belief,' and the school of Brentano '*Anerkennung*.' The tree is represented as something existing independently of me, and so objectified as something beyond my idea of it (p. 82). But more, it is now regarded as a 'centre of force,' as a being endowed with something analogous to a human will, of which the various attributes it exhibits, and the changes it undergoes, are the manifestations (p. 83). It is of the very nature of intelligence to be anthropomorphic, and the judgment always introjects into the content upon which it acts a 'centre of force,' or 'will,' to serve as its permanent unity and principle of explanation. This mode of explaining the actions of external things is derived from the immediate experience of the reciprocal connection between psychical and physical process; that is, from the direct perception that all our movements are the result of our own will (p. 93). "The reciprocal connection of physical and psychical processes is the first and only form of Causality which we really experience" (p. 261). In the section on the development of Judgment, the author proceeds to show that all the various kinds of judgments fulfil the same function and fall under the definition given above. The judgment, 'It will rain,' is equivalent to, "In the present condition of the weather there exists a tendency or inclination or will to rain" (p. 135). Even in hypothetical judgments this introjection of a will has not altogether disappeared.

The whole discussion of Judgment is exceedingly suggestive, and the sections dealing with the relation of language to thinking are

especially helpful and instructive. It does not seem to me, however, that we have anything distinctively new in the theory here presented. That it is the function of Judgment to order and systematize the unanalyzed complex of perception into a world of known objects, is a doctrine which has been recognized by almost every one since the time of Kant. And that in performing this task Judgment always takes the form of Causality (which implies Substantiality) is no more than Schopenhauer maintained. Moreover, the view that this category only finds a meaning in our own volitional experiences, and necessarily leads us to interpret things as Wills, or centres of force, is scarcely a new doctrine to a reader of *Die Welt als Wille und Vorstellung*. It is worth noting, also, that Schopenhauer is much better furnished with categories than Herr Jerusalem, for, in addition to Space and Time — about which the latter says nothing — his category of Causality has a 'fourfold root,' and provides for the lower categories in the *principium rationis essendi*, and for the higher in the *principium rationis cognoscendi*. The author's sole principle of explanation, on the other hand, seems to correspond to the *ratio fiendi*, or principle of efficient causality.

It does not seem to me evident that every judgment which expresses causal relation necessarily involves the conception of objects as 'forces' or 'wills.' I should rather say that such a mode of conceiving the relation is a psychological accident, which is dependent upon the vividness of the imagination of the person who judges, and is in no way essential to the nature of the judgment. But even if this point be not pressed, the theory fails to provide any place for judgments expressing simple Quality and Quantity, and still more obviously for judgments involving teleology. I should be quite willing to admit all that the author urges regarding the unavoidable anthropomorphism of our judging faculty. *Homo mensura* is the principle upon which all explanation of the world must proceed: to render intelligible what is given through sense perception is to find ourselves in it. But to order and systematize the material thus given as centres of force, or *wills without purpose*, is by no means to satisfy completely the demands or the possibilities of Judgment as a function of explanation or interpretation. Our intelligence demands that the real shall be exhibited as rational, and this demand is not fulfilled so long as we view it merely as the expression of force or purposeless volition.

The application of the author's views to psychical phenomena carries with it some interesting conclusions. The fundamental

characteristic which distinguishes psychical from physical phenomena is the complete lack of any substratum in the former. "Physical phenomena cannot be thought without a substratum, psychical phenomena cannot be thought with one" (p. 9). However, in judgments regarding a mental process, there is always something which becomes the subject and is regarded as a permanent centre of force. This may sometimes be a bodily organ, sometimes a word which signifies a feeling or an emotion, sometimes the Ego itself (pp. 164-167). We must distinguish, however, between psychical states as merely lived (*erlebt*), and as forming the material of a judgment. The first stage corresponds to consciousness, the second to self-consciousness (p. 167). When, moreover, we raise the question regarding the truth or falsity of judgments, the author finds that judgments regarding physical processes do correspond to a reality beyond consciousness, and are therefore true. This conclusion is supported by the fact that our predictions and judgments of expectation regarding the external world are actually confirmed by the course of events, and also by the agreement of our judgments with those of our fellows. There is, however, no such evidence for the truth of the judgments we pass upon psychological processes. Indeed, since, as we have seen, it is the very nature of Judgment to substantialize and objectify, we must regard such judgments as in a certain sense a falsification of the psychical fact as actually lived. "Every attempt must be made to eliminate the personification attaching to Judgment, and to emphasize the fact that we only wish to describe the process so that the hearer or reader may be able to reproduce it in himself, or recognize it again when he experiences it" (p. 196). "Every judgment about psychical phenomena is, strictly taken, a figurative mode of expression, and the real process never exactly corresponds to the judgment made regarding it. Whether the subject be denoted by the head or the heart, the Ego or the Soul, there is always reference to a permanent centre of force which can never be found *im erlebten Vorgang*" (p. 259). Therefore, the author concludes, "physical phenomena can be known only discursively, psychological phenomena only intuitively" (p. 260).

Though this discussion is extremely interesting and has important bearings on the question regarding the proper procedure of psychology, the conclusion reached seems to me to depend upon the assumption that psychological processes are by their very nature destitute of any permanent centre or substance. To make judgments about them is to refer them to some kind of substratum which can never be found *im erlebten Vorgang*, and therefore, the author concludes, to falsify

them. But would not the same argument hold of our judgments regarding physical phenomena? For, when Judgment ascribes various physical changes and processes to permanent centres of force, when it 'introjects,' to use the author's own word, a will into the presented phenomena, there is certainly involved a reference to a permanent subject which can never be found *im erlebten Vorgang*. In every judgment we have a process of interpretation which carries us beyond the given to some permanent principle which makes the given intelligible. If now this process yields truth when dealing with physical events, it is not clear why it should fail to correctly interpret the occurrences of the mental world.

The theory of Judgment which we have been examining seems to the author to furnish the basis for a complete system of philosophy, and he promises to set forth its metaphysical, ethical, and sociological implications in a future work. Even in the treatment now before us, however, we are not left in doubt regarding the general character of that system. The author regards his theory of Judgment as leading directly to Dualism and Realism. It is curious to note that Idealism — to the refutation of which considerable space is devoted (pp. 222–234) — is opposed to Realism as the doctrine that nothing exists apart from the individual consciousness. Idealism thus interpreted is then described as the hypertrophy of the cognitive impulse (*die Hypertrophie des Erkenntnistriebes*), continuance in which must lead to the destruction of the organ of thought (p. 233). The same sentence is pronounced against Materialism and all other systems which attempt to reach a monistic view of the world by joining together what is fundamentally different (p. 248). Nevertheless, so far as one is able to judge from the brief statement at the end of the book, the author himself is driven to Monism. We must conceive of the world as a whole, the totality of physical and psychical phenomena, he tells us, as the manifestation of one all-ruling divine Will (p. 263). How this can be reconciled with the Dualism which has just been noticed I do not know. It will doubtless be wise to await the completer exposition promised in the forthcoming philosophical work. J. E. CREIGHTON.

Die Umwälzung der Wahrnehmungshypothesen durch die mechanische Methode. Nebst einem Beitrag über die Grenzen der physiologischen Psychologie. Von DR. HERMANN SCHWARZ, Privatdocent an der Universität Halle. Leipzig, Duncker & Humblot, 1895. — pp. xx, 198, 213.

This book is divided into three parts, each of which really forms an independent treatise. The first contains an account of the vari-

ous theories of perception from the time of Democritus to that of Hobbes and Descartes; the second deals with the question of the reality to be ascribed to the 'secondary' qualities; the third is a criticism of Exner's attempt to explain all conscious processes on the assumption that they are entirely dependent on physical changes.

In the first division of the book the author begins by briefly contrasting Aristotle's theory of 'perception at a distance' with the view of Democritus that all perception is due to contact. He goes on to show that, owing to a misinterpretation of the position of Aristotle, the prevailing opinion in the Middle Ages was more Democritean than Aristotelian. Suarez, who is taken as the representative of the dominant tendency, maintained with Democritus that perception could only be explained if we supposed that something passed over from the object to the subject. This mediating agency, however, was not regarded as a substance, for, apart from other difficulties, it was not clear to Suarez how an object could with impunity squander its substance in the reckless way Democritus supposed. Further, the migrating 'species,' unlike the atom-complex of Democritus, did not thrust itself between the mind and things; that which passed over from object to subject was a sort of transeunt quality or accident ('species'), which was not itself perceived, and whose sole function was to bring the real object before the mind. That the object itself was perceived, and not an image or copy of it, was the position of all the Scholastics. Thus Thomas, who differed from Suarez with reference to the mechanism of perception and who formulated a theory in some respects similar to that of Kant, asserted that the object itself was the thing perceived, and not any subjective image.

But, as Dr. Schwarz indicates, the writers in question were able to adhere to this point of view, only because they failed to perceive the logical consequences of their position. And, as a matter of fact, Suarez' final statements do not correspond exactly with those which he makes at the beginning. We find that images have crept in between the mind and things. Hence Biel attacks not only the doctrine of mediate perception by means of wandering 'species,' but also the view that the mind perceives ideas and not objects. It must be noted, however, that Suarez asserted to the end that it was possible in an intellectual way to get into contact with the things themselves. By means of the intellect we are able to cognize substance directly. This, taken in conjunction with his admissions in

regard to sense, leads him to maintain that we may perceive the real thing with unreal qualities, the thing as substance being cognized by intellect, the qualities by sense.

Even in mediaeval times, as we have seen, the doctrine of 'species' was attacked from the nominalistic standpoint. Despite the obvious difficulties it involved, however, it was not overthrown till a new and better substitute was furnished by the mechanical conception. Armed with this, Descartes and Hobbes effectually destroyed it. The value of the mechanical method in enabling us to get rid of the Scholastic hypothesis is well illustrated in the case of Hobbes. At first the English writer, while opposed to the mediaeval view, was not acquainted with the doctrine of Motion. After discarding the theory of migrating accidents, therefore, he was forced to adopt that of migrating substance. This position, of course, was even more untenable than the one he had attacked. Thus, before he reached the conception of motion communicated from the object to the organ of sense, he could only attack the doctrine of transeunt accidents from the point of view of the still more absurd doctrine of wandering substance. But modern and mediaeval theories of perception differ in yet another respect. The Scholastics never questioned the reality of the external world, and, consistently or inconsistently, clung to the notion that we perceive the object itself. Descartes raised a doubt both as to the existence of the external world and the validity of our perception, and thereby brought to light difficulties of which his predecessors had taken no account. Dr. Schwarz maintains that Descartes and Hobbes were too much under mediaeval influence to deal with these questions thoroughly. He concludes this part of the book with an exposition and criticism of their theories of perception.

In the next section of the work, the author sets out to examine the grounds and validity of the doubt which had arisen in the seventeenth century with regard to the representative nature of the secondary qualities. He devotes most of his space, however, to the statement and general criticism of Descartes' and Hobbes' theories of perception, and in doing so covers some of the ground which he has already traversed. Only in the last chapter does he deal with the arguments which Descartes brings forward to prove that the secondary qualities are purely subjective.

The third treatise contains an attack on the view that psychical processes can be accounted for by means of physical conditions alone. Nerve processes differ only in intensity and locality, are "two-dimensional," while sensations possess quality, intensity, and

local sign, and are therefore "three-dimensional." Moreover, feeling and cognition are qualitatively distinct, while the physical processes which are supposed to condition them can only differ in quantity. And if the general possibility of explaining conscious processes by means of physical conditions be admitted for the sake of argument, the numerous special differences which appear in consciousness will still prove an insuperable obstacle to a purely physiological psychology. The author is successful in proving that Exner cannot account for the difference between sensation and perception, and he makes a very good case against the general position which Exner represents. His main argument, however, that differences in quality cannot be explained by quantitative variations, is not made so convincing as it might be. He might have shown that, even on the physiologists' own showing, the cause they assign is but a partial one. If physical conditions which are merely quantitative variables can produce different psychical qualities, we must suppose that consciousness is such that qualitative reactions are elicited by quantitative variations; *i.e.*, that the nature of the mind comes into play as part cause. This view, that psychical and physical conditions both coöperate and that either series alone is partial and insufficient, is indicated in a figurative way, but it is not emphasized sufficiently or employed as a basis of criticism.

The polemic against Exner is written with much more precision and force than the rest of the book. In the first two treatises there is little unity and much repetition. There is no method in the exposition unless a methodical avoidance of method be a form of method. Questions are treated, dropped, and treated again; writers appear, disappear, and reappear in a bewildering fashion. Important distinctions are not clearly grasped, or, at all events, are not clearly stated; and general assertions are made without qualification, when they ought to have been modified if the conclusions which are reached on various points hold true. As a general rule, indeed, the reader is left to piece things together for himself and to exercise his synthetic activity on the various results scattered here and there throughout the book. The author has amassed a good deal of material which the reader can turn to his own uses at his own expense, but the work as a whole cannot be very cordially recommended in its present form.

DAVID IRONS.

SUMMARIES OF ARTICLES.

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

PSYCHOLOGICAL.

Ueber die Definition der Psychologie. W. WUNDT. *Phil. Stud.*, XI, 1, pp. 1-66.

This article is a defence of the author's own position and a polemic directed against Külpe, with chief reference to the latter's *Einleitung in die Philosophie*, though Münsterberg is also included in the criticism. It falls into three distinct parts. The first discusses the definition of psychology, and is an attack upon the definition given by Külpe and Münsterberg. The second and third parts are a defence, written with Külpe's position in view, of the author's theories on 'actuality' and volitionalism. The definition to which Wundt objects is that psychology is the science which treats of the phenomena which are dependent upon the experiencing subject. The difficulty to which this definition leads, at least as used by Münsterberg and Külpe, is that the experiencing subject is regarded from the natural-science point of view as the corporeal subject. The result is that the definition really becomes: "Psychology is the science which treats of phenomena in their dependence upon the corporeal individual"; and the theory of the psychical processes consists in referring them to bodily processes upon which they are regarded as dependent. Against this definition, therefore, Wundt brings four objections. (1) It contains a logical fallacy which seems to be a combination of a *quaternio terminorum* with a *petitio principii*. The term 'nature,' or 'natural science,' is at first used to include the objective phenomena as independent of the subject; it is used again to include the objective phenomena plus the subjective, with the implicit assumption that the subjective

is ultimately part of the objective, that the former is included in the latter. (2) The definition does not correspond to the actual progress of scientific investigation. It implies that the true fields of the subjective and objective are originally separate and distinct; whereas, as a matter of fact, they are both abstractions from the given, and the result of scientific investigation in psychology and the natural sciences. (3) When strictly carried out on the lines of this definition, psychology is reduced to cerebral physiology, since all the conditions and causes of psychical activity are found on the physical side. (4) The definition by no means avoids metaphysical assumptions, as its supporters believe; it rather implies a psycho-physical materialism whose differentia from materialism proper is that it gives a physical basis for the elements, but makes them purely psychical in their true reality. Wundt proposes, as a substitute for this, the definition that psychology is the science of the immediate experience in connection with both subject and object, as opposed to the science of *mediate* experience which works with the objective in abstraction from the subjective. The subject-matter is the same for both psychology and the natural sciences; but the latter treats the original experience, in abstraction, mediately by concepts, the former treats it as originally and immediately given. The two sciences are supplementary. — A thorough discussion is given of the principle of psycho-physical parallelism in connection with this criticism. The relation between physical and psychical is shown to reduce to mere coexistence. When properly used in this way it is, at most, but an aid to psychological theory, not a fundamental principle of explanation. Even then it can only be applied to the simpler processes, and here our knowledge of the physical is less complete than that of the psychical. — In justification of the theory of the actuality of the mental processes against the theory of substantiality or of a substantial mind, Wundt gives a detailed explanation of the implications of both views. The only empirical fact which demands an explanation is that the mental states are continuous. It is this fact which gives rise to the hypothesis of a substantial soul, and is the immediately given general fact which forms the basis of the theory of actuality. The latter does not, as is charged, make the manifold of conscious processes in itself the bearer of each individual process and therefore a unity. It rather accepts the given fact that the only evidence of unity is continuity, and distinguishes between the necessity for a logical subject of the inner experience and its substantial existence. It is shown that the conception of a substantial soul is made in the spirit of a natural

science hypothesis. It is not given in experience, and it fails to make the facts more easy of comprehension, which could be its only justification. — In the concluding section the author defends his theory of volitionalism against Külpe's attacks, and restates it. The theory itself consists of three points. (1) The psychological processes form a unitary whole : sensation, affection, and conation are but the products of analysis and abstraction, and are not found separately in the empirically given. (2) The most typical of the psychological processes, *e.g.*, the feelings, come to full development only in voluntary action. (3) Voluntary action is typical of all the mental processes ; it is a unitary process, and therefore it is most like a substantial thing. The last two statements are meant to justify the application of the term 'will' to the undifferentiated whole. The objections to the theory have arisen (1) from its identification with Schopenhauer's metaphysics (with which it has nothing in common) ; (2) from the misconception that the abstract will was meant and not the concrete whole of mental processes ; and (3) from the assumption that passages in the *System der Philosophie* were intended to be taken psychologically and not metaphysically.

W. B. PILLSBURY.

Recherche d'une méthode en psychologie. G. REMACLE. Rev. de Mét., IV, 2, pp. 129-160.

Mill stated the object of psychology to be the discovery of *the law of succession* of mental states. This assumes of course that there are laws of the uniformity of psychological succession. This assumption is carried over from the physical sciences. But this ideal of method is in contradiction with the very nature of psychological activity, for the desire to reduce psychological phenomena to laws of uniformity amounts to a desire to attain to states which *can* be thus formulated, and this means an absorption of the psychological in nature, and hence its annihilation as psychological. Mill assumed the law of uniformity of succession as imposed from without. The modern genetic psychologists, while also recognizing this law as given, yet attempt to reconstruct it by discovering its elements. Both regard the law as a fixed goal to be reached, not as a means for further activity. Consciousness, from the standpoint of knowledge, is the desire to construct the future. Psychology is nothing but the attempt to systematize the processes of realization having the same fundamental tendency, *viz.*, a continuous expansion of activity which *is* duration and which therefore cannot be stated in terms of uniformity of succession. Two points must be

noticed in regard to method : (1) psychological construction cannot take character from the world of space, since its characteristics are altogether different from those of duration ; (2) it must always be stated in terms of progress, and cannot therefore give *the* law of psychical phenomena in any other terms than of growth. There can be no definite fixed laws of what is yet to be.

FAITH B. CLARK.

Les caractères anormaux et morbides. TH. RIBOT. L'année psychologique, II, pp. 1-18.

In this paper Ribot discusses three main types of instability of character. The first class includes those cases in which two characters succeed one another in the same individual, as in religious 'conversion.' A second division is marked by the simultaneous presence of two characters. This is seen to a slight degree in the difference between a man's private and public character, more markedly in some instances of a 'double life,' where the same man seems to be at once a libertine and an ascetic. A third and more abnormal type is seen in the cases of double personality. It is suggested that all three classes of unstable types may be grouped under the general name 'psychological childishness,' *infantilisme psychologique*. The name seems to be appropriate, since all the types are marked by an instability of mental states, by an uncontrolled succession of mental states which is familiar to us in the child. In these types, then, this lack of 'character' has continued to adult life; in some it has been partially overcome, and in others it has become exaggerated as the period of youth has passed away.

W. B. PILLSBURY.

Un aperçu de psychologie comparée. A. FOREL. L'année psychologique, II, pp. 18-43.

This is a discussion of the general tendencies in the development of consciousness, based upon the author's comprehensive study of ants. The final outcome of the article is that all development arises through the subordination of the many independent nervous centres, which are the seat of automatic actions and of reflexes, valuable in themselves, to one general centre—the frontal lobes in the higher animals and man. This discussion gives occasion for the treatment of many interesting side problems, such as the nature of consciousness, the rival theories of heredity, and the numerous difficulties and advantages in the study of animal psychology.

W. B. PILLSBURY.

La continuité dans la mémoire immédiate des chiffres et des nombres en série auditive. PAUL XILLIEZ. *L'année psychologique*, II, pp. 193-200.

The author finds as the result of numerous experiments, that a series of numbers tends to become continuous in memory, *i.e.*, that the numerical difference between successive numbers tends to decrease.

W. B. PILLSBURY.

ETHICAL.

Is Pleasure the Summum Bonum? JAMES SETH. *Int. J. E.*, VI, 4, pp. 409-424.

Ethical hedonism, the theory that pleasure is the ultimate Good, rests upon psychological hedonism, the theory that pleasure is the only thing which we *can* choose. This psychological theory is false; the belief in it rests upon a confusion between the *pleasant idea* and the *idea of pleasure*. Pleasure is the 'efficient cause' of choice: unless the idea is pleasant we shall not try to realize it. The 'final cause,' however, is the content of the idea, which may be anything whatever. The earlier English moralists distinguished between the dynamical and teleological aspects of choice by the two terms 'motive' and 'intention.' Of late the distinction seems to have been ignored. Sidgwick's 'rational hedonism' denies that pleasure is the true *object* of choice, but makes it the only reasonable *ground* of choice. We choose, not pleasure, but objects; yet we choose them only because of their 'felicific' possibilities. Sidgwick thus makes the old mistake of supposing that, because we choose only what is pleasant, we must choose it *for the sake of* the pleasure. Ethical value must be objective as well as subjective. To make truth merely subjective is to destroy truth; to make the Good merely subjective is to destroy the Good. The hedonistic theory of the Good, because subjective, fails in two points: (1) it can interpret the Good only *quantitatively*, distinguishing between greater and less goods, but not between higher and lower; (2) it cannot transcend egoism.

ELLEN B. TALBOT.

Von der Wertdefinition zum Motivationsgesetze. CHRISTIAN V. EHRENFELS. *Ar. f. sys. Ph.*, II, 1, pp. 103-122.

This article is a comparison of the author's definition of 'value' with Meinong's (*Ar. f. sys. Ph.*, I, 3). Value may be defined by refer-

ence either to desire or to feeling. In the first sense, the author had defined it as "the relation (incorrectly objectified by speech) between an object and the human desire directed toward it." Meinong criticises this definition, but it is practically the same as his own. In consequence of one of Meinong's criticisms, however, the author alters his definition. With reference to feeling, Meinong defines value as the capacity of a thing to become the object of a 'value estimation,' *i.e.*, a feeling of pleasantness or unpleasantness occasioned by an affirmative existential judgment, and an opposed feeling occasioned by a negative existential judgment. The value is thus proportioned to the sum of the intensities of the two qualitatively opposed feelings. This formula of Meinong's is not general enough to cover all cases. A better statement would be that the value of an object is proportional to the difference between the affirmation and negation feelings with reference to it. This harmonizes with the author's previously developed concept of 'relative furtherance of happiness,' which Meinong attacks, but to which his own theory leads if fully worked out.

ELLEN B. TALBOT.

Herbert Spencer's Sociologie. KARL VORLÄNDER. Z. f. Ph., CVIII, 1, pp. 73-98.

This article contains an introduction and three parts. The introduction reproduces the leading features of parts I, II, and III of Spencer's *Principles of Sociology*; part I epitomizes part IV of that work; part II is a summary of Spencer's discussion of Political Institutions; and part III is a criticism of Spencer's Individualism, and also a reply to the latter's strictures on Socialism. If we seek for the conclusion of Spencer's sociology we shall find it in the doctrine of the two types of society, the military and the industrial, or, what corresponds to them, involuntary and voluntary coöperation. The military type is bitterly attacked, while the industrial type and the *laissez-faire* principle are regarded with great favor. Despite the fact that Spencer often shows great practical sense in dealing with questions of politics (*e.g.*, the methods of choosing magistrates, direct or indirect suffrage), in showing the inevitableness of lower and higher classes in the highest industrial organizations, in showing the futility of constitutions to regenerate society, etc., he nevertheless is extremely partisan in his advocacy of Individualism. For example, he thinks it is highly unjust to tax the unmarried and the childless to support a system of general education. He also

has a strong aversion to the socialistic programme, mainly because he erroneously thinks there is an essential antagonism between Liberalism and Socialism. He brings against Socialism the charge that, under the plan proposed by its advocates, the good and the bad the industrious and the indolent would share equally well in the distribution of goods. Vorländer urges in reply that no sensible socialist desires that the indolent should enjoy the fruits won by the labor of others. All he maintains is, that the good fortune of the minority of mankind should not be regarded as grounded on justice, so long as it results from the misery and subjection of the majority. Spencer's dream of a state in which men will voluntarily coöperate and assist one another, is only a pious hope. D. R. MAJOR.

Sociologie et démocratie. C. BOUGLÉ. Rev. de Mét., IV, 1, pp. 118-128.

Lincoln's utterance, 'for the people and by the people,' is the formula of democracy. It states the democratic end and the democratic means. But there appears a contradiction between the end and the means. Both the general principles of evolution and the more recent and special investigations of sociological psychology (e.g., *Psychologie des foules*, by M. Le Bon) indicate (1) that the collective judgment of an assembly is far inferior in intelligence to the average judgment of the individuals taken separately; (2) that the collective will is invincible. Democracy unites these two factors, and democracy has come to stay. What is the solution? Education of individuals seems to give no assistance. For, though the collective judgment might advance in intelligence from one decade to another, action, as determined by it, will always be determined by a relatively low degree of intelligence. Nor can any attempt to separate between the means ('by the people') and the end ('for the people') succeed, since the means here constitute part of the content of the end. The author himself offers no solution.

A. W. MOORE.

METAPHYSICAL AND EPISTEMOLOGICAL.

Ueber Glaube und Gewissheit. JULIUS BERGMANN. Z. f. Ph., CVII, 2, pp. 176-202.

The religious consciousness has always insisted that, in addition to the certainty of knowledge, there is a certainty peculiar to Belief,

which has not yet received adequate explanation. The purpose of this paper is to examine the nature of Certainty in general, to discover its ground in the judgments of the understanding, and to consider the possibility of that special type which is said to be present in Belief or Faith. First, then, every judgment not only asserts its own truth, but also contains within itself the guarantee or security of that truth. This guarantee has been shown, in the author's *Grundprobleme der Logik*, to consist in conformity to three criteria: (1) the identity of the predicate with the subject, in the analytic judgment; (2) the agreement of the predicate with experience, in the synthetic judgment; (3) the harmony of the judgment with a truth already established. In the judgments of knowledge these criteria are directly applicable, so that by immediate perception of its conformity one can justify the truth of a conclusion. But in such convictions as those of an external world, or of the truth of memory, or again, of the validity of the moral law, we find certainty present, although the criteria are not explicitly applied. In these cases, we must say that one perceives the applicability of the criteria to the judgment, but does not bring it to clear consciousness, and hence the belief might be called, not 'knowledge,' but an 'anticipation of knowledge.' If this position be adopted, we may conclude that all certainty, whether of belief or of knowledge, is a product of the understanding, which is thus the sole judge of truth. Feeling, then, may influence the understanding, may hinder or exalt it, but it cannot replace it; for a person cannot believe without a reason, just as he cannot hold two explicitly opposed opinions, nor believe what he knows to be false.

ALEX. MEIKLEJOHN.

Idee und Persönlichkeit. M. J. MONRAD. Ar. f. sys. Ph., II, 2, pp. 174-206.

Schelling, emphasizing the practical side of life, sets up the notion of personality as incompatible with that of the Highest Idea, and upon this ground rejects the claim of the latter notion to express the ultimate reality. Against this position two arguments may be brought. First, the separation of practical from theoretical, of actual from conceptual, is an abstraction which must be done away by the union of all these moments within the Highest Idea. Secondly, personality is not incompatible with the reality of the Highest Idea, but can be shown to find in this its complete and perfect realization. Thus we include within the finite person, not merely the individual, or even the self-conscious, but the being who is developing his nature in three

directions: (1) self-determination or freedom, which is complete harmony of thought and will; (2) perception of one's own being as an end in itself and of infinite value; (3) recognition of one's own personality in others, so that all conscious beings are seen to be members of the Universal Spirit. It is in the development of these attributes that finite morality progresses, or, in other words, that personality is realized. But now in the three attributes of the Highest Idea, viz., universality, objectivity, and self-realization, we have nothing else than the infinite completion of these finite strivings toward the ideal. The Idea is, then, not incompatible with personality, but is its highest realization; it is the Universal Spirit, not abstract reason but concrete spirit — in short, it is God.

ALEX. MEIKLEJOHN.

Zur Psychologie der Metaphysik. RUDOLF LEHMANN. Ar. f. sys. Ph., II, 1, pp. 38-70.

A study of the psychical factors in the development of metaphysics involves an investigation (1) of the origin of man's need of metaphysics and (2) of the means by which the need is satisfied. The need has two sources — the intellectual and the affective nature of man. So far as it is grounded in the intellectual nature, it does not differ greatly from the general need of explaining the unknown. The *differentia* of the speculative need is given by the affective nature. Certain facts of experience appeal to the affective interests, and thus impel to reflection. These facts, which furnish the chief problems of metaphysics, are the contrasts of life and death, freedom and natural law, egoistic and altruistic impulses. The metaphysical need can be satisfied only by the help of analogy. What lies beyond experience can be explained only by the analogies furnished by experience. These are of two kinds, according as they are borrowed from the intellectual or the emotional experiences. In the Ionic philosophy, and in the metaphysics of Hartmann and Spencer, we see the resort to physical analogies; while the Pythagoreans and Spinoza have recourse to mathematical analogies. We find analogies of feeling in Empedocles, Fichte, Schopenhauer, and others. Religious ideas also have strongly influenced philosophy, furnishing analogies of both kinds. Every philosophy combines the two elements of rationalism and mysticism, the one derived from the intellectual, the other from the affective side of human experience.

ELLEN B. TALBOT.

Les fondements de la religion et de la morale. A. SPIR. Rev. de Mét., IV, 3, pp. 317-337.

There are two forms of the ontological argument : (1) an inference may be drawn from the idea of a being absolute and perfect to the existence of that absolute and perfect being himself ; or (2) the idea of the supreme and perfect being may be regarded as implying the certainty of his objective existence, — in other words, the absolute and perfect being may be asserted to be a being absolutely necessary. It may be conceded that the second form of the argument was completely overthrown by Kant, but the first, when freed from misconceptions, may be reconstructed. Innate in all thought is the conception of a perfect and absolute being, *i.e.*, a being absolutely identical and complete in itself. Through this idea we become aware of our own imperfections and of the imperfection of the physical world. As an idea it reveals to us the error and evil in the world. Hence there must be a being completely identical and perfect in itself. Here, then, we have a foundation for morals and religion. But, again, we must not suppose that this absolute being is the cause or condition of the phenomenal world. To suppose this would make it the author of evil and error, and this is contradictory to the thought of a perfect and absolute being. Our result, then, is that we must frankly accept a dualism in maintaining consistency in our thought, and in obtaining a foundation for religion and morals.

S. F. MACLENNAN.

NOTICES OF NEW BOOKS.

Agnosticism and Religion. By JACOB GOULD SCHURMAN, President of Cornell University. New York, Charles Scribner's Sons, 1896.—pp. 181.

This little book consists of a reprint of three lectures, the first two delivered before an academic audience and the last before a more popular assembly. President Schurman has done well to preserve them in this more permanent form. They are the work of a man of culture and wide philosophical reading, and they are couched in language entirely free from technicalities, and rising at times to eloquence. The author would not claim for them that they do more than state, in a form perfectly intelligible to the ordinary educated reader, the general point of view of those who believe that what is unfortunately known as Agnosticism, as well as the traditional theology of the older dogmatic type, does not represent the conclusions which a comprehensive grasp of the best modern thought compels us to adopt. The critical and yet sympathetic spirit in which the author discusses scientific and philosophical Agnosticism is a most commendable feature of the volume, making it in this respect a model of calm and scholarly criticism, while his brief characterization of Spiritual Religion, though by no means exhaustive, is undoubtedly in the right line, and is calculated to dispel various prejudices in regard to the nature of religion, which still linger in the popular mind. If one were disposed to find fault with a book which does not claim to be more than a popular presentation of philosophical ideas, it would be mainly that the writer is sometimes led, in his desire to avoid technicalities, to employ phraseology in different passages which is not always, at least taken literally, quite consistent. But it is a mistake, I think, to apply to a book such as this a "leaden rule"; it must be read, as it was meant to be read, as the suggestion of a point of view, rather than as an attempt to set forth a precise and systematic doctrine. Judged in this way, it will be found to fulfil admirably its purpose of stimulating as well as enlightening. The account of the life and thought of Huxley, that great unconscious idealist, is done with discretion and sympathy. Perhaps an admirer of the great expositor of Darwinism might fairly object that much of what is said should be somewhat modified in the light of Huxley's latest and in some respects greatest essay, his Romanes lecture on Evolution and Morality; but the author might fairly answer that even in that work the old agnostic attitude is not surrendered, though there are passages which show it to be in process of demolishing itself. The second lecture, on Philosophical Agnosticism, takes us over more familiar ground, but its mode of presenting old arguments is fresh and convincing. The last lecture, which is also the shortest, is the least satis-

factory. Here the writer was hampered, I think, by his reluctance to give needless offence to those in whose minds religion is inextricably interwoven with current theological views, and perhaps he did not feel that he could attempt to present to a popular audience a new philosophical theology up to date without giving offence and being misunderstood. Personally, I also feel somewhat dissatisfied with his view of creation, which seems to endorse the common, but, as I believe, indefensible idea of a creation occurring at a definite point of time; and I cannot accept the distinction which he makes—a distinction, however, which can claim the support of the great name of Leibnitz—between the ethnic religions as based on a cult, and Christianity as based on a creed. There are also various minor points to which one might fairly take exception; but Dr. Schurman has given us a book so suggestive and so sane, on the whole, that one feels indisposed to dwell upon minor differences. The influence of Dr. Martineau is evident in various places, though the author says things which that large and liberal mind would not endorse. I refer, for example, to his view of the idea of God as an intuition, and to phrases which seem to imply that God is completely separated from the world. This, however, is a point which still requires much illumination; and it may be that Dr. Schurman was in this case partly employing language with which an ordinary audience feels at home. I am the more disposed to think so because he speaks in one place of “the immanence as well as the transcendence of God.” In any case, this little book may be warmly commended even to intelligent readers who have no special philosophical training, and to all who are disposed to stop at the agnostic half-way house, or who have not freed their minds from the fatal confusion between genuine religion and its inadequate formulation in the traditional theology. I hope it will be widely read and pondered. We are at present in a hollow of the wave into which we have descended, partly by the natural reaction from the perhaps over-bold adventure of the earlier idealists of this century, and partly from our perception of the tremendous complexity of the problem to be solved. Such works as this, which seek to keep before us the vast importance of a rational religious belief, have a place, and a very important place, of their own; and when a writer of eminence takes the pains to adapt himself to the wants of the intelligent but philosophically untrained public, he deserves our best thanks, especially when his modest task is discharged with so much ability and taste as Dr. Schurman has shown.

JOHN WATSON.

The Theory of Knowledge. A Contribution to some Problems of Logic and Metaphysics. By L. T. HOBHOUSE, Fellow and Assistant Tutor of Corpus Christi College, Oxford. London, Methuen & Co.; New York, Macmillan & Co., 1896.—pp. xx, 627.

This is one of the big books which will have to be read and reckoned with. For it does not set forth any new theory which is the unassisted product of

the author's brain. It proclaims no break with the past, nor any new method by which philosophy is to be revolutionized. On the contrary, the author's purpose rather seems to be to bring together divergent currents of thought, and to discover what is true and permanent in each of them. "The time would seem ripe," he says, "for an unprejudiced attempt to fuse what is true and valuable in the older English tradition with the newer doctrines which have now become naturalized among us. In betaking ourselves to Lotze and Hegel we need not forget what we have learned from Mill and Spencer; and if we can hold the old and the new together we may perhaps find ourselves on the way to the synthesis which we seek" (p. ix).

A slight examination of Mr. Hobhouse's book is sufficient to show that his own investigation has been painstaking and thorough, and that he has kept constantly before him the results of other writers of the present day, like Bradley and Bosanquet in England, and Sigwart and Wundt in Germany, who have all had to some extent a similar object in view. The book falls into three parts. Part I, entitled "Data" (pp. 15-188), has twelve chapters, and discusses, among other topics, Simple Apprehension, Memory Ideas, The General Nature and Validity of Judgment. The second part (pp. 189-482) deals with Inference, and has twenty chapters. The more fundamental metaphysical problems are reserved for the third part, entitled "Knowledge." We have eight chapters, with the following titles: I. Validity; II. The Validity of Knowledge; III. The Conception of External Reality; IV. Substance; V. The Conception of Self; VI. Reality as a System; VII. Knowledge and Reality; VIII. Grounds of Knowledge and Belief.

A review of the book will follow.

J. E. C.

Die Lokalisationstheorie angewandt auf psychologische Probleme.

Beispiel: Warum sind wir zerstreut? Von GEORG HIRTH. Mit einer Einleitung von Ludwig Edinger. Zweite vermehrte Auflage. München, G. Hirth's Verlag, 1895. — pp. xxiv, 112.

This book, now in its second edition, had its origin in a discussion before the Munich Psychological Association in April, 1894. It is, to put the matter briefly, an attempt to show how much better off we should be, if we knew more than we do about the localization of nervous processes in the brain. While acknowledging that only a few sensory and motor areas have as yet been definitely made out, the author believes that associative systems of cells and fibres exist, whose locality it is theoretically possible to determine, — systems which function more or less independently, are differently developed at different ages and in different individuals, and whose functioning, whether conscious or automatic, constitutes thought life. 'Psychic' and 'nervous' are for the author interchangeable terms; and consciousness is an epiphenomenon of psychic life. Self-consciousness is still more casual, as it were, depending wholly upon the activity of the peripheral organs,

which makes possible the distinction between inner and outer. As for 'attention,' it means that state of any nervous element in which it is fully ready to discharge. Herr Hirth is willing, however, to make a concession to our traditions here, and substitute the coined word 'Merksamkeit' for 'Aufmerksamkeit.'

The associative systems which do our thinking for us, and to which the author gives the name 'Merksysteme,' he classifies as follows: (1) primitive feelings and impulses connected with the physical self, — movements for nourishment, walking, etc.; (2) later predominantly motor associations, *e.g.*, swimming, dancing, manual dexterities; (3) later predominantly sensory associations, — language, thought, aesthetics; (4) such complicated groupings as make up moral personality, the virtues, etc. These systems, as we have said, are to a degree independently variable, and may be inherited independently, those which are oldest in the history of the race being most stable.

The latter part of the discussion is occupied with a treatment of the nature of absent-mindedness, or mental distraction, as a specimen problem to be elucidated by the preceding hypotheses. Distraction, when not abnormal, is due either to the fact that the peripheral occasionally asserts its rights and interrupts an exclusively central train of thought, or to the fatigue of one associative system, and the consequent increased activity of a different one.

The author apologizes, in the preface to the second edition, for the introduction of sections on what he calls 'two original energies of the nervous system', namely, the power of externalizing conscious states, and the fact that the central nervous system as such is not sensed. He considers it important to emphasize these points, though they are not strictly relevant to the rest of the discussion, because it is of great advantage for psychology to substitute "the operation of energies" for such "philosophical abstractions," as, *e.g.*, an innate principle of causality. It is difficult to see why an original energy is not as abstract a conception as an innate idea.

Whether we agree or not that Herr Hirth has given us glimpses of the coming psychology, it is questionable whether so elaborate a structure, built on the basis of undiscovered facts, is worth the trouble of its production.

MARGARET WASHBURN.

Psychologie du caractère. Contribution à l'éthologie. Par ALBERT LÉVY, Docteur en philosophie et lettres de l'Université Libre de Bruxelles. Paris, Félix Alcan, 1896. — pp. 207.

This is a thesis presented to the University of Brussels for the doctor's degree. The writer's aim is twofold: to enumerate the various sources which contribute to form that very complex whole, the human character; and to furnish an approximate classification for the varieties of character. He distinguishes first between the innate and the acquired elements. The

latter are derived during the individual's life-experience from the peculiarities of his environment, physical and social. The former, or innate element in character, is due largely, though not wholly, to heredity. M. Lévy is throughout inclined to minimize the importance of heredity, and declares himself quite ready to assume the creation of a new force with each new individual, which reacts upon and modifies hereditary tendencies. The innate factors in character may be divided into the physical factors, the bodily temperament, and the psychic factors, the 'nature.' Innate character influences acquired character, since different individuals react differently to the same environment. The author stoutly maintains his belief in free-will, though he leaves it marvellously little scope when he says: "Man remains free to act as he pleases, but it is precisely this 'as he pleases' that is unconsciously and instinctively determined in each individual by the psychic constitution of his character."

M. Lévy's classification of types rests upon the sound basis of the division of man's mental nature into intelligence, feeling, and will. A cross principle divides human characters into *exclusive* types where either intelligence, feeling, or will predominates; *mixed* types where any two of these elements are in the ascendant; and *balanced* types where there is no preponderance of any one factor over the others. Exclusive types are rare; the intellectual may be instanced in Kant; the sensitive, in De Musset; the active, in Montluc. Brutus is a good instance of the mixed intellectual-active variety; Savonarola, of the sensitive-active; Stendhal, of the intellectual-sensitive. The balanced types are of two orders: those who show no marked tendencies because they are characterless — instances are too numerous to mention; and those rarely perfect beings who have full development of every side of their natures — Goethe, for example.

There is a certain plausibility in these examples, but the necessarily general nature of the classification becomes apparent when one tries to fit oneself or one's friends into these pigeon-holes where historical characters go so comfortably. Nor, as regards the first part of the work, is it easy to determine just what element in a given person is due to heredity, what to his physical constitution, what to the influence of the community, and so on. However, one may say for M. Lévy's book that it is as scientific as any book on its subject can hope to be at present.

MARGARET WASHBURN.

The Connection between Thought and Memory. By HERMAN T. LUKENS, Ph.D., Docent in Clark University. Boston, D. C. Heath & Co., 1895. — pp. viii, 169.

This book is a monograph on the basis of F. W. Dörpfeld's *Denken und Gedächtniss*. There is no attempt at an exhaustive treatment of thought and memory, but the author shows the relation between them, first psychologically, and then practically. After a brief survey of the genesis of knowl-

edge, Dr. Lukens describes in outline the formation of concepts, the apprehension of relations, the formation of judgments, and the process of reasoning. After some preliminary statements as to the nature and function of Simple Ideas, he analyzes the content of memory, and describes in brief the part it plays in the more complex mental processes. Then, proceeding from memory as a starting-point, he passes in review the laws of memory and of thought. Thought, he declares, depends on the coalescence of the similar elements of ideas; memory, on similarity and simultaneity of ideas.

Applying his doctrine to pedagogy, the author discusses the steps in acquiring knowledge, ways and means of committing to memory, forms of memorizing, repetition; and reviews in their various forms the value (or *non-value*) of mnemonics, forms of lesson-giving in their relation to memory, the use of questions, etc.

The doctrine of the book may be summed up as follows: (1) In school instruction memory is fundamental in its importance; but (2) thought is the sole end to be aimed at, and at the same time the very best means of doing the work of memory. This volume adds one more to the valuable series of educational monographs, of which Radestock's *Habit* and Lange's *Apperception* are, perhaps, most prominent. Its practical value for primary and secondary teachers ought to be very great, and it is full of suggestiveness for students of psychology in general. C. S. PARRISH.

The following books have also been received:—

The School of Plato. By F. W. BUSSELL, B.D., B.Mus., Fellow and Tutor of B.N.C., Oxford. New York, Macmillan & Co.; London, Methuen & Co., 1896. — pp. xvi, 346.

The Age of Reason. By THOMAS PAINE. Edited by M. D. Conway, M.A. New York, G. P. Putnam's Sons, 1896. — pp. iv, 208.

Hegel as Educator. By F. L. LUQUEER, Ph.D. New York, Macmillan & Co., 1896. — pp. x, 185.

The Nicene Theology. By H. M. SCOTT, D.D. Chicago, Chicago Theological Seminary Press, 1896. — pp. ix, 390.

Nature of an Universe of Life. By LEONIDAS SPRATT. Jacksonville, Vance Printing Co., 1896. — pp. xii, 210.

Pensée et réalité. Par A. SPIR. Traduit de l'allemand, sur la troisième édition, par A. PENJON. Paris, Félix Alcan, 1896. — pp. xvi, 566.

De l'infini mathématique. Par LOUIS COUTURAT. Paris, Félix Alcan, 1896. — pp. xxiv, 667.

La femme criminelle et la prostituée. Par C. LOMBROSO and G. FERRERO. Traduction de l'italien par LOUISE MEILLE. Paris, Félix Alcan, 1896. — pp. xvi, 679.

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PHILOSOPHICAL FAITH.

THE final problem of the universe may be taken as the signal object-lesson for illustrating the limit of man's power to interpret experience, his intellectual relation to reality, and the ultimate constitution of moral faith in the universe. Can our final relation to the highest realities be found in and through what we are as thinking or intellectual beings only? Does the 'reasonableness' of our philosophic interpretation of things not depend on complex influences other than those that are determined by the scientific understanding measured by data of sense? Must not the moral, practical, and reverential dispositions in man, as well as the logical understanding and sense-experience, be recognized when we try to read the deepest available thought about the world—including the spiritual world—that we are living and having our being in? Is it therefore possible for man to eliminate all mystery from his final philosophical conception of himself, the world, and God, in an intellectual vision in which an imperfectly understood faith that things are working together with loving purpose towards a reasonable end, is exchanged for an all-comprehending philosophical intuition of the infinite reality in an unmysterious, or rationally articulated system? Is man potentially, if not as yet with full consciousness, an omniscient being? Can his individual intelligence of the universe become perfect without any eternally necessary remainder of incompletable mystery left for faith to assimilate, in what some

might deprecate or disparage as a mystical act? What if this be in reason impossible, unless man can become absolutely identified with God — his incarnate consciousness one with the eternal consciousness? Moral faith or trust must then be each *man's* highest form of living, in relation to what can be completely intelligible only at the Divine centre of things, from which man is eternally excluded, as entrance into it would mean complete deification. If this be true, theistic faith cannot be exchanged by man for theistic thought that has been completely liberated, by philosophy, from the abridged or broken, because imperfect, knowledge that at last takes the form of feeling, action, and faith.

These questions are suggested by attempts to think out exhaustively the human ego, the outer world in its temporal process or evolution, and the Divine active reason, all 'organically united' in necessities of reason, and emptied of resolved mysteries. This is offered as relief from the mental discomfort of imperfect knowledge, implied in a final faith burdened with mysteries. The moral faith out of which theism seems to emerge cannot, of course, sustain what is demonstrably self-contradictory, — what can be *shown* to be absolutely irrational. But may the faith, in addition to conformity with this negative criterion, be also transformed, in a human mind, into complete unmysterious insight — unclouded mental vision that is, so to speak, *coextensive* with universal reality? If a philosopher affirms this, and professes that he has accomplished this transformation, let us make sure that no convictions which are indispensable to human experience are thereby virtually converted into illusions, — rejected only because they cannot be provided with accommodation in the philosophic theory that is offered in exchange for a final faith. For we are in that case face to face with the alternative of either rejecting a philosophy of the universe that is obliged to *spoil* indispensable root-convictions in order to vindicate its own claims, or of eliminating the convictions themselves, in order to save the philosophical theology that must be pronounced inadequate if they are retained. In order to rise wholly out of the incomplete knowl-

edge of the universe which needs trust, shall we adopt a speculative system which contains the seeds of general scepticism? Should we not rather regard the offered system as a failure, if it cannot consistently recognize in their integrity the root-convictions which human life needs?

It was the speculative intrepidity, more immediately of Spinoza and others, in offering a purely intellectual solution of the mysteries which confront religious and moral faith, that at the end of the seventeenth century opened what is now perhaps the most significant question of modern thought — that between a final nescience, a final gnosticism, and a final combination of nescience with gnosticism in which the last word is moral faith in the perfect goodness or perfect reasonableness of the end — incompletely conceivable by man — towards which all things are making, — towards which, in virtue of necessary moral postulates of experience, we are obliged to believe that they are making. John Locke was in this matter the earliest spokesman of modern religious thought as regards the question of the limits of a human understanding of the realities of existence, who sought by argument to restrain rash attempts philosophically to translate human feeling and faith into full intellectual vision. Locke set to work in order to try how far a human understanding could go in what one might call the ontological direction — in dispensing with the authority of faith, as non-rational, possibly fallacious, but anyway an insufficiently thought-out sort of knowledge. He was the first deliberate modern representative of this investigation. Yet one need not take his famous *Essay*, in which the inquiry is initiated, as a sufficient reply to the fundamental question about the power of man as a thinker to think out the universe, or as to the possibility of elaborating a philosophy or theology which should make all that was mysterious about the human ego, the temporal process of nature, and the Eternal Consciousness or Universal Reason, fully understood. Locke only raised what has become the question between a thorough-going agnosticism, a thorough-going gnosticism, and the intermediate blending of the two in a final faith. The question has come to

its crisis in the nineteenth century, which is confronted by the philosophy that finds its apotheosis in the Unknowable, at the one extreme, and the philosophy which, at the other extreme, seems to claim the Infinite Reality as within the comprehension of human thought.

The caution that is characteristic of Locke's state of mind finds emphatic utterance in the familiar sentences in the Introduction to his *Essay*, which tell of its occasion and design : we there learn what gave rise to his philosophical enterprise, which has become the problem of modern thought in the last two centuries. It was the perplexities in which human understanding is involved when one engages intrepidly in religious speculation, and tries to interpret the universe finally. "This it was," Locke tells us, "which gave the first rise to this *Essay* concerning human understanding. For I thought that the first step towards satisfying several inquiries the mind of man was very apt to run into, was — to take a view of our own understanding, examine our own powers, and see to what things they were *adapted*. Till that was done, I suspected we began at the wrong end, and in vain sought for satisfaction in a quiet and sure possession of the truths that most concerned us, whilst we let loose our thought in the vast ocean of Being ; as if all that boundless extent were the natural and undisputed possession of human understanding, wherein there was nothing exempt from its decisions or that escaped its comprehension. Thus men extending their inquiries beyond their capacities, and letting their thoughts wander into those depths where they can find no sure footing, it is no wonder that they raise questions and multiply disputes ; which, never coming to any clear resolution, are proper only to increase their doubts, and to confirm them at last in perfect Scepticism." Locke's tone in this enterprise has been deprecated as an expression of the languid speculative interest, and compromising intellectual mediocrity, of the unspeculative Englishman. We are told that the true and only way to determine the extreme resources of man's understanding is for men to make trial of what their intelligence can do : let each man actually enter the water without

first seeking to find, in this abstract way, whether he is able to swim ; let him persist in trying, in hope of reaching a fully satisfying or omniscient intellectual vision of the infinite reality. Furthermore, we may be told that for man to ask how much man can know, is to presume already that man *can* know enough to justify him in engaging in supreme intellectual enterprise — that which Locke inaugurated, which Kant a century later carried further, and which underlies contemporary theological thought and controversy.

But an inquiry into the foundations of what may turn out on reflection to be necessarily incomplete human knowledge of God, the world, and the individual self, in their organic unity, need not be engaged in — indeed was not by Locke — in order to find first whether man can be intelligent of *anything*, and then to find whether he can reduce all final questions about the three supposed realities to answers in which no remainder of intellectual incompleteness or mystery need remain. To show that a *human* knowledge of the universe *must* at last become incomplete or mysterious, presupposes that something is knowable by man, although divine omniscience may not be within his reach. Now the inquirer who recognizes that he already knows something, or that he has some amount of intelligible experience, may perhaps be able to find points at which reason itself forbids further approach to intelligibility or completeness, under human conditions, of thought and experience, — the point, for instance, at which understanding is arrested by the absence of all experience, or else by the discovery that there are indispensable needs and convictions of human nature which are spoiled whenever they are taken as *adequately* rendered in a human intellectual vision, instead of remaining in the living religious or moral faith, which would be thus shown to be our only, and sufficient, philosophy. It may be that such faith cannot be held in its spiritual integrity in the purely intellectual way, inasmuch as the whole man, emotional and moral as well as intellectual, may be required to sustain what human understanding can only in part comprehend, or realize in terms of sense and sensuous imagination. If it should turn

out on inquiry to be so, what is called man's 'participation' in the Universal Consciousness or Universal Reason would be *finally* an act of trust in that which his spiritual constitution authorizes and requires, but which his understanding of the universe is too incomplete to explicate in a finally unmysterious philosophy. In this way submission to what is reasonable would at last bear the character of submission to reason as the *trusted authority*, rather than recognition of reason, on account of the fully perceived meaning and rationality of the faith. It would be the issue of the living action of *the whole man at his best*, in response to the universe of reality in which he awoke into dim perception and self-consciousness at first. This is what I mean when I speak of human attempts to determine the final meaning of the universe, as being necessarily, in their last and highest form, what may more properly be called reasonable *faith* or *trust* than absolutely complete science. The result must be the outcome of what is characteristic in man in his whole spiritual personality, not the outcome of man merely in his sensuous understanding, incapable of grasping and elaborating what is needed for the whole divine or infinite problem. Man, as Goethe says, "is born not to solve the problem of the universe, but to find out where the problem begins." The reason of man and the reason of God are in this different.

May it not be said that the otherwise impassable gulf between the Divine Omniscience or Infinite Knowledge—towards which no advance in *our* scientific knowledge is more an approach than an addition of finite spaces is an approach to Immensity, or an addition of finite times an approach to Eternity—that the gulf between this Omniscience and our necessarily incomplete scientific understanding of the universe is practically crossed, sufficiently for human purposes, by our spiritual humanity in the fulness of its rationally authoritative *needs*—by the larger reason, if one chooses so to call it—by reason as authoritative, as distinguished from the purely logical understanding? For this would be reason in the form of authority, in so far as it is a faith and hope that is imposed by something

in the mind — incapable of being proved to contradict logical intelligence, although the reality cannot be adequately represented in the religious or philosophical imagination. This may be sufficient for man, while infinitely insufficient. When opposed to what is properly knowledge, this final trust or faith involves the incompleteness, or necessary mysteriousness of its object in imagination and in any empirical evidence, while yet the result cannot be charged with being absurd or self-contradictory. It is not sufficiently comprehensible for this charge to be brought against it, and therefore it may be reasonably sustained by what one might call *spiritual motive* as distinguished from *full intellectual insight*. It may even be said to be the crowning example of our inevitable dependence upon authority, that all human thought about the meaning and active principle of the universe must end in an *authoritative*, because partly blind or agnostic, exercise of reason, as contrasted with those acts in which a man comprehends, or completely grasps, a defined but isolated object.

Faith, trust, authority, are accordingly words not unfit to designate the final relation of the human spirit to the universe of reality. Properly speaking, we *know* only what is perfectly comprehended; we *submit* in faith to the *authority* of our spiritual constitution, when it moves us to assent to what must by man be imperfectly comprehended. In this way reason itself, it has been said, at last rests upon authority; for its *original*, in a finite intelligence, with a limited experience, cannot consist of logical conclusions, but of what is accepted by reason as reasonable, because found in harmony with human nature. These data are therefore submissive, of the nature of trust. Our final interpretation of the appearances which the changing universe presents — so unlike in many ways to what man might have expected in an essentially divine universe — is therefore an interpretation that has to unfold itself in the moral faith that it is a fragmentary revelation of the perfect reason and perfect goodness or love. Working convictions, the object-matter of which cannot be fully translated into realizable thought for the understanding, even by the

philosopher, seem to be the implied condition under which man exercises intelligence, and which must therefore determine his finally reasonable attitude towards the Whole. It is a *crede ut intelligas*, in which *intelligo* is partly contained in the *crede*; it is not the *intellige ut credas*, in which omniscience or perfect intelligence is the precondition of the *credo*. This philosophical faith is implicit knowledge, but it is for man an unrepresentable knowledge, of the infinite reality: it is the human equivalent for Omniscient Divine Reason. So it may be said that we have at last only faith in the 'authority' of a necessarily incomplete, or finally mysterious, knowledge, because the concrete conclusions of human reason must all be rested on trusted principles that are not in their turn logically proved conclusions. In the end —

“We have but faith: we cannot know;
For knowledge is of things we see;
And yet we trust it comes from Thee,
A beam in darkness: let it grow.

Let knowledge grow from more to more,
But more of reverence in us dwell;
That mind and soul, according well,
May make one music as before,
But vaster.”

It is in this way that the religious spirit is obliged to rise above the finite and transitory, and, although intellectually incapable of finding complete satisfaction, yet enabled to find it in the more practical form of a responding spiritual life, and in a philosophy that some may disparage as timid, indolent, and mystical, or as dogmatic and uncritical. This too, I take it, may give meaning to Sir William Hamilton's paradox, when he speaks of the last and highest consecration of true religion being “an altar to the unknown and unknowable God.” For this may signify that the final Principle, or supreme Power, of the universe is forever unknowable by man, in the sort of way we are said to know ‘things we see,’ or the natural laws of change in the temporal procession, in the physically scientific meaning of ‘knowledge.’ But in a larger meaning of ‘knowledge’ and

'reason,' this final faith or trust may itself be called knowledge, as when St. Paul says, "I *know* in whom I have believed," or St. John exclaims, "We *know* that we *know* Him." The "knowledge" that "God is love" is the deepest expression of theistic faith in the principle of the universe.

I seem to find a germ of this philosophy latent in those opening aphorisms of the *Novum Organum*, which express the action of final faith in its physical form: in words reported as spoken by Jesus to his followers in Palestine, one seems to find recognition of the final faith, in its moral and spiritual form. When Bacon speaks of man as the interpreter of nature only so far as he is its *obedient minister*, and when he makes the suggestion in the often-quoted words, "*Natura non nisi parendo vincitur*," does he not strike the key-note of reverential submission to an authoritative voice proceeding from the reality that is undergoing investigation, and which must not be gainsaid, although it is only imperfectly comprehensible, and accepted at last in an act of obedience rather than of victorious intelligence? And is not a like idea at the root of the memorable words, "If any man *will do* God's will, he shall know," — know by this practical criterion — the final difference between individual opinion and the divine reality — know this so far as this is intellectually comprehensible by man? Not through intellect alone, nor by man exercising himself as a thinking being exclusively, but in and through the constant exercise of all that is best or highest in him, through the active response of the entire man, while still in an incompletely understood 'knowledge,' — it is only thus that it is open to man finally to dispose of his supreme problem, with its mysterious intellectual burden. The final philosophy is practically found in a life of trustful inquiry, right feeling, and righteous will or purpose — not in complete vision; and perhaps the chief profit of struggling for the vision may be the moral lesson of the consequent discovery in the consciousness of the scientific inaccessibility of the vision.

The rational reality in which all finite spirits may in a sense be said to participate, cannot be fully reached even in the most

philosophic thought of a human spirit, if the time-consciousness of finite intelligence and the eternally complete divine thought must remain unharmonized. And we must meet the mystery of man's personal power to create acts that ought not to be acted, which are inconsistent with the perfect reason, and for which the human person, not the Power at the heart of the universe, is responsible. These two, with other mysteries, are bars to perfect intellectual vision. The burden of the first is not removed by explaining away history, and resolving the whole at last into the Universal Consciousness, in which the illusion of time is supposed to disappear; nor is the mystery of the other relieved by disclaiming moral responsibility for man and other finite spirits, and thinking of them all as only temporary, non-moral occasions for the manifestation of an eternal Substance. The reality of time and change disappears in the one explanation, so that the words 'before' and 'after' are philosophically irrelevant, and this means scepticism even as to all the temporal evolutions of external nature, and in the history of man. Then if God is self-revealed as the real agent even in the immoral acts of man, how can this be reconciled with the inevitable self-accusation of which the immoral man himself is conscious, which supposes that he himself must be the culprit, and therefore the sole origin of the acts? And how does it consist with moral reason in reprobation of the man by mankind, or with the continued constitution of society?

It is difficult to see that modern thought of the Hegelian sort has done much towards translating these two mysteries—the universe in time and morally responsible personality—out of the darkness in which preceding philosophies have had to leave them, and in which it seems that they must remain unless man can become God. Philosophy may show, notwithstanding, that those dualisms—continuous change and absolute endlessness, physical causality and moral freedom from this sort of causality—are not necessarily inconsistent with scientific reason. It may also show that moral reason obliges us to live under their pressure, although we cannot fully think the whole out into an articulately consistent image, but must be content with *an in-*

completable fragment at the last. Moreover, an eternal consciousness that is supposed to reduce to illusion the temporal procession of events in Nature, and to explain away the moral economy of finite spirits independent enough to originate acts that ought not to be acted—this abstract universal consciousness, or abstract system of rational relations, while called ‘spirit,’ now begins to resemble the Universal Substance of Spinoza, of which nothing could be predicated, which takes a semblance of meaning only from the illusory things and persons in which it is manifested in time. The intellectual vision which was to give relief seems to present a God that is in a gradual process of revelation or self-development, yet in what is after all an unreal or illusory revelation,—at least if we are bound to think that God is dependent on the successive conscious acts of finite persons—who are *not* persons—for entering into consciousness at all.

On the other hand, is it more than the semblance of a perfectly explained ‘organic unity’ that the Hegelian thought presents, if it is able to preserve the reality of outward events and of persons with their successive changes, and if it is able to deliver the divine perfection from all responsibility for the immoral actions of men? It is true that men are not conceived by the Hegelian to be mechanically parts of God, although they find their true reality in Him; but, in that case, ‘organic unity’ is only a term which covers over a relation that is still left in the mystery of a necessarily incomplete human thought or philosophy. It is still an organic unity that passes human knowledge, although it is doubtless innocent of the gross idea which makes all things and all persons only physical parts of One Boundless Substance,—the physical effects of One Unknowable Power called ‘Nature.’

That Hegel meant his final thought to be interpreted consistently with the actuality of the world, and also with the moral personality of man, I do not deny; nor can one fairly interpret his philosophy or theology ‘pantheistically,’ in the obnoxious sense that involves final moral, and therefore final scientific, scepticism. Its fundamental unity is perhaps elastic

enough to admit of being interpreted so as to comprehend, in some mysterious way, the world of successive nature and the world of human spirits — without spoiling our experience of the actuality of the world, or the morally necessary conviction of the freedom of each man to create actions referable exclusively to himself for their responsible causation. But then this is no more than an assertion of faith at last. Yet we were led to expect that, through Hegelian dialectic, this and every other legitimate faith could be translated into a philosophic thought, with the burden of its mystery all removed — not merely with the mysteries articulated in a fresh form of verbal expression. If there is more in it than amended rational articulation of the old difficulties, one fails to find it, as long as, notwithstanding Hegel, the burden still oppresses that resisted all former attempts so to think out the universe of reality as to eliminate, for example, the two mysteries which I have taken as illustrations of man's intellectual inadequacy. Even the philosophic human knowledge of what we are living and having our being in, and of how we are so living, to us seems still to remain knowledge of something that in the end passes knowledge, that is known while it is still unknown — known, in a moral and spiritual life which can be lived if we will; unknown, because it cannot be fully thought out in the infiniteness of its reality. So intellectual analysis of human experience generally, and of religion in Christianity, seems always to leave at the last a residuum of trust, inevitable in what one might call *authoritative reason*, instead of *perfectly understood reason* — the authoritative reason in which reverential obedience to what is trusted in as reasonable, is more prominent than intellectually victorious insight. Surely the authority of final faith can be dispensed with only in the Omniscience which leaves no room for mystery or incomplete knowledge.

But after all it may be only the question of how the final attitude of man to what is of human interest in the universe of reality should be *named*, rather than a difference with regard to what the actual attitude must at last be, that separates those who suppose that they are adopting, from those who suppose

that they are rejecting, the Hegelian interpretation of the relation of man and the universe to God. Should the final attitude be called *knowledge, thought, reason*; or should it be called *faith, trust in authority*? To call it 'knowledge' seems to claim too much, as long as there is an *inevitable* remainder of mystery, which leaves the so-called knowledge incomplete in quantity, and an unimaginable unity incomprehensible by the sensuous intelligence. To call it 'faith' may seem to mean that it is empty of objective rationality; for this is not secured by even the most confidently felt conviction, — personal certitude being no sufficient ultimate test of absolute truth. As for 'authority,' this is a word that suggests deference to a person, instead of the impersonal intellectual necessity that belongs to purely rational proof. Yet if those who prefer to express, under the names 'reason' and 'knowledge,' their final relation to the highest reality, at the same time disclaim for man the omniscience which otherwise seems to be assumed in their words — then this philosophic thought, at last obliged to submit to arrest, is really the philosophic faith that at last trusts in what is not fully open to man's understanding. The difficulties in which the inevitable remainder of final ignorance involve every human mind are not necessarily suicidal, if they do not necessarily forbid man, on pain of contradicting reason, from satisfying his moral and spiritual needs. The suicidal or essentially sceptical philosophy is then the one that claims to have thought out in its infinity what man can think out only incompletely.

An intellectual analysis of religion that adopts this final attitude, would probably be regarded by some as not inconsistent with Hegelian theism and its exhaustive interpretation of the universe in terms of the Divine Reason. The 'organic unity' of Nature and Man in God is then interpreted in a meaning that admits the moral freedom of agents who are responsible for themselves when they act immorally, and also the reality of change or temporal succession. What is called 'participation' in, or 'identity' with, Universal Reason, and 'organic unity' of the universe, are taken only

as emphatic expressions of the conviction that men are not isolated psychological atoms, but members of a moral totality, in which the moral faith that is in us is sure to find sympathetic response in the incompletely comprehensible Divine Reason that is perpetually active at the centre of the Whole. So the further man penetrates intellectually, the more fully this divine order discovers itself; more and more of what corresponds to the final faith is recognized in the principles that are determining the history of the world; and it is seen that, while men are 'free' to resist God by doing evil, it is in their harmony with the Divine Reason that the highest freedom is to be found. So understood, the Hegelian speculation becomes an elaborate dialectical recognition of man's final dissatisfaction with the limited phenomena of sense in time, in perception of which human life begins; also of the obligation which the reason that we call *ours* finds to unite the universe of change in dependence on the Perfect Reason that, in broken form, is involved in our experience, but under which we can never fully comprehend the Whole. It becomes a vindication of the universe, as incapable of being conceived as mindless, purposeless evolution of phenomena, as really the expression of morally related Spirit — thus relieving the chill of abstract physical science with the warmth of pervading Divine life and love. In the thorough-going intellectual analysis of Christian Religion, man may in this way be helped to recognize his own moral or personal reality, by its mysterious affinity with the transcendent intellectual system on which all depends. Still this philosophy would be at last only an expression of faith, founded upon needs inherent in the entire human constitution, not upon perfect intellectual comprehension on the part of the human thinker. It would at most represent man's best way of carrying an intellectual burden that is too heavy for the sensuous understanding. It would be his philosophical acknowledgment of absolute dependence upon the constantly active Reason that he is nevertheless mysteriously able to violate and resist, in his volitions and voluntary habits. This final faith or theistic reason is weakened when it is made the object of logical proof. Its

justification is that the universe of reality dissolves in sceptical and pessimist doubt when the moral faith is withdrawn. The ultimate foundations of proof must be incapable of proof, and intellectual reserve is the correlative of a philosophic faith.

Philosophical Faith is the truly rational trust that nothing can happen in the temporal evolution which can finally put to confusion the principles of moral reason that are latent in Man, scientifically incomprehensible as the world's history of mingled good and evil must be when measured by finite experience and scientific intelligence. Philosophical Faith is thus the reflex of theistic faith.

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THE TERM 'NATURALISM' IN RECENT DISCUSSION.

ONE of the results of Mr. Balfour's *Foundations of Belief* has been to bring to light some serious and even remarkable divergences of view as to the meaning and precise application of current philosophical terms. This was particularly the case in regard to the term Naturalism, which is so prominent in Mr. Balfour's argument. Much of the criticism of the book took, in fact, the form of an indignant repudiation of the author's use of names. It may perhaps, therefore, contribute to the fixing of philosophical usage in this case and in the case of some other terms frequently conjoined with it, if, starting from Mr. Balfour's definitions, we examine his usage in the light of some of the chief objections taken to it.

In his introductory chapter Mr. Balfour thus indicates the system of thought against which his book is directed: "Whatever the name selected, the thing itself is sufficiently easy to describe. For its leading doctrines are that we may know phenomena and the laws by which they are connected, but nothing more. 'More' there may or may not be, but if it exists we can never apprehend it; and whatever the World may be 'in its reality' (supposing such an expression to be otherwise than meaningless), the World for us, the World with which alone we are concerned, or of which alone we can have any cognizance, is that World which is revealed to us through perception, and which is the subject-matter of the Natural Sciences. Here, and here only, are we on firm ground. Here, and here only, can we discover anything which deserves to be described as Knowledge. Here, and here only, may we profitably exercise our reason or gather the fruits of Wisdom" (p. 7). In another passage he speaks of "the two elements composing the naturalistic creed: the one *positive*, consisting, broadly speaking, of the teaching contained in the general body of the natural

sciences ; the other *negative*, expressed in the doctrine that beyond these limits, wherever they may happen to lie, nothing is, and nothing can be, known" (p. 92) ; and again of "the assumption that the kind of 'experience' which gave us natural science was the sole basis of knowledge," and "the further inference that nothing deserved to be called Knowledge which did not come within the circle of the natural sciences" (p. 171). "After all," he says in another place, "naturalism is nothing more than the assertion that empirical methods are valid and that no others are so" (p. 134). In these passages the theory is defined by reference to its presuppositions or method ; when we look at the resulting body of doctrine, we find that the theory attempts "the impossible task of extracting reason from unreason" (p. 301). It involves the "deposition of Reason from its ancient position as the ground of all existence to that of an expedient among other expedients for the maintenance of organic life ; an expedient, moreover, which is temporary in its character and insignificant in its effects. An irrational Universe which accidentally turns out a few reasoning animals at one corner of it, as a rich man may experiment at one end of his park with some curious 'sport' accidentally produced among his flocks and herds, is a Universe which we might well despise if we did not ourselves share its degradation" (p. 75). And, finally, the naturalistic catechism which he elaborates at the conclusion of the first part of the volume clearly identifies Naturalism with consistent Materialism (pp. 83-5).

To the system whose substantive doctrines he thus indicates, Mr. Balfour applies throughout his volume the term 'Naturalism.' "Agnosticism, Positivism, Empiricism," he says, "have all been used more or less correctly to describe this scheme of thought, though in the following pages, for reasons with which it is not necessary to trouble the reader, the term which I shall commonly employ is Naturalism." This passage and the usage it indicates have called forth emphatic disclaimers from the patrons or representatives of the views which are here practically identified. Each objects to be identified with any of the

others, and they all disclaim responsibility for the system of doctrines attributed to them in common. Professor Huxley, not unnaturally jealous for the honor of the term which he invented, objected "to making Agnosticism the scapegoat on whose head the philosophic sins of the companions with whom it is improperly associated may be conveniently piled up," while Mr. Frederic Harrison, as a Positivist, is still more wroth to find himself identified with the Agnostics, against whom he has so often gone forth to war in the Reviews. "The passage just quoted," he says, "is a coagulated clot of confusion and misstatement" — from which it is easy to see that Mr. Harrison is very angry indeed. Professor Wallace, on the other hand, though himself accepting in the main an Idealism of the Hegelian type, puts a lance in rest for Naturalism, which he seems to think has been hardly treated in being identified with its own extreme consequences. "Its faults," he says, "spring from a creditable motive. It is the desire to be honest, to say only what you can prove, to require thorough continuity and consistency in the whole realm of accepted truths.¹ Naturalism was a reaction from the follies of Supernaturalism." "Naturalism," he says again, "was at the outset and in essence a negation, not of the supernatural in general, but of a supernatural conceived as incoherent, arbitrary, and chaotic; a protest against a conception which separated God from the world, as a potter from his clay, against the *ignava ratio* which took customary sequences of events as needing no explanation, and looked for special revelation from portents and wonders."²

¹ I cannot help remarking the striking similarity between this account of Naturalism and Professor Huxley's truly extraordinary definition of Agnosticism as consisting essentially "in the application of a single principle, which is the fundamental axiom of modern science. Positively, this principle may be thus expressed: in matters of the intellect, follow your reason as far as it will take you, without regard to any other consideration. And negatively: in matters of the intellect, do not pretend that conclusions are certain which are not demonstrated or demonstrable." On this showing, we should all desire with one accord to take service under the Agnostic flag, for Agnosticism, so defined, is another name for intellectual honesty. Similarly, on Professor Wallace's showing, no self-respecting person would permit himself to be called anything but a Naturalist.

² These quotations are from an article by Professor Wallace in the *Fortnightly Review* for April, 1895.

Understanding Supernaturalism in this sense, Professor Wallace regrets "that some recognition of the inner aims of Rationalism and Naturalism is not vouchsafed," and he would evidently prefer to rehabilitate the term Naturalism and follow that banner, rather than be suspected of any complicity with a discredited Supernaturalism. To this Mr. Balfour might easily retort that his purpose was not an historical review of the progress of opinion, but an attempt to deal directly with current ways of looking at the universe, using terms as nearly as possible in the sense which is most general in philosophic usage, and which they tend to bear in the vocabulary of educated people. And although Naturalism, as a matter of etymology and history, may take its rise as merely the denial of an external and arbitrary Supernaturalism, I think there can be no reasonable doubt that the name has acquired within the present century the signification which Mr. Balfour gives it, and that it has, indeed, of late been gradually supplanting other terms as the most fitting designation for the system of beliefs in question. Naturalism, in accepted phraseology, is a name applicable to any system which, as Mr. Balfour expresses it, finds the metaphysical or permanent reality of the universe in "the world which is revealed to us through perception and which is the subject-matter of the Natural Sciences." Naturalism is, therefore, practically identical with Materialism, though it may not pretend to explain the origin of the phenomena of consciousness from matter in motion, but may content itself in that regard with a doctrine of concomitance. In any case, the fundamental explanation — the central fact — of the universe is to be found, according to the theory, not in the phenomena of consciousness with their rational and ethical implications, but in the mechanical system of causes and effects of which consciousness seems to be the outcome or accompaniment. If that is so, any attempt to re-define Naturalism in such a way that absolute Idealism might reasonably be included under it, could only result in still further confusing the issues. The 'New Naturalism,' of which Professor Wallace constitutes himself the champion, would have, as he says, "to repair the

defects of the Old." But when repairs are so extensive as to alter the whole structure and outlook of the building, the question as to the identity of the edifice becomes a point of casuistry. Naturalism, in ordinary usage, is the antithesis not merely of the Supernaturalism which finds its support in supposed divine 'interference,' but also of every spiritual or idealistic theory of the universe. The wide influence of Mr. Balfour's book must have largely contributed to stereotype this use of the term; and, from the point of view of philosophical terminology, I cannot regard this as other than a fortunate result.

As a standing designation, it is distinctly preferable in point of accuracy to any of the terms which Mr. Balfour mentions as currently, but somewhat loosely, in use as synonyms. The absence of God and immortality from the Positivist scheme may well seem to the ordinary man to leave no practical difference between that doctrine and the theory of Naturalism. Yet, from a philosophical point of view, the difference is not unimportant. Though in its denials Positivism makes common cause with Naturalism, its constructive doctrine is borrowed from Idealism, or, if you like, from Christianity. In the stress which Positivism lays upon man, even to the extent of calling itself the religion of Humanity, Positivism echoes the thought of Pascal, that man — the dying reed — is greater than the universe by which he dies, that there is no common measure for the immensities of the physical universe and the spring of love, of thought, of reverence that wells in a human heart. To this Positivism owes its vitality, for the germ of the higher religions is this sense of the true infinite, the truly adorable, as revealed in man alone. "Comtianism," Dr. Hutchison Stirling has aptly said, "bears to Hegelianism a relation very similar to that of Mahometanism to Christianity" (Schwegler, p. 464). If we generalize the statement, we may, I think, recognize in Positivism an idealism *manqué* — an idealism with strange defects and inconsistencies — but still a doctrine in spirit and intention widely removed from mere Materialism. It is well, therefore, not to ignore this difference, but to continue to use

the term in a narrower and specific sense, as applicable to the different sects which appeal to Comte as their founder and claim to represent the Religion of Humanity.

Naturalism seems also more accurately descriptive than Agnosticism; for the theory in question is essentially a negative dogmatism, whereas Agnosticism, according to its etymology and according to the intention of the inventor of the term, is meant to convey only an expression of ignorance, a balance of the intellect, a refusal to pronounce upon ultimate problems either in one sense or in another. "A plague on both your houses" is, in effect, the language held by Professor Huxley to the partisans of Idealism and Materialism alike, in his well-known essay "On the Physical Basis of Life," in the essay "On Descartes," and in many other places. "The materialistic position that there is nothing in the world but matter, force, and necessity is as utterly devoid of justification as the most baseless of theological dogmas. The fundamental doctrines of Materialism, like those of Spiritualism and most other 'isms,' lie outside the limits of philosophical enquiry, and David Hume's great service to humanity is his irrefragable demonstration of what these limits are" (*Collected Essays*, I, p. 162). No doubt it is difficult constantly to keep oneself correctly balanced upon the razor-edge of agnostic orthodoxy. Professor Huxley tells us that "the further Science advances the more extensively and consistently will all the phenomena of Nature be represented by materialistic formulæ and symbols"; and though he enters his protest against the error of mistaking the symbols for real entities, he admits, in doing so, that it is a mistake only too easy to fall into. The Agnostic, like David Hume, who is here invoked as patron of the creed, is apt to reserve his denials for 'divinity or school metaphysics,' while he views with something like equanimity the materialistic conclusions drawn from the advance of science. He is certain that he knows nothing of spiritual realities or agents; theoretically he should be equally certain of his ignorance of reality or agency in the case of natural phenomena. But, as he is constantly occupied with the latter, his hand becomes subdued to

what it works in. As man, moreover, is not a creature of pure reason alone, the senses assert their imperious sway over his practical beliefs, and his position becomes indistinguishable from Materialism pure and simple. Still, in spite of the fatal facility with which the one may glide into the other, we have in strictness no more right to identify the two, than a naturalist would have to deny the difference between two species because of the existence of intermediate forms in which they continuously approach one another. Definition in such cases must be by type. The typical Agnostic, like Huxley, is clearly distinguished from the typical Materialist. It would be an unjustifiable and quite unnecessary removal of landmarks, therefore, to use the two terms indiscriminately. No one in these days will allow that he is a Materialist; but Naturalism supplies exactly the term needed to enable us to surmount this verbal difficulty, while Agnosticism may be conveniently retained to designate the quasi-sceptical position which it etymologically suggests.¹

The only legitimate objection to this use of the term Naturalism is that urged by Professor Wallace. Naturalism, in a certain context, appears as the antithesis of Supernaturalism, and he who attacks Naturalism may accordingly be supposed to do so in the interest of 'miracles' and other 'supernatural' adjuncts of theology. Some parts of the discussion in Mr. Balfour's concluding chapters certainly seem to favor this view of his argument. But there are others which suggest a larger interpretation, as where he expressly discards what he calls "the common division between 'natural' and 'supernatural.'" "We cannot consent," he proceeds, "to see the 'preferential working of Divine Power' only in those religious manifestations which refuse to accommodate themselves to our conception (whatever that may be) of the strictly 'natural' order of the world; nor can we deny a Divine origin to those aspects of religious development which natural laws seem competent to

¹ Empiricism may be disregarded in this connection as a term which is no longer much in popular use. It tends to become restricted to the bloodless controversies of the schools, and even there it suggests, perhaps, a more or less obsolete formulation of the issues.

explain. The familiar distinction, indeed, between 'natural' and 'supernatural' coincides neither with that between natural and spiritual, nor with that between 'preferential action' and 'non-preferential,' nor with that between phenomenal and noumenal. It is perhaps less important than is sometimes supposed." Quite in keeping with this is the fine passage which follows on Inspiration, as "limited to no age, to no country, no people" (pp. 330-1).

But whatever Mr. Balfour's personal attitude may be towards the supernatural in the ordinary theological sense of that word (and that is a matter which does not concern us here), it is sufficiently plain that this is not the kernel of the argument. Even when he comes to deal with the central article of the Christian faith, it is not on the extra-naturalness of certain facts that the emphasis is laid, but upon the adaptation of the doctrine to the needs of man — upon what might be called, therefore, in the highest sense its 'naturalness.' The antithesis which runs through the volume and which must impress itself upon any candid reader, is not that between the natural and a so-called supernatural, but between the natural and the spiritual, between nature, as 'revealed to us through perception,' and that higher nature in nature which makes us men and gives us an earnest of the Divine. This antithesis also has the sanction of usage on its side. Both in theological and in philosophical writing the natural and the spiritual are as currently and intelligibly opposed to one another as the natural and the supernatural. The moral world of persons is constantly contrasted with the natural world of things. What other interpretation is to be put upon Leibnitz's 'Kingdom of Nature and Kingdom of Grace,' upon Kant's opposition of 'the Sensible and the Intelligible World'? "Nature," says Jacobi, "conceals God. Man reveals God." "Man Supernatural" is the title chosen by Professor Campbell Fraser for one of his recent Gifford Lectures. "As a merely sentient being, man is wholly, or almost wholly, an event in the orderly natural system. In his moral acts, man appears to exemplify that final principle on which natural order ultimately depends." "Nature," says

Green, concluding his long argument for a spiritual principle, "implies a principle which is non-natural" (*Proleg.*, p. 56). I quote these prominent expressions of widely different thinkers, not because I regard them all as equally sound, or any of them perhaps as beyond criticism, but simply to prove how widely current is the narrower sense of 'Nature' which is embodied in Mr. Balfour's use of Naturalism. In not one of the passages quoted is there the least suggestion of the supernatural in the mechanical and external sense of popular theology. The contrast is substantially between the material and the ideal, the natural and the spiritual. If we turn to the histories of philosophy and their classifications of philosophical doctrine, we find also that the usage is no innovation. When Schwegler applies that term to the doctrine of Democritus, when Ueberweg uses it as an equivalent to Materialism in his account of the French Encyclopaedists, and describes in the same way the transformation which the Hegelian system underwent at the hands of Feuerbach, both apparently appeal to accepted usage. No apology is offered for the introduction of the term, nor does the reader feel that any explanation is required of a terminology so appropriate. The conjecture is permissible that Mr. Balfour's usage would also have been accepted without cavil, but for the sub-title of the volume which seems to make the whole discussion ancillary to the study of theology. The air of England is charged with ecclesiasticism, and this was sufficient to create an inveterate prejudice in many minds, and to rouse in many more the suspicion of an *arrière pensée*. For there are many, unfortunately, who are more jealous of the encroachments of the supernatural than alive to the conservation of the spiritual truths of which it has been the vehicle.

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THE RELATION OF LOGIC TO PSYCHOLOGY.

I.

IT is easy enough to mark in general terms the distinction between logic and psychology ; but in the treatment of many logical questions, even by our most careful writers, there seems to me frequently some want of clearness in the detailed application of this distinction. And, in consequence of this want of clearness, many logical questions seem to be rendered more obscure and doubtful than need be. In any case, an attempt to see how the accepted distinction works out in several of the problems of logic may serve to test the accuracy of this distinction, and, unless I am too sanguine, may even throw some light on these problems themselves.

Every psychologist and every logician would agree that, whereas logic, even in its widest sense, has to do only with knowledge, and not with feeling and will, psychology has to do with all mental phenomena. So far as this goes, however, logic might be simply a branch of psychology, and many psychologists, though professedly recognizing some further distinction between logic and psychology, are in the habit of including a great many logical questions in their treatment of the psychology of cognition. Almost all, however, recognize a distinction between the properly psychological and the properly logical aspects of the problem of knowledge. This distinction may be conveniently marked by saying that psychology has to do—among other things—with ‘knowing,’ while logic has to do with ‘knowledge.’ In other words, psychology has to do with mental processes as events ; logic has to do with the validity of these mental processes. Psychology is therefore called a ‘descriptive’ science ;¹ it deals with facts, with what

¹ It may seem to make no important difference if it is said that psychology is ‘descriptive and explanatory.’ Every science is, or professes to be, explanatory ; and explanation is simply a more advanced kind of description,—a description

actually happens in the mind. Logic, on the other hand, is a 'regulative' science; it deals with what ought to be, with rules for the right performance of the mental processes that lead to cognition. And, on this account, as is often pointed out, logic is related to the psychology of cognition in a way analogous to the relation of ethics to the psychology of feeling and volition, and to the relation of aesthetics to the psychology of a certain group of the emotions.

So far we seem to be on firm ground. No sooner, however, do we begin to apply these generally accepted distinctions than difficulties suggest themselves. They may show themselves even in connection with the definition given of logic in an elementary text-book. Thus Jevons mentions the common definition of logic as "the science of the laws of thought," and goes on to explain "law of thought" as meaning "a certain uniformity or agreement which exists and must exist in the modes in which all persons think and reason, *so long as they do not make what we call mistakes or fall into self-contradiction and fallacy.*" Now this looks like an acceptance of the view that logic is a "regulative" science, whose "laws" are "rules" or "precepts." But Jevons continues, "the laws of thought are natural laws with which we have no power to interfere, and which are of course not to be in any way confused with the artificial laws of a country, which are invented by men and can be altered by them" (*Elementary Lessons in Logic*, p. 1). Now if by 'laws of thought' we mean simply general statements of what actually happens in our thinking, or statements of what under certain conditions will happen as a matter of fact, 'laws of thought' are merely the concern of the psychologist. But the psychologist is not restricted to those uniformities which exist in our thinking when we do not make mistakes. In seeking to ascertain the 'laws of association of ideas,' which are that brings particular phenomena into relation with a wider range of phenomena. At the same time, in proportion as psychology professes to go beyond mere description of particular mental processes, and aims at a more and more complete grasp of all that bears on our mental life, it becomes more and more difficult to exclude logical questions from psychology. To this I shall have to refer later on.

psychological 'laws of thought,' the psychologist may find the fallacies into which the average human mind is prone to fall an even more instructive study than the rigidly correct intellectual processes of the soundest scientific thinker. 'Laws of thought,' for the psychologist, are certainly 'natural laws' in the sense of the other 'laws of nature'; they are statements of what happens, or at least of what under certain conditions would happen. A statement of the fallacies into which the *intellectus sibi permissus* tends to fall, would be a statement of laws of thought in this psychological sense. But 'laws of thought,' in the logician's sense, tell us how we ought to reason, and thus may not seem properly comparable with the 'laws of nature.' We all seem to be able to violate the logical laws of thought; we do so every time we commit a logical fallacy. Now we cannot, in any strict use of language, be said to 'violate a law of nature,' though the phrase is used often enough. What is meant is that we violate some practical precept of prudence based upon a knowledge of a law of nature. The man who throws himself from the top of a high cliff does not violate, he illustrates, the law of gravitation; he may be violating the laws of prudence or of morality. And so the man who commits a fallacy illustrates psychological, but violates logical, laws. Are we, then, to compare the 'laws of thought' in their logical sense with maxims of prudence, or precepts of morality, or even with "the artificial laws of a country"? Are the laws of logic simply precepts of intellectual prudence which are, or should be, based on a study of psychological processes? Warnings against inaccuracy in observation, against hasty generalization, against the tendency to overlook negative instances, if these warnings are called logical 'laws,' are such only in this sense. But this is a kind of logical doctrine which some of the stricter logicians have considered an excrescence rather than an essential part of the science. And, in any case, the term 'laws of thought' has not been applied to describe such maxims for the avoidance of fallacies as we find in the first book of Bacon's *Novum Organum*, but has always denoted specially the axioms of formal logic,—the principles of identity, contradiction, and excluded middle;

and to these the logicians who take a wider view of their science would generally add the principle of sufficient reason (under some name or other). Now can these fundamental axioms be considered practical precepts based on psychological laws? If so, what are these fundamental psychological laws? If they are not distinguishable from the logical axioms, and these last are therefore laws of nature, how are the fallacies which consist in their violation possible? The distinction between nature or 'things' and our thinking about things, will hardly help us here, for these axioms of logic are at once statements about things and about the necessities of our thought. Here, then, we are face to face with a difficulty which is just one aspect of the problem, 'How is knowledge possible?' with its companion problem, 'How is error possible?'

The 'formal' logicians, who have chiefly favored the definition of logic as 'the science of the laws of thought,' may seem, in limiting the problem of logic to consistency, to have separated logic from epistemology. But here we see that a consideration of the laws of thought themselves brings before us some at least of the fundamental questions about knowledge. In teaching logic to students who are only beginning the study of philosophy, or who are unable, or cannot be induced, to study ultimate philosophical questions, it may be advantageous to put aside the problems of epistemology. For bibliographical purposes, also, it is convenient to mark a distinction between works which deal mainly with the general question of the nature and limits of human knowledge, and those which are mainly or exclusively occupied with a detailed examination of the forms of judgment and inference with a view to testing their validity. But it does not seem to me possible to draw any really scientific line between logic and epistemology. The attempt to cut off logic from the problem of the validity of knowledge can only lead to that narrow and 'formal' treatment which has brought logic into bad repute with men of science and philosophers alike, and which has made it an easy prey to the sport of the exuberant mathematician. If we seek

to limit the province of logic by defining it as 'the science of inference,' we cannot avoid the question about the relation between our self-consistent reasonings on the one side and facts on the other. An attack on the syllogism, or a defence of it, must deal with the question whether it *astringit res*; and that is surely a question of epistemology. Again, even if we limit logic to inference, we must drag in by a side door those processes 'subserving to inference' which we have just kicked out at the front entrance. To what science does it belong to consider concepts, judgments, definitions, divisions,—not the mental processes as such of thinking, judging, defining, classifying, but the products of these processes in their possible relations to the real world to which they profess to refer? And how can we deal with the validity of general concepts, with the distinction between the essential and accidental, with the difference between 'real kinds' and artificial classes, without being compelled to face the very problems with which a 'theory of knowledge' professes to deal? Nay, how can we discuss the meaning of affirmation and negation without considering the relation of thought to reality? Traditionally, such topics as I have just named belong to the province of logic. As a matter of historical propriety, the science of logic might be expected to denote those subjects which are treated in Aristotle's *Organon* and specially in the *Analytics*. To separate logic from epistemology is to ignore the most important of Aristotle's logical writings, the *Posterior Analytics*; and the habit of ignoring this work is doubtless responsible for a good deal of that contempt for the Aristotelian logic which some logicians seem still to imagine to be the beginning of wisdom. Not merely, however, as a matter of historical sentiment and convenience, but on the ground of philosophical accuracy, we must include the question about the validity of knowledge in logic. Only for provisional pedagogic reasons can we afford to leave it out. I shall assume, then, that our 'general logic,' if taken seriously, must carry us up into 'transcendental logic'; and I have just been showing how Jevons, in his first 'elementary' lesson, raises (unwittingly,

perhaps) the fundamental question about knowledge and error.

In Mill's *Logic* we have perhaps the most striking instances of a confusion between logic and psychology, or rather of a tendency to merge logic in psychology—a tendency which gradually becomes explicit and acknowledged. In his "Introduction" (§ 7) Mill speaks, indeed, as if his logic were independent of metaphysics; and by 'metaphysics' it is clear from the context that he understands principally psychology, "the analysis of mental processes." But, by this independence of logic, he only means that logic, being chiefly practical in its aims, need not carry the analysis of mental processes very far. "The extension of logic as a science," he says, "is determined by its necessities as an art." That the "analysis of mental processes," which need not be carried very far in logic, is nevertheless psychological analysis, comes out clearly in the course of the treatise. Thus, in the chapter on "The Functions and Logical Value of the Syllogism," he speaks of those against whom he argues as representing the syllogism "as the correct analysis of what the mind actually performs in discovering and proving the larger half of the truths, whether of science or of daily life, which we believe" (Book II, ch. III, § 1, p. 209, 8th ed.). "Larger half," it may be remarked in passing, is a phrase which may seem ominously to foreshadow Mill's scepticism about the certainty of mathematical truths. Farther on in the same chapter (§ 8, p. 235) he speaks distinctly of "the psychological process," "false psychology,"—taking for granted that the psychological analysis of itself decides the logical question. It is in strict accordance with this that Mill, in treating the whole problem of necessary truths, deals with it solely as one of psychology. He rejects the inconceivability of the opposite as a test of truth, on the ground that as a matter of fact many persons have been incapable—*i.e.*, *psychologically* incapable—of conceiving or believing what has afterwards turned out to be true. Now, if 'inconceivability' be taken in a purely psychological sense, it is impossible to defend the 'ultimate postulate' as an infallible test of truth. The

psychological question about belief has indeed a very important connection with the logical test of truth ; but, unless the logical question is distinguishable from the psychological, Mill's position is assailable only by showing that it is completely sceptical and destructive of other parts of his logical theory, such as his admission of the validity of the proof *per impossibile*. As a logical principle, the inconceivability of the opposite is nothing but the principles of Identity, Contradiction, and Excluded Middle taken together ; and it is best to take them together, for in their separation they are only partial and one-sided expressions of the basis on which all our knowledge rests. I am most certainly not prepared to defend the principle of the inconceivability of the opposite as the ultimate test of truth on any interpretation which would make of it a separate and distinct principle from that which is universally admitted as the basis of formal logic—the logic of mere consistency—and which is everywhere taken for granted in mathematical proofs. If A is B, it is impossible that in precisely the same sense of the terms, and the same relations of time, place, etc., A can also be Not-B ; and, conversely, if A cannot be Not-B, it must be B. This is the principle of Contradiction combined with the principle of Excluded Middle ; and this is also, expressed in its most abstract form, the principle of the inconceivability of the opposite, as a logical principle.

In the application of the principle, two considerations are of primary importance ; and, if they are sufficiently kept in view, a great many of the objections commonly made to the principle fall to the ground. In the first place, it should be stated in a hypothetical form : “ *If A is B.* ” That is to say, the principle cannot by itself furnish us with any positive knowledge whatever. We must start with some assertion ; and this assertion may be itself a mere assumption which may turn out to be quite untenable. But, in the testing of the truth of this assumption, the principle of contradiction renders indispensable service. When we test an hypothesis by comparing it with facts, we must assume the validity of the logical processes by which we deduce from our hypothesis the consequences which

would follow if its truth were provisionally admitted. And the validity of logical processes involves the validity of the principle of contradiction. Even when a merely psychological interpretation is given to the principle of the inconceivability of the opposite, its validity as a logical principle is tacitly assumed. We know, for instance, that a sincere and undoubting Catholic, or Calvinist, or Mohammedan cannot, as a matter of fact, consciously and knowingly accept propositions as true which are inconsistent with the fundamental articles of the creed which has come to be a real part of his mind. He will, as a matter of psychological necessity, reject such propositions, although they may be accepted as certainly true by persons who have been differently brought up, or who do not hold their professed religious beliefs with the same thorough-going earnestness of conviction. And, it must be added, though this is not always so clearly recognized, he *ought*, as a matter of logical necessity, to reject such propositions. To profess to believe propositions which are strictly inconsistent with one another, is a proof that there is a want of thoroughness somewhere, — a want of clearness in thinking, or a want of sincerity, or both. Of course there are various well-known devices for getting over the difficulty — notably the distinction between two (or more) kinds of truth. There are undoubtedly real and important differences between what is 'scientifically true,' on the one hand (and that means, of course, true according to the phraseology, and subject to the limitations and conventions of this or that particular science), and, on the other hand, what is 'morally true' or 'aesthetically true,' in the sense of being more satisfactory to the moral or aesthetic emotions. But there is here an ambiguity in the word 'true.' The artist in color or in words may produce a higher artistic effect by deviating from the exact proportions of nature, and we may call such deviation a preference of artistic over scientific 'truth.' An analogous distinction may reasonably be admitted in matters of religion: that is to say, religious emotion, like aesthetic, may struggle to find expression for itself in utterances which, taken as judgments and literally interpreted, are not accepted

by the intellect. But it is only with the truth or falsehood of judgments, construed strictly, that logic can concern itself; and no distinctions between the 'truth' of poetry and the 'truth' of fact entitle us to say that in precisely the same sense of the terms the two propositions, 'the world was made in six days,' and 'the world was not made in six days,' can both be true. In ordinary phraseology, for our practical convenience, we still use pre-Copernican astronomy; but we do not seriously assert that the sun goes round the earth, and that the sun does not go round the earth, in precisely the same sense of the words. When, therefore, any one holding a system of beliefs finds that a strict application of the logical consequences of that system obliges him to contradict a proposition which, apart from that system, seems to him sufficiently proved, he ought logically either to deny that proposition or to be prepared to revise his system of beliefs. What any one, face to face with such a contradiction, will actually do depends on the kind of person he is. Most people's system of beliefs is not very much of a system: they can accommodate in their minds a number of inconsistent beliefs by holding many of them very languidly, by not thinking much about them, and by keeping them for use on different occasions, just as Sunday clothes and ordinary apparel can be stowed away in separate drawers. There are a number of interesting psychological problems as to the nature and degrees of belief. But with these logic as such has nothing to do, for logic 'should be made of sterner stuff.' Beliefs which are still dimly outlined in a realm of dreams and hazy twilight are not yet subject-matter for logic. They must be brought up into the full light of 'clear and distinct thinking' before they can be logically analyzed and compared and tested.

But this is as much as to say that the principle of Contradiction must be taken in a perfectly strict sense; and this is the second consideration to be attended to in applying it. The principle of Excluded Middle applies to logical contradictories only and not to contraries. It is only in the case of contradictory opposition that we can infer from the falsehood of a prop-

osition to the truth of its opposite. A and Not-A divide the universe — or ‘the universe of discourse’ — between them, but Not-A must not be turned without further proof into some positive B or C, nor must A alter its meaning in the very least. These limitations to the applicability of the principles of Contradiction and Excluded Middle are generally admitted in words ; but I do not think they are sufficiently recognized in the discussion about the inconceivability of the opposite as the test of truth. In other words, ‘inconceivability’ is treated as a matter of psychology, and the purely logical character of the ‘ultimate postulate’ and its identity with the axioms of formal logic are overlooked. Let me take the familiar example by which Mill seems so easily and plausibly to prove the untrustworthiness of the alleged test of truth. The antipodes were rejected as inconceivable by the ancients : we know that they exist. Now many persons may have rejected the notion of antipodes simply because it was unfamiliar to them, or because it was rejected by others on whose authority they relied. But those who rejected the notion thoughtfully did so in the belief that gravitation was a force acting in the direction of an absolute ‘down,’ and they were quite right to reject the alleged existence of the antipodes, *if their system of belief about gravitation was correct*. They could not consistently think of human beings, constituted as we are, walking on the other side of the earth and not falling down. Can we consistently think such an idea? What we can picture or image is irrelevant to the question. Can we think it, *i.e.*, think it out? No more than we can consistently think of human beings at the antipodes falling off, now that we know that ‘falling off’ would mean to them ‘falling up,’ which is a self-contradictory notion.¹

This example brings out very clearly the risks which may attend the application of an infallible principle to concrete problems. It can only be safely applied where we are certain that there is no ambiguity in the terms and when we are dis-

¹ I may be allowed to refer to what I have already said on this matter in an article on “What is Reality?” in vol. I of this REVIEW (May, 1892), republished in *Darwin and Hegel*.

tinctly aware of the conditions under which we are making our assertions. We are very apt to take that which is true (or false) *secundum quid*, as if it were true (or false) *simpliciter*; in other words, we are apt to make statements roughly and vaguely without 'clearly and distinctly' realizing all that we are really meaning by the terms we use. The infallible logical principle is always infallible; there is no doubt as to it when it speaks *ex cathedra*. But we are apt to apply it without due attention to the fluctuating meaning of ordinary words and the vague outline of most of our conceptions. It is not a test which is valid in formal logic and in mathematics, and not elsewhere, for every assertion about anything implies its validity. The difference is only that in abstract matters, where the conditions are fully stated and easily kept in mind, the principle can be applied with a certainty to which we can only approximate in the case of more complex and concrete subjects.

It may be here objected that the principle of inconceivability of the opposite, so interpreted, is a principle of consistency only and not of truth; truth, it may be said, is the agreement of thought with things, of theory with facts. But what do we mean by 'facts'? Everything that in ordinary language, or in ordinary scientific language, is called a 'fact' is, if we are to use words with philosophical precision, a 'theory.' Even the simplest perceptive judgment (*e.g.*, it is hot, it hurts) involves some element of interpretation. In becoming aware of a sensation as 'hot' or 'painful,' we have applied thought to what is given in sense. Nothing is mere *datum*—mere fact (if 'fact' is to be opposed to 'theory')—except (1) the uninterpreted sensation (and even in calling it a sensation we are making it something more definite and individual than a careful psychology warrants), and (2) the ultimate fact of consciousness itself. The uninterpreted sensation, moreover, is really an abstraction from what we actually know, and therefore is not in any full sense of the term an existing reality. Consciousness itself, on the other hand, cannot very well be opposed to 'thought,' unless we restrict the term 'thought' to the operation of the discursive understanding. Beyond these

ultimate facts — the *data* of outer and inner sense — all so-called facts are theories, thoughts about these *data*. Thus the question of truth cannot be separated from that of consistency. The only distinction we can draw, if we are speaking accurately, is that 'mere consistency' means consistency within any system of thought or belief, however narrow, however incongruous with other 'systems' or with the *data* of sense or consciousness; whereas 'truth' means ultimately consistency within a complete and perfect system of knowledge which embraces the whole universe. Such truth is, of course, to us an ideal merely; and we are in the habit of dignifying with the name of truth anything that is consistent with whatever system of beliefs is the best and most coherent that we have yet been able to reach. Truth is consistency on a large scale, where the 'universe of discourse' includes potentially, or analogically at least, a reference to the ultimate *data* of sense and consciousness. I insert the qualification 'potentially or analogically', because otherwise we might seem obliged to deny the truth of abstract mathematical propositions. We can verify such propositions as $2 + 2 = 4$ by touching fingers or counting heart-beats, but we cannot draw a hard and fast line between such propositions and those in which an appeal to perception is impossible. $\frac{\sqrt{2}}{\sqrt{2}} = 1$ is quite as true, but is not equally well adapted for the methods of the Kindergarten.

A different kind of objection to the character here assigned to the principle of Contradiction, might seem to be suggested by the philosophical doctrine that truth is to be found in the unity of contradictions. Such an objection would, however, rest solely on an ambiguity in language. The unity of contradictions does not mean a unity of logical contradictories as explained above. As Mr. McTaggart has very clearly put it in his *Studies in the Hegelian Dialectic*: "So far is the dialectic from denying the law of contradiction, that it is specially based on it. The contradictions are the cause of the dialectic process" (p. 10). The dialectic movement of thought is, in fact, just the process I have been describing, by which systems of

belief are tested and corrected. Contradictions in the strict logical sense can never be reconciled. One or other must be true. But the true proposition may be so very abstract that it gives us very little to satisfy our desire for positive knowledge. On the other hand, when we are dealing with *contraries*, which are what people generally mean when they speak of opposites or contradictories, the principle of contradiction forbids us accepting both as true ; but both may be false, and if, nevertheless, both have some plausibility or reasonableness, we are driven logically to look for some deeper and fuller truth which lies beyond and of which they may be partial and inadequate expressions, false because one-sided and incomplete. The laws of 'formal logic,' if carefully interpreted, are by no means useless, even in metaphysics. To take an example : that 'Time is finite' and that 'It is infinite' are often spoken of as contradictory judgments. They are not ; and they are not even contrary judgments, though they have contrary (or, if 'infinite' means merely 'not finite,' contradictory) predicates. 'Time is finite' and 'Time is not finite' are contrary propositions (A and E), which may both be false. 'Time is in every respect finite (or infinite)' and 'Time is in some respects not finite (or infinite)' are contradictories (A and O), one or other of which must be true. The application of the principle of contradiction in all its sharpness sets us free from the incompleteness of the oppositions in which the inaccuracy of ordinary language leaves us entangled. How much popular argumentation turns on the assumption that between Freedom and Necessity, between Law and Liberty, between Authority and Reason, between the Ideal and the Real there is an absolute antithesis !

The 'wonder' which makes science and philosophy begin and advance, is just the feeling of a contradiction ; it is the logical law of thought making us uncomfortable by setting up a standard of rigid coherence over and against the scrappy, incongruous, ill-fitting bits of belief we have got hold of. The progress of the sciences is often spoken of as if it consisted in a continuous accumulation of facts ; but, if facts are merely

accumulated, that is not yet science, but only materials for science to work upon. When an alleged new fact is presented to us, we inevitably, *i.e.*, by *psychological* necessity, test it by our existing system of beliefs; and, as already said, we are *logically* bound to do so. If the alleged fact turns out to be really a fact, and does not cohere with our existing system of beliefs, that system ought to be modified so as to become coherent with it. In this process of modification it may happen that many supposed facts will have to disappear. The progress of science is the continually more and more complete adjustment of our system, or rather systems, of belief; they are made more coherent in themselves and with one another, and so enable us to fit isolated facts into their places. Now such a progress may be more correctly represented as a dialectic movement of thought than as a continuous aggregation of facts. The ideal of a completely harmonious whole of knowledge is always before us, however unconsciously, leading us to destroy and reject incomplete and incoherent systems, or, in the more advanced stages of the process, to fit them into their places as partial and yet complementary fragments of the truth. Such scientific revolutions as the substitution of the Copernican for the Ptolemaic astronomy, of the Newtonian for the older account of gravitation, of the undulatory for the corpuscular theory of light, of the Lamarckian theory of species for the traditional theory, and of the Darwinian for the Lamarckian explanation of biological evolution, cannot be described correctly as additions to our stock of facts; they are the displacement of less adequate by more adequate theories. This 'dialectic' character of intellectual progress becomes still more conspicuous in the case of metaphysical systems. The substitution of new 'categories' for old, in the sciences, in politics, in art, in religion, in any department of human life, leads to a readjustment of the metaphysical system in which the old categories had been held together in what seemed a coherent system. What a new 'fact' or a new 'law' is for each of the special sciences, that a new 'category' is for metaphysics.

In the mathematical sciences we have, indeed, an example of what seems a steady and continuous advance; but it is an advance simply by the application of the Cartesian method of 'clear and distinct thinking,' *i.e.*, by the continual application of the logical laws of thought to the *data* of space and number. And even in the progress of mathematics there have been periods of revolution, like that in which Descartes was a leader, when, if old categories have not been rejected, they have been absorbed in wider conceptions. There have, indeed, in recent times been suggestions which, if true, have been thought fatal to the supposed absolute truth of mathematics. I refer, of course, to the non-Euclidean systems of geometry (on which there has been an interesting discussion lately in this REVIEW¹); and perhaps to some persons even heretical systems of arithmetic may seem conceivable, such as would have to prevail in John Stuart Mill's planet where $2 + 2 = 5$. Now, so far as I am able to understand a matter in which I have no special knowledge, such hypotheses as those of spherical space, of space of more than three dimensions, etc., are altogether meaningless, except on the previous assumption of our tri-dimensional space, *i.e.*, of our actual space, which for convenience of thinking we analyze into three dimensions, finding that we require at least three determinations to fix the position of any point, but that three are quite sufficient. If it is said that in spherical space parallel straight lines meet, that can only mean that on the surface of a globe lines *which on a flat projection of this surface would be parallel* must converge; or else it is nonsense. If it has any meaning, it assumes the truth of Euclidean geometry. Similarly, if any one likes to amuse himself by talking of 2 and 2 making 5, he can only mean either to use the symbol 5 where we now use 4, or else he means that when (*e.g.*) two pounds' weight of a certain kind of substance are placed alongside of other two pounds of the same substance, the resulting heap is found to weigh five pounds,—a statement which if true would reveal some hitherto

¹ Vol. V, No. 26, Mr. Schiller's article on "Non-Euclidean Geometry," and No. 28, Professor Hyslop's article on "The Fourth Dimension of Space."

unsuspected physical or chemical change, but which is meaningless except on the assumption of the absolute truth of *our* arithmetic ; for the assertion of the mysterious appearance of the extra pound implies that $2 + 2 = 4$, and that $4 + 1 = 5$. We find $4 + 1$, where we expected 4.

Even supposing the contention of the neo-geometers to be admitted — I mean, of course, their metaphysical contention with which alone I am concerned — the truth of geometry would still be absolute within the conditions as to the nature of space taken for granted in any particular system of geometry. The dispute is as to whether Euclidean geometry is only a system parallel to other possible systems, or whether it occupies a position of primacy, being presupposed in all of them. Within the limits of any fantastic 'meta-geometry' or 'metarithmetic,' the logical laws of thought would have to hold good or there would be no system.

The main purpose of the foregoing discussion has been to show the connection — or I should rather say, the identity — between the ultimate test of truth in every department of knowledge, viz., coherence within a system, and those 'laws of thought' which are the basis of formal logic in its narrowest interpretation. Leaving these more general problems, which would usually be classed as epistemological, I shall in a future article deal with some of the special problems which are usually discussed under the head of logic.

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HEGEL'S CONCEPTION OF GOD.

HEGEL'S *Philosophy of Religion* begins with the thought of God, which is the result, he says, of the other parts of his philosophy. But God is at the same time the Prius that eternally manifests itself. He is the result only in the sense of being the goal of philosophy. There are three stages in the movement of philosophy towards truth : first, the logical, or stage of pure thinking ; second, nature ; third, finite spirit. From finite spirit we move upward to God, who is the last result of philosophy. "The result is the absolute truth." "The last becomes the first."¹

God is thus at once the presupposition and the goal of all Hegel's thinking. "A reason-derived knowledge of God is the highest problem of philosophy."² God is for him the self-conditioning, self-centered totality of all that is, *i.e.*, the ultimate unity. But philosophy must not remain standing with the bare assertion that God is the ultimate unity. It must specify (*bestimmen*) this unity and exhibit it as a concrete system of differences. "Philosophy knows God essentially as concrete, spiritual, real universality, that is not grudging but communicates himself."³ The different parts of Hegel's system are expositions of different aspects of God's existence. Taken together they exhibit the development in that process of concretion or specification (*Bestimmung*) which it is the task of philosophy to show forth, as Hegel is always telling us.

Logic, the first part of the philosophy, is a criticism of the categories by which men interpret reality.⁴ Truth, for Hegel, is not the correspondence of thought with external reality. He has no interest in, and would condemn as utterly fruitless, the attempt to determine the objective validity of thought. Truth for him is "the agreement of a thought-content with itself,"⁵

¹ Hegel, *Werke*, XI, p. 48.

³ Hegel, *Werke*, XII, pp. 287, 447.

² Wallace, *The Logic of Hegel*, p. 73.

⁴ Wallace, *op. cit.*, pp. 30-59.

⁵ *Ibid.*, p. 52.

i.e., self-consistency. This definition must constantly be borne in mind, inasmuch as the entire work of the *Logic* consists in passing in review the ascending series of categories in the light of which men interpret reality. Each succeeding category is found inadequate, because it does not square at all points with the idea of self-consistency. Each category is merged in a higher one until the ultimate category of the 'Notion' is reached. Into this category all the lower categories are received, and by it they are fulfilled. The *Logic* is "an immanent criticism of categories."¹

Inasmuch as men have always used the highest categories of their thinking to interpret and give unity to their experience, logic may be regarded as the history of the different thought forms in which men have given expression to their conceptions of the ultimate reality — God. "Logic is metaphysical theology, which considers the evolution of the idea of God in the ether of pure thought."² Hegel's philosophy is preëminently a philosophy based on experience. But experience means for him chiefly the experience of the race in thinking out the world problem. He seeks his material chiefly in the history of human thought. Categories are objective thoughts,³ *i.e.*, thoughts regarded as objectively true, as universally valid. So Hegel says: "Logic . . . therefore coincides with Metaphysics, the science of things set and held in thoughts — thought accredited able to express the essential reality of things."⁴

The *Logic* is a history of metaphysic. Its work is to bring to light the ground thoughts of metaphysic. It has been said "there is no evolution possible of a fact from a conception."⁵ There is, however, a possible evolution in the conception of a fact. The Hegelian *Logic* is, I take it, an attempt to trace the evolution in the conception of the ultimate fact — God. It is true that Hegel seems to think that the highest notion of the Absolute is attained in logical science as the pure Notion comprehending itself. He says that the *Logic* sets forth the

¹ A. Seth, *Hegelianism and Personality*, p. 91.

² *Werke*, XII, p. 366.

⁴ *Ibid.*

³ Wallace, *op. cit.*, p. 45.

⁵ Seth, *op. cit.*, p. 125.

self-movement of the Absolute idea as the original Word or Self-expression. He believes that in the *Logic* he is tracing the actual course of God's manifestation of Himself through human thought about Him. Hegel has no doubt that he has discovered, and is setting forth, the process by which the Absolute manifests itself in the appearances of our time and space world. The *absolute* method which is *his* method gets at the very heart of the object, he would say. The absolute method, being the immanent principle and soul of its object, develops the qualities of that object out of the object itself. This method Hegel unhesitatingly applied to the ultimate Object. The final category is the idea of God regarded in the light of pure thought. It is the Notion (*Begriff*), or End. Hegel's 'Notion' corresponds to the Final Cause of Aristotle, in which are included both the efficient and the formal cause. "In the End the Notion has entered on free existence and has a being of its own by means of the negation of immediate objectivity."¹ The category of end takes up into itself mechanism and chemism as subordinate categories. The end is not merely blind causation like the efficient cause.² In having a being of its own, end has properly subjectivity and is really self-consciousness abstractly considered. As subjective, end implies a matter external to itself on which it works. We have so far only external design. This is superseded in the notion of inner design, of reason immanent in the world.³ The true end is the unity of the subjective and objective.⁴ The end exists and is active in the world. It constitutes the world. Individual existences have their being only in the universal end. "The Good, the absolutely Good is eternally accomplishing itself in the world."⁵ The end as actual is the Idea. "The Idea may be called Reason (and this is the proper philosophical significance of 'reason'), subject-object, the unity of the ideal and the real, of the finite and the infinite, of soul and body,"⁶ etc. The Idea is a process which is ever splitting itself into differ-

¹ Wallace, *op. cit.*, p. 343.

² *Ibid.*, p. 344.

³ *Ibid.*, p. 345.

⁴ *Ibid.*, p. 351.

⁵ *Ibid.*, p. 352.

⁶ *Ibid.*, p. 355.

ences, but always preserves its relation to self. Hegel seeks to throw forth on the philosophical screen a vivid picture of the Absolute at work, weaving a world of men and things in the "loom of time." The first form of the Idea is life. Life is the Idea existing in the world as external and immediately given. From life we rise to cognition. Here the subjective Idea stands over against the objective world that is given. In the process of cognition¹ the subjective Idea starts out with faith in the rationality of the objective world and seeks to know it, *i.e.*, to realize its own unity with the objective. But the subjective Idea does not merely seek to *know* the objective world. It also seeks to realize its own ideals in the objective world.² This is the effort of will toward the Good. The subjective never quite succeeds in bending the objective to its purposes, and it is forced to fall back on the faith "that the good is radically and really achieved in the world."³ This faith is the speculative or absolute Idea. Its object is the "Idea as such,"⁴ and for it the objective is Idea. The Absolute Idea is the self-identity which contains the whole system of concrete things and persons as integral parts of itself. It is the absolutely good and absolutely true. It is not a mere abstract universal, but is rather the all-embracing, self-centered unity of things. The universal realizes itself by determining itself to be the absolute individual, the absolute subject. Every step that the Absolute Idea takes in going beyond itself is at the same time a reflection into itself, an enrichment of self. The greater extension brings the higher intension. The highest, most acute point in the development is pure Personality, which alone, through the absolute dialectic which is its nature, grasps and holds all in itself. We have reached the notion of God. A confusion is liable to occur here because of Hegel's use of the same phrase, 'the Absolute Idea,' to represent both our thought and the object of that thought. This double use has led to the charge that Hegel attempted to construct the real world out of abstract thought. The double use is in a

¹ Wallace, *op. cit.*, p. 363.

² *Ibid.*, p. 371.

³ *Ibid.*, p. 373.

⁴ *Ibid.*

measure justifiable, since the Absolute Idea as the ultimate existence is really the divine self-consciousness. From Hegel's point of view, it is the divine in us that enables us to grasp the Idea. Hegel analyzes the notion of self-consciousness and puts it forward with courageous anthropomorphism as the ultimate explanation of the universe.¹ He admits no dualism in the realm of consciousness. Underneath his double use of the word 'Idea' lies the assumption that thought can fathom the depths of the divine activity in the world. But his use of this phrase, 'the Absolute Idea,' in the objective and subjective sense, gives some ground for asserting that Hegel reduced the divine life in the world to thought.

But the Idea is the reverse of *abstract* thought. It is the most concrete reality. It is the *τέλος*. "As the beginning was the universal, so the result is the individual concrete subject." "The universal is only a moment in the Notion." The concrete Idea is not an abstraction. It is rather the complete reality. It is this individual and comprehensive character of the Absolute Idea which enables us to see that it is much more than mere thought. The Idea takes up into itself all the wealth of the subjective and the objective worlds. It holds together in one unity all the contradictions of human thought and passion. The Absolute Idea is not less but more than the rich and thronging world of human experience. It is all this because it is the one Absolute Individual. To forget this is to overlook what lies at the heart of Hegel's thinking.

Until the Idea is reached in the *Logic*, we have untrue categories. The Idea alone is true, *i.e.*, adequate to the reality, because itself the most concrete reality. It is the unity of thinking and being, in which both are not merged in a higher existence, but thinking is regarded as the highest form of being, embracing all lower forms. The Idea is the realized Notion (*Begriff*). The realized Notion is the complete individual. "The Notion is not merely soul, but rather free subjective Notion that exists for itself and is therefore personality — practical objective Notion, determined for itself, that as per-

¹ See Stirling, *The Secret of Hegel*, I, p. 239.

son is impenetrable atomic subjectivity."¹ The highest point reached by the dialectic method is the richest and most concrete. It includes in itself all the other stages of the dialectic movement, and thus becomes pure subjectivity or personality.

In the *Logic*, the *Philosophy of Nature*, and the *Philosophy of Spirit* are presented the three stages of the dialectic movement of Hegel's philosophy. The *Logic* lays the groundwork in pure thought. The other works fill in the details. In the final stage we reach absolute personality or absolute spirit, which is the most concrete fact, for it includes all the other facts. The Absolute Spirit is the Whole and the True. It is the ultimate being upon which all finite being depends for its existence.

It has been thought that Hegel, in making a passage from the Absolute Idea of the *Logic* to nature, attempted to construct the real world out of abstract thought. It seems to me that what he really tries to do is to preserve the absolute coherence of his system, by showing that the inner necessity of the Idea demands that the Idea be discovered in nature. The transition from Logic to Nature is essential to the dialectic movement of his thought. The starting point for interpreting the natural world is the Idea as end, concrete totality,² subjectivity which includes objectivity. In its application to the spheres of nature and spirit the Idea seems to receive more concrete determinations than it receives in the *Logic*. Nevertheless the Idea in its most concrete form as Absolute Spirit has been the presupposition throughout. In the *Philosophy of Religion*, God appears as spirit, and nature is his self-externalization. Although Hegel does not construct the world out of abstract thought, he does deprive it of independent existence. It is but an aspect of the life of the Absolute Spirit. This brings us to the consideration of the nature of God as set forth in the *Philosophy of Religion*.

Hegel criticises the theology of the Enlightenment (*Aufklärung*) very sharply, on the ground that it empties the thought of God of all content and makes Him a mere unknown being

¹ *Werke*, V, p. 318.

² Wallace, *op. cit.*, p. 378.

beyond the world.¹ The task of philosophy, he says, is to *know* God. "Philosophy has the end to know the truth, to know God, for He is absolute truth, and in contrast to God and His explanation, nothing else is worth the trouble of knowing."² It knows "God essentially as concrete, spiritual, real Universality."³

The Enlightenment does not get beyond the abstract categories of the understanding (*Verstand*). The understanding makes distinctions, such as finite and infinite, absolute and relative, and then lets these distinctions harden into oppositions. Hegel seeks to overcome this opposition from the standpoint of reason (*Vernunft*).⁴ When we look with the eye of reason we perceive that the infinite includes the finite. God contains the world of nature and finite spirits as differences within himself. God is to be conceived as the unity of all that is. He is the universe, the "concrete totality." God is the absolutely necessary being in relation to whom contingent things have no being.

The nature of this being must be further determined. To say simply that God is the identity of all that is, is to make Him a mere universal, a substance.⁵ We must not rest satisfied with a bare identity. With a world of concrete differences on his hands, with finite nature and finite spirits before him, Hegel seeks for a definition of the Absolute which will allow it to take up all these differences into itself and still maintain its own unity. He finds the principle he seeks in self-consciousness or spirit. All things become moments of the divine self-consciousness, constituent elements of the Absolute Spirit. "God is spirit, the absolute spirit, the eternal, simple essential spirit that exists with itself."⁶ "It belongs to God to distinguish himself from himself, to be object to himself, but in this distinction to be absolutely identical with himself—Spirit."⁷ Spirit is spirit only as manifesting itself. "Spirit that does not appear is not."⁸ "God is a living God who is

¹ *Werke*, XII, pp. 280-1.

² *Ibid.*, p. 287.

³ *Ibid.*

⁴ *Ibid.*, XI, pp. 102-157.

⁵ *Ibid.*, XI, pp. 53, 56, etc.

⁶ *Ibid.*, p. 50.

⁷ *Ibid.*, XII, p. 151.

⁸ *Ibid.*, XI, p. 18.

real and active.”¹ “A God who does not manifest himself is an abstraction.”² It is the very nature of God to manifest himself.³ The finite worlds of nature and spirit are manifestations of him,⁴ and he is the concrete totality of these manifestations.⁵

In immediate knowledge or faith, God is object for the finite spirit.⁶ For faith He is not a mere totality but rather a being to whom the finite spirit stands in relation.⁶ God appears as Object in the form of representation (*Vorstellung*).⁷ It is the task of philosophy to exhibit in the form of reason that which exists in the common mind in the form of representation. Philosophy and common-sense correspond in content; they differ only in their manner of conceiving the same fact.⁸ We have the conception of God as unity, as totality of the finite, as manifesting himself in the finite world. We have also the representation of him as objective to the finite spirit. These two views of God must be unified and exhibited as equally necessary aspects of God's being. This is done in a child-like pictorial fashion in the Christian doctrine of the Trinity. “The Trinity is the determination of God as Spirit. Spirit without this determination is an empty word.”⁹

The three aspects of God's being are treated respectively under “the realm of the ~~Father~~,” “the realm of the Son,” “the realm of the Spirit.” God is the absolute eternal Idea who exists under these aspects. The absolute Idea¹⁰ is, in the first place, God in and for himself, in his eternity, before the creation of the world, beyond the world. In the second place it is the creation of the world. This created world, this other being, divides itself into two parts, physical nature and finite spirit. Created being at first appears as external to God, as having existence independent of Him. God reconciles it with himself, and we have, in the third place, the process of

¹ *Werke*, XI, p. 24.

² *Ibid.*, p. 135.

³ *Ibid.*, p. 134.

⁴ *Ibid.*, p. 18. Nature, finite spirit, and will are embodiments of the Idea, specific forms in which the Idea appears.

⁵ *Ibid.*, XII, pp. 189–190.

⁶ *Ibid.*, XI, pp. 63–64 ff.

⁷ The content or object is God, who is present at first in the form of inner intuition (*Anschauung*).

⁸ *Ibid.*, XI, pp. 14–15 ff.

⁹ *Ibid.*, p. 22.

¹⁰ *Ibid.*, XII, p. 177.

reconciliation. In this process the spirit, which as finite was cut off from the divine Spirit, returns to unity with the divine. The third aspect of God's being is the first enriched by union of the second with it. These three aspects are not external differences, but differentiations of one individual. The one spirit is regarded in these three forms or elements.¹ Each element involves the other two.² Any one element by itself is an abstraction and realizes its true being only through the other elements.

The first element is spaceless and timeless. It is God in his self-existence. It is the unity which preserves its oneness amidst change. In the second element or aspect, God enters the world of space and time, the world of nature and the human spirit. It is God's manifestation of himself in space and time. As manifesting himself in the world, God has a history; as eternal, he has none. The third element is the region of the reconciliation of the finite world to God. It is God as totality. In nature God is present only in an external fashion. Man rises to the consciousness of his unity with God and to the presence of the divine life in himself.³ In the third element we have God, nature, and man comprehended in their unity. God is seen to be the "concrete universal" which sets up a difference that is nevertheless "only ideal and is immediately abolished."⁴

We have in the *Philosophy of Religion* the fuller development of the Absolute Idea, with which the *Logic* culminates, expressed in terms of religious thinking. In neither work is God a mere category. It is plain that the Absolute Idea, which is the unity that returns to itself from difference, or, to express the same thought differently, the self that maintains itself amid change, is identical with God as unfolded in the *Philosophy of Religion*. God is the ground thought of Hegel's system. But Hegel tells us that the Absolute Idea does not mean quite the same as God.⁵ The term 'God' carries here the meaning that it has for finite spirits contemplating him.

¹ *Werke.*, XII, pp. 177-9.

² The Idea is the divine self-revelation in these three forms. (*Ibid.*, p. 179.)

³ *Ibid.*, pp. 267-8.

⁴ *Ibid.*, p. 190.

⁵ *Ibid.*, XI, p. 16.

It refers to God as he is present in religious devotion. God is object to man's faith in the form of representation (*Vorstellung*). Religion always presents God in the form of representation. As he exists in religion, God is wholly objective in relation to man, hence not the Absolute. The Absolute Idea is the comprehensive unity of God and man. Nevertheless the Absolute Idea is God speculatively considered. As a mere object to man's thought, God would be a finite individual entering into relation with other finite individuals. His individual character would thus be defective. God is not merely objective to man. Man has his being in God. God is at once the source from which the finite individual springs, and the ground of the relation through which, in its dependence, the finite individual reaches out to, and realizes itself in, the absolute individual. Finite selves are true only because they belong to the infinite self. Therefore, metaphysically, God and the Absolute are one. We have seen above that God, metaphysically regarded, is the unity which differentiates itself into nature and man, and yet remains identical with itself. When man sees himself and nature as contained in this unity, and feels himself to be at one with the unity, he has reached absolute knowledge. He has attained the metaphysical determination of God. He lives in the kingdom of the spirit.

What is the relation of God as the central unity to his content, the world-process? God as self-related unity is not in time or in space, and yet the process of the world is an essential element of God's being. Hegel would say that the central unity and the world-process are both abstractions. Therefore it is fruitless to talk about their relations. God is both. They seem to contradict each other, but this apparent contradiction is a pulse of the divine life.

The meaning of the world-process is further developed in the *Philosophy of History*. "The destiny of the spiritual world, and — since this is the substantial world, while the physical remains subordinate to it, or, in the language of speculation, has no truth as against the spiritual — the final cause of the world at large we allege to be the consciousness of its own

freedom on the part of the spirit and *ipso facto* the reality of that freedom."¹ Freedom is the Idea of Spirit. In the development of the world this freedom is at first implicit and unactualized. All the struggles of nations and individuals are stepping-stones by which men rise to freedom. Men began with the belief that one man only was free, the king, and have risen to the belief that all men are free.

Hegel says that the spirit realizes itself in time and that the idea of spirit is the end of history. 'Spirit' is used here in the generic sense. The Absolute Spirit realizes itself in history, but as eternal; it is at every moment completely real. It does not wait until the end of time to attain fruition. History, Hegel says, is the theatre of the unceasing strife and reconciliation of the Absolute Spirit and the finite individual. The former continually overrules the purposes of men in order that they may realize their true destiny—freedom. God is immanent in the world, directs the world's history towards the development of freedom. God himself does not develop. Men are the subjects of historical development. The divine Idea realizes its purpose in history through the realization of human freedom. The concrete individuals have a place, not in themselves, but as realizing the divine purpose. On the other hand, the divine Idea has no meaning apart from the concrete individuals in which it finds expression.

It has been doubted whether there is any place in Hegel's system for individuals. It seems to me that the most insistent note in Hegel's writings is the emphasis on the concrete individual. He never wearies of attacking abstractions like 'being' and 'substance.' The movement of the *Logic* is towards the category of individuality. The *Philosophy of History* makes the freedom of the individual the goal of history. Hegel maintains that the moral, ethical, religious aspect of human individuals is an end in itself. This aspect in individuals is "inherently eternal and divine."² But the individuality of the *Logic* is the absolute, all-comprehensive self. The freedom of the human individual exists only where individuality is recog-

¹ *Philosophy of History*, p. 20.

² *Ibid.*, pp. 34-35.

nized as having its real and positive existence in the divine being.¹ The *Philosophy of Religion* is the presentation of an absolute individual, a unity in difference, a self-related system in which infinite individuals are at home when they know themselves as dependent on the whole organism, which is God. To speak in concrete terms, in Hegel's thought man has no existence *in himself*. He is real only as he knows himself in God. To know himself so is man's true destiny. But, on the other hand, God exists only as he knows himself in man. To separate the finite and the infinite individual is to destroy both, according to Hegel. The finite individual is but a moment in the Absolute, but he is none the less essential to the life of the Absolute.

It has been asserted that in the consideration of the time-process of the finite world God as completed self-consciousness disappears, and that he appears only as subject of the historical development. It is true that, in the specific consideration of the time-process, which is one aspect of God, the aspect of him as eternally complete reality does not come forward prominently. Hegel would say that this abstraction is necessary for the purposes of exposition, but that it is not true. The truth is that eternity and the time-process belong together. God is not a mere subject of the historical development, yet the historical development is necessary to his selfhood. For God is the unity of all that is. The objection is made, however, that Hegel makes no passage from the notion of God as eternal, self-related unity to the facts of the finite world.² Here, again, Hegel would answer that only the abstract understanding would ask for such a passage, and that the demand is fruitless. His system is an attempt to give unity to the facts of the time and space world. The facts by their incompleteness demand the unity, and they depend upon that unity for their existence. By his construction of the Trinity, Hegel seeks to provide a place for the facts of the finite world in his conception of God. The phrases drawn from the conception of the Trinity are used in

¹ *Philosophy of History*, p. 53.

² A. Seth, *Hegelianism and Personality*, Lecture 6.

a metaphorical way. The three spheres of Father, Son, and Spirit express the three moments in the relation of the eternal and the time-process. God as eternally complete is the eternal-in-itself, being-in-itself. But being-in-itself could never exist by itself. God must manifest himself in the finite world. The eternal must appear in the time-process. This is being-for-self. But by itself being-for-self, that is, Being which goes outside itself, is unreal. The eternal and the temporal must exist together. This existence together, Being in and for self, the unity of the Father and the Son, of God and the World, exists in the realm of the Spirit. The Spirit is the sphere of reason, or, as we might put it, of constructive imagination that unites and holds together contradictions. In the Spirit we see God, nature, and ourselves in unity. The third element returns to the first. We recognize ourselves as contained in God.

The old puzzle of *how* to think together a permanent unity and the flux of Becoming is not solved by Hegel. To put the matter otherwise, he does not reconcile the imperfection of God as shown in the time-process with his perfection as a completed totality. He would say that such a reconciliation is unnecessary, because each aspect implies the other. He holds firmly to both aspects of existence as equally present in experience. The experience of the real flux of events presses too insistently on the philosopher to permit of his taking refuge in a merely static world. On the other hand, the instinct of thought, the thirst for completeness impels him to seek a unity. In what way shall he best express this unity that persists amidst change as the permanent law of change? How shall he conceive the perfect being without denying the progress of the imperfect world? In self-consciousness which is ever in movement but retains its self-identity, which proceeds outward and gathers the concrete details of the world into itself, which absorbs and assimilates what at first seems external to it, Hegel finds the principle which best enables him to adumbrate the nature of the totality of things — God. He analyzes with keen insight the Self which, always reaching beyond itself and

ever involved in contradictions, yet never loses itself and never succumbs to these contradictions. He applies the principle of selfhood to all the "tangled facts of experience."

Hegel's so-called followers of the Left have interpreted his conception of God as that of an impersonal Absolute which develops itself in the world-process, comes to consciousness first in man, and reaches perfection only in the greatest man. If the *Logic* only were in evidence, the interpretation might be justifiable. Such passages as: "Spirit, in so far as it is the Spirit of God, is not a Spirit beyond the stars," "God is present everywhere and in all spirits,"¹ have been interpreted in this way. What these passages actually testify to is a belief in God's living presence in the world. To say that "man feels and knows God in himself"² is not to say that God has no conscious existence apart from this individual feeling. The passage which would give strongest support to the view taken by the Hegelians of the Left is perhaps this: "Religion is knowledge by the Divine Spirit of itself through the mediation of finite spirit."³ This statement is perfectly consistent with the idea of God as objective to every man. Finite spirit is an integral part of God's being. Man is God as 'other.' But God does not lose his identity in this difference. "Spirit is spirit *for* itself."⁴ "We say God produces eternally his son (the world). God distinguishes himself from himself, . . . we must know well that God is this whole act. He is the beginning, the end, and the totality."⁵ Nevertheless the process is nothing but a play of self-conservation, self-assertion.⁶ God can be said to be conscious of himself in the religious man since he is immanent in man, and in religion this divine immanence comes to consciousness. God knows himself in man only as man knows himself in God. The divine immanence is not a dead fixture, but a living spiritual process. Man is indeed essential to God's being. The Hegelians of the Left emphasize this aspect of the system and neglect entirely the

¹ *Werke*, XI, p. 24.

² *Ibid.*, p. 37.

³ *Ibid.*, p. 129.

⁴ *Ibid.*, p. 13.

⁵ *Ibid.*, XII, p. 185.

⁶ *Ibid.*, p. 199.

aspect in which God is regarded as eternally completed self-consciousness.¹

Hegel is sometimes criticised for using the word 'spirit' without qualification "to designate both God and man." He used the word in this way because with him 'spirit' was the meeting-point of the divine and the human. But 'spirit' is no abstraction. Hegel was keenly conscious of the necessity of doing justice to the concrete detail with which the world confronts philosophy. His theory of the concrete universal, *i.e.*, the *individual*, is an attempt to meet the difficulty. For Hegel the individual is the real, but there is only one real individual, namely, God. In the *Philosophy of Religion* God is described in the realm of the Spirit as the complete unity which takes up the other two aspects into itself. "This third realm is the Idea in its determination of individuality."² Some critics think that the tendency of Hegel's thought is to make God an impersonal unity. Hegel's incessant naming of God as Idea lends color to this view. His vice is over-intellectualism. But an impersonal Absolute would leave no place for religion, and Hegel maintains in his system the reality of religion. He tells us that the *Philosophy of Religion* has the task to convert what is present pictorially to the mind of the common man into terms of thought.³ He says that the opposition of believing and knowing is a false one. In believing or immediate knowing (*unmittelbares Wissen*) there is present in the form of feeling what is present in cognizing (*Erkennen*)⁴ in the form of thought. In his lectures on the proofs for God's existence, he seeks, not to show that these proofs are adequate, but that they are means by which the human spirit elevates itself to God.⁵ He talks quite in the Pauline vein of "the witness of the spirit to the spirit in man's knowing God." The relation of man to God is "the relation of spirit to spirit."⁶ At the conclusion of the *Philosophy of Religion* he tells us that the "end of these

¹ The view that God exists only in feeling is distinguished from Hegel's own view in *Werke*, XI, p. 28.

⁴ *Ibid.*, pp. 64 ff.

² *Ibid.*, XII, pp. 257 ff.

⁵ *Ibid.*, XII, p. 301.

³ *Ibid.*, XI, pp. 14-15.

⁶ *Ibid.*, XI, p. 60.

lectures is to reconcile science and religion.”¹ His designation of God as Idea is only the logical aspect of his theory of God. In his works dealing with the concrete world, God is called the Absolute Spirit. We have seen that God is essentially individuality, and that Hegel regards personality as the richest and most concrete being, including all differences in itself. Hegel characterizes the Absolute Idea and Personality in similar terms. The Absolute Idea contains in itself as essential moments the facts of the finite world. But in the finite world finite spirits are the true realities over against material things. God is the Absolute Spirit, the supreme self in whom finite spirits live and move and have their being. If God is not personal as we know personality, it is because he is supra-personal.

In brief, God, in Hegel’s philosophy, is the universal self-consciousness which comprehends within itself all concrete differences, men and things. “God is a Spirit *in* his own concrete differences, of which every finite spirit is one.”² Man truly knows God when he sees nature and himself as manifestations of God and recognizes himself as the highest of these manifestations, capable of grasping in thought the whole of which he is a part.³

Finally, what is to be said of this magnificent attempt to interpret the whole sphere of being in the light of a self-conscious principle of rationality. It must be said, I think, that the attempt fails to accomplish all that was aimed at. The aim of the system is to show that reality is rational through and through. But the contingent detail of experience proves too refractory for Hegel, and he is forced to admit that all the facts cannot be rationalized. In other words, his absolutism breaks down. The vice of this absolutism consists in the tendency to identify the ultimate reality with the time-process. The Hegelian system sought to reveal the warp and woof of the universe, and not merely to show us the pattern of that

¹ *Werke*, XII, p. 288.

² Stirling, *op. cit.*, II, p. 579.

³ See Pfeleiderer, *Philosophy of Religion*, II, p. 95. After reaching this conclusion I find myself confirmed in it by Professor Pfeleiderer.

part of the fabric on which we are figures, but to lift the screen and reveal the Great Weaver sitting at the loom. The fabric woven by Hegel is made up so entirely of intellectual threads that it fails to represent fairly our world with its complex constituents. The system is one-sidedly intellectualistic. Hegel has marked some of the salient features of self-consciousness or personality. His terms ('in itself,' 'for itself,' 'in and for itself') are abstract expressions for the ceaseless movement of the human soul, for our life with its cravings, its desires, and its satisfactions, which seem to follow one another in a never-ending spiral movement. Our mental life is a ceaseless movement of outgoing to the object and return to self. But in this movement of the self it seems to me that conation (or willing) and not ideation (or thinking) is the fundamental factor. In his terminology at least, Hegel did violence to psychology by overlooking the feeling and will aspects of the self. This oversight gives ground for the assumption that his philosophy is a system of mere logical idealism. Perhaps the same oversight is responsible for Hegel's absolutism.

After all we are finite. What human thought assimilates is infinitesimal in comparison with the mass of refractory material that remains to be subdued. There may be forms and conditions of being of which we have never dreamt. It is useless and mischievous to assume that God exhausts his nature by his manifestations on our planet. We should hesitate before "transferring to God all the features of our own self-consciousness." Hegel was too sure of the similarity of divine and human thought. We can trust the examination of our own self-consciousness to give us but dim suggestions of the nature of the universal self-consciousness.

Hegel's great quality as a philosopher is his faith in the rationality of the world. He stands as a splendid example, worthy to be followed by all who would ask questions of the universe. He inspires us with the confidence that such questions in some way will be answered. His highest philosophical achievement consists in his insight into the apparent contradictions of life. He sees clearly that we must hold conflict-

ing views on ultimate questions without denying either view. Contradictions belong to the heart of things. This is a faith to live and work by. But it is the offspring of the whole man, rather than the product of the mere intellect. Hegel gives us the true standpoint from which to view human history, and then vitiates his work by assuming an air of finality and infallibility. We cannot, from the standpoint of scientific knowledge, make dogmatic statements with regard to what lies beyond the world of our experience. But Hegel's insight into the mysteries of the life of the spirit in the individual and the race is profound, and gives a permanent and fruitful point of view from which to appreciate and penetrate the inner meaning of human history and the individual life.

J. A. LEIGHTON.

DISCUSSIONS.

PROFESSOR PFLEIDERER ON MORALITY AND RELIGION.

THE article by Professor Pfleiderer in the September number of the REVIEW, raises once more the always interesting question of the relation that subsists between ethical theory and religious belief. The position is taken by the author that morality depends for a rational basis upon the acceptance of a distinctly religious view of the nature of the universe; and that the churches, as the recognized channels of religious inspiration and instruction, constitute the only proper medium for ethical teaching, while the so-called Societies for Ethical Culture, which claim to work independently of all theological creed, are founded on a mistaken theory of the moral life, and hence must prove inefficient, and may perhaps be positively injurious to the interests of morality. In regard to this doctrine of the dependence of ethics upon religious dogma, I venture to suggest that, before we give our adhesion to it, there are certain considerations that we cannot afford to overlook.

According to Professor Pfleiderer, there is and can be no solid ground for moral distinctions, and no effective motive to moral action, unless one particular theory is held as to what is the ultimate nature of reality. "The moral sanction," he affirms, "must have a transcendental ground; it must have as its basis some absolute or super-subjective rational will, *i.e.*, God." "The divine consciousness must be postulated as the necessary condition of the existence of the moral law, and of the possibility of its realization." Two statements are here made: first, that no moral sanction is possible unless there exists an absolute will, that is, a "will" over and above the various "wills" of human beings; secondly, that no ethical end is susceptible of realization unless a divine consciousness governs and directs the world. Now in considering this subject we are not concerned with the question whether the belief in the existence of such a superhuman consciousness and will is not well founded, we are not discussing the proofs for the existence and personality of God; but we are simply endeavoring to see whether the absence of this belief, or the denial of the conclusiveness of these proofs, must cut away the ground from all morality, and whether the non-believer in the philosophical doctrine of the Absolute must, if logically consistent, be reduced to a state of moral apathy and nihilistic pessimism.

As a matter of fact, we do not find that a rejection of the particular form of spiritualistic Idealism which recognizes an "overruling Providence," has generally led to a condition of moral inertia or indifference. No doubt it is true, that when from any cause there is in the individual a violent and sudden mental revolution in regard to religious beliefs, there is also not infrequently a loosening of moral rules, and a deadening for a time of the sense of moral obligation. But the reason for this is not far to seek. The churches have taught us, and we have taught our children, that morality depends upon certain religious feelings and beliefs. When these beliefs are shattered, and the emotions corresponding to them fade away,—which not infrequently happens just when the lower passions are strongest and while the moral training of the man is still imperfect,—it is not strange that the mind should reject those rules of conduct which have been supposed to rest on an authority which is now no longer regarded as worthy of credence or respect. It is because we go on reiterating that without religion a man cannot be truly moral, that we make it hard for those who conscientiously reject supernaturalism to retain their faith in the sanctity and absoluteness of the moral law. Yet there have been too many examples of noble, earnest, and disinterested lives among those called sceptics, to allow us to grant that the rejection of any theological or metaphysical dogmas renders men in any way incapable of the highest and purest virtue. To say, with the author of the article under discussion, that such persons are "not far from the kingdom of God" is to cover an evasion of the point at issue under the cloak of an amiable commonplace. They *are* far from the kingdom, if from it are excluded all those who, after an honest and careful examination of facts, reject the belief in an "overruling Providence," or a "super-subjective rational will,"—they are wholly within the kingdom of God, if this be taken as a figurative expression for the blessed company of all who, whatever their faith or unfaith, have striven earnestly to enlighten, to purify, and to bless their fellow-men. The honored name of John Stuart Mill, which occurs in Professor Pfeiderer's article, might alone be sufficient to remind us how a soul, developed under conditions absolutely inimical to the influence of the Christian religion, could yet show a lofty disinterestedness and a steadfast devotion to the good of humanity seldom surpassed by those whom the church has included in her calendar of saints.

But is the virtue of the man who rejects theism logically justifiable, or is it only a sort of amiable weakness on the part of the

sceptic which prevents his becoming selfish, licentious, and brutal? Let us look for a moment at this question. It is, we may safely say, impossible to *disprove* the existence of an overruling Providence, but let us suppose that this could be done, and that it could be actually demonstrated with mathematical certainty that the world as a totality is insensate, and therefore, unconscious of and indifferent to human welfare or woe, and that there is no superior will external to our own wills, but that man himself stands as the highest form of reason and volition in the universe, — a form that has been developed by natural processes through long ages from lower forms. Were such a belief inevitable, — were its truth so patent as to be, as it were, forced upon the minds of all rational men, how should we regard in its light the old familiar facts of the moral life? Surely, however great to many would be the sense of loss, however painful the jar as the old, happy confidence in a divine, omnipotent Father, whose wisdom orders all things in heaven and on the earth, gave place to a conviction that man must look on himself alone as the lord of nature, and must trust to whatever little of knowledge and love and strength he himself may possess for the alleviating of human suffering and the promotion of human good, — yet no thoughtful man could then claim that he was released from the bond of duty, or that he could now approve of selfishness and fraud, of violence and cowardice. These things would remain as before, qualities inimical to the general welfare, and the characteristics of persons who are reprehensible and despicable; while justice and generosity, unselfishness and purity, would be as much admired and as highly approved in a society from which the belief in the supernatural was banished as they are at present. For while many of the doctrines of religion, and especially of the Christian religion, have added strength and vividness to the feelings that lead to right action, yet unselfish affections and social impulses have originated independently of, and in many cases long anterior to, the recognition of such doctrines. Love antedates religion both in the history of the individual and in the history of the race. Professor Pfeiderer expresses a doubt whether it is possible to believe in a divine in man without believing in a Divinity above and prior to man; but surely a truer insight into mental processes is shown by the apostle who asks: "If a man love not his brother, whom he hath seen, how can he love God, whom he hath not seen?" It is the love of the human for the human, which has led to that intense and lofty idealization of love which makes us recognize in it the omnipotent and the divine. And love, beginning in the

mere altruistic instincts which man has inherited from brute-like ancestors, and which he shares with his brute neighbors, has its roots deep down in the hidden depths of our nature, and depends for its support on no theological or philosophical theory of the universe. In simple, half-conscious form, that altruistic instinct, without which the race could not have been preserved, must have existed since man came to be man; it has grown with the growth of civilization, and strengthened with the increasing strength of the social organism; and it will surely remain after each of our systems of thought shall have had its day and ceased to be. And so long as altruism exists, so long must man find his satisfaction, not in seeking his own things alone, but the things of others also. And herein we find the permanent basis for the moral sanction. Against the cruder statements of hedonistic theory, much that Professor Pfeiderer urges may have weight, but his criticism does not touch the sounder form of Eudæmonism which takes for the ethical end the greatest good of humanity.

Moreover, it may fairly be questioned whether the assertion that despair of human nature and moral apathy are the inevitable results of the rejection of the theistic doctrine is maintainable. It is, indeed, not strange that such an assertion should be made. For, assuredly, those who believe in a divine Governor of the universe can fairly claim that their creed implies the final triumph of all good, and the utter overthrow of all evil. Logically, indeed, it implies more than this, and the consistent believer in an overruling Providence should not scruple to affirm that "whatever is, is right." But, though a rational theism is necessarily optimistic, it does not follow that the sceptic must abandon all hope for humanity, or lack a stimulus to zealous moral endeavor. For, as a student of human history, he must admit that mankind has made ethical progress in the past,—and that, slow and fitful though this progress has been, it yet contains a promise of the gradual attainment to a higher moral standard in the future. If, on his hypothesis of the nature of the universe, man, without any supernatural interposition, has already evolved a moral consciousness, and if that moral consciousness has increased in strength and clearness as his intellectual and social nature has developed, surely he has no reason to dread for the race a general relapse into a non-moral condition. Even for those who believe that man originates his own ethical ideal, and that it has no objective existence save as man himself is able to realize it, such ideal may yet remain a motive power to right living, and a touchstone by which to test his daily conduct. Let it indeed be frankly admitted that religion has in

this connection frequently been a valuable ally to morality. An ideal of goodness is often more vividly conceived by the mind, and more powerfully affects the feelings, when there is attributed to it a super-human personality and an external objective existence. But it is one thing to say, that the religious mode of representing the reality and worth of goodness and love and truth has been helpful to moral progress, and another thing to affirm, that always and with all persons it is essential. And while every one who thinks and feels must recognize the tragic, and often terrible, facts of human nature and human life, yet he is a morbid and prejudiced spectator of the drama of existence, who cannot detect in himself and others, along with "much that is waste and many a weed, and many a passion run to seed," the "little good grain, too," that shall give a more abundant harvest in the future, if cultivated with wisdom and patience.

Is there not, then, a justification for associations without, as well as within, the churches, for the furthering of greater earnestness in the moral life, and for the instruction of those who, while desirous of helping their fellows, feel the need of guidance as to the soundest principles and the best methods for the promotion of social well-being? And surely they who have at heart the true interests of the churches need not fear the rivalry of those who strive for such ends. Rather can they safely say in the spirit of the Master, "Forbid them not, for he that is not against us is for us."

E. RITCHIE.

WINDELBAND ON "THE PRINCIPLE OF MORALITY."

It is our purpose, in this brief discussion of Professor Windelband's interesting chapter on ethics in his *Präludien*, to try to indicate how an application of the teleological method to ethics will lead necessarily to the consideration of metaphysical questions.

A critical and teleological method seems to be necessary in this sphere, for if ethics is to be more than a mere history of moral ideas or description of moral experience, it must seek to explain and rationalize the moral consciousness. If, now, we seek for that which is fundamental in this moral experience, we find it expressed in the fact that something is demanded of us. If nothing can be required of men in their actions, no moral judgment can be passed on them. The consciousness of moral obligation, then, or Kant's imperative, is the fundamental ethical fact demanding explanation. If this be so, then the inductive and empirical methods will not solve the ethical problem, because they will either fail to explain, or explain away

this fact of moral obligation. By an induction from the content of actual wills, no step can be made to that which ought to be the content of the moral will. But, on the other hand, this "duty-consciousness," as Professor Windelband calls it, is purely formal, and hence one cannot proceed deductively to unfold from it a content for it. It is for such reasons that Professor Windelband determines to seek a content for the formal principle of duty, by searching for an end which shall have supreme and universal worth and validity. And first, by a purely formal use of teleology, certain duties can be arrived at which are themselves only formal. He says (*Präludien*, p. 287) that the axiom of teleology is that the willing of the end requires the willing of the means. In this way certain duties are derived which are necessary to the attainment of any end. Among such duties are self-control, energy, etc. The formal character of these, he says, can be seen from the fact that they can be put to non-moral or immoral ends. Therefore, just as the categories of epistemology cannot be derived from those of formal logic, but must be determined by a critical investigation of experience, so in ethics there is an element of historical and empirical content which is to be determined critically by "teleological reflection" on moral experience in its concrete setting.

Man, considered as an individual apart from society, is an abstraction. The concrete man always stands in certain relations to his society and times. Now by an application of teleological criticism to these concrete relationships, a material content for the category of moral obligation is to be obtained. "There is no doubt," says Windelband, "that in the teleological subordination of the individual to society, the content of the moral consciousness must be sought." (*Präludien*, p. 293.)

Our author goes on to show, however, that society is not the final end,—its right over the individual being merely that of the stronger over the weaker,—unless society itself is justified teleologically by seeking some ethically worthy end higher than itself. Moreover, the fact that we can call one society better than another shows this to be true. The duties, then, which are material for the individual become formal for society, and the question is, What is that end which shall give to it a right over the individual? It seems at first, our author says, an impossible problem, since society is the last synthesis of empirical knowledge beyond which we cannot go. The theory of the greatest happiness of the greatest number goes back to the individual, because it can only mean the happiness

of the individuals in society ; but, in seeking the final end, we must go beyond the social organism, and not back to the states of feeling of the individuals which comprise it.

The author admits that, if any metaphysic were possible, it would help us out of the difficulty ; but, unfortunately, a metaphysic is what we can never have. There is, however, a solution for the problem. All societies are made up of thinking, feeling, and willing individuals. Each, therefore, has its 'total consciousness,' the bearers of which are individuals, and not a mystical substance. Out of the community of their lives there results a common undertone of psychic life. Now, in so far as every society brings this into clear consciousness, it makes its *Cultursystem*. This is its task.

"Every society has — that is its moral task — to work out from the mass of individual activities, that which constitutes the common basis of ideas, feelings, and determinations of will." "This task of society takes its root in the idea of universality ; it ought to bring to consciousness and to outer manifestation that in it which is universal." (*Präludien*, p. 310.) Now by the application of the teleological method, following the three forms of this universal psychic activity, the final "culture-duties" of truthfulness, sympathy, and benevolence arise, and the *Cultursystem* is to be realized in the three final goods, Science, Art, and the State.

But the critic may now ask how we are to pass from that which is common or universal to that which ought to be so, or, in Professor Windelband's language, how we are to get the "*Allgemeingiltige*" from the merely "*Gemeinsame*." A naturalistic ethic would dispense with an ideal which ought to be realized, and would, consequently, have to be met on this ground. A metaphysical ethic, which held that an Absolute Being was realizing itself in the world, could claim that the universal ground tone of society was that which had supreme worth. But a theory which recognizes duty, obligation, and the existence of a supreme norm of morality, while at the same time rejecting all metaphysics, will find it hard indeed to derive that which shall have supreme moral worth from the "culture system" of society. Professor Windelband, we think, has failed to do this, and has taken an unwarrantable step, as the following passage in which he makes this leap shows. "While a single society in its historic conditions brings to mastery, in its inner and outer life, the universal (*das Gemeinsame*) which rules over all its individuals, it struggles up from its natural basis to realize in itself that which has universal worth (*das Allgemeingiltige*)." (*Präludien*, p. 310.) This is a statement of an

alleged fact, but the author fails to show how, in striving for the universal, a society will attain a principle of supreme worth. In this passage he really presupposes the sameness of the two. Taken apart from all metaphysics, this theory really turns back to the individual just as does the happiness theory. For while society has a fundamental tone which rules the individuals, it is none the less true that it is they who have made it. As Professor Windelband has said, there is nothing mystical about this 'total consciousness,' and if we are to reject all ultimate questions, it can only mean the interaction of the minds of the individuals comprising it. Here, again, if we admit an ideal element, we need a standard in order to select from this total content that which shall have supreme moral worth.

The use of the teleological method, however, commits us to the determination of an end which shall be final. Teleology means that we must seek the end which is perfect, and therefore able to justify and sanction all the content of duty that has preceded. If the formal and social duties of the individual acquire their sanction teleologically in relation to society, whence do the "culture duties" acquire their bindingness? If we abide by the principle of teleology, we are driven to this alternative: either we must endeavor to sanction these duties and justify the ends at which they aim by considering ethics in relation to metaphysics; or, if we reject this solution, we must say that Professor Windelband's three ends, Science, Art, and the State, are absolute and final ends in themselves. This latter is the only way left for Professor Windelband, but he makes no attempt to show that these ends are final. Neither, we think, can they be considered so. Can we say that these three ends make up the final content of ethics? Does morality exist solely for the sake of science, art, and the state? That these are moral ends, and that there is an obligation resting on society to realize them, cannot for a moment be denied. But that morality exists solely for their sake cannot be maintained. While it is true that the individual exists for society, and society in part for these ends, it is also true to a larger extent that society with all its culture exists for self-conscious individuals. Indeed, science, art, and the state could not exist but for the fact that self-consciousness exists, and all three derive their worth in relation to self-consciousness. It is difficult to see from what standpoint these ends can be regarded as in themselves final. For the utilitarian moralist they would exist for society. For an idealist in ethics, which Professor Windelband is by his own admission, science, art, and the state must have an ideal justification from the ideals of

Truth, Beauty, and Goodness. One may reject all metaphysics, but Science, Art, and the State will not therefore be ends in themselves; and whether or not an answer be possible, the question as to whether these three ideals are abstractions, or have real existence in an Absolute functioning in the world as the spirit of Truth, Beauty, and Goodness, must be regarded as the final problem for theoretic morality. Thus the teleological method, applied to ethics and driven to its ultimate conclusion, must lead to the discussion of metaphysical problems.

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REVIEWS OF BOOKS.

Le mouvement idéaliste et la réaction contre la science positive.

Par ALFRED FOUILLÉE. Paris, Félix Alcan, 1896.— pp. lxxviii, 348.

“After having gone through a period in which, according to the phrase of Auguste Comte, the intelligence was in insurrection against the heart, we are entering upon another in which the heart is in insurrection against the intelligence.” Such are the words with which M. Fouillée opens his contribution to the Library of Contemporary Philosophy. The anarchy, intellectual and moral, which seems to be described in these words is, he contends, merely apparent. Beneath the appearance of anarchy he thinks it possible to trace the order of a definite progress, and this end his new work is intended to subserve. It is limited to the philosophic movement which is seeking an idealistic interpretation of the universe; but he promises a companion study of the movement towards a construction of philosophy from the standpoint of positivism (*Introduction*, p. xxix).

One word on the plan of the book. M. Fouillée begins with a lengthy introduction (68 pages) on the idealistic movement in France and the reaction against science. This is the only part of the work that can be called historical in the proper sense of the term; and even this is far from being exclusively or even mainly historical. The body of the work, on the other hand, though containing a great deal of information in regard to the idealistic movement, does not communicate the information in an historical form: at least the history of the idealistic movement is made entirely subservient to the critical and even controversial spirit in which the author approaches the doctrines of which he gives an account. To many, undoubtedly, perhaps to most, of his readers this plan of treatment may be disappointing. A work with such a title as that adopted by M. Fouillée will probably in general create the expectation that it is designed to trace the historical evolution of the movement to which it is devoted, with all critical or controversial matter subordinated to the elucidation of the history. Still such a criticism is essentially subjective. It does not necessarily represent the critic's own ideal of what may be regarded as absolutely the best method of treatment for the work

criticised. It is more likely to express merely the critic's own intellectual craving, and that perhaps a craving of a temporary nature. The competent literary workman is in general the best judge of the form in which his materials may most fitly be given to the world in order to accomplish his aim. The remark, therefore, in regard to M. Fouillée's plan is to be taken, not as a complaint, but rather merely as a description of his work, such as his critic may fairly be expected to give.

Even if the plan of this work were open to complaint, there can be little or none against its execution. M. Fouillée not only gives an admirable exposition of the doctrines he reviews, but displays an equally admirable skill in his critical analysis of their purport. His whole style, it is sufficient to say, exhibits that lucidity of thought and expression which forms, for foreigners at least, the peculiar charm of the best French writers, and the want of which is a chronic complaint of English readers against much of the philosophical literature of Germany.

M. Fouillée divides his work into four Books, devoted severally to (1) the limits of science and the Unknowable, (2) the idealism of knowledge, (3) the idealism of existence, and (4) the indeterminist philosophy of contingency. The first of these follows, through four chapters, the various concepts which may be formed of the Unknowable, and the various theories of its nature. In the first chapter the Unknowable is considered as 'thing in itself,' that is to say, as imposing an objective limit upon science. Then, in a second chapter, the subjective limit of science is discussed; in other words, the Unknowable is traced as a factor in the conscious subject. In this connection, M. Fouillée enters into a critique of the psychological school, of which he takes James and Münsterberg as representatives, who "take for granted that consciousness is purely and simply a bundle of presentations." In opposition to them, he holds that emotion (pleasure and pain) and will (desire and volition) "are incapable of being reduced to presentations of objects that come and go before the mirror of consciousness" (p. 18). Here, it appears to me, the critic shows a tendency to treat the current classifications of psychology not as merely useful or necessary abstractions of science, but as if they were real and independent varieties of mental activity. He hardly, therefore, meets the view which represents those classifications as being merely the different phases which the life of the mind exhibits to scientific reflection, and finds accordingly an element of cognition, of emotion, and of volition in every conscious state.

This discussion of a psychological theory may be taken as illustrative of the thoroughness with which the author works out his theme, even in minute details. Into these details the critic cannot, of course, be expected to follow his author; nor is it desirable that any criticism should lead attention away from the main drift of a work to what are mere incidents of the discussion. We shall therefore rather seek to grasp the general aim of M. Fouillée's work, and to estimate the success with which he has accomplished that aim.

We have seen that the author starts with a recognition of an apparent conflict between the claims of the understanding, as formulated in science, and the claims of the heart, as embodied in the objects of moral endeavor and aspiration. This conflict, we have also seen, he regards as merely apparent; and he hopes to find a reconciliation of the conflicting claims. He contends that philosophy is far from being merely a perpetual discussion of antagonistic systems of thought. He insists that even systems so opposed as idealism and positivism move towards the same end; for the "objective synthesis," which was sought by the latter, and the "subjective synthesis," which the former seeks, become united in an universal synthesis (pp. ix, x). Apparently, also, he believes that this universal synthesis is to be found only when philosophy ceases to be a speculative activity for the private satisfaction of the individual thinker, and aims at an object which expands human endeavor to the widest ideal of social morality, and intensifies it with the fervor of religious inspiration. "The school," he says finely, "of which Victor Cousin was the chief representative, considered philosophy always as a sort of individualistic effort by which a small number of select intelligences raise themselves, on their own account, to the broad daylight of reflection, while leaving the mass of men in the twilight of 'symbols.' It may be questioned whether this conception of philosophy is truly the highest; in our opinion it is neither sufficiently social, nor, for that, even sufficiently religious, — it is not merely the alliance, we believe, but the unity, of philosophy and religion which the society of the future ought to propose as its ideal" (p. xiii).

In working out this noble conception of the task of philosophy, M. Fouillée rejects any theory of the universe which would find in it an object that is ultimately incomprehensible; he rejects with special decisiveness that curiously self-contradictory concept of the Unknowable which for some third of a century or more has afforded an illogical satisfaction to English and American Agnostics (pp. 39, 40). He does, indeed, at the same time follow, with a keen and

patient analysis, the various attempts that have been made, especially in France, by M. Paul Janet and others, to retain a place in science for the concept of final causes (Book III). But if I understand the *resumé* with which he closes this long analysis (pp. 146, 147), he leaves open the teleological interpretation as one of the possible methods of explaining the unity of thought and being which reason ultimately demands.

Though this concession may appear to be somewhat hesitating and reserved, M. Fouillée seems to shut his readers up to the teleological idea as the only philosophical construction of the universe. He sees, more clearly than many who obtrude the Relativity of Knowledge as the very keystone of their philosophical systems, that knowledge implies not merely the reciprocal relation of objects with one another, but also the relation of them all with the intelligent subject. He holds, therefore, that the universal relation of all objects to the subject can never be subordinated to any particular relations, such as those of quantity or causality, which one object may be construed as holding to another. Accordingly he refuses to admit that any activity of the conscious subject, whether in knowing or willing, is capable of being explained as an effect, by referring to the known or willed object as cause of the conscious activity. I have, in fact, noted two passages (pp. 50, 275) in which this interpretation of consciousness is rejected, as being characteristic specimens of the author's best style of lucid reasoning and statement. The point of view from which such passages are written receives additional elucidation from the contention, that the particular aspects in which the special sciences deal with phenomena are illusory abstractions, which it is the function of philosophy to correct by reëstablishing the concrete in its entirety (p. 41).

With the decided idealism of such teaching, one might expect a consistently idealistic construction both of intellectual and of moral life. But in regard to neither is this expectation fulfilled. On the contrary, the author's whole critique of idealism has largely the appearance of a polemic. In his second Book, on the idealistic theories of knowledge, he overlooks what is implied in his own idealistic contentions. The whole polemic of this book fails to face the fact that, by the author's own teaching, knowledge must be construed as an evolution of self-conscious intelligence, and that whatever self-conscious intelligence necessarily implies must form an *a priori* condition of the very possibility of knowledge.

A similar criticism applies to the elaborate polemic of the fourth

Book against liberty. Here liberty is identified with the contingent, and that again with something which, being out of all determinate relation to everything else, is inexplicable, unknowable. This seems merely a vaguer fiction of abstract thought than the old *libertas indifferentiae*, which has surely been abandoned long ago by all intelligent defenders of moral freedom. The doctrine of freedom is a protest against the theory that a volition can be completely explained, like any event in external nature, by the category of causality. That, however, is a theory which, as we have seen, M. Fouillée himself explicitly rejects. In fact, he seems to have left for himself no alternative but the position of the philosophical libertarian, that the essential explanation of a volition is to be found, not in the category of causation, but in that of self-conscious, purposive intelligence.

It may seem ungracious to refer in conclusion to one or two points in M. Fouillée's language. He speaks (p. xii) of the Kantian antinomy between "la raison pure" and "la raison pratique." He knows, of course, as the context proves, that Kant opposes practical, not to pure, but to speculative, reason. It is unfortunate, however, that his language should even appear to countenance a mistake, that is sometimes made, of opposing pure and practical reason. Again, it is worth inquiring whether "amoralisme" is a coinage current among good French writers. Surely such an unpleasant hybrid is not an indispensable addition to the nomenclature of philosophy. Let me add that the paucity, if not the triviality, of these linguistic criticisms may be taken as an indication of the general faultlessness of M. Fouillée's language.

J. CLARK MURRAY.

History of Philosophy. By ALFRED WEBER, Professor in the University of Strassburg. Authorized translation by FRANK THILLY, Professor of Philosophy in the University of Missouri. New York, Charles Scribner's Sons, 1896. — pp. xi, 630.

To the histories of philosophy by Erdmann, by Windelband, and by Falckenberg, recently rendered into English, is now added the manual by Professor Weber. No apology is needed for presenting to the American public this additional history of philosophy, as it is quite different in scope from the other histories named, and supplies a want long felt. There has long been needed a modern substitute for Schwegler's manual—a book for undergraduate students and the general reader, covering the whole field of European philosophy, ancient, mediaeval, and modern, at once brief in compass,

scholarly in matter, and attractive in style. In Weber's *History of Philosophy* we have just such a work.

This book had its origin in the desire of its author to supply an acceptable manual to his French-speaking students at Strassburg. When it appeared, twenty-five years ago, it immediately took high rank among the manuals in French on the subject of which it treats. Since then it has gone through five editions in the original, and has been repeatedly enlarged and greatly improved; and with each new edition it has been received with increased favor. The translation here offered is from the last French edition, that of 1892, and includes a number of changes and additions communicated by the author to the translator in manuscript. It is to be regretted that the translation does not bear the more accurate title of the original work, *History of European Philosophy*, since the author explicitly declines to treat of Oriental speculation. We miss also in the translation the interesting prefaces to the third and fourth editions in which the author states his own philosophical position.

The author is, on the whole, judicious in his allotments of space to the different periods and systems. After an introduction on the nature of philosophy and the divisions and sources of the history of philosophy, the work is divided into three parts: Greek Philosophy (pp. 17-184), Philosophy of the Middle Ages (pp. 185-285), and Modern Philosophy (pp. 286-603). Each of these periods is treated in two subdivisions. The first is divided into the age of metaphysics proper or philosophy of nature (substantially the pre-Socratic period), and the age of criticism or philosophy of mind; the second is divided into the period of the reign of Platonic-Christian theology, and that of the reign of Peripatetic Scholasticism; the third or modern period, to which more than half of the volume is devoted, is divided into the age of independent metaphysics (Bruno to Leibniz), and the age of criticism (Locke to the present age).

Professor Weber follows in the main, and wisely we think, the chronological order. His presentations of the various systems are uniformly clear and impartial, and, considering their conciseness, exceptionally comprehensive and satisfactory. In a few luminous sentences he often conveys to his reader the salient points of a complex system or a protracted controversy, or the characteristics of a period. He is very skilful also in tracing the historical connections of various speculations,—in pointing out their origin and in tracing their subsequent influence. He is fond of calling attention to the similarities in systems, and to the reappearance, under slightly dif-

ferent phraseology or in different connections, of certain fundamental notions (*cf.* pp. 378 n., 492, 493, 498, 499, etc.). He takes pains also to point out the contrasts between systems (*cf.* pp. 139, 140, 482, 483, etc.), and how in important respects one system is the development from or the complement of another (*cf.* p. 243). From beginning to end the reader is conscious of the genetic and evolutionary character of the history he is reading. The book does not, like so many manuals, including even Schwegler's, leave the impression that philosophical systems are arbitrary creations, each intended to supplant its predecessor, and having little or no historical connection with one another. Professor Weber's account begins as simply, and moves forward as naturally, as the actual history did, and the reader is made to feel from the beginning of the book to the end of it that he is dealing with real problems and not with idle imaginings; and he is made to see, too, that there is a steady progress toward truth.

The following paragraph, which stands near the beginning of the account of the philosophy of the first period of Ancient (or Greek) Philosophy, embodies several of the author's characteristics of style. It will be noticed that, in the main, Hegel's interpretation of the speculations of this period is followed, but how different the style from that of Hegel!

"The first question that arouses controversy is the problem of becoming. *Being* persists, *beings* constantly change; they are born and they pass away. How can being both persist and not persist? Reflection upon this problem, the metaphysical problem *par excellence*, since it lies at the root of all the sciences and dominates all questions, gives rise to three systems, the types of all European philosophies, — the Eleatic system; the system of Heraclitus; the atomistic system, which was proclaimed in the idealistic sense by the Pythagoreans, in the materialistic sense by Leucippus and Democritus, and with a dualistic turn by Anaxagoras. The first two are radical; each suppresses one of the terms of the antinomy; the third is a doctrine of conciliation. According to the Eleatic hypothesis, being is everything, change is but appearance; according to Heraclitus, change is everything, and being, or permanence, is but an illusion; according to the monadists and atomists, both permanence and change exist: permanence in *the beings*, perpetual change *in their relations*. The Eleatics deny becoming; Heraclitus makes a god of it; the atomists explain it."

Professor Weber is equally skilful in the characterization of the philosophy of other periods, as, for example, that of Scholasticism

(p. 202). He does full justice to the speculations of that much decried period, and declares that the more familiar we become with Scholastic literature, the less apt are we to exaggerate the progress of free thought from the thirteenth to the nineteenth centuries (p. 248).

While the author's expositions and criticisms of ancient philosophy are skilful, and his treatment of the philosophy of the middle ages fuller and better than would be expected in so brief a manual, it is in the exposition and criticism of modern philosophy, to which, as already said, more than half of the volume is devoted, that we regard him as most successful. It is difficult, however, where all is good, to select for especial mention the exposition of any one system. The expositions of Descartes, Spinoza, Locke, and Kant are all models of their kind, and would be readily understood and enjoyed by the young student and the general reader. The exposition of Hegel, too, is about as luminous as so brief a presentation can well be made. Full justice, also, is done to the modern evolutionary philosophy of Darwin and Spencer. The treatment of English philosophy generally is fuller than is usual in German manuals, although, like nearly all Continental writers, the author is less full in his expositions of post-Humean than of pre-Humean British thought. Of British philosophy generally he remarks that it is, to this day, almost as empirical and positivistic as in the times of Bacon and Locke; and that we may even claim, in general, that England, "though rich in thinkers of the highest order, has never had but a single school of philosophy, or rather, that it has never had any, for its philosophy is a perpetual protest against Scholasticism" (p. 391). In treating of the philosophy of the middle ages, attention is called to the fact that Great Britain, the fatherland of Scotus Erigena (whom Weber regards as on the whole the most profound philosopher of the Christian middle ages), Occam, John Duns Scotus, and the two Bacons, has every reason to boast of being the Ionia of modern philosophy.

It is not to be expected, of course, that Professor Weber's interpretations and criticisms will be accepted by every one, but our space does not allow of a detailed mention, let alone criticism, of the points in which we would differ from him. It suffices to say that, on the whole, we regard his interpretations and criticisms as unusually impartial and sound. We must express our surprise, however, at his superficial criticisms of Anselm's famous ontological argument (p. 217); at his omission of all reference to the numerous representatives of the German *Aufklärung*; at his wholly inadequate and unsatisfactory reference to Lotze (p. 542 n.); and at his scant treatment, in a book

written expressly for French students, of the French Eclectic or Spiritualistic school (p. 590). The statement on page 287 implies that Bruno was imprisoned for but two years before his execution, while in fact his imprisonment, first at Venice and afterward at Rome, lasted for almost nine years (May, 1591 to February, 1600). The author rarely makes use of undefined technical philosophical terms, but we find it difficult always to understand in which of their many senses the terms 'idealism' and 'monism' are used. In his treatment of, and reference to, the controversy between nominalism and realism, he fails to distinguish carefully enough the psychological from the ontological question involved. For example, he speaks of the "extreme nominalism of Locke," while, as is well known, on the psychological question Locke was anything but a nominalist.

The treatment of disputed points of interpretation, a particular in which so many historians of philosophy fail, is excellent. As examples, we may refer to what is said concerning Spinoza's doctrine of attributes and his maxim *determinatio negatio est* (pp. 329 f.); the question as to Bacon's scientific merits (p. 299); and the question as to whether or not Hume had a serious philosophy (pp. 418 f.). To speak of the first of these only, we find Professor Weber taking the realistic view of Spinoza's doctrine of attributes, and declaring that *determinatio negatio est* does not signify, determination is negation, but *limitation* is negation. By calling God *ens absolute indeterminatum*, Spinoza does not mean to say that God is an absolutely indeterminate being, or non-being, or negative being, that is, an unqualified being, possessed of no attributes or characteristics, but, on the contrary, that he has absolutely *unlimited* attributes, or absolutely *infinite* perfections, — that he is a positive, concrete, most real being, the being who unites in himself all possible attributes and possesses them without limitation. Spinoza evidently intended, he thinks, to forestall the objections of the non-attributists, who maintain that to give attributes to God means to limit him, by ascribing to God *infinita attributa*, which seems to mean both *infinite attributes* and an *infinity of attributes*. Professor Weber thinks, however, that strictly speaking, *infinita attributa* are boundless attributes rather than innumerable attributes, and that had Spinoza been decided on the question as to whether the absolute has attributes other than extension and thought, he would evidently not have employed an ambiguous expression.

While, as we have said, the author is as impartial as could be expected in his expositions of the views of others, he is not at all

inclined in his criticisms to conceal his own. He regards positivistic monism as the dominant feature of the philosophy of the century now closing. He is himself an outspoken metaphysical voluntarist, in this respect following Schopenhauer, while, however, rejecting the latter's pessimism. The absolute spiritualism of Berkeley is, in his opinion (p. 397), the only metaphysic that may be successfully opposed to materialism, for it alone takes into consideration the partial truth of its objections. But this spiritualism is to be understood voluntaristically, that is, it is the Will which is, in the last analysis, the higher unity of Force and Idea (*cf.* prefaces to third and fourth editions, and pp. 600 ff. of the translation). This "concrete spiritualism," as Professor Weber is fond of calling his view, which considers *will* as the ground of all things, and the common denominator to which the world of physics and the world of mind can be reduced,—which denies, that is, that force and thought are separate entities, and holds that they are united in intelligent *will*,—is, he holds, the only truly universal metaphysic.

As to the translator's part in the volume, Professor Thilly claims to have taken pains to render the original into clear and simple English, and to have increased the bibliography (1) by adding the titles of standard American, English, German, French, and Italian works; (2) by mentioning translations of foreign books referred to in the text and notes; (3) by giving the names of important philosophical journals published in this country and abroad; (4) by placing at the end of the volume a list of the best modern works on logic, epistemology, psychology, anthropology, ethics, aesthetics, the philosophy of history, the philosophy of religion, jurisprudence, politics, etc.; and, finally, to have prepared an index. His translation reads smoothly, and is, as he aimed to make it, in clear and simple English. We have, however, noticed a few odd-sounding or imperfect renderings, such as 'Sophisticism' (p. 62), 'Apologete' (p. 187), 'emanatistic' (pp. 167, 205), 'affluences' (pp. 57, 302, etc.) for the usual 'effluxes,' 'moral conscience' (p. 478 and elsewhere) for 'moral consciousness,' 'creation of the Saviour' (p. 553) where allusion is made to the miraculous conception. The name of our old friend St. Anselm always appears as 'St. Anselmus' (as though his elevation to the archbishopric of Canterbury had not entitled him to the English form), while the name of his contemporary critic appears, now in the form 'Gaunilon' (p. 461), and again in the form 'Gaunilo' (p. 217). On page 171 we have 'Plato' where we should have 'Plotinus.' The date of the second edition of Mr. Spencer's *Social Statics* appears as

1874 (p. 581) instead of 1894. Reference 1 on p. 586 to "p. 537, note 2" is a misprint, as there is no "note 2" on that page. The reference, apparently, should be to p. 563, note 5. Similar remarks apply to the next reference, which probably should be to p. 563, note 4. Reference 7 on p. 588 should apparently be to "p. 542, note 2" instead of "p. 517, note"; and C. Smyth (p. 609) should be N. Smyth.

Professor Thilly could have greatly improved his list of translations of foreign books referred to in the text and notes. To illustrate, without regard to chronological order, we may point out that there is no mention of the English translations of any of Malebranche's writings; of the two renderings of Cousin's *La philosophie de Locke* and the translations of other of his writings (except the *Lectures on Kant*); of Stirling's translation of the earlier part of Hegel's *Wissenschaft der Logik*; of the renderings by Dr. Harris and Dr. Burt from Hegel's *Propaedeutik*; of Dr. Kedney's translation of the first part of Hegel's *Aesthetik*; of Stirling's partial translation of Kant's *Critique*; of the three complete translations of Kant's *Foundation of the Metaphysic of Ethics* by Willich, by Semple, and by Abbott; of the translations of Martensen's *Christian Ethics*, of Ueberweg's *Logic*, of the more important writings of Jouffroy and of Rosmini; of Professor Smith's translation of Spinoza's *Ethics*, nor of the translation of the same work by D. D. S., published by Van Nostrand of New York.

The bibliographical references, too, excellent as they are, could easily have been improved. For example: in the references given on Kant, we find no mention made of Green's *Lectures on Kant* and no reference to Schopenhauer's criticisms; there are no sufficient references to the literature on English Deism; there are but meagre references to the literature on J. S. Mill and on Mr. Spencer (such important criticisms of Spencer as those by Martineau and by Birks are unnamed); there is no mention of the last edition of Professor Bain's *Senses and the Intellect*, etc., and none of the recast form of Renouvier's *Essais de critique générale*. Still the translator's additions to the bibliography and his index have added greatly to the value of the book. His work, on the whole, has been conscientiously and well performed, and teachers of the history of philosophy are indebted to him for a most useful text-book.

GEORGE MARTIN DUNCAN.

Studies of Childhood. By JAMES SULLY, M.A., LL.D., Grote Professor of Philosophy of Mind and Logic, University College, London. New York, D. Appleton & Co., 1896. — pp. viii, 527.

Many of us had already read with deep interest Professor Sully's articles in the *Popular Science Monthly* and several English magazines on the subject of mental development in children. The present volume is really a collection, comprising these articles, together with some valuable new material (particularly on children's drawings). The reader must therefore bear in mind, in the first place, that the book does not pretend to cover the whole field of child-psychology, but that it deals instead somewhat fully with a limited number of prominent topics; and, in the second place, that a considerable portion of the volume has been in print for a number of years in another form, and that the matter contained therein has thus become the common property of child-psychologists. This of course robs the work of the character of newness; and yet every student of childhood will be glad to have Professor Sully's work put into this convenient and permanent form; especially as the great bulk of the literature of this subject exists at present only in magazine articles and pamphlet reprints of these.

A most commendable feature of the work is its cautious and conservative tone, and its remarkable freedom from hasty generalizations. Over and over again, we find general statements ventured only hypothetically, and with the remark that "more observations are needed on this point." There can be little doubt that child-psychology has already suffered injury from the undue zeal of some of its friends, who hasten to the most sweeping generalizations on the scantiest data, and assume that all children "rigorously correspond to one pattern of which we have a perfect knowledge." This is to run into the very error which child study is intended to counteract. The principal defect of the psychology and pedagogy of the past was that they ignored individual differences, and subjected all children to the same mode of treatment. A chief reason for the cautious tone of Professor Sully's work lies, no doubt, in his keen appreciation of the *difficulty of interpreting the facts observed*. — "The phenomena of a child's mental life, even on its physical and visible side, are of so subtle and fugitive a character that only a fine and quick observation is able to cope with them. But observation of children is never merely seeing. Even the smile has to be interpreted." And this very interpretation presents enormous difficulties. Let any of those who speak of the child's mind as an open book, which one who runs may

read, sit down patiently before a little child, as Preyer has done, and let him undertake to tell us, not merely what sounds and movements the child made, physically and externally, but let him explain the mental state of which they are the 'outward and visible sign.' Before long he will probably come to Professor Sully's conclusion, that the child-observer needs to possess "a divining faculty, the offspring of child-love, perfected by scientific training." It is scarcely necessary to add that the book is written in a charming style, and that it fully sustains the author's reputation of being scholarly without being pedantic or dull.

In chapter I, which is introductory, some general remarks are made on the characteristics of the infant mind, and on the present state of child study, showing how it has come to pass that "not merely to the perennial baby-worshipper, the mother, and not merely to the poet, touched with the mystery of far-off things, but to the grave man of science, the infant has become a centre of lively interest."

That charming subject, the childish imagination, is treated in chapter II, and exemplified principally by the play and the story. Middle ground is taken between those who say that children are predominantly matter-of-fact, and those who speak of them as abounding in the play of fancy. The fact is, most children are both. They are "at once matter-of-fact observers and dreamers, passing from the one to the other as the mood takes them, and with a facility which grown-up people may well envy." Not only so, but there is a periodicity in most children's imaginativeness. Most children are *for a time* fancy-bound. Moreover, not all children are imaginative in the same way. Some live in a colored world, others in a world of sounds, others in a world of movements. The well-known tendency of the child-mind to personify inanimate nature is fully illustrated. Children's play, which arises out of the impulse to give outward embodiment to vivid and persistent images, is essentially "the acting of a part, and the realizing of a new situation"; not, however (as in the case of the actor), that others may be pleased, but purely in gratification of the child's own impulse. It is pointed out that only the human being in his play assumes other characters. The child assumes the *rôle* of horse or cat, but the cat never assumes any other *rôle* but that of cat. The intense activity of child-imagination is ascribed, on the physiological side, to the fact that the brain centres concerned in imagination have not as yet come to any great extent under the control of the higher thought centres, but remain under the sway of the senses.

In treating of the "dawn of reason" (chapter III), it is shown that the essential prerequisites of reason are observation, retention, and imagination. In observing, the child is apt to be spell-bound by some prominent feature, such as color, instead of grasping the object as a whole. The early reasoning of the child is dominated by a strong native impulse to connect and simplify, and by a "naïve prepossession of a regular, well-ordered world," which, "alas, finds itself confronted with an impenetrable tangle of disorder." This reminds us of Lotze's remark that metaphysic has its source in the apparent conflict of actual experience with our naïve expectations regarding cosmic regularity and order. The child here shows himself a metaphysician, as also in his interminable questionings in regard to the origin and purpose of things (the material and final causes of Aristotle). Children's thoughts about Nature, the Soul, and God (chapter IV) are dominated by the following impulses: to think of what is far off as like what is near (one form of which is the tendency to ascribe life, growth, and even "senile shrinkage," to inanimate as well as animate nature); to believe in the tangibility of all that is visible (the infant tries, for instance, to pick up sunbeams from the floor); to be specially interested in the *sounds* and *movements* of things; and to be anthropomorphic and anthropocentric in his ideas of the supernatural.

In the development of language (chapter V), we have the familiar stages: (1) impulsive babblings, at first purely emotional, and then self-imitative and reduplicative; (2) instinctive utterance, which is demonstrative or expressive, and quite spontaneous, as Preyer and others have also shown; (3) imitative (including the onomatopoeic) sounds, in which the child usually simplifies the sound heard, giving prominence to the accented syllable. "Such simplification of words is from the first opposed, and tends in time to be counteracted, by the growth of a feeling for their general form as determined by the number of syllables as well as the distribution of stress and any accompanying alterations of tone or pitch." Linguistic difficulties are avoided by means of omissions, substitutions, transpositions,¹ reduplications, and various other contrivances, familiar to the child-psychologist. Professor Sully seems to think that the variability of the *order* in which different children acquire the various sounds proves that the law of physiological ease is not followed. I must confess my inability to see the conclusiveness of this remark. If we once admit — what Professor Sully so strongly contends for — that children

¹ I know a little girl who for a long time used to say "racksal" for "rascal."

differ widely from each other, then the order of acquisition of vocal sounds may be extremely various, and yet the line of least resistance *may* be followed in all cases. One child may find a certain sound difficult, and so acquire it late, while another may find it easy, and acquire it early. The mere fact of variation in order of acquisition certainly does not disprove the law of ease.

In the account of the development of fear (chapter VI), its physiological groundwork in nervous shock is well explained. Sully thinks we do not require Darwin's hypothesis of heredity here, the bigness, strangeness, and unexpected movements of things being sufficient to account for the phenomena. He suspects that "fear of darkness takes its rise in a sensuous phenomenon, a kind of physical repugnance." It has, perhaps, not yet been clearly shown that there is any fear of the dark as such, at all. Certainly Professor Sully's examples are not conclusive on this point; and, if one may speak from his own experience, the writer is quite sure that, though always a very timid child, he was never afraid of the darkness itself, but only of the monsters with which his childish imagination peopled it. The darkness itself, provided he could succeed in banishing these uncanny inhabitants, was a comfortable, soothing thing, of which he was quite fond, especially when tired. It is still an open question whether that 'reifying' of the darkness of which Mr. Sully speaks, is not really the same thing as that peopling of the darkness with robbers and tigers of which I have just spoken. Further investigation is needed on this point.

Two of the most valuable chapters in the book are those on the child's moral nature, and his relation to authority (chapters VII and VIII). Here, as generally, the author avoids both the extremes of hasty theorists. Refusing to accept either the doctrine that the child is essentially bad, or the opposite doctrine that he comes from the Creator's hand the ideal of virtue, he takes the position that in the infant there is no morality at all, but only its raw material in the shape of tendencies, some of which are pro-moral, and others contra-moral. "The infant, though it has a nature capable of becoming moral or immoral, is not as yet a moral being; and there is a certain impertinence in trying to force it under our categories of good and bad, pure and corrupt." It is not fair to call the little child a thief because he shows himself supremely indifferent to the distinction of *meum* and *tuum*, to put him down as wholly egotistic because of his boundless greed, or to describe him as a savage because of his violent fits of passion. Indifferent to suffering he certainly is, but

only because he does not understand it. Children's cruelty to animals is far from a mere delight in the sight of suffering, and has its source rather in the impulse to have, hold, possess, etc. It is shown by many examples that "generosity is as truly an impulse of childhood as greediness"; and that the so-called lies of children cannot, in many cases, be called lies at all in the strict sense. We must take the same view of the child's relation to authority. He is neither obedient nor disobedient by nature; but there are in him impulses in both directions. The very attempt to find excuses for his misdeeds is an evidence of a respect for law which, however, may consist pretty largely of "an innate disposition to follow precedent and rule, which precedes education," and which is "one of the forces to which education can appeal."

The newest material in the book is to be found in the chapters on the art of childhood (IX and X). Art arises out of two impulses: the play impulse and the desire to please others. Art and play are therefore closely connected. In chapter X, we have the results of what has evidently been a very careful study of a large number of children's drawings, many of which are reproduced. Infantile drawing begins with a free, aimless swinging of the pencil to and fro, and then passes through the stage of "primitive design," in which the figure is largely symbolic, with very little attempt at exact representation, attaining finally to a more sophisticated treatment, in which, however, the child is apt to ignore perspective, and show both eyes in a profile, or make one's body visible through his clothing. The whole development shows a progress from bold symbolism to a naturalistic treatment (shall we say from idealism to realism?).

Chapter XI is a record of an individual child, containing some very interesting illustrations of facts and principles discussed throughout the volume. Professor Sully's interpretations here are generally far-sighted and suggestive. The present writer has been very much impressed while reading this diary by the differences among children. The boy C, the subject of this chapter, is in most respects very much in advance of a little boy who came under the writer's own observation, but in some particulars less precocious.

The short chapter (XII) with which the book closes (the account of George Sand's childhood) is a gem which no one interested in children from any point of view can afford to miss. The account of her intensely vivid imagination, her original interpretations of religious ritual, and above all, her self-evolved religious system, with

its temple and its god Corambé, constitutes the most interesting bit of child-literature with which the writer is acquainted.

Those who are interested in that view of infant development which makes it a recapitulation of the growth of the species (the ontogenetic-phylogenetic parallel) will find many illustrations of the principle scattered throughout the volume. On the whole, it may be said that Professor Sully has given us the most readable, and one of the most valuable works on the psychology of childhood that have appeared in any language, — a distinct addition to the literature of this subject which will do much to gain for that line of study the appreciation which it deserves.

FREDERICK TRACY.

The Primary Factors of Organic Evolution. By E. D. COPE.
Chicago, Open Court Publishing Co., 1896. — pp. xvi, 547.

In this volume the distinguished leader of American Neo-Lamarckians gathers together the evidence tending to establish the reality and importance of direct adaptation to environment as a factor in Organic Evolution. Out of the rich stores of his palaeontological knowledge Professor Cope is able to make out a very strong case for the view that the Lamarckian factors, *i.e.*, mechanical strains, physical and chemical conditions, the use and disuse of the various parts of the organism, etc., have been the directing forces in the gradual development whereby the existing forms of life have come into being. At least he easily shows that the actual succession of organisms is just what might have been expected *if* such had been the efficient and directing causes of Variation. This method of argumentation does not, of course, *compel* assent. For it avails not to show in a thousand cases that the facts look *as if* the Lamarckian factors had been active: that is no proof that they were the actual causes, and it may still remain only a curious coincidence that the 'spontaneous' variations should have appeared just where Lamarckism led us to look for them. All that can be done in this way is to render the Lamarckian explanation increasingly probable, and this, it must be admitted, Professor Cope has done with admirable skill. He also makes effective use of the old difficulty that Natural Selection cannot be the cause of the variations from which it selects the fittest to survive, and emphasizes the logical incompleteness of an ultra-Darwinian view which is content to leave the causes of Variation unexplained. He shows further how little support the facts lend to the initial assumption of an indefinite number of multifarious variations

in every direction, how manifestly the actually occurring variations which have more than individual extension are correlated with definite changes in the organic conditions of life. Lamarckism, therefore, not only accords with the facts, but also has this important methodological superiority over Darwinism, that it enables us to carry scientific explanation one step further.

But Professor Cope is not satisfied with this. He essays also to determine why, and in virtue of what, living beings adapt themselves to the changes of their environment, and here his views acquire still greater philosophic interest. The process, according to him, is not by any means a mechanical one. It is to be understood only by the intervention of consciousness. A living organism consciously strives to adapt itself to its conditions of life, and it does so because adaptation yields pleasant, and non-adaptation unpleasant, sensations. And it is this conscious effort which gradually builds up the mechanical structure of the body, all of which is ultimately deposited by the living protoplasm. It is, however, slowly and with difficulty that these efforts after adaptation affect the relatively-isolated germ-plasm, and this sufficiently accounts for the comparative rarity and slowness of the transmission of acquired characteristics. The key to the problem of heredity is to be found in analogies not physical but psychical. The germ contains the record of the past history and experience of the race; the registration of that record observes laws whose character is essentially psychological, and Professor Cope finally suggests outright (p. 493) that "if heredity is a form of memory, its laws may resemble those of psychic memory."

It will be seen that Professor Cope is by no means a believer in the automaton theory, which would make consciousness a merely otiose and accidental "epiphenomenon," displayed by organisms which were developed by the survival of a succession of happy accidents. On the contrary, he urges the strongest reasons against any such pandering to materialistic prejudice in the supposed interests of scientific method. He points out that "as no adaptive movement is automatic the first time it is performed, we may regard effort as the immediate source of all movement," and (p. 505) "although it is frequently alleged or assumed that designed conscious acts are the products of reflexes, no one has yet shown how this is possible. On the other hand, the development of automatic acts out of conscious ones is of ordinary occurrence, and is known under the name of education." Thus the unconscious functions of the organism are simply cases of a "retrograde metamorphosis of energy," such as abound

everywhere. Professor Cope is quite aware of the full scope of his doctrine, and consistently thinks that "the true definition of life is *energy directed by sensibility, or by a mechanism which has originated under the direction of sensibility*" (p. 513). He holds not only that "life has preceded organization, but that consciousness was coincident with the dawn of life" (p. 508).

And these propositions are not only backed by an amplitude of illustration, but advanced in the light of a full knowledge of the difficulties they are commonly thought to involve. Professor Cope's replies to two of these will be found especially interesting. The first is the difficulty of ascribing consciousness to the lower animals and the plants. This difficulty is greatly lessened if we remember that habitual activity may become automatic and unconscious. It follows that as far as their consciousness is concerned, many of the animals of the present day may be thoroughly degenerate. Their case is analogous to the difference recognized in sociology between modern savages and ancient, whose habits had not become hopelessly crystallized. As for plants, they also are degenerate as a class: they lost consciousness by becoming "earth parasites," a process of which the history may still be traced in the Protozoa, who in youth display the purposive motions of animals, but later on "settle down" and become plants. The vegetable kingdom as a whole, having devoted itself to the manufacture of protoplasm out of inorganic matter, found that this occupation is best carried on in a sedentary posture and with a consequent loss of consciousness. The animal world, on the other hand, discovered that much energy could be economized by becoming parasitic on plants and annexing ready-made protoplasm, and its surplus energy developed a higher consciousness. There is then no insuperable difficulty about the doctrine of "Archaesthetism," *i.e.*, about conceiving consciousness as a primary characteristic of life.

And, secondly, this view is further supported by the unique character of protoplasm and the impossibility of assimilating its action to that of the other physical and chemical forces. It is not true that by constructing 'organic' compounds our chemistry has come any nearer to solving the mystery of life. For though it was a mistake to suppose that only living beings could produce these compounds, yet Professor Cope contends they are all products of organic waste, deposited in the breaking up of protoplasm. It is in growth, *i.e.*, in the production of protoplasm alone, that the characteristically vital changes are exhibited. And as the growth of a living organism is

endothermic and essentially involves an *absorption* of energy, Professor Cope protests against its being included by Herbert Spencer in one and the same formula of Evolution with physical processes which involve the *dissipation* of energy. He proposes instead to recognize it as a special form of energy under the name of "bathmism," of which the direction is not, like that of all other forms, towards degradation and dissipation, but towards the integration and absorption of energy. In Professor Cope's language, it is not *catagenetic*, but *anagenetic*.

The philosopher will at first be inclined to regard this theory as merely a revival of the old 'vital force,' and be prepared to find it as sterile as its predecessor. But it differs from it by being an attempt at generalizing a large number of empirical observations, and no merely tautologous and verbal deterrent from further investigation. And Professor Cope ingeniously utilizes it to explain a peculiarity about the history of organisms which has hardly been noticed, and certainly not explained, in the current theories of Evolution. I refer to its *progressive* character, to the predominance of progress over degeneration, of "anagenesis" over "catagenesis." Of this the ordinary Darwinian 'Survival of the Fittest' offers no explanation, for no reason is given why the fit should not generally be the structurally degenerate, as in cases of degeneracy they exceptionally are. Professor Cope recognizes this progressiveness as a fact to be explained, and suggests (p. 448) that "the existence of the peculiar form of energy" showing itself in "the building or growth of the added characters" explains it. It is refreshing to have the existence of the problem recognized, but I cannot see that the mere existence of 'bathmism' solves it any better than Spencer's 'law' of heterogeneity. For just as in the latter case we must still ask why the tendency towards heterogeneity prevails over the contrary tendency towards homogeneity, so here we are not told why 'bathmism' triumphs over the catagenetic forms of energy. In other words, the law of Progress is not yet discovered, though the recognition of the specific peculiarity of vital energy seems a large step in the right direction.

Enough has perhaps been said to convey some idea of the great suggestiveness of Professor Cope's book to all students of the philosophy of Evolution. I regard it as especially valuable for its clear exposition of the ultimate necessity, even in science, of explaining the lower by the higher (the biological by the psychological rather than by the physical and chemical, in this case), and as an important

contribution to the proper method of such explanation. And in an age in which the joy of working the methodological assumptions of the lower sciences has too often led to their indiscriminate and exclusive application, one cannot be too grateful to a scientist of Professor Cope's eminence when he, from his side, essays to pave the way for the final harmony of the facts of science with the postulates of philosophy.

F. C. S. SCHILLER.

SUMMARIES OF ARTICLES.

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

PSYCHOLOGICAL.

The Reflex Arc Concept in Psychology. JOHN DEWEY. Psych. Rev., III, 4, pp. 357-370.

The author urges that the older principles of explanation and classification, which are supposed to have been replaced by the reflex arc conception, are still dominant in that conception itself. Instead of interpreting the character of sensation, idea, and action from their place and function in the sensori-motor circuit, we still incline to interpret the latter from our preconceived ideas of rigid distinctions between sensations, thoughts, and acts. The sensory stimulus is one thing, the central activity standing for the idea is another thing, and the motor discharge is a third. As a result, the reflex arc is not an organic unity, but a patchwork of disjointed parts. What is needed is that sensory stimulus, central connections, and motor responses shall no longer be viewed as separate and complete entities in themselves, but as functioning factors within the single concrete whole now designated the 'reflex arc.' The reflex arc idea, as commonly employed, is defective (1) in assuming sensory stimulus and motor response as distinct psychological existences, while in reality they are always inside a coördination and receive significance solely from the part they play in maintaining or reconstituting the coördination; and (2) in holding that the *quale* of experience which precedes the 'motor' phase and that which succeeds it are two different states, instead of the last being the first reconstituted, the motor phase coming in only for the sake of such mediation. Stimulus and response are not distinctions of existence, but teleological distinctions,—distinctions, that

is, of part played with reference to reaching or maintaining an end. The conscious stimulation or sensation and the conscious response or motion have a special genesis or motivation and a special end or function. The reflex arc theory, by neglecting this genesis and this function, gives us an arc instead of the complete circuit of which it is an arc, and so does not allow us to place and centre the latter. The circle is the temporary disintegration and need of reconstitution which affords the genesis of the conscious distinction into sensory stimulus and motor response. The stimulus is that phase of the forming coördination which represents the conditions which have to be met in bringing it to a conscious issue; the response is that phase of one and the same forming coördination which gives the key to meeting these conditions. The stimulus is something to be discovered, to be made out. So soon as the problem is solved by its adequate determination, then, and then only, is the response also complete. To attain either means that the coördination has completed itself. The application of this theory to the nature of psychical evolution, to the distinction between sensational and rational consciousness, and to the nature of judgment, is deferred for the present.

J. E. C.

Some Remarks upon Apperception. J. KODIS. *Psych. Rev.*, III, 4, pp. 384-397.

The author finds that three types of the notion of apperception appear in the history of psychology: (1) apperception as an event which imparts clearness to representations; (2) apperception as reflective knowledge; (3) apperception as an act of knowledge produced by the impact of two groups of representations. Has, now, it is asked, one of these definitions a stronger claim to existence than another? Are all three definitions a delineation of three phases of the same event, or are they all descriptions of three separate and distinct events? And is apperception, in all or any of these theories, conceived as an especial and important function of the soul? The author's conclusions are that these different significations are not false conceptions of the notion, but a use of the same nomenclature for three different phenomena. Moreover, the processes of apperception as defined in (1) and (3) are partial phenomena, which can be excluded from no act of knowledge. Apperception as reflective knowledge (2) may arise but is not necessarily involved in every act of knowledge. And it is further concluded that the name 'apperception'

most properly belongs to the phenomena of reflective knowledge. Reflective knowledge is a special content of knowledge, which is of particular importance for the formation of the psychical personality. The historical sanction for this use of the word 'apperception' was given by Kant, who often describes it as 'the representation of self.' Modern psychology, however, demands that we avoid all transcendentalism, and deal with the notion of apperception as an empirical one which must be treated according to empirical methods.

J. E. C.

Character and the Emotions. ALEXANDER F. SHAND. Mind, No. 18, pp. 203-226.

General psychology investigates human nature, which is at bottom identical, not merely in its cognitive and conative functions, but in its emotions and sentiments as well. Ethology, on the other hand, analyzes the different *types* of human beings, classifies them, and considers their process of development, their interactions, and transformations. (By a 'type' is meant a group of qualities either empirically found to coexist, or psychologically deducible from a central quality.) Ethology should proceed upon the principle of a correct classification of the leading types of character, as they are found empirically to exist, although it should remember that human beings are not *petrified* types, nor even the embodiment of a single one. We cannot, as Mill thought, start from circumstances and deduce the kind of character that would be produced by them. On the contrary, we have to consider what the type of character is, before we can deduce the effects of those circumstances. It is, however, possible to calculate the universal influence of a particular class of experiences apart from their particular influence on individual types. If, now, we obtained a classification, both of those cardinal differences between men on which their typical characters depend, as well as of the circumstances which affect them, and were able to achieve the more difficult undertaking of deducing our types and of following out the changes produced in them by circumstances, our knowledge of the type would then be more complete than our knowledge of the individual. Before we can classify the types of character, however, we must know the nature of the emotions and sentiments which, in their differences among different men, account for a large number of these types. The difference between our emotions and sentiments lies in the different growth of their organization. While the latter

are highly organized, the former may subsist at a stage of relative isolation and simplicity. But the emotions always tend to build themselves into more stable and complex feelings; and these are sentiments which, in their turn, become the centres of attachment of the organized emotions. The former are merely adjectival, and attach themselves as temporary qualifications in those more complex and persistent feelings, which they both serve to develop, and into which they are absorbed. The latter are the substantial and persistent sentiments which include them, and which in each particular case suffuse with something of their own flavor the emotion which happens to be excited in them. — Feelings may be classified according to the degree or character of their organization. To which class any particular feeling belongs, depends upon whether it is or is not assimilated by any performed sentiment. The lowest class of feelings includes pleasures and pains of special or organic sensation, — all our appetites, and some of our emotions. The next class contains the organized appetites, emotions, and specific pleasures and pains of sense, and, on the other hand, all the sentiments and interests. The third and most highly organized class of feelings includes the sentiments and interests.

G. A. COGSWELL.

ETHICAL.

Rights and Duties. J. S. MACKENZIE. *Int. J. E.*, VI, 4, pp. 425-441.

The most characteristic and significant struggle in which man is engaged, is not a mere struggle for existence, but rather a struggle for justice, a struggle for rights, — rights which men often are ready to prefer to existence itself. But what is justice? Justice is simply the best possible realization of the means of developing man's spiritual capabilities. This view of justice involves two sides, — rights and duties, claims and obligations. But we are not concerned here with the rights and obligations of one legal or political person or body to another, but with the relations of man to the world regarded as a means of his realization. The rights which a man has must be acquired. They must be won by struggle, by the development of personality. Such a right is a power or capacity, but the possession of this power or right, as the power or right to work, does not give the

right to work if there is no work to be done. Our rights over things depend upon the claims which they make on us, as well as upon our power of dealing with them. In the case of legal and political rights, it may be urged that there is no such reciprocity as that referred to, and no such dependence on the stage of personal development that has been reached. This is the superficial view of legal and political rights. Laws and political institutions are a growth out of the general consciousness of a people. They do not adapt themselves to each new personality, yet they are an expression of a people's life. There cannot be granted legal or political rights, if there is not a presupposition that the individuals will use them well. Our rights should not go beyond our faculty to use them rightly. So also in the sphere of morality, rights and obligations have a distinct reference to the general level of social development that has been attained. The right of expressing one's opinions, for instance, is one that is recognized only when a certain level of reasonableness in the formation of opinion has been reached. Otherwise it would be a public nuisance. The conventional rights and obligations recognized by ordinary law and morals must submit to examination from the standpoint of ideal ethics, by the standard of human welfare. It would be profitable to take up, one by one, the rights and obligations recognized by ordinary law and morals, and ask whether and how they help us forward, or whether they hinder our progress.

D. R. MAJOR.

Hegel's Theory of Punishment. J. ELLIS McTAGGART. Int. J. E., VI, 4, pp. 479-502.

The writer's object is to consider what relation Hegel's theory of punishment bears to the ordinary vindictive, deterrent, preventive, and reformation theories. Hegel does not, as has been claimed, support the vindictive theory of punishment. He maintains that punishment by its very nature tends to bring the guilty to repentance. This differs from the reformation theory, for as pain itself is regarded to be capable of reforming criminals, those who hold the theory are not anxious to spare pain, while those who maintain the reformation theory wish to inflict as little pain as possible. Is it true, as Hegel maintains, that punishment may lead to repentance for the crime which caused the punishment? I answer that it is able to fulfil the office which Hegel declares to be its highest function — that of producing repentance — when it does so by emphasizing some moral tie

which the offender all along was prepared to admit, although it was too faint or incomplete to prevent the fault. It may be shown that, under certain conditions, punishment can perform the work which Hegel assigns to it. The question is, when are these conditions realized? Are they realized in the relation of the state to the criminal? I think not, and herein lies Hegel's chief mistake. The state may frighten the criminal from crime, but rarely is it able to convert him to virtue. It may convince one that he has done wrong, but it cannot inspire him with a desire to do right. Hegel's mistake, in applying his conception of punishment to criminal law, resulted from his high opinion of the state as against the individual citizen. He did not lay enough emphasis on the fact, that without the approval of the individual conscience, no modern system of morality can be satisfactory. We conclude that, when punishment does produce repentance, it is fulfilling its highest end. But this function is one which it scarcely ever succeeds in performing at present when administered in the course of criminal law.

D. R. MAJOR.

Zur Sozialphilosophie der Staatsromane. LUDWIG STEIN. Ar. f. G. Ph., II, 4, pp. 458-485.

The significance of political romances is not in their contents but in their symptomatic character. As mysticism is the foreshadowing of philosophy, so Utopianism is the foreshadowing of the coming social philosophy. Political romances appear only when political and social conditions become unendurable. All that we have, from the *Republic* to *Looking Backward*, have been written in periods of great political or social disturbance, and all are heralds of higher stages of development. The *Utopia*, for example, heralded the beginning of the Reformation, which was a social as well as a religious struggle. The influence of More's work is due less to its positive ideal of government, than to its biting criticism of the social order then existing. From More's time till the present, the strength of Socialism has consisted chiefly in the weakness of its opponents. In the later romances, such as those of Cabet and Bellamy, the conflict is not between the people and the titled classes, but between labor and capital. The defect of both writers is that they do not tell us how we are to pass from the present era to the new one. The change cannot be made in a short time. Only by long training can man pass from egoism to altruism. The true value of political romances is not scientific, but pedagogical: by presenting higher ideals of social life they assist in the education of the race.

ELLEN B. TALBOT.

METAPHYSICAL AND EPISTEMOLOGICAL.

Der Begriff des Daseins und das Ich-Bewusstsein. Part I.

JULIUS BERGMANN. *Ar. f. sys. Ph.*, II, 2, pp. 145-173.

To the question, "What is existence?" the natural answer is: "An existent object is one which is independent of the idea which represents it." To this it might be objected that such independence is merely ideal; but we reply that our ideas must be taken as objectively representative of reality, and that therefore an object is existent, whenever it is represented by thought as independent, and as the reality to which the idea must conform. But this position, though valid, is rather a description than a definition of 'the existent,' and we must go further. In the first place, every idea represents its object as existing; hence it follows that we cannot make a judgment of an object unless its existence is already established (here the ontological proof fails). Again, from the same ground it follows that existence is presupposed in every judgment, and hence that existence is not a predicate of the object. Here is the problem: existence must belong to the object, — for we cannot arbitrarily give it to any idea we please, — and yet it is not a predicate of the object. Our solution is, that only that idea has an existing object, in whose constitutive content existence is contained in the same way as a general is contained in a given particular. In other words, every represented object whose existence is by content possible, exists actually; and every representation, through which the inner possibility of the existence of its object is recognized, is knowledge of the actual existence of its object. It is to be noted that we do not here justify argument from the possibility of a concept to the actual existence of its object, but we maintain that an idea may be such that the existence of its object is immediately given by the presence of the idea in consciousness. This does not justify the ontological proof from the *ens realissimum*, since this notion has no content which could include existence, but it is almost a justification of Leibniz' attempt to unite all thinkable realities into one. If we could get such a unity as that, its idea would certainly involve the existence of the object.

ALEX. MEIKLEJOHN.

Der Begriff des Daseins und das Ich-Bewusstsein. II. JULIUS BERGMANN. Ar. f. sys. Ph., II, 3, pp. 289-316.

In the preceding article, it was found that everything which is thought is thought as existent, or, in other words, that existence is contained in every concept. Now, what is meant by existence, and to what things is the notion applied? The existence of a *thing* consists in its being in connection with the other things which make up the existing world. If, now, we define the existence of the world as that which contains existing things, the argument seems to move in a circle. But this error may be avoided by making the existence of the world to depend upon that of the self. In fact, we do think all reality in relation to the self, and can think it in no other way; and again, besides its existence as a thing, the self has another element of existence which fits it to be that upon which all existing things depend. This peculiar characteristic is that of conscious self-identity, — the recognition of subject and object as one consciousness; and we may say that just as the existence of the world consists in its connection with the self, so does the existence of the latter consist in its identification of itself, as thinking subject, with the self which thinks the world. The self then possesses two elements of existence: (1) its connection with the world of things, and (2) its self-consciousness, or identification of subject and object, which is, of course, only a thought-identity after all. But the notion of the identity of subject and object needs to be cleared up. Herbart has shown that the finiteness of conscious states leads us into an infinite series, if we attempt their explanation. Such a series is not, however, unintelligible, and it is quite possible to regard conscious existence in time as such a series, without beginning or end. In that case, every state of the self would be subject, while it thinks the world, and would pass into the object, as it becomes content for the states which follow. In this way, the self would maintain its conscious self-identity, and yet in each state it would possess that existence which belongs to things as such, viz., independence of the consciousness which thinks them.

ALEX. MEIKLEJOHN.

Über einige Grundfragen der kantischen Philosophie. F. STAUDINGER. Ar. f. sys. Ph., II, 2, pp. 207-234.

The Kantian distinction of phenomenal and noumenal causality falls to the ground, if we insist that all ideas must be equally objective in their reference to reality. But the Neo-Kantians try to save

something of this distinction by affirming, that the ideas of the Unconditioned, or of the final end, exert a different kind of causality from that which pertains to ordinary experience. This contention we admit, but we deny the further claim that these ideas carry us beyond experience altogether. Certainly the activity of the free will is different from that of blind compulsion, but these are only two different forms of the causal sequence. The laws of ethics are then natural laws, and, like those of the other sciences, they express a constant tendency, or order of events, which is valid so long as we abstract from such disturbing circumstances as may intervene. This constant tendency in the moral life is the striving toward a Kingdom of Ends—the effort of the individual to bring his own thinking and willing into complete accord, and also to give to his own purposes their proper place within a harmonious system of the ends of all conscious beings, both as individuals and as members of the social organism. This striving for harmony is the law of moral action; ethical ideals may change, but in all conscious life this constant impulse is present. We may say, then, that in the ideal of Personality we have the statement of a moral law which is quite analogous to the scientific formulæ which express abstractly the order of events in nature.

ALEX. MEIKLEJOHN.

Ist das Sittengesetz ein Naturgesetz? Bemerkungen zum vorstehenden Aufsatz F. Staudingers. PAUL NATORP. Ar. f. sys-Ph., II, 2, pp. 235-253.

In what do the Neo-Kantians agree with Staudinger, and in what must they disagree with him? We agree that the moral law is well defined as the constant tendency toward a Kingdom of Ends, but deny that this statement is analogous to those which are accepted as laws of nature. A natural law deals with what 'is'; the moral law has to do with what 'shall be.' Again, Staudinger's 'constant tendency' will not bear comparison with such a formula as that of the gravitation of bodies; this latter is applicable to every event in the material world, and its validity is universal; the former cannot possess this universality, for not all ideas can be reckoned as within the impulse to Personality, but many must be described as directly antagonistic to this. Neither can one escape this difficulty by observing that to disobey the moral law is to lead to one's own destruction, for the fact still remains that not all ends and purposes can be assumed within the law as it is stated. Our conclusion is, then, that the prin-

ciples of ethics are not adequately expressed in causal terms, but, like those of mathematics and logic, they must have a non-temporal validity which rests upon the unity of consciousness. Staudinger's mistake rests on a confusion between empirically conditioned purpose and unconditioned moral end; his ethics is confined by the limits of empiricism.

ALEX. MEIKLEJOHN.

Pensée théorique et intérêts pratiques. G. SIMMEL. Rev. de Mét., IV, 2, pp. 160-178.

Theoretical knowledge is determined by practical interests. Truth is not something objective; it is a name which is given to conceptions which have proved the occasions of useful actions, and so have fixed themselves in the race. In thus basing knowledge upon practical needs, we no more degrade it than we ignore the spiritual existence of man, when we trace him through a long development to the most humble beginning. Furthermore, in this case as in the natural world, after the true has been established from the useful, the order of development will be unconscious, for that which is the cause in the race may frequently appear as an effect in the individual. Its objective application still remains, however, the criterion of truth. If, *e.g.*, a group of men decide upon a certain coin as a means of exchange, it will be true money within the group, but false outside, because it can be used only within the group. Formal logic gives the abstract expression of the rules to be followed in the attainment of truth. It is thus formal and powerless in regard to details of the phenomena of will and sensibility. Here the opposition of the individual to the social whole manifests itself, and under two forms: (1) in the simple case where one kind of feeling and acting, irreconcilable with other ends, rules us; (2) where passions do not remain in the sphere of sensation, where they are born, but become theoretical truths themselves, and so conflict with established truths. From this conception of the relation of the theoretical and practical, follows the further truth that the fundamental maxims are not debatable. If harmony reigns here, all particular differences can be settled, but if not, argument is useless, because there can be no basis to start from. This shows that particulars are only relative and should not be held as absolute. In the measure in which knowledge frees itself from practical ends it acquires a character of absolute value, but this makes it formal and void of practical content. If truth satisfies the demand made by formal thought upon it, and in a measure explains

the content of the object, it has fulfilled its office. If the ideal of truth is thus freed from a conditional character, if it is admitted only in a general way, the value will not be increased or diminished with the circumstances which elsewhere accompany it.

A. ALLEN-FORREST.

La science rationnelle. G. MILHAUD. Rev. de Mét., IV, 3, pp. 280-302.

The author conceives science as a teleological construction, not as an outcome of passive observation. The factors of this construction are (1) phenomena—the element of diversity and change, and (2) laws—the element of unity and permanence. An examination of so-called ‘positive’ laws reveals at once their teleological nature. For example, in the law, ‘phosphorus fuses at a temperature of 44 degrees,’ the properties constituting phosphorus have been selected out of a countless number on wholly teleological grounds. Again, the term ‘temperature of 44 degrees,’ saying nothing of temperature as such, involves (1) that temperature shall be measured by the expansion of a body; (2) that the body shall be a column of mercury in a tube; (3) that equal variations of temperature shall correspond to equal variations in expansion. Finally, the conceptions of degree and measurement have no meaning apart from a process of adaptation. Further illustration is found in astronomical laws. Nor are the so-called ‘fundamental hypotheses,’ *e.g.*, that of a vibrating ether, any more or less teleological than the ‘positive’ laws. What passes for ‘objective verification’ of a law or hypothesis, is simply an application of it. The breakdown of a law or hypothesis means that in the growth of the whole body of experience a stage has been reached where readjustment is demanded at that particular point, though it is conceivable that it might be demanded at some other. If, for instance, the facts of astronomy should demand a non-Euclidean geometry, the demand might be met by giving up the hypothesis of the rectilinear propagation of light. In a word, the teleological justification of a law or hypothesis constitutes its objective verification.

A. W. MOORE.

Perception et matière. H. BERGSON. Rev. de Mét., IV, 3, pp. 257-279.

In this article the author avowedly follows the method which he has found so fruitful in other investigations, and especially in con-

nection with the controversy between the determinists and indeterminists in regard to the freedom of the will. Experience itself is a whole, qualitative and indivisible. But in scientific procedure this living unity is broken up into factors externally united. Thus what we call facts are not the reality as it appears to immediate intuition, but adaptations of the real. The motive for, and function of, this scientific abstraction are found in the exigencies of social life. That is, the abstraction subserves a practical purpose in life. It is by means of it that experience appreciated as a whole is defined and set clearly before the mind. Now one of the qualities of experience is that it is a moving continuity. In immediate experience its parts are bound up together, but when abstraction is made for practical purposes, this whole falls into a dualism of the permanent and the changing. That is, in ordinary experience we have objects, and these objects change. Or more scientifically, we have atoms and motion. But in whatever form stated, we have to do with an abstraction from the immediate unity of living experience, an abstraction made for practical purposes and to be viewed from this standpoint. The overlooking of the nature of the abstraction has given rise to the contradictions which in all times have been found in reference to the permanent and the changing. The only solution is to be found in seeing that both are but one-sided abstractions from experience, which in its immediate nature is a moving continuity.

S. F. MACLENNAN.

NOTICES OF NEW BOOKS.

Obligation morale et idéalisme. Par G. LEFÈVRE, professeur de philosophie au lycée de Laon. Paris, Félix Alcan, 1894.—pp. 157.

The aim of this work is to show that moral obligation and idealism are inseparable. No appeal is made to any who do not accept either one or the other; but the attempt is made to prove that if either be granted, the other must follow. The authority of duty is not assured unless everything can be reduced to thought; and reciprocally, certitude is guaranteed only by the entire intelligibility of things, and idealism involves duty. The two parts into which the work is divided discuss, respectively, these two propositions. In Part I (chapters III–IX), which aims to show that duty depends upon idealism, the argument, summarized for the most part in the author's own words, runs as follows:

Man asks himself not simply, What am I to become? as might be asked of things, but What shall I do? That is, What kind of being shall I choose for myself? Man thus regards himself not simply as a spectator, but, in a measure, as the master of his destiny. Now, as formerly, the mass of mankind believe that they are capable of acting, that their actions imply preference, choice, and that their choice supposes the notion of that which is of greater and less worth, a distinction between that which is to be done and that which is not to be done,—in a word, a distinction between good and evil. No further attempt is made to justify this distinction of good and evil; but starting from the fact of obligation and duty, which rests upon this distinction, the author aims to show that outside of an idealistic metaphysics this fact is inexplicable, and that its existence is irreconcilable with every other philosophy. We cannot prove moral obligation, but, on the other hand, it never has been and never can be proved that there is no moral obligation. Experience may not be able to establish the validity of duty, but it is certainly unable to refute it. If it is said that duty is an illusion established by the experience of the past, how can we be sure that the experience of the present is a more trustworthy criterion by which we may pronounce this product of the past an illusion? The adversaries of duty can speak only for themselves. Nothing can prove to them that there are not other beings for whom duty exists and possesses a sacred character, or in fact that they themselves may not become such beings some day. Not until we knew all facts could experience (the knowledge of facts) disprove the existence of duty. Were duty, in fact, shown to be incompatible with all that we know, and irreconcilable with the order of things thus far revealed in our experience, still we might regard it as the

idea of an order of things to come, the representation of a new *régime*, for which all the rest is only a preparation. Such considerations may be presented in opposition to those who attempt to deny duty on the ground of facts.

We cannot by empirical methods discover either the end of conduct or the means of reaching it. We may seek pleasure, but nothing can show us that we are under obligation so to do. We may seek happiness, but without absolute knowledge we cannot know what the real outcome of our acts may be. Education and the influence of the past may have established in us the habit of working for the good of others, and we may find great joy in so doing. If, with such habits established, we desire the good of others, we are but seeking our own satisfaction. Our altruism is only a type of egoism; and should an adventurous individual, determine to resist these habits of the race, no valid reason could be brought against it. We have no proof of the infallibility of hereditary or acquired tendencies. Whatever end be chosen, by the very fact that we ask experience to determine it for us, the obligation imposed will never be justified. No mere equilibrium can ever satisfy us—we must make progress. But progress implies a determined end, and this experience and observation can never give us. The real march of things, and hence the distinction of good and evil, can be known only by an *a priori* principle.

An *a priori* principle, corresponding to an order of things external to us, could not regulate our conduct even if we possessed a complete science and omnipotence besides. The Divine Will itself can dictate to us our duty only if we know for a certainty what God exacts. He must not disavow by a new decree the order given in the past. God must in a sense be subject to the law of our reasonable determinations. It is necessary that He be bound by His promises, and that the moral law have no less power over Him than over us. In short, between God and ourselves there must be no essential difference. The Will can draw its rule of conduct only from itself. It cannot receive the law from anything foreign to it. Outside of the autonomy of the rational will there is no foundation for moral obligation—the will must be stable. To act is to continue, even in the accomplishment of the act, to be that which one was at the moment of undertaking it. To admit duty is then to declare that we are, that our existence is not moving, but stable; it is even, to take the words in their rigorous sense, to affirm that we are absolute. Our autonomy is guaranteed only if there is nothing outside of ourselves, and we are able in our own thought to attain to the last depth of reality. If we are environed by the unknown, if our own being is a mystery for us, what becomes of the independence of this being, and of the direction of the will by itself? What becomes of the moral obligation inseparable from this autonomy? The question is, whether in submitting to the law reached by the rational will we are obeying our own proper nature. If there are unknowable things in themselves, then there may be an antagonism, not only between the external and ourselves, but also between the unknown depths

of our being and the duty which is, after all, only on the surface. Who knows if to be truly ourselves we ought not to avoid as much as possible the life of consciousness and purposive action, repudiating an attitude which has appeared to us good thus far only because we have misunderstood our true character? If any part whatever of ourselves remains in darkness perhaps it is the most lasting, the most fully ours, — to speak absolutely, the best. It would then be folly to sacrifice the real to the appearance and the substance to the phenomenon. If our thought is limited to a mere surface knowledge of things we shall never have anything but an illusion of existence. Our will will be only a word, for it exists only on the condition that it belongs to itself, does not receive being from without, and, in short, has no other author than itself. If there be anything whatever irreducible to thought we are menaced by a total change at each moment. If one does not consider the rational will as the principle to which all reduces itself, one submits it to unforeseen influences, and strikes a mortal blow at moral obligation. On the doctrine of Substances the autonomy of the will cannot be established, and without this there is no foundation for morality. If one denies the power to reach in thought the depth of being, with science and certainty vanishes morality. Let us renounce, then, things-in-themselves, and at the same time acknowledge that without the real unity and identity of spirit directly seen by reflection, there would be neither representation, nor existence, nor action. At the root of all that is, is found the inexpugnable activity of thought. The autonomy of our being, and the hegemony of thought, are implied in morality. If duty exists, thought alone is the ultimate principle of all existence.

But if we grant that this argument is valid, and admit that, if there is duty, the world must be fundamentally intelligible, does it follow that the universe is of the nature of spirit? The author seems to make the tacit assumption that, if intelligible, it is therefore an intelligence. Certainly this is not immediately obvious. It can be shown only by considerable argument, if at all, that the knowable is necessarily a knower, that the object of thought must perforce be subject of thought. Another criticism may be made on this half of the work. In the last chapter of Part I a passage of several pages is devoted to showing that the autonomous will, the truly moral will, must be a will that wills itself. But what morality is there in an everlasting reassertion of self-identity? Grant the difficulty of conceiving the moral will willing anything independent of itself, we must still ask if there is any morality, or in fact conduct of any sort, in will merely willing itself?

In Part II (chapters X-XIV) the author sets out to prove that idealism involves duty, but most of the space is taken up with arguments to show that certitude depends upon idealism. When this matter is finally settled, the main question is very briefly argued. The argument does not seem to me very clear, and, if I understand it, it is far from conclusive. It amounts to saying, as nearly as I can make out, that thought is possible, *therefore we ought* to think. We may well admit the converse of this, which was argued in Part I, that unless we can think and know, there is no meaning in conscious

effort, and still fail to see how the possibility of thought necessitates the duty of thought. In short, our author seems to me to have been much more successful in the first half of his work in showing that duty implies truth, than he has been in the latter half in showing that truth implies duty. Clearness and vigor of style, and the close limitation of the discussion to the problems proposed, are admirable features of the work. There is not, however, a reference to a single philosophical writer from beginning to end.

F. C. FRENCH.

Inductive Logic. By JOHN GRIER HIBBEN, Assistant Professor of Logic in Princeton University. New York, Charles Scribner's Sons, 1896. — pp. xiii, 345.

This is one of the Logics which refuses to devote itself to solemn trifling over propositions and syllogisms dealing with the mortality of Socrates and the elemental nature of iron, but endeavors to give a philosophical theory of the procedure of thought in the face of the actual problems which the world presents to it. It is a distinct merit of the book that it begins by explaining the nature of Inference. If Logic is the science of thought, it is surely necessary to make clear, at the outset of any treatment of the subject, what is signified by thinking, — what results it aims at, and under what general conditions those aims can be realized. The doctrine which the author teaches in his first chapter would, I think, be accepted by every one at the present time, and his statement of it is simple and admirable. My own judgment is that even more space might profitably be devoted to making still clearer the structure of knowledge, and the nature of the thinking process. And it would be well, I think, to keep the general theory thus reached more explicitly in view throughout the work than Professor Hibben has done. That is, the theory should be applied to the various scientific methods described, so that they may be seen to be simply means for the fulfilment of the conditions previously laid down as necessary to the attainment of knowledge.

In the second chapter it is shown, as a direct result of the author's theory, that Induction and Deduction are not mutually exclusive processes, but necessarily go hand in hand. That teaching would, perhaps, have received additional emphasis, if the author had seen fit to treat of these two processes in the same work. There would then have been less danger of any one supposing that he had separated what God had joined together. The very term 'Inductive Logic' suggests that there is also a 'Deductive Logic,' dealing with a totally different kind of thinking. However, it is very ungracious to look a gift horse in the mouth. Let us be thankful for the treatment of Induction which Professor Hibben has given us.

There are three methods of inductive research laid down in chapter IV, — Enumeration, Comparison or Analogy, and Scientific Analysis or Search

after Causal Connection. These designations cannot be regarded as happy. For, on the one hand, it is evident that Analogy is not the same thing as Comparison, and on the other, that it also implies a search after Causal Connection. It is a still more serious error in exposition, in my opinion, to invert the natural order, as the author has done, by beginning his treatment with the Method of Scientific Analysis. For Enumeration and Analogy are indispensable first steps towards the complete explanation at which that method aims. It therefore is essential to show the part which they play in that result. This can only be done by leading up through them to the Method of Scientific Analysis, by showing, in short, that the latter goes beyond them, while still including their results in itself. The author's method of arrangement unfortunately gives the impression that Enumeration and Analogy are independent, though imperfect, processes, which have nothing to do with the Method of Scientific Analysis, and that an account of them is merely appended to that of the latter.

An important feature of the work is the use of examples from the history of science as illustrative of the various methods of logical procedure. These illustrations are well chosen, and do much towards making the logical theories concrete and interesting. There is also a collection of examples at the end of the book intended to serve as exercises for the student. It is well to remember in this connection that the history of science is not only useful to the logician as furnishing him with illustrations of his theories. It is also to a large extent the source from which he learns the nature of the thinking process, — a mirror, as it were, in which our intelligence is reflected. It affords us a record of at least some of the more recent forms through which thought has passed, and a picture of some of its more notable failures and successes. The surest way of acquiring information regarding the nature of knowledge, says Whewell, is by surveying and studying the history of those sciences which are universally recognized as the surest examples of knowledge and of discovery (*Philosophy of the Inductive Sciences*, vol. I, p. 8). This is the reason, it seems to me, why the history of the sciences, like the history of philosophy, is of such immense educational value. Neither of these studies should be regarded as a mere record of opinions and events. For him who has eyes to see their real significance, they may become a biography of his own intellectual life, and an important influence in its development.

There can be no doubt that Professor Hibben has used the history of the sciences in his work as 'original material of investigation,' as well as for illustrative purposes.

J. E. C.

An Examination of Weismannism. By GEORGE JOHN ROMANES, F.R.S. Chicago, Open Court Publishing Co., 1896. — pp. ix, 221.

Darwin and after Darwin. An Exposition of the Darwinian Theory and a Discussion of Post-Darwinian Questions. II. Post-Darwinian Questions, Heredity and Utility. By the late GEORGE JOHN ROMANES, F.R.S. Chicago, Open Court Publishing Co., 1895. — pp. x, 344.

In the first of these volumes Mr. Romanes devotes himself to an exposition and critical examination of the complicated theory, or rather to the successive theories, of Heredity and Evolution, which the biological world owes to the prolific imagination of Professor Weismann. In both respects Mr. Romanes' work is admirable, and the student of biological speculation could secure no abler or more lucid guide through the tortuous mazes of a much advertised subject. Mr. Romanes, after much patient explanation, comes to the conclusion that Weismann's latest admissions amount to an abandonment of the principle for which he fought so hard, and that his attempts in part to bolster up a defeated theory are improbable in the extreme. He shows that all that is valuable and tenable in Weismann was long ago stated in Galton's theory of "stirp." But though his criticism is crushing, it is throughout courteous in tone, more so than the disingenuousness (*cf.* p. 156) and logical shortcomings of his adversary would perhaps require. The book concludes with a declaration of his intention henceforth to discuss the question of the inheritance of acquired characteristics on its own merits, and without special reference to Weismann's theories.

This promise is fulfilled by the second volume, as valuable as the first, which was put into final shape, after the author's lamented decease, by Professor Lloyd Morgan. It was, he tells us, merely necessary to arrange the order of the materials in a couple of chapters. For the concluding portion are reserved the topics of Isolation and Physiological Selection. The present volume is marked by all the candor, fairness, and moderation which Mr. Romanes' readers had learnt to expect from him, and its results are summarized under the following eight heads: (1) The assertion that Natural Selection has been the sole source of species and specific characters is an *a priori* deduction from the theory. Hence (2) it cannot be met by an appeal to facts. The question is logical, not biological. (3) It claims, therefore, that *all* species (or *all* specific characters) are *necessarily* due to Natural Selection. (4) There is not, however, a necessary connection between the assertion that all species are due to Natural Selection and the assertion that all specific characteristics are useful. Moreover, Natural Selection is not primarily a theory of the origin of species, but only of adaptations, whether specific or generic. (5) It is not true that no other principle of change can operate in the presence of Natural Selection. That is only true of deleterious characters. Nor is it true that Natural Selection alone can give stability of specific characters. (6) Climate, Food, Sexual Selection, Isolation, and the Laws of Growth, somehow or other, are amply

able to produce 'specific' characteristics. (7) If it be asserted that the changes produced by the first two of these are not stable, the answer is (a) the question must not be begged; (b) it is admitted (by Weismann, etc.) that the factors in question may act on the material of heredity itself; (c) there are no 'stable' species, anyhow. (8) It is very neatly shown that the ultra-Darwinian view seeks to draw a hard and fast line between varieties, species, and genera, and claims utility only for the *specific* characteristics. But that is a mere survival of the pre-Darwinian belief in the fixity of species. The true lesson of Darwin was to teach that species are only pronounced varieties on the one hand, and incipient genera on the other.

Nevertheless, Mr. Romanes in no wise wishes to combat the theory of Natural Selection itself. On the contrary, he hopes he is rendering it no unimportant service by relieving it "of a parasitic growth,—an accretion of false logic."

F. C. S. S.

La vie sociale, la morale, et le progrès. Essai de conception expérimentale. Par Dr. JULIEN PIOGER. Paris, Félix Alcan, 1894. — p. 249.

In this book Dr. Pioger completes the outline of empirical philosophy presented in his earlier works: *Le monde physique* (Alcan, 1892), *La vie et la pensée* (Alcan, 1893). The standpoint of the writer is mechanical and biological. In this, as in all works by members of the biological school, metaphor and analogy play an important part. Every resemblance between facts in different spheres of knowledge is seized upon with avidity, while essential differences are minimized or ignored altogether. As a result, the elaboration of a social theory is rendered comparatively easy, for the real complexity of social problems is overlooked.

For Dr. Pioger, the statement that society is an organism, is not merely a metaphor, but the expression of a literal fact. The national mind is a real mind. The public will is not merely an accumulation of individual volitions. It is the unification of those volitions,—a resultant arising from their conflict, just as a voluntary action is itself a resultant of a conflict of desires, tendencies, etc. Social life is a unification of individuals in a social body, as the physiological life is the unification of anatomical elements in a living organism. Organization and solidarity are the essential conditions of the life of a society. From that organization spring collectivity all those reciprocal relations which result from the spontaneous arrangement of men according to their needs and aptitudes. Collectivity, or the dependence of individuals, is produced by that plasticity of human nature which enables men to adapt themselves to the most diverse conditions of life, and so makes possible the differentiation of individuals, and their arrangement in classes according to their wants or their abilities. Society exists only by the incessant action and reaction of internal and external influences, continually producing new adaptations and new functions. These are rendered permanent by organization, and so are transmitted from generation to generation, though

they vary with time and place. Morality is a necessary condition of social life, but morality is not synonymous with this or that particular moral code. Morality may be reduced to the idea of solidarity. It is the form given to the reciprocal relations of social beings, just as health is the harmony of the functions of an organism. A superior moral code contributes to the chances of the survival of a society by rendering it better fitted for the struggle for life. Progress consists in the better adaptation of individuals to their circumstances.

The author sums up his position thus: "The organic conception of social life involves many important consequences. The first is, that time is an essential factor in social reforms. The second is, that progress consists less in destroying than in using and perfecting that which already exists. The third is, that the end to be aimed at and the means of its attainment must vary with time and place. In a word, it is the ruin of the absolute and of the *a priori* in politics. It is the advent of the experimental, that is to say, of social intervention based upon the evidence of facts and results." So Dr. Pioger calls for the nationalization of all railroads, telegraphs, and other means of communication, for the limitation of private fortunes, for restricting the right of bequest, etc. Unlike Spencer and the Individualists who regard the mistakes of government as sufficient evidence that state interference is unjustified, he regards those mistakes as a necessary part of the experimental method. Governments must try and try again; only through repeated failures can success be attained.

T. W. TAYLOR, JR.

Kant's Inaugural Dissertation of 1770. Translated into English with an Introduction and Discussion. By W. J. ECKOFF, Ph. D., Professor of Philosophy and Pedagogy in the University of Colorado. New York, Macmillan & Co., 1894. — pp. xi, 101.

The writer of this pamphlet divides his work into three parts. Part I, the *Introduction*, considers "the antecedents of the *Dissertation* of 1770 in contemporaneous philosophy, and in Kant's own previous work" (pp. 13-43); Part II gives us an English version of the same (pp. 43-86); while Part III discusses the relation of the *Dissertation* to the *Critique* (pp. 86-101). The object of the book is, of course, a highly commendable one. We need good English translations of all of Kant's more important writings, especially of those preceding the appearance of the *Critique of Pure Reason*. But the task is not easy, as students of Kant can readily guess, and should not be undertaken heedlessly. In attempting to render into English the celebrated Latin dissertation of the great German thinker, Dr. Eckoff has bravely attacked a difficult problem. The translation, however, can hardly be called a success. It is awkward, obscure, and artificial. Passages like the following are, unfortunately, not infrequent: "But although phenomena are properly the appearances of things, but not ideas, or express the inner and absolute quality of objects, their cognition is, nevertheless, of

the truest. For, in the first place, being apprehended sensual concepts, they being consequences, witness the presence of the object, contrary to Idealism; and as regards judgments concerning that which is sensuously known, since truth in judging consists in the agreement of the predicate with the given subject, and since the concept of the subject as a phenomenon is given only by relation to the sensuous cognitive faculty, the sensuously observable predicates being given according to the same, it is plain that the representations of subject and predicate are made according to common laws, and hence give occasion for perfectly true cognition."

The introduction and discussion which Dr. Eckoff has prepared to accompany his translation, are as unsatisfactory as the translation itself, and should never have been published in their present shape. We miss the thoroughness and care which we have a right to expect from works of this kind. Windelband's *History of Philosophy* seems to be the writer's *vade mecum*. He fails to mention the opinions of Kuno Fischer, Paulsen, Riehl, Vaihinger, and other great students of Kant's philosophical development, though the position taken by him, that the *Dissertation* forms the turning-point of Kant's philosophy, is Kuno Fischer's.

F. THILLY.

Der Entwicklungsgang der Kantischen Ethik bis zur "Kritik der reinen Vernunft." Von F. W. FOERSTER, Dr. Phil. Berlin, Mayer and Müller. — pp. 106.

The aim of this work is to trace the development of Kant's ethical views up to the appearance of the *Critique of Pure Reason*. In addition to the pre-critical writings of the master, our author investigates the Fragments published by Reicke, and the unpublished ethical reflections collected by Benno Erdmann. He finds that the final ethical system of the sage of Königsberg is not, as has been supposed, diametrically opposed to his earlier moral beliefs, but that it is the natural outcome of the latter. The development of Kant's ethics runs parallel with that of his attempts to reform metaphysics. There is no absolute breach between the period when Kant taught eudaemonism, and the critical epoch. The two periods are connected by a stage of transition.

Dr. Foerster's work is a valuable contribution to the history of Kantian ethics. The author has made a careful study of the writings pertaining to his subject; and the results reached by him cannot, it seems to me, be questioned. His judgment is sound, and the only criticisms that can be made are not very serious ones. The book, however, is full of typographical errors, and the references are not always exact.

F. THILLY.

Seele und Geist in streng wissenschaftlicher Auffassung. Von Dr. EMANUEL JAESCHE. Leipzig, Otto Wigand, 1893. — pp. vi, 119.

The author holds that in order to combat the materialism of the times, to reconcile faith and science, to terminate the bitter feud existing between the

different social classes and religious sects, and thus to bring about a general state of peace, we must study and establish the laws of mental being. First, he says, we must define "the simple psychical consciousness" which occurs in its purest form in animals. Then "the spiritual self-consciousness" of man should be defined, and the relations between these two forms investigated. This knowledge, together with the knowledge of the external world in which our age has made such wonderful advance, cannot fail to give man absolute control over inner and outer nature.

F. T.

The following books have also been received :

Théorie nouvelle de la vie. Par FÉLIX LE DANTEC. Paris, Félix Alcan, 1896. — pp. 323.

Le mouvement positiviste et la conception sociologique du monde. Par ALFRED FOULLÉE. Paris, Félix Alcan, 1896. — pp. 379.

Beiträge zur Geschichte des Materialismus. Von GEORG PLECHANOW. Stuttgart, J. H. W. Dietz, 1896. — pp. viii, 264.

Beiträge zur Geschichte der Griechischen Philosophie und Religion. Von PAUL WENDLAND und OTTO KERN. Berlin, Georg Reimer, 1895. — pp. 117.

Der Darwinismus. Von ROBERT SCHELLWIEN. Leipzig, Alfred Janssen, 1896. — pp. 69.

Das Doppel-Ich. Von MAX DESOIR. Zweite, vermehrte Auflage. Leipzig, Ernst Günther, 1896. — pp. 82.

Das Wesen des Denkens. Von Dr. R. WRZECIONKO. Wien und Leipzig, Wilhelm Braumüller, 1896. — pp. 39.

Das Vorstadium und die Anfänge der Philosophie. Aus dem Nachlass von Dr. GUSTAV GLOGAU. Herausgegeben von Dr. HERMANN SIEBECK. Kiel und Leipzig, Lipsius & Tischer, 1895. — pp. x, 79.

Kant-Bibliographie für die Jahre 1890-1894. Von RUDOLF REICKE. Königsberg, F. Beyer, 1895. — pp. 60.

Ist Philosophie ohne Psychologie möglich? Von FELIX KRUEGER. München, Theodor Ackermann, 1896. — pp. 28.

Psychologie und Philosophie. Von Dr. C. GÜTTLER. München, Piloty & Loehle, 1896. — pp. 34.

Adam Smith's pädagogische Theorien. Von Dr. PAUL BERGEMANN. Wiesbaden, Emil Behrend, 1896. — pp. vi, 64.

Das Lebensideal Karl Christian Plancks. Von Dr. F. J. SCHMIDT. Berlin, R. Gaertner, 1896. — pp. 43.

Die Grundbegriffe christlicher Weltanschauung. Von S. KRÖLGER, Dr. Med. Leipzig, S. Böhme, 1896. — pp. 120.

Immanuel Kants Auffassung von der Bibel. Von C. W. VON KÜGELGEN. Leipzig, S. Böhme. — pp. viii, 96.

Hobbes Leben und Lehre. Von F. TÖNNIES. Stuttgart, F. Frommanns Verlag, 1896. — pp. xiii, 232.

Jésus et l'ère de la science. Par J. STRADA. Paris, Félix Alcan, 1896. — pp. xvi, 323.

An Outline of Psychology. By Professor E. B. TITCHENER. New York, Macmillan & Co., 1896. — pp. xiv, 352.

New Essay Concerning Human Understanding. By G. W. LEIBNITZ. Together with an Appendix consisting of some of his Shorter Pieces. Translated by ALFRED GIDEON LANGLEY. New York, Macmillan & Co., 1896. — pp. xix, 861.

The Metaphysical Basis of Plato's Ethics. By A. B. COOK, M.A., Fellow of Trinity College, Cambridge. Cambridge, Deighton, Bell, & Co., 1895. — pp. xv, 160.

Biological Lectures. Delivered at the Marine Biological Laboratory of Wood's Holl in the summer session of 1895. Boston and London, Ginn & Co., 1896. — pp. 188.

The Law of Civilization and Decay. By BROOKS ADAMS. New York, Macmillan & Co., 1896. — pp. xi, 393.

Popular Scientific Lectures. By ERNST MACH. Translated by J. T. MCCORMACK. Chicago, The Open Court Publishing Co., 1896. — pp. 313.

The Perfect Whole. By H. W. DRESSER. Boston, G. H. Ellis, 1896. — pp. 254.

The Necessary and the Contingent in the Aristotelian System. By Dr. W. A. HEIDEL. Chicago, The University of Chicago Press, 1896. — pp. 46.

NOTES.

The general board of studies at Cambridge, England, recommend that steps be taken for the immediate appointment of a Professor of Mental Philosophy and Logic. The names of Dr. J. Ward, Dr. Venn, and Mr. G. F. Stout are mentioned in connection with the appointment.

Mr. G. F. Stout has been appointed to the Anderson lectureship on Comparative Psychology recently founded at Aberdeen.

Dr. Arthur Allin, Honorary Fellow in Psychology in Clark University, has recently been elected to the professorship of Psychology and Pedagogy in the Ohio University at Athens.

Dr. F. C. Sharp, of the University of Wisconsin, has been promoted to the rank of Assistant Professor in that University.

E. L. Hinman (Ph.D., Cornell) has been appointed instructor of Philosophy and Psychology in the University of Nebraska.

Miss A. J. Hamlin (Ph.D., Cornell) will have charge of the department of Philosophy in Mount Holyoke College.

J. F. Brown (Ph.D., Cornell) has been appointed instructor of Philosophy in the University of Indiana.

Professor Rehmke of Greifswald, author of *Lehrbuch der Allgemeinen Psychologie*, will shortly publish a new book, *Grundriss der Geschichte der Philosophie*.

The death is announced of Professor Richard Avenarius of the University of Zurich, editor of the *Vierteljahrsschrift für wissenschaftliche Philosophie*; also of Professor J. Delbœuf of the University of Liège.

A notice has reached us, too late for publication in this issue, of a prize of £50 offered for the best treatise upon the following subject: *The causes of the present obscurity and confusion in psychological and philosophical terminology, and the directions in which we may hope for an efficient remedy*. The notice itself will be published in our next issue, and in the meantime those interested may obtain further information by addressing Professor E. B. Titchener, Cornell University.

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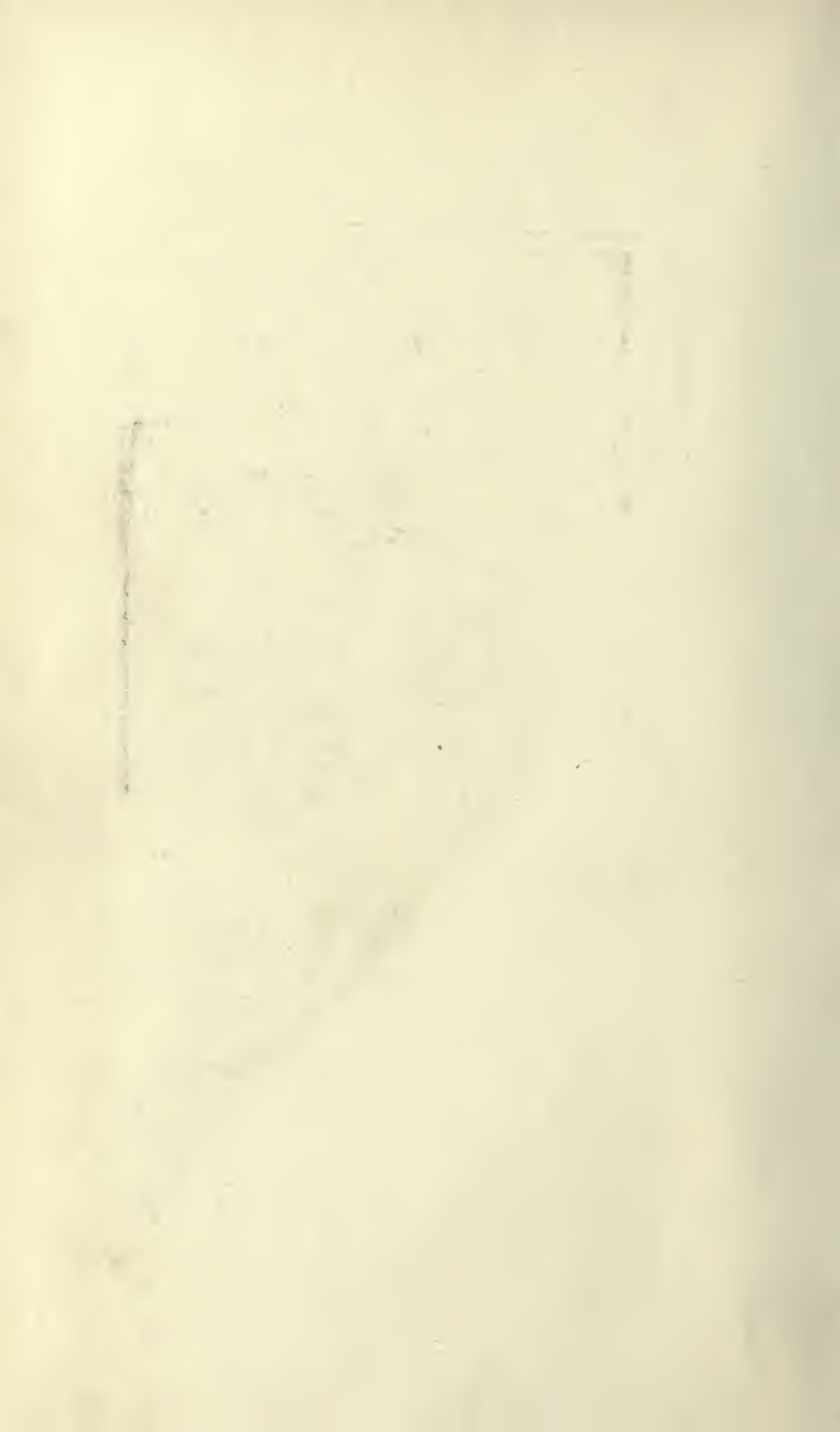
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