

mations and in land surcharged with moisture—prefer in their natural state “the débris of granitic rocks, with dry subsoil”; while “sandy loam and cool subsoil” are requisite for Firs. These and all similar facts have to be counted with and registered: and what, in a word, is needed is the consistent practice of marking degree and mode of variation, and of making use of these wherever they attain a constancy sufficient to rely on. It is only thus that botanical practice can ever be assimilated to botanical precept, and the science attain that degree of logical perfection of which it is susceptible.

WILLIAM L. DAVIDSON.

V.—THE METHOD OF KANT.

It is no longer wise for any writer, having a due regard for his own reputation, to speak of Kant as a benighted “*a priori*” philosopher of the dogmatic type, afflicted with the hallucination that the most important part of our knowledge consists of innate ideas lying in the depths of consciousness but capable of being brought to the light by persistent digging. The labours of recent commentators have compelled us to see that this short and easy method of disposing of the Critical Philosophy is by no means satisfactory. At the same time I cannot help thinking that much of recent criticism rather shows the need, on the part of the critics, of a closer acquaintance with Kant’s writings and mode of thought than calls for actual refutation. I am far from saying that Kant has produced a final system of philosophy, admitting of no development and demanding only a docile acceptance; all that I mean is, that Kant, along with much that is imperfectly worked out and even with some self-contradiction, has given us a philosophy that must be regarded not so much as a rival of English psychology as above and beyond it. I cannot accept so sweeping a condemnation of Kant’s system and method as is contained in the very strong language of Dr. Hutchison Stirling, who regards the system as “a vast and prodigious failure,” and the method as “only a laborious, baseless, inapplicable, futile superfetation” (‘These be brave ’orts’). So very harsh a judgment, modified even as it afterwards is by the remark that “Kant nevertheless abides always, both the man and the deed belonging to what is greatest in modern philosophy” (*Princeton Review*, Jan., 1879, p. 210), seems to show a plentiful lack of intellectual sympathy on the part of the critic. Kant, in spite of the minor contradictions and the incomplete development of his theory,

has opened up a "new way of ideas," which should win general assent the moment it is seen as it really is. I propose therefore to state in my own way the main points in Kant's theory of knowledge. And, as the Critical Philosophy is most likely to commend itself to living thinkers when brought into connexion with the difficulties they feel in regard to it, I shall interweave with this statement a review of recent criticisms.

Quite recently Mr. Balfour¹ has given us a vigorous criticism of the general method of Kant, which, if conclusive, would virtually foreclose any more detailed inquiry into the merits of the Critical Philosophy. That method he holds to be radically unsound, and its main propositions therefore unproved assumptions. I am aware that Mr. Balfour directs his artillery rather against Neo-Kantians or Transcendentalists than against Kant himself. I cannot of course hold myself responsible for the opinions of all who may be called or who may call themselves Transcendentalists; but, in so far as such writers as Mr. Green and Mr. Caird are concerned, I think I may venture to say that, as they undoubtedly conceive of the problem of philosophy very much as Kant conceived of it and seek to solve it by a method similar if not identical with his, whatever applies to Transcendentalism applies in all essential respects to the Critical Philosophy.

In opening his battery against Transcendentalism, Mr. Balfour has occasion to state the problem of philosophy as he understands it. But unfortunately he has done so in terms that are fatally ambiguous. "The usual way," he says, "in which the Transcendental problem is put is, 'How is knowledge possible?'" . . . But "the question should rather be stated, How much of what *pretends* to be knowledge must we accept as such, and why?" . . . Now, "if we were simply to glance at Transcendental literature, and seize on the first apparent answers, we should be disposed to think that the philosophers of this school assume to start with the truth of a large part of what is commonly called science—the very thing which, according to my view of the subject, it is the business of philosophy to prove". . . . Nevertheless, "Transcendentalism *is* philosophical, in the sense in which I have ventured to use the term: it *does* attempt to establish a creed, and, therefore, of necessity it indicates the nature of our premisses and the manner in which the subordinate beliefs may be legitimately derived from them" (MIND, XII, p. 481).

Now Kant would certainly have been willing to admit that the problem of philosophy might be thrown into the form,

¹ The remarks that follow, on Mr. Balfour's article on "Transcendentalism" in MIND XII., are not intended as a complete reply to that article, but deal only with his general criticism of Kant's method.

"How much of what pretends to be knowledge must we accept as such?" and he would also have admitted that it is the business of philosophy to prove "what is commonly called science"; but he would as certainly have insisted at the outset upon defining more exactly what is to be understood by "knowledge" and "science". For, manifestly, Mr. Balfour's words may be taken in two very different senses: they may mean either (1) that philosophy has to prove the truth of the special facts of ordinary knowledge and the laws embodied in each of the special sciences, or (2) that philosophy must show from the nature of our knowledge that the facts of ordinary knowledge and the laws of the special sciences rest upon certain principles which make them true universally and not merely for the individual. I cannot help suspecting, from the general tenor of his criticism, that Mr. Balfour has allowed these very different propositions to run into one in his mind; so that, having shown, as he very easily may do, that Kant does not prove the first, he rashly concludes him to have failed in proving the second. Surely Mr. Balfour does not seek to lay so heavy a burden on philosophy as is implied in the demand to prove the truth of the special facts of observation and the special laws of the natural sciences, or even the generalisations of empirical psychology. No one, I should think, would seriously ask a philosopher to prove it to be a fact that we have experience, say, of a ship drifting down a stream, or that the three interior angles of a triangle are equal to two right angles, or that bodies attract each other in proportion to their mass and inversely as the square of the distance. Manifestly, if philosophy is to attempt a task of this kind and magnitude, it must go on for ever without reaching any final conclusion, for the special facts and laws of nature are infinite in number. Philosophy has certainly to do with the proof of knowledge, but he would be a very foolish philosopher who should attempt to unite in himself the functions discharged by all the special sciences. "The sceptic," says Mr. Balfour, "need not put forward any view of the origin of knowledge." The sceptic is a privileged person, and of course need not put forward any view about anything; but, supposing him to be reasonable, he will not dismiss without inquiry the view of those who hold that the question as to "the origin of knowledge" is *the* question of philosophy. The follower of Kant, at any rate, must refuse to have the formula which best expresses the problem of philosophy as he understands it, replaced by the very different formula, How much of what pretends to be knowledge must we accept as such? if by this is meant, How are we to show that this special fact or law is true? The special facts of ordinary knowledge and the special laws of the natural sciences are not propositions which the philosopher seeks to prove, but

data which he assumes. Of all our knowledge the conclusions reached by mathematics and physics are those which we have least doubt about; and hence I do not understand how Mr. Balfour can object to the philosopher assuming to start with "the truth of a large part of what is commonly called science". I have no objection to find with Mr. Balfour's assertion, that a philosophy must consist partly of premisses and partly of inferences from premisses. I should certainly prefer another mode of expression, from the fact that the process of inference, according to the account given of it by formal logic, does not allow of any inferences except those which are purely verbal; but, as Mr. Balfour probably only means to say that there are certain facts which do not stand in need of proof by philosophy and certain conclusions which it is the business of philosophy to prove, I am content to accept his way of stating the case. My objection lies against what he very strangely supposes to be the "premisses" of Transcendental philosophy. The actual premisses of Kant are the special facts of ordinary experience in the widest sense, and especially the facts and laws of the mathematical and physical sciences. No doubt the particular philosophical theory we adopt will cast upon these a new light, but it will in no way alter their nature or validity. Should the Kantian explanation of the essential nature of knowledge be accepted, a new view of the process by which knowledge has been obtained, and therefore a new view of the general character of the objects of knowledge, will grow up; but the facts themselves will remain just as they were before. The philosophical theory, that the existence of concrete objects apart from the activity of intelligence by which they are constituted for us, is an absurdity, does not throw any doubt upon the scientific truth, that bodies are subject to the law of gravitation. The evidence for a special scientific law is purely scientific. The philosopher who should attempt, from the general nature of knowledge, to establish a single individual fact or a single specific law of nature, would justly draw upon himself the censure of going by the "high priori roads" leading to the kingdom of shadows. From a general principle only a general principle can be inferred: the proof of a special law demands special evidence. If a philosopher may by an examination of the nature of knowledge establish a single qualitative fact, why should not he evolve a whole universe out of his individual consciousness? If the sceptic is so unreasonable as to ask the philosopher to prove the truth of any law of physics, the philosopher will at once refer him to the physicist: all that he pretends to do is to show that the law is not a mere fiction of the individual mind, but can be accounted for by the very nature of human intelligence. On the other hand, should the philosophical

theory advanced be such as to reduce our knowledge to a mere series of individual feelings, we shall of course have to admit that the facts of individual consciousness have no universality or necessity; we shall, in other words, be compelled to say that there are no facts, in the ordinary sense of the term, but only supposed facts, or, if you will, fictions. It will no longer be safe to say that there is a real connexion between objects, but we may at least say that there is a real connexion between what we ordinarily understand by objects. The empirical philosopher, with the fear of Mill before his eyes, may hesitate to say that two and two are four, but at least he will feel entitled to say that being two objects added to other two are for us four.

It may be, however, that Mr. Balfour admits all this. In that case the problem of philosophy will be for him, as for Kant—What are the universal principles which are presupposed in the facts of our ordinary and scientific knowledge? But, if so, I must take the strongest exception to Mr. Balfour's way of stating the "premisses" of Kant and his followers. The problem being to show how we may justify the knowledge we all believe we possess by an exhibition of the nature of our intelligence as manifested in actual knowledge, it is manifestly inadequate and misleading to say that the Transcendentalist begins by begging the sceptic to admit "that some knowledge, though it may only be of the facts of immediate perception, can be obtained by experience: that we know and are certain of *something*—e.g., of a coloured object or a particular taste". The Transcendentalist, unless I am altogether mistaken, would not state the matter in this way at all. Kant at least would not ask anybody to admit that he has *just a little* knowledge; much less would he ask him to grant that he has a consciousness of a coloured object or of a particular taste. The difficulty is not at all a quantitative one. Nothing is gained by reducing the facts "postulated" to a minimum, so long as the sceptic is asked to admit a fact at all; and if he does admit such a fact as the immediate perception of a colour or a taste, why should he refuse to grant the carefully established laws of the special sciences? Is the evidence for the consciousness of the law of gravitation less urgent than the evidence that a coloured object is perceived? What the sceptic should object to is not the mere *number* of facts assumed as true, but the assuming that *any* facts are true, in the sense of being more than the assumptions of the individual. What I object to, the sceptic may say, is the assumption that the particular facts and laws which no doubt exist in our consciousness, are universally and necessarily true; I ask you therefore to prove the supposed absoluteness, objectivity, or necessity—state it as you please—of these facts and laws. The request is perfectly

reasonable, and the father of Transcendentalism claims that he has in all essential respects resolved the sceptic's doubt. It is in the process by which he endeavours to prove that there are universal and necessary principles underlying knowledge and making it real or objective, that Kant is led to refer to such simple experiences as the consciousness of a coloured object or of a particular taste; but he does so, not because he has more faith in such immediate feelings than in the established laws of science, but, on the contrary, because he has no faith in them at all. The argument is indirect, and proceeds somewhat in this way:—If the philosophical theory be maintained that all external concrete objects are *without consciousness*, an attempt must be made to account for knowledge from a mere "manifold" or detached series of impressions—as, for example, the impression of a bright colour or a sweet taste; and from such an attenuated thread of sensation no explanation of the actual facts of our experience can be given. Kant, in other words, argues that you must *not* suppose an unrelated feeling to be a constituent of real knowledge. Mr. Balfour completely misses the point of the reasoning, and actually supposes Kant to be begging the sceptic to grant him the fact of a little knowledge, in order that he may go on to extract from it a great deal more.

Philosophy presents itself to the mind of Kant with an antique largeness and nobility of conception. Psychology, which with us is usually made to bear the whole burden and strain of philosophical thought, he regards as a special branch of knowledge ranking in scientific value along with chemistry, and standing below those sciences, which, as admitting of mathematical treatment, assume the most precise and the most systematic form. His impulse to philosophise arises in the first place from his interest in such purely metaphysical questions as the existence and nature of God, the freedom of the human will, and the immortality of the soul. His ultimate aim is, in the language of Lewes, to lay the "foundation of a creed". But he soon discovers that, in our common knowledge and in the mathematical and physical sciences, certain principles are tacitly assumed, which are not less metaphysical than those commonly bearing the name. We are perpetually making use, for example, of the principle of causality, and the natural philosopher assumes the truth of such propositions as the indestructibility of matter. Thus an examination into the nature of human knowledge is forced upon us, both as a means of determining the limits of our real knowledge and of justifying, if that be possible, the universal and necessary principles which are embedded in ordinary experience and the special sciences. Until we determine the essential conditions of human know-

ledge, it seems vain to attempt the solution of the more ambitious problem as to supersensible realities. Hence Kant seeks, by starting from what every one admits, to discover whether or no those purely metaphysical questions are capable of any solution. And it is his special charge against all previous philosophy, that, from neglect of this preliminary criticism, it has fallen either into a dogmatism that can give no reason for its existence, or into a scepticism that can only be a temporary phase of thought. His aim is thus in one way dogmatic, but it is a dogmatism which comes as the crowning result of a critical investigation of the nature of knowledge, enabling us to distinguish demonstrable from indemonstrable or problematic assertions. The *Critique of Pure Reason* undertakes the preliminary task of determining what are the ultimate constituents of knowledge, and this cannot be done without drawing in outline the sketch of a true metaphysic, the details of which, as Kant asserts, can easily be filled in by any one who has firmly apprehended its main features. Hence we are told that "we must have Criticism completed as a science before we can think of letting metaphysics appear on the scene" (*Prolegomena*, Vorrede, p. 9, ed. Hartenstein). Metaphysic is thus compelled to undertake a kind of investigation which is not required in other branches of our knowledge. Other sciences may probably occupy themselves with the agreeable task of increasing the sum of knowledge; metaphysic before it can make a single dogmatic assertion, must first prove its right to exist. Failure to apprehend this fact has led in the past to aimless wandering in the region of mere conjecture, and to the continual alternation of over-confident dogmatism and shallow scepticism. The first and most important task of philosophy is therefore to prove that there are metaphysical propositions implied in our ordinary knowledge, which can be established upon a secure foundation; and, as it turns out, that the propositions ordinarily known as metaphysical do not, at least by the theoretical reason, admit of either being proved or disproved. Thus the inquiry into the nature of knowledge proves to be at the same time a discovery of the limits of knowledge.

The first problem of Critical Philosophy—one that is necessarily bound up with the second—is, How can there be any knowledge of real or objective existence? The question, as Mr. Green has pointed out, is not, *Is* there real knowledge? but *How* can there be real knowledge? It is true that we may give a meaning to the first question by interpreting it to mean, as Mr. Balfour does, How am I to distinguish real from pretended knowledge? but, on Kant's view, this is only another and less definite way of asking how knowledge is possible. For we can

only separate real from apparent knowledge by pointing out what are the essential conditions of there being any real knowledge for us, and this is just another way of asking, How is knowledge at all possible? By determining what are the conditions of knowledge, we at the same time determine indirectly what is not real knowledge. Now, an inquiry into the nature of knowledge must in some way comprehend all the facts that make up the sum of knowledge, and hence, to find the problem workable at all, we must get these facts into a convenient and portable shape. But this has in large measure been already done for us. Our common-sense knowledge of the world of nature and of the world of mind has been carried up into a higher form in the mathematical and physical sciences, on the one hand, and in psychology, on the other; and from these we may therefore start as from facts that every one admits. Thus the general and somewhat indefinite question, How is knowledge possible? breaks up into the two closely connected questions, How is mathematical knowledge possible? and How is scientific knowledge possible? We are not here concerned with the special truths of mathematics or physics or even psychology, but only with the necessary conditions without which there could be no mathematical or physical or psychological knowledge. The special truths of these sciences we assume to be true: they are the facts from which we start, not the conclusions which we desire to reach. Our object is to discover, by a consideration of the nature of human intelligence, what are the essential conditions without which there could be no sciences of mathematics, physics and psychology. What hypothesis, then, are we compelled to adopt, assuming the truth of these sciences?

As to Kant's method of solving this problem, we may say that, like the scientific discoverer, he sought for an hypothesis adequate to account for the facts in their completeness. The only exception that may properly be taken to this way of putting the matter is, that it is not so much a statement of the peculiar method of Kant, as of the method by which all knowledge is advanced. It is rather a truism than a truth, that the discoverer must cast about for some hypothesis that will harmonise with the facts he is seeking to explain. The merit and characteristic difference of Kant's method lies not simply in setting up tentatively a hypothesis and testing it by admitted facts, but in the comprehensiveness with which he has stated the problem of philosophy, and in the special solution he proposes. Like all discoverers, he began with certain facts which he sought adequately to explain, and, like them, he was assisted in making his discovery by observing the failures of his predecessors. This accounts to a great extent for the peculiarities of his mode of

statement. All through the *Critique* he combines with a statement of his own theory of knowledge a polemic against the theory of others. This union of exposition and criticism makes it peculiarly difficult to follow the course of his thought. In a sense his method is dialectical; that is to say, he brings forward certain propositions as if they were precise statements of his own theory, when in reality they are merely stages in the gradual evolution of his thought. Thus he not infrequently speaks of "sensible objects," or "objects perceived by the senses," as if sense of itself were an independent source of knowledge, instead of being merely, in the critical meaning of the term, a logical element in knowledge. So also he speaks of an abstract conception and a category, of an analytical judgment and a synthetical judgment, and of "experience" in its simple and in its philosophical sense, as if each of these terms belonged to the same stage of thought. In truth it must be admitted that Kant was, to some extent at least, the victim of his own mode of statement; for while he always keeps the ordinary conceptions in regard to knowledge distinct from the purely critical formulation of it, it cannot be said that he has completely harmonised in his own mind the two very different points of view.

The distinction, then, between the data from which he starts and the philosophical theory by which he endeavours to account for them, is never absent from Kant's mind. It does not seem to have occurred to Kant that any one would refuse to admit that mathematics, physics and psychology do as a matter of fact contain propositions that are true within their own sphere. Repeatedly he states this assumption in perfectly definite language. Mr. Balfour himself quotes from the *Critique* Kant's remark, that "as pure mathematics and pure natural science certainly exist, it may with propriety be asked how they are possible; for that they must be possible is shown by the fact of their really existing". And many other passages might be cited to the same effect. Thus he remarks, in the *Prolegomena* (§ 6, p. 29), that pure mathematics is "a great and well established branch of knowledge"; and, again, in speaking of Hume's mistake in supposing mathematical judgments to be analytical, he remarks that had Hume but seen that his onslaught on metaphysic was virtually an attack on mathematics as well, the good company into which metaphysic would thus have been brought would have saved it from the danger of a contemptuous ill-treatment, for the thrust intended for it must have reached mathematics, and this was not and could not be Hume's intention" (§ 4, p. 20). Kant was mistaken about Hume's "intention," as Mr. Mahaffy and others have noted, but as to his own opinion

there can be no possible mistake. But perhaps the clearest passage of all is that in which he says that "pure mathematics and pure science of nature had no occasion for such a deduction as we have made of both for *their own* safety and certainty, for the former rests upon its own evidence, and the latter upon experience and its thorough confirmation. Both sciences therefore stood in need of this inquiry, not for themselves, but for the sake of another science, metaphysic" (§ 40, p. 75). Kant therefore invariably assumes the truth of the mathematical and physical sciences, and only asks how we are to explain the fact of such knowledge from the nature of knowledge itself. It is true that he qualifies this unlimited statement, so far as to admit that the special sciences are ultimately dependent for their truth upon philosophical criticism; but the qualification applies, not to the special truths which form the body of those sciences, but to the universal principles which they take for granted, and which, strictly speaking, belong to metaphysic. "The possibility of mathematics," he says, "may be conceded, but by no means explained without [metaphysical] deduction." That is to say, while no one can doubt that mathematical judgments are universal and necessary, this must be an article of faith, until we discern philosophically the ground of their universality and necessity. But this does not mean that proof is demanded of the special truths of mathematics, but only that, in accounting for knowledge, we must find out the secret of their universal character. Kant's problem is therefore the purely metaphysical one as to the objective validity of the knowledge we possess, not the scientific problem as to the evidence for the truth of special laws. No doubt, Kant would have admitted that a failure to account for the possibility of real knowledge must throw doubt on the absolute truth of the conclusions of mathematics and physics, since these sciences cannot get along without making use of principles which they do not seek to prove; but Kant's attitude toward the scepticism of Hume and his unwavering faith in the truth of the sciences show us that his conclusion in that case would be, not that science has no truth, but that the metaphysical theory propounded is marred by some inherent flaw. The extreme scepticism which Mr. Balfour's language suggests would have seemed to him a voluntary creation of self-tormenting difficulties. The truth of mathematical definitions as such was in his view necessarily mathematical, and of physical propositions physical, and it would have seemed to him mere folly to ask philosophy to prove what no one denies: it is surely enough, he would have said, if I show that my system is consistent, and alone consistent, with the undoubted truths of mathematics and physics.

In developing his proof, as has been said, Kant was warned by the utter failure of previous dogmatic systems—a failure which he regards Hume as having proved beyond dispute, so far at least as the principle of causality is concerned—that the mode of explanation must follow a completely new track. The inherent vice of those systems betrays itself in the double defect (1) that it assumes knowable objects to exist, in the fulness of their attributes and in their relation to each other, quite independently of our intelligence ; and (2) that, as a consequence, it supposes that we can by mere introspection or analysis obtain judgments which hold good of things-in-themselves, and are therefore true, not merely subjectively or for us as individuals, but objectively, *i.e.*, universally and necessarily. This twofold assumption is a characteristic mark of dogmatism. In the statement of his own theory, Kant starts from the dualism of knowledge and reality, and seeks to develop a true theory by a gradual transformation of the false theory. Adopting the objection made by Hume against the ordinary proof of causality, and expressing it, to borrow the language of mathematicians, in its utmost generality, he points out that the principle upon which it goes cannot possibly account for the fact of real knowledge. (1) If, as the dogmatist assumes, known objects are without consciousness and yet are known as they exist, we must, to account for that knowledge, say that we go to them and apprehend them one by one, and also observe that they are permanent, that they undergo changes, and that they act and react on each other. Our knowledge of concrete things, and of their succession and co-existence, is thus resolved into a series of particular perceptions. Philosophically, therefore, the dogmatist tries to account for our knowledge of real objects by saying that they are revealed to us in the individual apprehensions or perceptions which come to us from without. Now, granting in the meantime that things exist without consciousness just as they are known, it is plain, that so far as our actual knowledge goes, and so far therefore as the dogmatist is entitled to affirm, knowledge resolves itself into a succession of feelings or ideas in consciousness. But the most that we can philosophically base upon a series of feelings or ideas is a knowledge of particular objects, particular series of events and particular co-existences. This was what Hume pointed out, so far as the sequence or causal connexion of events is concerned. I observe flame immediately after I have observed heat, and finding this particular sequence repeated frequently in my consciousness, I infer that flame is actually connected with heat, and that the one cannot exist without the other. The inference, however, is unwarranted. All that I can legitimately say is that in my past experience as

remembered, and in this particular experience I am now having, flame and heat occur successively. Individual perceptions of such sequences I have, but the inference based upon them, that these could not be otherwise, arises merely from the nature of our imagination, which illegitimately goes beyond the immediate perception, and converts it into a universal rule. On perception, as we may say, generalising Hume, no judgment in regard to the existence of real objects, or of their connexion or co-existence, can properly be founded. The reality of the objects, or of the relations of objects, as a judgment is something that *we* add to perception, not something actually in perception. (2) This leads us to ask whether we are more successful when we attempt to prove the permanence, the causal connexion, or interaction of objects, from conceptions instead of perceptions. Now conceptions are for the dogmatist, simply ideas in the mind, which are completely separated from things without the mind. The conceptions of the permanence, the changes and the mutual influence of substances, are separated by an impassable gulf from substances themselves. It is thus perfectly evident that we cannot legitimately pass over from the conception of a substance to the substance itself. Completely shut up within our own minds, we shall vainly endeavour to break through the walls of our prison. We can certainly frame judgments in regard to the ideas which exist in our minds, but we cannot show them to have any application to real objects or events. Thus, having the conception of substance, we may throw it into the form of the judgment, "Substance is that which is permanent". Such a judgment is no doubt correct so far as our conception is concerned, and is even necessarily true, in the sense that it is free from self-contradiction or conforms to the logical principle of identity, but it has no demonstrable relation to the real substances we suppose to exist without consciousness. All that we have done is to draw out or state explicitly what was contained in the conception with which we started, and however necessary and valuable this process may be in making our conception clear, it is valueless as a means of proving the reality of objects supposed to correspond to it. The mere analysis of the conception of substance no more shows that there are real substances *in rerum natura* than the conception of a hundred dollars entitles us to say that we have a hundred dollars in our pocket. Now dogmatism never gets beyond purely analytical or tautological judgments of this kind; the account it gives of the nature of knowledge is such that we cannot understand from it how it is possible to have the experience of real objects or of their connexion. We may therefore sum up Kant's objection to previous philosophy as fol-

lows :—Knowledge of real objects existing beyond the mind, and of their connexion and interaction, must be obtained either from perceptions or from conceptions ; but perception cannot take us beyond the consciousness of particular objects as now and here, and conception tells us nothing at all about such objects ; hence dogmatism cannot explain the possibility of knowledge at all.

So far Kant has closely followed in the wake of Hume, at least as he understood him, the main difference being that whereas Hume shows the imperfection of dogmatism only in regard to the principle of causality, Kant universalises the criticism and throws it into the comprehensive form. Real knowledge cannot be accounted for from mere perceptions or from mere conceptions. It is in fact the great merit of Hume in Kant's eyes, that he shows with such clearness wherein the weakness of dogmatism lies. All *a priori* judgments, *i.e.*, judgments derived from conceptions, seem to be merely analytical, and therefore, however accurately I may analyse the conception of cause, I can never get beyond the conception itself. The supposition therefore, as Hume argues, that the conception of causal connexion proves a real connexion of objects is a pure assumption. The moment I am asked to explain how I get the knowledge of objects, I must refer to my perceptions, and no perception can entitle me to make universal and necessary affirmations. Expressed in the language of Kant, Hume's difficulty is this : How can the conception of cause be thought by the reason *a priori*, and therefore possess an inner truth independent of all experience ? And this question, when put universally, assumes the form, How are *a priori* synthetical judgments possible ? Hume indeed does not content himself with pointing out the purely subjective character of the notion of causality, but endeavours to explain how we come to suppose a necessity where none exists ; and in this Kant refuses to follow him. A series of perceptions can never yield necessity, for however frequently a given perception follows another we cannot thence conclude that they must follow each other. Our belief in the connexion of perceptions is therefore explained by the psychological law of frequency or repetition : we naturally suppose that what is often associated is really connected, and thus by the influence of custom we confuse an arbitrary association of our ideas with a real connexion of objects. Accepting Hume's criticism of dogmatism, and rejecting his psychological account of the principle of causality, Kant endeavours to show that we can have a synthetical *a priori* judgment of causality, as well as other judgments of the same kind which Hume altogether overlooked.

We can now see why Kant states the problem of philosophy as he does, and what is the general method he is likely to follow in attempting to answer the question, How are synthetical judgments *a priori* possible? As the failure of dogmatism evidently arises from the assumption, which no one prior to Kant had questioned, that objects and events exist beyond consciousness as they are known, it was only natural to ask whether this assumption may not be a mistake. The general answer therefore given by Kant to the problem he has himself propounded, is that known objects, instead of being passively apprehended, are actively constructed by intelligence operating on the material supplied by the special senses. The existence of things-in-themselves is not indeed positively denied, but such things are shown to be absolutely distinct from the objects we actually know. The theory that intelligence constitutes known objects instead of passively apprehending them, is held to be the only theory that explains the facts as a whole. In the development of his proof, we find Kant continually seeking to intensify the persuasiveness of his own solution, by showing the inherent imperfection of the dogmatic conceptions previously accepted as conclusive. His method of proof thus takes, in many cases, an indirect form. All through the first part of the *Critique*, we find him asserting, that unless we admit the activity of intelligence in the constitution of knowledge, we are reduced to a "mere play of representations," or, what is at bottom the same thing, we are compelled to attempt the impossible feat of extracting reality from subjective conceptions. These two things always go together in Kant's mind; the impossibility of justifying universal and necessary judgments from a mere manifold of sense, *i.e.*, from an arbitrary succession of feelings, and the impossibility of accounting for knowledge on the supposition that known objects are things-in-themselves independent of our intelligence. When he proposes to show why mathematical judgments are apodictic and yet refer to individual figures, &c., he points out, on the one hand, that they cannot be obtained by an analysis of perceptions and, on the other hand, that their demonstrative character is unintelligible if we suppose the objects of mathematics to be known by particular observations of sense or by empirical measurements. In proving the principle that the knowledge of permanent substances is one of the conditions of a real knowledge of objects in space, he shows that, apart from the schemes of the "permanent," we can only have a number of unrelated feelings which by no possibility can be identified with real substances; and in confirmation of this criticism he remarks, that the ordinary derivation of permanent things from the conception of substance assumes that an analytical or tautological

judgment is capable of bridging the gulf between individual conceptions in the mind and things-in-themselves. So, in his proof of causality, he seeks to show that our knowledge of a real sequence of events can be accounted for, neither from an arbitrary train of feelings coming one after the other without determinate order or connexion, nor from the mere conception of cause as we find it lying ready-made in our minds; for, in the former case, we are not entitled to say that there are real sequences but only that there are sequences of our perceptions, and, in the latter case, we have no criterion by which to distinguish the conception of cause from an arbitrary creation of the imagination. Again, the existence of a primary self-consciousness he establishes, both on the ground that a succession of states of consciousness, not bound together by a single identical self, will not account for the systematic coherence and unity of our actual experience, and on the ground that the mere fact of having a conception of self as one does not prove the self to be one in its own nature. Lastly, in the "Refutation of Idealism" this indirect method of proof assumes an open and explicit form: the argument being, that the "psychological idealist" can never show that the mere sequence of ideas in the individual mind could give us the knowledge of real substances as permanent; that, on the contrary, we could never have experience of the self as in time, had we no knowledge of real objects in space. It should be observed however that this polemic against dogmatism might be eliminated from Kant's proof without really destroying its intrinsic force. The transcendental proof has assumed this form chiefly from historical causes, and Kant, in stating it as he does, only intends to commend to the lips of the dogmatist the ingredients of his own poisoned chalice. The conclusiveness of the theory does not lie in this indirect mode of proof, but in the completeness with which it accounts for the facts of experience as a whole. Kant might have stated his proof altogether in the affirmative form that known objects must exist in relation to intelligence; and, having done so, the details of the system would have consisted entirely of a presentation of the essential elements of knowledge in their relation to each other. The "manifold of sense," or "flux of sensations," is not, as Mr. Balfour seems to suppose, a ghost of Kant's raising, but the unladen ghost of dogmatism itself. Transcendentalism "convinces by threats" only in so far as, like every other system of philosophy, it must take some account of accepted systems that differ from it.

If the above is at all a correct account of Kant's problem and method, the objections of Mr. Balfour have been virtually disposed of beforehand. Those objections seem to me to be rather

the difficulties which naturally occur to one who has not yet seen into the heart of the system, but looks at it from the outside, than the sympathetic and luminous criticism of one who, by the very act of mastering and thoroughly assimilating the thought of another, is already, as Fichte remarks, to some extent beyond it. This judgment can only be completely justified by an examination of Mr. Balfour's objections to the proofs of Substance and Causality, and to the "Refutation of Idealism"; but, even without a special consideration of these, one may see that his criticism is destitute of that sureness and lightness of touch which can only come from the closest familiarity with the subject. What the Transcendental Philosophy is called upon to prove is, we are told, that the principles it asserts to be true are "involved in those simple experiences which everybody must allow to be valid" (MIND, XII., p. 483). Now, in the first place, there is no need, as has already been indicated, to lay special stress on "simple" rather than on complex experiences. When Kant is speaking of experience as data he has to explain, he places scientific truths on the same level as common-sense knowledge, and with the whole body of experience as thus understood, he contrasts purely philosophical knowledge as a higher consideration of the facts common to both. In speaking of the distinction between mathematical and philosophical knowledge, he remarks, that the essential difference between these two modes of knowledge lies in the fact that the former sees the particular in the universal, and the latter the universal in the particular; and that those thinkers who propose to distinguish philosophy from mathematics on the ground that the former deals with *quality* and the latter with *quantity*, have confused a difference in the objects of those sciences with the true difference, which consists entirely in the point of view from which the objects are regarded (*Kritik der reinen Vernunft*, pp. 514 ff, Ed. Hartenstein). In the second place, Mr. Balfour, unless I misunderstand him, entirely misrepresents the method of Kant, when he speaks of certain "principles"—by which he means, I suppose, such judgments as the permanence of substances, the causal connexion of events and the like—as "involved in" our simple experiences. We may say that the principle, say of causality, is involved in our experience, in the sense that an analysis of our ordinary beliefs will show that as a matter of fact we do suppose events to be really connected together. Everyone is "natural philosopher" enough to know, that "the property of rain is to wet, and fire to burn: that good pasture makes fat sheep; and that a great cause of night is lack of the sun". Mr. Balfour's words may therefore mean that, while everyone has the belief that there is a real connexion between certain known objects, it is

only by a process of abstraction that we learn to throw this belief into the general form of a principle, and to affirm, not that fire is the cause of heat and rain the cause of wetness, but that every event has a cause. I am loath to suppose that Mr. Balfour is under the impression, that the Transcendentalist has no other means of establishing his principles than simply taking our ordinary beliefs, abstracting from the concrete or individual element in them, and straightway baptising the residuum by the name of a "principle". For this is just what Kant means by dogmatism, consisting as it does in the mere explicit statement of what is wrapped up in our ordinary conceptions. By such a process, as Kant points out, we can only frame analytical judgments that do not take us a single step beyond the assumptions with which we begin. And yet it is difficult to resist the conviction that Mr. Balfour has fallen into this mistake, when we find him saying, that the principles of the critical philosophy are the "casual necessities of our reflective moments," which are supposed to be established by showing that they have "always been thought implicitly"; and that "to argue from these necessities [the principles] to the truth of things is to repeat the old fallacy about innate ideas in another form" (*MIND*, XII., p. 489; cf. p. 484). What these utterances mean, except that Kant and his followers endeavour to prove the truth of their principles by an analysis of their ordinary beliefs and perceptions, I am unable to understand. Kant's doctrine can only be assimilated to "the old fallacy about innate ideas" on the supposition that it assumes certain conceptions as true, and proceeds to "deduce," or set forth in abstract language, what is implied in them. But this is exactly what Kant does *not* do. If he has one merit more than another it is that he has disposed for ever of the supposition that knowledge may be justified by merely analysing the beliefs we happen to possess. Instead of admitting the absolute separation of thought and reality, an assumption underlying and vitiating the whole procedure of dogmatism, Kant maintains that reality is meaningless apart from its relations to thought. Mr. Balfour's mode of statement can be regarded as a correct formulation of the method of Transcendentalism, only if we suppose him to mean that the facts and laws of our whole experience imply or presuppose certain principles belonging to the constitution of our intelligence; and, when it is understood in this way, his objection loses any force it seemed at first to possess. But let us consider Mr. Balfour's criticism more in detail.

Let us suppose the transcendentalist to be asked by the sceptic how he proves the absolute truth of such a principle as that of causality. The reply, according to Mr. Balfour, will consist in begging the sceptic to admit that we "get some know-

ledge small or great by experience"; and, having obtained this very moderate concession, he will proceed to show that his transcendental necessities or principles are involved in it. To take a concrete instance, the sceptic may be asked whether he admits that we have an experience of *change*, and if he assents, the transcendentalist will attempt to show that experience "is not possible unless we assume unchanging substance". Or again, the sceptic, enticed into the admission that we have an experience of real events, is straightway forced to admit that such an experience is only possible if we virtually think of those events as under the law of causation. The essence, then, of the Transcendental method consists in showing, or attempting to show, that, in questioning the truth of such principles as substantiality and causality, the sceptic contradicts himself, since he grants the reality of certain experiences and yet "makes an illegitimate abstraction from the relations which constitute an object". He has therefore either to rescind his admission of the reality of the object, or to admit that a certain principle is involved in his knowledge of it. "He cannot, in all cases at least, do the first; he is bound therefore to do the second" (MIND, XII., pp. 482 ff.).

I acquit Mr. Balfour entirely of any intentional misrepresentation of the Critical Method; but the fact is not the less certain, that he has given, not a fair statement, but a travesty of it. I see nothing, in his way of stating the case, to distinguish Criticism from Dogmatism. Mr. Balfour's criticism of the "Refutation of Idealism" seems to show, that he has not carried his scepticism so far as to doubt the correctness of the ordinary dualism of intelligence and nature. But without appreciating in the clearest way the essential absurdity of this dogmatic assumption, the method of Kant is simply unintelligible. The only way, Mr. Balfour evidently thinks, in which the Transcendentalist can seek to make good his position, is by analysing, after the method of formal logic, the ordinary or uncritical knowledge which we all possess. The Transcendentalist is supposed to reason, that cause, substance, &c., are really thought, although only in an obscure way, by us in our ordinary consciousness. And no doubt this is true enough; but it is not that which constitutes the essential nerve of proof. If this were the sole force of the argument, Mr. Balfour's objection, that the principles are assumed, not proved, would be perfectly sound. The explicit statement of the implications of ordinary experience cannot prove the necessity and universality, or what is the same thing, the objectivity of the principles in question. The ready answer to such reasoning is, that no reflection upon our ordinary beliefs that does not in some way transform the current view of them,

can justify us in asserting that they are laws of nature. What Kant maintains is, that, reasoning back from our actual experience, we perceive that there are certain forms of intelligence without which there could be no experience at all. His method is, starting from our ordinary knowledge of concrete facts, and from our ordinary dogmatic judgments in regard to them, to show that we can never prove the reality of the facts, or the objectivity of our judgments concerning them, so long as we oppose thought and nature as abstract opposites. This Kant endeavours to make intelligible to the dogmatist by saying, that the observation of independent objects owing nothing to intelligence, can never yield real knowledge, because it cannot take us beyond an empirical "is". And this led Kant to say, that, while intelligence may be dependent on separate impressions for its apprehension of the determinate properties of things, it is yet active in combining or relating these impressions, and so constituting them as real individual objects, real events and real coexistences. It is only in accordance with Kant's method of thought to say, that he who maintains the independent reality of things *as known*, and denies to intelligence any share in the construction of that reality, must attempt to account for the knowledge, which we at least seem to possess, without any other materials than separate impressions. What else indeed can there be if we assume that thought has nothing to do with the constitution of phenomenal objects? On the other hand, supposing known objects to exist only in relation to our faculties of knowledge, intelligence must have certain functions of synthesis, which at once combine into unity the detached differences supplied by the special senses, and enable us to explain how we can have a knowledge of objects other than our own subjective conceptions. For if nature exhibits everywhere a system and unity of objects, which have been actively constructed by thought acting upon the manifold of sense, the puzzle which dogmatism completely fails to solve at once disappears; we are no longer perplexed with the essentially unmeaning riddle, How can we pass from conceptions in the mind to objects without the mind? for objects as known have no existence except in relation to the intelligence by which they are made real. The functions of synthesis, or potentialities of combination, we may, if we please, call "relations"; but it must be observed that they are able to operate whether they are brought into explicit consciousness or no. A function is not an "innate idea," but the potentiality of an indefinite number of cognitions. But how do we know that thought has such functions? We know it because the workmanship of thought is manifested in actual knowledge or experience, in so far as we combine and unite impressions, and thus form

judgments about real things. From the fact that we have scientific knowledge, we are enabled to reason back to the functions of thought by which such knowledge is made possible. We do not beg the sceptic to admit that, in our immediate perceptions, there are involved principles which we can discover by mere analysis, and that, unless this is granted, we are making "an illegitimate abstraction from the relations which constitute an object"; but we ask him to explain how there can be a knowledge of objects apart from the activity by which intelligence constitutes them. Kant has no thought of cajoling the sceptic, or anybody else, into the admission that there is a confused metaphysic even in such simple experiences as a perception of colour or a feeling of taste; all that he asserts is, that any one who is earnest in his endeavour to account for our experience in its totality must come to the conclusion that intelligence contributes the essential element in the constitution of the known universe. And those who refuse to accept his theory of knowledge he asks to explain how real knowledge can be derived from a mere analysis of conceptions, or from the perpetual rise and disappearance of individual feelings.

In this sense alone, and not in the sense that each of us has a confused consciousness of the "relations which constitute an object," do Kant and his followers hold that there can be no objects apart from the relations of thought. Mr. Balfour objects, quite in the vein of Locke's criticism of Descartes' innate ideas, that "the majority of mankind have habitually had certain experiences without ever consciously thinking them under the relations" asserted to be implied in them; and, from his point of view, he very naturally objects that, as an implicit thought is "simply a thought which is logically bound up in some other thought," it is "a mere possibility which can be said to have existence only as a figure of speech". The simple reply to this is that when certain relations are said by the critical philosopher to be involved or implicit in ordinary experience, all that is meant is that they are manifestations of the activity of intelligence in relation to its own objects. That the majority of mankind do not consciously bring these relations before their minds only shows that they are not metaphysicians; it does not show that they can know objects which, by definition, are beyond consciousness altogether, and are therefore in the strictest sense unknowable. Intelligence, as Kant maintains, has an essential nature, which comes into operation in our actual experience; but the recognition of this fact must necessarily be made only after actual experience has been had. Mr. Balfour asks how it comes that, "if relations can exist otherwise than as they are thought, sensations cannot do the same" (*MIND*, XII., p. 488).

The answer of course is that a sensation can only exist as it is felt, whereas a function of thought must operate before we can be conscious of it as having operated. A function of thought, in other words, is in itself a pure capacity or potentiality, the existence of which can only be revealed to us when, in relation to the material which it informs, it develops into actuality. The fact that people are unaware of the part played by intelligence in the combination and connexion of impressions, no more shows that intelligence is a pure blank than ignorance of the calculus on the part of the "majority of mankind," is a proof that the judgments of pure mathematics are untrue.

JOHN WATSON.

VL.—CRITICAL NOTICES.

An Introduction to the Philosophy of Religion. By JOHN CAIRD, D.D., Principal and Vice-Chancellor of the University of Glasgow, and one of Her Majesty's Chaplains for Scotland. Glasgow: Maclehose, 1880. Pp. 358.

THIS is, in many respects, a remarkable book; and perhaps the most important contribution to the subject with which it deals that has been made in recent years. Its substance was delivered in Edinburgh as the "Croall Lecture" for 1878-9, and it has been recast for publication in the form of a treatise. A strictly speculative work, it appeals to many who are unaccustomed to philosophy; and it is stimulating, in no ordinary degree, to the advocates of those philosophies which it attacks. In the literature of the subject to which Dr. Caird's book belongs, we meet with so much irrelevant and partisan discussion, that an able and fair-minded treatise, free from the rhetoric of the ordinary religious essay, is as welcome as it is rare. It is also refreshing to find a book enriched with the results of speculative study, and erudite in the best sense of the word, unencumbered with that display of learning which in similar works is sometimes thrust upon the reader's notice.

The real merit of the book, however, does not lie in the satisfactoriness of the results which Dr. Caird has reached, or of the philosophy which he champions; but in the intellectual breadth of the treatise, its happy suggestiveness, its elevated tone, and the general felicity of the speculative discussion. These portions may be appreciated most by those who are least able to assent to the philosophy.

In a preliminary chapter, the aim or function of Philosophy is stated, and sundry objections to the competency of Reason in the sphere of Religion are mentioned. Although the special ontological theory which the author advocates is discussed more fully in the eighth chapter, entitled "Transition to Speculative Idea of Religion," in this