



A Criticism of the Critical Philosophy

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Mind, Vol. 8, No. 29 (Jan., 1883), 69-91.

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IV.—A CRITICISM OF THE CRITICAL PHILOSOPHY.

I.

It will be generally admitted that the amount of attention bestowed on the philosophy of Kant is one of the most noteworthy phenomena in recent English philosophical literature. Besides the remarkable monument to Kant's influence recently offered by Mr. Max Müller in the form of a translation, we have had within the last five years what the latest worker in this field¹ has described as "a penetrating exposition of Kant's central doctrine by Dr. Hutchison Stirling: an eloquent and suggestive account of the first *Kritik* by Professor Caird: a well reasoned *resumé* of the theoretical and moral philosophy by Professor Adamson: and an able and elaborate review of current English opinion on Kant by Professor Watson". It is evident, again, that the main aim of most of this work² is not merely to throw light on an interesting department of the history of thought, but rather to effect a radical change in current English philosophy: the writers desire that our philosophy should "return to Kant" (Adamson), should obtain from the study of Kant a "philosophical rejuvenescence" (Max Müller), should—in Mr. Wallace's briefer, but yet more solemn phrase—"learn Kant". They plainly consider that the only obstacle to this result is the want of due intelligence on the part of the students of philosophy who remain obstinately unkantised: that, as Mr. Watson says, "Kant has opened up a new way of ideas, which should win general assent the moment it is seen to be what it really is". Under these circumstances it seems desirable that some of the yet unconvinced persons should endeavour to co-operate with the efforts that are thus liberally being made to instruct them, by explaining clearly, and as completely as is consistent with due brevity, the reasons why they remain unconvinced. And, in default of more competent or more representative writers, I have determined, after considerable hesitation, to undertake this task.

One main reason for my hesitation may perhaps be here

¹ Prof. Wallace, in the preface to his recent work on Kant in Blackwood's *Philosophical Classics*.

² I must except the "penetrating exposition" of Dr. Stirling; who considers Kant's method "a laborious, baseless, inapplicable, futile superfluous".

explained, in order that the point of view from which this article is written may be better understood. It is, briefly, that I cannot regard the criticism of Kant on which I am about to enter as anything but a *pis aller*: it is not what I should have wished to write on the subject to which it relates, but the only thing open to me to write—according to the view that I have just given of the occasion for writing something. I should have preferred, if I dealt with Kant at all, to treat his work in a more sympathetic and more historical manner; to explain carefully how his doctrines are related to those of his continental¹ predecessors, and how even when they appear to me most manifestly invalid, we may yet understand the process by which an acute and truth-loving mind was led to hold them, at a certain stage in the development of metaphysical speculation in Germany. I feel it to be somewhat of an anachronism, and not altogether in good taste, to bring to bear upon the weak points—as I regard them—of the Kantian system, the minute, unreserved and unqualified criticism which a system or method of philosophy challenges and requires when it is first offered to the acceptance of students. I should have much preferred to apply this manner of criticism not to the doctrine of Kant himself, but to the doctrine of these contemporaries of mine who are inviting us to learn the lesson of Kant and obtain thereby a new philosophical birth. But this latter course, I conceive, is not really open to me; because no attempt has yet been made to put this latter doctrine before us in a form in which it would be worth while to apply serious criticism to it. In fact I am hardly warranted in making the assumption that there is such a common doctrine; and that all or even most of the writers above referred to have really learned from Kant the same lesson and, in their own philosophical speculations, are pursuing the same “way of ideas” under his guidance. I think, however, that I may with approximate accuracy speak of Professors Adamson, Caird, Wallace and Watson as belonging to the same school—without, of course, meaning to saddle any one of them with responsibility for the precise statements made by any of the others. And I might perhaps be able to give a general account of the method and conclusions of this school which would not be found altogether misleading and erroneous. But as no one

¹ I say ‘continental’ because, as Kant shows no sign of having really understood Hume’s position—whatever fruitful suggestions he may have derived from him—and every sign of having misunderstood Berkeley’s, I do not consider it particularly instructive to dwell upon his historical relation to his English predecessors.

of them has yet expounded their view of the universe in a direct and systematic manner, it would be futile to attempt to criticise it in the only way in which philosophy appears to me worth criticising: that is by testing as rigorously as possible the clearness and legitimacy of its premisses, the cogency of its procedure, and the consistency of its conclusions. And it would, in my opinion, be especially futile to attempt this under the guise of a discussion of Kant's doctrine; since it is quite clear to me that the English Neo-kantians—if I may venture so to call them—differ from Kant in points that I regard as fundamental. Indeed, when I have been reading the criticisms with which Prof. Caird and Prof. Watson intersperse their exposition of Kantism, I have often longed to call up the philosopher of Königsberg himself, and to ask whether if the parts of his system which these disciples assail were abandoned, the remainder would, in his opinion, be of much value—whether the edifice of his transcendental philosophy would not be ruined from top to bottom, and need to be rebuilt from its foundations, and refashioned into something very unlike his own construction. This, at any rate, is my view of the situation: the English Neo-kantians appear to me to be living with every appearance of comfort in a mansion of thought which never was very firmly based, but from which they have ostentatiously removed the imperfect foundation that it originally had. And, this being so, a systematic reconstruction which I could not presume to undertake appears to me an indispensable preliminary before any adequate criticism can be attempted of the doctrine that they have learnt from their master. If therefore I criticise anything I must criticise Kant: and so far as this criticism may fall on points that no one will defend, I must throw the responsibility for its irrelevance on my Neo-kantian contemporaries. It is Kant's philosophy that they are professedly commending to our attention, in the eloquently suggestive, well reasoned, and ably elaborated treatises before mentioned: it is Kant's "way of ideas" which, we are told, ought to win our assent as soon as it is understood: and if, as I think, it is some philosophy quite different from Kant's that they really have in their minds, it is surely high time that this other philosophy should be placed on an independent basis and duly reasoned out from its own proper premisses.

I propose then to attempt a brief examination of the Critical Philosophy, in which I shall try to expose what seem to me the radical defects of its procedure; taking it as offered for the acceptance of Englishmen, at the time at

which I write. I have called the method and system which I propose to examine Critical rather than Kantian, because this is the style which the English Neo-kantians seem to prefer, especially when they are emphasising the claims of their master to a more than mere historic interest. At the same time the term involves a serious ambiguity; which, however, we can hardly expect our Neo-kantians to take pains to dispel, since they derive from it a not unimportant rhetorical advantage—the same kind of advantage that accrues to “liberal” politicians from the similarly ambiguous denotation of their party. For the term “critical”—especially if we spell it, as these writers usually do, with a small *c*—does not lose its common meaning for the ordinary reader by becoming the proper name of Kant's doctrine: though it denotes the method of a particular school, it still connotes a faculty and a habit of mind which all schools would allow to be valuable and important to a metaphysician—the faculty of detecting flaws and blemishes in any intellectual product to which it is applied, and the habit of scrutinising carefully the processes and results of thought, with a view to such detection. These qualities do not necessarily accompany eminent inventive or constructive genius in any department; indeed, they are commonly thought to be somewhat alien to it. We expect a “critical” philosopher to be keenly sensitive to any inexactness or uncertainty in his premisses, any want of cogency in his inferences, any inconsistency in his conclusions; but we do not expect him to be necessarily original, penetrating, or profound. Now it so happens that, while no one would deny to Kant originality and penetration, the excellences which the term “critical” thus surreptitiously attributes to him are, in my opinion, those to which his claims are most disputable: and in fact, it will be the main aim of this paper to show that the system that has appropriated the term Critical as its proper appellative, does not really deserve the title in the wider sense which I take to be still current and legitimate. A critical philosophy is surely nothing if not self-critical: and Kant, though a penetrating critic of other philosophers (when he understands them) seems to me very deficient in the faculty or habit of self-criticism. This deficiency I find manifested in two different manners: first, Kant does not seem to have ever been clearly conscious of the “presuppositions” involved in his Critical procedure, still less to have compared them impartially with the presuppositions of his dogmatic predecessors; and secondly, under the fatal temptations of asymmetrical system-making to which his fertility in subtle

distinctions and analogies rendered him peculiarly prone, he seems to intermix with his most profound and plausible reasonings fallacies and inconsistencies of a very palpable kind. Now the general objections that I entertain to the procedure of Criticism are so fundamental that, if valid, they amply justify me in rejecting it; but since I cannot suppose that they have not been fully considered by the advocates of the Kantian system, I should not feel the confidence that I still do feel in their validity, if they were not supported by the cumulative force of narrower objections to particular arguments and details of the system. To exhibit fully this cumulative force would require a book rather than an article; but I must try at least to give some representative examples of these more special objections besides stating the more general ones: and therefore must criticise Criticism in some detail.

At this point, however, the ambiguity just spoken of recurs in another form: since when we speak of criticising Kantian Criticism, we may either (1) use the term "criticise" in a wide and general sense, or (2) we may use it in the special signification which Kant has fixed on it: that is, we may propose to test the validity of the Kantian system by applying to it its own precise procedure, and demanding that the transcendental knowledge it offers shall be demonstrated on general grounds to be possible, before we consent to examine its details. Now I certainly think that this latter method is one which, on Kant's own principles, we have a *prima facie* right to adopt: that if it was legitimate and opportune for him to ask "How is (dogmatic) Metaphysics possible," it must be equally legitimate and opportune for us to ask, "How is Critical Philosophy possible". For the occasion and justification of Kant's question is stated by himself to consist in the lack of steady progress in the *soldisant* science of metaphysics: and the most convinced adherent of the Kantian system must admit that the Critical Philosophy has not, as Kant hoped, succeeded in removing the reproach. So far as it was true¹ in 1783 that "while every other science is incessantly advancing, in this . . . we are continually turning round on the same spot, without getting a step farther,"² it must, I think be allowed that

¹ I do not mean to say that it *was* true: on the contrary, I think that the statement is far too violent and sweeping. But it had a certain element of truth: and my point is that to whatever extent it was true then, it would be true now to nearly the same extent.

² *Prolegomena*, Introduction.

the contrast is hardly less marked in 1883: if it was then found "impossible to produce unanimity among those who are engaged in the same work, as to the manner in which their common object should be attained," there is, I fear, no clear evidence that it has become more possible now. And therefore if it was competent to Kant to "suspend all metaphysicians solemnly from their occupations" till they have shown the possibility of metaphysical knowledge, it must surely be competent for us Englishmen to impose a similar inhibition on the Critical philosophers, until the "credentials" of Criticism have been tested and found satisfactory.

Here, however, I suggest this question chiefly in the hope that the consideration of it may cause our Neo-kantians to abate somewhat of that air of superiority which they are in the habit of adopting towards all whom—with a great extension of the term as used by Kant—they are pleased to call Dogmatists: all, that is, who seek knowledge on the great questions of ontology without first asking "How is such knowledge possible?" Unless the Critical Philosopher can first explain how *his* knowledge is possible, he would seem to be only a dogmatist of a new kind: and I do not perceive that he ever does premise such an explanation. He may perhaps reply that I might equally well ask him to prove the possibility of this explanation, and so on *ad infinitum*: but this answer, if valid, would only show more cogently the unreasonableness of his original attack on his Dogmatists. However, I do not now wish to press this *argumentum ad hominem*: since the criticism that I propose to apply to the Kantian system will only be of the common and humble kind: I shall not demand to be shown how Critical Philosophy is possible, but merely that it is proved.

In order to proceed systematically, I shall begin by examining the account that Kant gives of the premisses or point of departure of his system, which appears to me open to very serious criticisms. But before I state them, it will be well to notice at the outset certain fundamental objections which different classes of instructed readers are likely to feel to the kind of criticisms that I am about to make. It will be said by some that Philosophy, properly viewed, has *no* premisses, in the sense in which I am assuming Kant's system to have them; that is, it has no basis of knowledge or irrefragable belief, independent of its own work, and on which this stands or upon which it logically depends; that though, in making its way into our minds, it must begin from some cognition that is not yet philosophical,

this point of departure must not be mistaken for its foundation, since Philosophy is in reality self-centered and has its principle of highest certainty within itself; so that, when fully comprehended, it really gives support to the cognitions from which, in the process of being learnt, it has to start, and does not need to receive support from them. Again, it will be said by others that Philosophy, properly viewed, has no *particular* premisses; that what it starts with is the whole aggregate of what is taken for knowledge—or reasoned and systematic thought, so far as this is a wider term than knowledge—by the thoughtful part of society to which the philosophising individual belongs; that his function as a philosopher is to bring this aggregate into clearer coherence by impartial reflection on it, any conclusions he may reach as to the superior validity of particular portions of the aggregate being arrived at in the course of the reflection itself. Now I should quite allow the force of one or other of these answers if I were professing to criticise certain other kinds of philosophy in the manner in which I am about to criticise Kant—*e.g.*, I should allow the force of the former answer if I were criticising an avowed disciple of Hegel, and the force of the latter if I were criticising an avowed disciple of Reid. But I cannot admit the applicability of either on behalf of a philosophic method which, like Kant's, professedly seeks and obtains knowledge as to the nature of our faculty of knowing in order to establish the limits of its legitimate exercise: since no one can maintain that cognitions relating to our faculties can have—even ultimately and when the philosophy is complete—logical priority over cognitions relating to the manifestations of these faculties. The knowledge that we have faculties of knowledge so and so constituted must always, I conceive, remain an inference from the knowledge that we have such and such knowledge. Hence in order to attain any valid conclusions as to the "faculty of reason in general" which Kant, in the preface to his first *Kritik*, states to be the subject of his inquiry, he must have, as the premisses from which he starts, some valid cognitions attained by the legitimate exercise of this faculty; and any defect of certainty in these presupposed cognitions must attach also to his Critical conclusions. Indeed, as we have already seen, the Critical procedure assumes this presupposed knowledge to be not only as trustworthy as we can get, but so much more trustworthy than certain other widely accepted systems of beliefs,—*i.e.*, Rational Psychology, Ontology and Theology—that the ascertainment of the conditions of the

former will afford us cogent reasons for denying the possibility of the latter.

We have therefore to ask (1) What are the (apparent) cognitions of his own and other minds which Kant assumes to be really valid knowledge? and (2) How are we justified in assuming this, at the outset of the Critical procedure? The answer that Kant gives to the former of these questions in the passage in which he answers it most explicitly,¹ appears quite clear and definite: Pure Mathematics and Pure or Rational Physics constitute the knowledge assumed to be real. And I think that this was undoubtedly *one* of Kant's points of departure, and that he had perfect confidence in its legitimacy; hence, though I shall presently show that it was not his *only* point of departure, it will be simpler to consider it by itself in the first instance. How then does Kant justify this very important preliminary assumption of his philosophy? I know no passage in which he answers this question very completely; and I am inclined to infer from this that he has never fully realised either the importance or the difficulty of the question:—the more because our Neo-kantians, for the most part, hardly appear to realise them at all.² The difficulty, in my view, arises from the attitude of complete scepticism which Kant asks us to take up with regard to dogmatic metaphysics, with the attitude of unquestioning reliance which he adopts towards mathematics. What broad distinction is there

¹ *Prolegomena zu jeder künftigen Metaphysik* §. 5. "Indem wir . . . voraussetzen, dass solche Erkenntnisse aus reiner Vernunft wirklich sind, so können wir uns nur auf zwei Wissenschaften der theoretischen Erkenntniss . . . berufen, nämlich reine Mathematik und reine Naturwissenschaft.

² I ought, perhaps, to make an exception in favour of Mr. Watson, who does devote some pages to this question in the first chapter of his book. But after a careful perusal of the pages, I find it difficult to grasp Mr. Watson's view of the subject. On the one hand, he says, in the most unqualified way (pp. 5. 6), that "the special facts and laws of the mathematical and physical sciences" are Kant's actual premisses "not propositions which he seeks to prove but data which he assumes;" of which "the particular philosophical theory we adopt will in no way alter the nature or *validity*:" he even opines (p. 16) that "it would have appeared to Kant mere folly to prove the truth of mathematical and physical propositions". On the other hand he says (p. 10) that "an examination into the nature of knowledge is forced on us as a means of *justifying*, if that be possible, the universal and necessary principles which are imbedded . . . in the special science:" and also (p. 1) that "the request . . . to prove the supposed absoluteness, objectivity or necessity of the particular facts and laws which no doubt exist in our consciousness . . . is perfectly reasonable". I can hardly suppose Mr. Watson to mean that I am justified in assuming, apart from Criticism, that the special laws of mathematics and physics are

between the intellectual process by which the apparently self-evident universals of the latter science are known, and that by which the human mind is led to affirm the apparently self-evident universals of the former? The manner in which Kant sometimes (*e.g.*, *Prolegg.* § 5) tries to exhibit the distinction seems to me palpably inadequate. He says that "pure Mathematics and pure Physics can exhibit their objects to us in intuition, and hence, supposing there should occur in them a cognition *a priori*, can show us the truth or harmony of the cognition with the object *in concreto*, that is, its reality, from which we could then proceed analytically to the ground of its possibility". But this does not clearly affirm more than that the mathematician or physicist can show one or more particular concrete examples of any universal proposition that he lays down: and no one knows better than Kant that no accumulation of such particular examples can establish the validity of the universal proposition, *quâ* universal. In the case, however, of Mathematics Kant means a good deal more than this: he means that mathematics can show us its object in a "pure *a priori* intuition,"—can, as he otherwise says, "construct" it. This meaning is most clearly expressed in a passage in the *Kritik* ('Methoden-lehre' I. Hauptst. I. Abschn.) where the essential difference between mathematical and philosophical cognition is developed at some length.

"Philosophical cognition," he says, "is the rational cognition obtained from concepts, mathematical that obtained from the construction of concepts. By constructing a concept I mean representing *a priori* the intuition corresponding to it. For the construction of a concept, therefore, a non-empirical intuition is required which as an intuition is a single object, but which nevertheless as the construction of a concept or general notion must express something that is generally valid for all possible intuitions which fall under the same concept. Thus I construct a triangle by representing the object corresponding to that concept either by mere imagination, in pure intuition, or after this on paper also in empirical intuition, in both cases however *a priori*."¹

Now I will grant that the distinction thus laid down

true for me individually, but not that they are true for mankind generally; and that that is Kant's assumption: since nothing can be more manifest than that, so far as Kant assumes anything with regard to the laws in question, he assumes their "objectivity" and "universal validity". Cf. *Prolegg.* § 5, §§ 14—20. And again I can hardly suppose Mr. Watson to mean that I am justified in assuming the truth of special laws and yet not similarly justified in assuming the truth of the more general principles on which these laws depend. Hence, I am unable to collect from his various statements any consistent view that has even a *prima facie* plausibility.

¹ Hartenstein's ed., p. 478; Rosenkranz' ed. p. 552, 3.

holds in the case of Geometry, from which Kant's illustration is drawn: I will grant that geometrical reasoning is distinguished from philosophical by being referred to an object which as concrete and individual can be perceived and not merely thought. But Kant's distinction is drawn in favour not of Geometry only but of Pure Mathematics generally: and it is certainly not obvious that algebraic or even arithmetical reasoning involves any similar reference to an individual concrete object. The reader will therefore look with some curiosity to see how these branches of Mathematics can be shewn to proceed "aus der Construction der Begriffe:" and I cannot but think that he will be rather surprised when he comes upon the following explanation.

"In Mathematics, however, we construct not only quantities (*quanta*) as in Geometry, but also mere quantity (*quantitas*) as in Algebra, where we abstract completely from the properties of the object that has to be thought according to this quantitative conception. We accordingly adopt a certain notation for all construction of quantities generally—such as addition, subtraction, extraction of roots, &c.—and having also characterised the general concept of quantities according to their different relations, we represent in intuition every operation by which quantity is produced and modified, according to certain general rules. Thus when one quantity is to be divided by another, we place the signs of both together according to the form denoting division, &c.; and thus Algebra arrives by means of a symbolical construction, no less than Geometry by means of an ostensive or geometrical construction of the objects themselves, at results which our discursive cognitions by means of mere conceptions could never have attained."

This passage appeared to me to show conclusively the careless and imperfect manner in which Kant has thought out this part of his doctrine. He has begun by giving us, as the *differentia* of Mathematics, that it "constructs" its concepts, defining "construction" to be the representation *a priori* of a concrete individual object corresponding to its concept: and then proceeds to give, as a particular case of this construction, the "symbolic construction" of Algebra, as explained in the above passage. But it is plain that in this "symbolic construction" there are no individual concrete objects corresponding to the concepts of quantity employed in the algebraical reasoning, except the symbols that we write down on paper, and that these are neither more nor less individual and concrete than the symbols of ordinary language used in philosophic reasoning; so that the distinction sought to be established between mathematical and philosophical cognition breaks down altogether. Yet Kant is so satisfied with this explanation that he substantially repeats it a few pages later in a passage "On Demonstration," in which he tells us that the procedure of Algebra in dealing

with equations is "a construction, not geometrical but by characters (*charakteristisch*) in which, by means of signs, we exhibit in intuition the concepts especially of the relation of quantity . . . and secure all our inferences against error by placing each of them visibly before the reasoner's eyes: whereas philosophical cognition must dispense with this advantage as it must always contemplate the universal *in abstracto*, &c."¹

Surely it is hardly necessary to point out that the algebraist can no more bring his reasonings "vor Augen" by the simple expedient of writing down his *x*'s and *y*'s, his + and - &c., than the philosopher can by similarly writing down his philosophical terms with verbs, conjunctions, &c., appertaining. Surely it is manifest that the universals of Algebra are just as much contemplated *in abstracto* as the universals of Philosophy, the superiority of Algebra lying in greater definiteness of conception not in any "concrete" or "intuitive" presentation of what is conceived—and in short that Kant having established a plausible distinction between *Geometry* and Philosophy is forcing it on to the alien matter of *Algebra* with a violence that must be palpable to every one except himself.

So far as Arithmetic is concerned, there is another passage (*Prolegg.* § 10) in which Kant seems to offer a different account of the procedure of Mathematics in this department. He says that "Arithmetic accomplishes its concepts of number by successive addition of the units of time"; thus suggesting that it is the pure intuition of time by which the concepts of number are "constructed". Now it is true of course (1) that the process of counting one, two, three, . . . occupies time, each number being thought a moment later than the preceding ones; and (2) that some process of counting is necessary to the full realisation of the small numbers—which are the only ones that we ever do fully realise. But it does not therefore follow that the abstract units summed up in the notion of any number are units of time: indeed, it seems to me manifest that they are not, and that on the contrary when we fully realise the meaning of (say) "four," the four parts of this whole are necessarily conceived simultaneously and not successively—although, as I have said, a process of counting is required to attain this realisation. Time is no more involved in the notion of number, than it is in any other notion which is at once complex and definite: since for the full realisation of any such conception we

¹ Hartenstein, p. 499, Rosenkranz, p. 568.

require a process of synthesis in which we dwell on each part separately. And it may be observed that this view as to the relation of Arithmetic to Time seems to be rather doubtfully held by Kant: at least there is no suggestion of it in the discussion of Time in the *Transcendental Æsthetic*.

A similar hasty extension to Arithmetic of a view originally formed by a consideration of Geometry may be seen, I think, in Kant's famous distinction between "analytical" and "synthetical" propositions—or at least in the discussion in which he illustrates and defends this distinction. I do not deny that in a certain sense arithmetical equations are synthetical: that is, an act of synthesis is required to form the concept of each successive number in counting; and the validity of arithmetical reasoning depends upon the possibility of such syntheses. But this is not what Kant means in affirming that $7 + 5 = 12$ is not a merely analytical proposition; he means to deny that it can be obtained by inference from the definitions of numbers—or, in his own words, from "mere analysis of their concepts," granting their concepts to have been legitimately formed. Now it is doubtless true that the proposition $7 + 5 = 12$ cannot be obtained by mere analysis of the notions 7 and 5, or even of the whole series of numbers up to 7. But Kant would hardly deny that it may be obtained from the proposition $12 = 7 + 5$ by simple conversion: and it is easy to show that this latter proposition can be strictly inferred from propositions which Kant can hardly deny to be analytical. For, first, I do not see how he can deny that $12 = 11 + 1$ is an analytical proposition, since this is what the symbol 12 signifies, according to the rules of arithmetical notation: secondly, it must similarly be admitted of numbers from 10 downwards that $10 = 9 + 1$, $9 = 8 + 1$, &c., &c., are analytical; and, thirdly, since Kant says that "the whole $>$ its part" is analytical, I hardly suppose that he would deny this of the closely connected quantitative axiom "the whole = the sum of its parts taken in any order". If so, the proposition $12 = 7 + 5$ may obviously be deduced from the above premisses.

In short Kant appears to me to fail altogether in making out the resemblance between Geometry and Arithmetic which he requires for the purposes of his argument, and therefore his distinction between the self-evidence of mathematical and the self-evidence of metaphysical premisses palpably breaks down.

Let us now consider how the case stands in respect of the non-mathematical universals of Physics: *e.g.*, the proposi-

tion that every event must have had a cause, or that matter is indestructible. Kant has no more doubt that the validity of these propositions may be unhesitatingly assumed prior to criticism, than he has in the case of the universals of Mathematics: "Pure Mathematics and pure Science of Nature would not have needed *for their own safety and certainty* any such deduction as we have made of both".¹ But the ground of this certainty is stated differently in the two cases, since the concepts used in the non-mathematical universals of Physics cannot be "constructed *a priori*": and therefore, while the universals of Mathematics are said to "rest on their own evidence," the non-mathematical universals of Physics have to "rest on experience and its thorough confirmation"² (*durchgängige Bestätigung*). Similarly in the second paragraph of the Preface to the first edition of the *Kritik*, Kant refers to the principles of Physics as "principles . . . the use of which is sufficiently guaranteed (*hinreichend bewährt*) by experience". But how can Kant consistently say that these universal propositions are sufficiently "confirmed" or "verified" by experience, when he at the same time maintains as a fundamental point in his argument that experience cannot really establish universal propositions? If experience cannot establish them, it must be obvious that it cannot adequately "confirm" or "verify" them *quod* universal. Is it possible to adopt the answer to this question suggested by Mr. Watson? Can we suppose that Kant really means that the "safety and certainty" of the universals of Physics may be assumed not because experience can prove them—as it manifestly cannot—but because they are "undoubted," because everybody does assume them and experience does not contradict him? that, in Mr. Watson's words, it "would have appeared to Kant mere folly" and "a voluntary creation of self-tormenting difficulties," to "ask philosophy to prove what no one denies"?—that, in short, he relies not strictly on induction from experience, but on Common Sense uncontradicted by experience? But what is meant by saying that the principle of causality is undoubted? Grant—for the sake of argument, and in spite of the prevalent belief in free will—that it is undoubted by Common Sense, it cannot be said that its absolute universality within the limits of possible experience—which is its fundamentally important characteristic from the Critical point of view—is undoubted

¹ *Prolegomena*, § 40. The emphasis on the words italicised is Kant's own.

² *Prolegomena*, l.c.

by philosophy : and it is difficult to believe that Kant would have deliberately appealed to Common Sense as an authority on a question at issue among philosophers, when we recall his severe censure on the Scotch school for making such an appeal.¹

But how impossible it is for Kant to appeal to Common Sense with any consistency, appears more manifestly when we ask what he means by the "experience" that verifies the universals of physical science ; since there is at any rate no doubt that his view of it is fundamentally different from the common sense view of the plain man. Common Sense undoubtedly means by my experience of physical facts cognition of something that exists as cognised independently of my or any man's cognition : while it is, of course, a cardinal point in Kant's system that I do not know things as they are but only as they impress my own and other human minds. But if Common Sense is so completely thrown over as regards the extra-cognitional existence of the object of perception, its authority can hardly remain worth much as regards the strict universality of the principle of cause and effect. In fact the two cases seem *prima facie* parallel ; as in each case we have a proposition assumed in ordinary thought which reflection—to most people—shows to be not self-evident, and therefore to require some kind of proof. I am not now considering whether it is possible for Kant to *prove* one of these propositions and disprove the other ; but whether it is legitimate to assume one on the authority of Common Sense while yet rejecting the other : and I submit that, whether the plain man's view of the matter is worth much or little, it must be clearly unphilosophical to play fast and loose with him as Mr. Watson is disposed to do.

To sum up : I maintain that the premisses of Criticism, so far as we have yet examined them, are illegitimately and inconsistently assumed. Grant that the universals of Mathematics are apparently self-evident : the same may be said of many of the discredited universals of Metaphysics ; and Kant has failed to show any such fundamental difference in mathematical method, when compared with that of dog-

¹ *Prolegomena*, Introduction. "They therefore discovered a more convenient means of carrying the matter with a high hand without any insight, *viz.*, by appealing to the *common-sense of mankind* . . . as long as a morsel of insight remains, a man will certainly avoid this desperate resource. For if you look at it this is nothing but an appeal to the judgment of the multitude, at whose applause the philosopher blushes, while the popular wit triumphs and gives himself airs on the strength of it."

matic metaphysics, as would warrant us in relying absolutely on the former appearance of self-evidence, while altogether distrusting the latter. Grant that the currently accepted universals of Mathematics and Physics are in a sense "verified by experience"; still, strictly taken, this can mean no more than that they are in harmony with our experience, so far as it has yet gone; and, according to Kant himself, this cannot establish their strict universality. Grant, again, that an effective appeal may be made to Common Sense, in Mr. Watson's manner, against the "voluntary self-torture" of raising doubts as to the universal truth of mathematical axioms or the principle of causality, within the range of possible experience; still, such doubts have been raised by philosophic intellects, and Kant has himself told us what to think of the misguided persons who appeal to Common Sense against Philosophy; and even if he had not told us, his own divergence from Common Sense on the fundamental question of external perception would have disabled him from making such an appeal consistently.

But, as I before said, I do not regard the point of departure that we have so far been occupied in examining, as the only point of departure of Kant's system. I do not think that in his own view he *requires* to assume the certainty of mathematical and physical universals in order to establish his Critical doctrine. In fact the very passage in the *Prolegomena*, in which this assumption is made, suggests that it belongs to the "analytical method" employed in that treatise, which a previous passage has expressly distinguished from the synthetical method chiefly used in the *Kritik*. And it seems to me clear from many particular passages in the *Kritik*, as well as from the general drift of that treatise, that Kant, while he considers himself justified in assuming the certainty of mathematical and physical universals, considers also that Criticism is competent to establish them by a process of reasoning in which this assumption is not made. I pass, therefore, to examine the precise nature of this process.

As I understand Kant, this part of the Critical procedure consists (1) in obtaining by reflection on and analysis of ordinary experience of particular facts—as distinct from general premisses or conclusions of science—a knowledge of the complex nature and functioning of the mind that experiences, and thus of the precise manner in which our different faculties—sense, understanding, and imagination—necessarily co-operate in producing the composite result which we call experience: and (2) thence inferring certain

necessary characteristics of this experience, and correspondingly universal laws of its objects. Here, then, again, our first duty is to make clear to ourselves his conception of the fact to be analysed, as he takes it prior to analysis. As I have already said, it is fundamentally different from the Common Sense notion of experience—so far at least as experience of physical fact is concerned. An empirical cognition of physical fact, in Kant's view, whatever else it may be, is not the cognition of an object that exists as cognised independently of this cognition. His grounds for discarding this element of the Common Sense view I shall presently consider; meanwhile I wish to ask what Kant exactly does mean by saying that we have "experience of objects," since he does not mean that we know things as they are. His language on the subject is a little perplexing: as he tells us on the one hand (*Prolegg.*, § 5) that "experience is nothing but a continuous synthesis of perceptions": and on the other hand (*Prolegg.*, § 18) that "judgments of perception" are distinguished from judgments of experience by being merely subjectively valid. But how can a synthesis of what is merely subjective give us knowledge of objects? or rather what is the meaning of "object," if it is somewhat that results from a synthesis of merely subjective elements? Kant's answer to this question appears to me confused and inconsistent: it is given as follows in the most explicit passage that I can find (*Prolegg.*, § 18):—

"All our judgments are at first mere judgments of perception; they are valid merely for us (for our subject), and it is not till afterwards that we give them a new reference, namely, to an object, and insist that they¹ are to be valid for ourselves always and for everybody else: for if a judgment agrees with an object all judgments concerning the same object must also agree among themselves, and thus the objective validity of the judgment of experience signifies nothing else than its necessarily universal validity. But also conversely, when we find reason to attribute necessarily universal validity to a judgment, we must also consider it objective, i.e., as expressing a property of the object; for there would be no reason why the judgments of others should necessarily agree with mine, if it were not the unity of the object to which they relate, and agreeing with which they must necessarily also agree among themselves."

Now to the first part of this passage I make no objection,

¹ Kant's words are . . . "nur hintennach geben wir ihnen eine neue Beziehung . . . und wollen dass es auch für uns jederzeit und ebenso für Jedermann gültig sein solle". The only way of making the sentence grammatical is to refer the "es" to "Object": but as in all the rest of the passage it is always to "Urtheile" that "Gültigkeit" is attributed, I have preferred to regard the "es . . . solle" as an accidental lapse from the plural ("Urtheile") to the singular. The same view is taken in Mr. Mahaffy's translation.

except that I cannot regard as psychologically accurate Kant's account of two successive mental acts involved in any empirical judgment—*first*, the judgment of perception, and *then* the reference to an object. I recognise no such doubleness in my ordinary experience: but I so far agree that when I reflect on any judgment that I make concerning any external object, and ask what is implied in it which is not implied in a mere affirmation concerning a transient feeling of my own, I certainly find in it the implication of "universal validity," which Kant here makes explicit. I regard a mere sensation—using this term to denote a psychical phenomenon and not its physical concomitant—as existing, being *there*, for me alone; or at least, I assume that other minds can only know it representatively, by the exercise of imagination: but an objective perception is assumed to be the perception of something that is there, at least potentially, for all minds alike. As I have said, I find also implied in my notion of an object cognised, that it exists, *as* cognised, independently of my cognition; but, assuming for the present that this implication has been eliminated, I should be willing to accept "objective validity" as merely meaning "universal¹ validity". But I do not understand how Kant can with consistency assert that, conversely, a universally valid judgment must be a judgment expressing some property of the object. For Logic is, in Kant's view, an *a priori* science, in which universally valid propositions are laid down: and yet he expressly says—and indeed gives it as a reason for the peculiar success of Logic—that it has "not only the right but the duty to make abstraction from all objects of knowledge and their differences".² And even if we confine the statement to the mathematical and physical universals which Kant—while finding the ground of this universal validity in the mental conditions of knowledge, the forms of sensibility and thought—declares to be "objectively valid" or "valid of objects of experience," it still seems to me misleading to say that the universal validity of these judgments implies "the unity of the object to which they all relate". I cannot see that

¹ I have omitted the idea of 'necessity' because it seems to me to involve a certain ambiguity. The existence of particular objects of experience, *quæ* particular, is commonly thought as contingent and therefore not necessary; but true judgments relating to them are thought to be necessary, in the sense that they cannot be contradicted by any right-judging mind.

² The quotation is from the third paragraph of the preface to the 2nd edition of the *Kritik*. Cf. also 'Transcendent. Logik,' Einleitung ii.: "General logic abstracts, as we have shown, from all reference of knowledge to its object".

it implies more than certain general resemblances in the objects of different minds. For instance, it would be quite possible for me and any of my readers to agree that two straight lines cannot enclose a space, or that every event must have a cause, and yet to have no agreement at all as to the particular sizes and shapes, the particular movements and other changes, of the material things that make up the external world of each of us. I lay stress on this, because it always seems to me one of the most glaring deficiencies in Kant's theory of knowledge, that he offers no explanation of the indisputable fact that we have all of us—speaking broadly—a common external world (though each of us stands in a different relation to it), instead of having a number of different external worlds subject to the same general laws. So far as I can see, while theorising at least ingeniously as to the origin and nature of the *universal* elements that enter into our notions of objects, he leaves the *particularity* of objects altogether unexplained: although the distinction that he explicitly draws, in the case of Logic, between “forms” of understanding and “objects” understood, would lead us to suppose that it is in the particularity of the object that the essence of its objectivity is to be found.

But I do not propose to dwell further on this point at present. Let us concentrate our attention on the universal elements which reflection shows us everywhere in the object-world of every mind: and let us consider more closely the analysis by which these universal elements are distinguished and classified, and by which the nature of all cognising human subjects is believed to be ascertained sufficiently for the establishment of valid critical conclusions about them—i.e., conclusions as to the necessary limits of their possible knowledge. We find that two of these universal elements, Space and Time, are referred by Kant primarily to Sense as distinguished from Understanding: and since this reference is argued by him in a separate and preliminary part of the treatise—the idealistic conclusions of which are, I think, assumed to be established in the more elaborate analysis that follows—it will be convenient to take this more elementary argument first.

The “metaphysical” exposition of Space and Time as forms of sense—carefully distinguished by Kant, in his second edition, from the “transcendental” exposition of the same notions, in which the strict universality of mathematical (and even physical) cognitions is assumed—may be divided into two parts: Kant seeks to show in the first

place that Space and Time are mental forms; and, secondly, that they are forms of perception or sense and not of understanding. The second part of the argument I am not concerned to dispute: it seems to me completely effective as against the Leibnitzo-Wolffian view, and indeed its conclusion would, in my opinion, be indisputable, supposing the first part of the argument to be valid. I have no doubt that my notion of Space or Time is primarily the notion of a concrete individual fact, and not of a mere class of relations: hence if Space and Time are mere forms of human cognition—and not facts belonging to a real world whose spatial and temporal existence is independent of the existence of human minds—I shall not dispute that they are forms of what we may allow Kant to call the “outer” and the “inner” sense respectively.

But are Space and Time mere forms of human cognition? It is certainly not self-evident to me that they are not, nor do I think it capable of being proved from any self-evident propositions; but it is an inevitable assumption of my ordinary thought that they are what I apprehend them to be independently of my or any man's cognition: and I cannot perceive that Kant, in the ‘Transcendental Aesthetic,’ has given me the least fragment of a positive reason for abandoning this assumption as invalid. For brevity, I will here take the case of Space alone. His points are two: (1) that the notion of space cannot be derived from external experience, because in order that I may apprehend things as out of me and out of each other, the notion of space must be already there (“schon zum Grunde liegen”); and (2) that the notion of space is a necessary one, for I cannot imagine space annihilated, though I can very well think it emptied of objects. As regards the first point, it is indubitable that I cannot apprehend material things as being outside my body, or outside each other, without apprehending them as being in space, because the two notions are identical; but I cannot see that this proves the notion of space to be “schon zum Grunde liegend” any more than, *e.g.*, the notion of colour is in all visual cognitions. Introspection does not show me that I first perceive things to be there and then perceive them to be coloured: I perceive them to be coloured in perceiving them to be there: and yet no one maintains the notion of colour to be not derived from experience. It is no doubt true that I can imagine myself cognising things in space, as the blind do, without cognising them as coloured; but I know no ground for believing that this is what actually happens, in the case of persons with full visual organs. Re-

fection shows that observable progress in our experience of objects always takes place, not by definite additions of new elements, but by the gradual consolidation into definiteness of vague apprehensions of difference and similarity; so that the newest fact definitely apprehended is always apprehended by means of notions which in a sense were there before. I see, therefore, no reason why we should not suppose a simultaneous gradual emergence into definiteness of our notion of space along with other notions admittedly empirical. No doubt if, with some commentators,¹ we take Kant's "schon zum Grunde liegen" to mean merely that the notion of space is *logically presupposed* in the perception of extended things, this particular objection is irrelevant: but then, as it seems to me, Kant's argument has no longer even an apparent tendency to establish his conclusion. For this logical presupposition can mean no more than that the notion of space is involved as an element in the more complex notion of matter; but that can surely be no reason why it should not be derived from experience, if other elements of this compound are admitted to be so derived.

Let us turn, then, to the second argument, that space is a necessary notion, as shown by the psychological experiment of trying to abolish it. This argument seems to have been regarded as weighty by writers for whom I entertain a sincere respect; but I am bound to say that it appears to me to combine the two worst demerits that any argument of a systematic writer can have—it really tends to prove the reverse of the conclusion that Kant draws from it, and it incidentally contradicts another principle of fundamental importance that he elsewhere lays down. In the first place I must define carefully the only sense in which I can admit the impossibility of imagining "dass kein Raum sei". It does not seem to me clear that I cannot, at least for a brief period, eliminate space from my consciousness; indeed there seem to me to be at least two kinds of cases within my experience in which this result is often either nearly or quite attained, (1) when I am absorbed in the solution of an algebraic equation, and (2) when I am absorbed in listening to a musical performance. But I quite admit what I rather understand Kant to mean, that when I contemplate or consider space, I am unable to conceive it annihilated. Only this space that I am unable to conceive annihilated is not conceived by me as a mere form of my—or of human—cognition, but as something that exists independently of my

¹ *E.g.*, Prof. Caird, *Philosophy of Kant*, Part II., c. iii.

cognition of it; hence if it is legitimate to infer anything from the inconceivability of its annihilation, it must surely be the necessary existence of space apart from my sensibility, and not its necessary existence as a form of my sensibility: so that Kant's argument would really tend to prove the opposite of his conclusion. But does this characteristic, that its annihilation is inconceivable, really distinguish space from matter, as Kant here asserts? Certainly I do not find that I "can very well think" space without objects in space: and I should have supposed that Kant would have found the same difficulty, since he elsewhere gives it as a synthetical *a priori* cognition of the pure understanding that "the quantum of substance in nature can neither be increased or diminished". How can we "very well think" space as emptied of all matter, if it is a necessary condition of experience that we should think *in nihilum nil posse reverti*? Whither is the matter that is thought out of space conceived to go? Until this question has been satisfactorily answered, it hardly seems to me worth while to discuss the present argument further.

If then the "metaphysical exposition" of Space as a form of sense breaks down, let us see whether the "transcendental exposition," in which the strict universality of geometrical propositions is assumed, could render any effective assistance, supposing the assumption allowed. Why can I not have universal knowledge of space as existing independently of my cognition, no less than of space conceived as a necessary form of my cognition? Kant's answer to this question, as obtained by comparing the *Kritik* and the *Prolegomena* (§ 9), appears to consist of two parts; he holds (1) that I cannot know universal truths concerning "things-in-themselves" or objects that exist independently of my cognition, because I can only know the characteristics of such things "when they are present and given to me"; and he holds (2) that I cannot immediately know the thing in itself at all, since "its properties cannot migrate (*hinüberwandern*) into my faculty of representation" (*Vorstellungskraft*).¹ We ought to begin by considering the second of these arguments, since if valid at all, it would obviously render the first altogether superfluous; but I find it difficult to believe that Kant can have seriously relied on it. For if I cannot have immediate

¹ I have preferred to treat this part of Kant's argument in the form in which it is given in the *Prolegomena*, as being more clear and explicit. But the passages in the *Kritik* seem to me equally to imply the two tenets stated in the text.

knowledge of any entity unless it "migrates into my *Vorstellungskraft*," must I not for the same reason be equally unable to have mediate knowledge of it, or even any valid belief or conception of its existence? Thus Rational Psychology, Cosmology, and Theology would vanish in a twinkling leaving nothing for Criticism to confute; but with them also, the "the things-in-themselves" in whose existence Kant is determined to believe, and which he continually represents as causing in us the sensations which we refer to matter. And not only are material things in themselves thus eliminated, but all knowledge of other minds than my own is cut off; for another mind cannot migrate into my faculty any more than anything else can. Knowledge of my past feelings would seem to vanish also; since, as being past, they cannot form a part of the present operation of my cognitive faculties. I need not pursue the *reductio ad absurdum* further; it is clear that whatever may be the necessary conditions of knowledge, migration of what is known into the faculty of that which knows cannot be laid down as one of them: I pass, therefore, to examine the narrower argument on which, as I think, Kant has really more reliance. And I quite admit that it seems at first sight plausible to say that I cannot immediately know the *non-ego* except when it is present and given to me, and therefore cannot have certain universal knowledge about it. But on looking closer this reasoning seems to me to involve, in a subtle form, that confusion between psychical and physical fact which has been so fruitful a source of error in theories of cognition. The argument, in fact, transforms a merely material and empirically known condition of bodies acting on other bodies, into a dogmatically assumed condition of a mental operation. In our ordinary experience of material changes, the bodies that we find acting on other bodies appear generally to be in local contiguity: and it is possible that this is always the case, and that some day gravitation will be explained so as to exhibit the same general law. But what has this to do with the conditions of the purely psychical phenomenon which we distinguish as knowledge of matter or space? The Kantians do not surely mean to materialise mind so far as to localise it; if not, the object of knowledge can never be properly said to be in local contiguity to the knowing mind. What meaning then can be attached to the statement that the mind can only know what is "present and given to it," except that it can only know—in fact, what there is to be known? To

the geometer it undoubtedly appears that certain universal relations existing in the *non-ego* are presented to his mind as necessary; and Kant cannot surely maintain that the impossibility of this is self-evident: but, if not, the assumption that such knowledge is impossible stands revealed as a mere naked dogma, in the very centre of *soi-disant* Criticism. And the negative dogma has to be supplemented by a positive one: for if I cannot have universal knowledge of anything except the forms of my faculty of knowledge, why should I be able to state anything that will always be true of these? Is the future history of my faculty "present and given"? or its immutability? or its similarity to the cognitive faculties of all other human minds? If not, what can possibly be gained for the universal validity of our geometrical cognitions by transferring Space from the *non-ego* to the *ego*?

Here I must break off. It may perhaps be said that in all this article I have not really attacked Kant's stronghold, but merely skirmished in his outworks; since I have not dealt with the more elaborate and complete analyses (and synthesis) of the 'Transcendental Analytic' in which the combination of the forms of Sense with the forms of Understanding is expounded. It may be maintained that it is here that the real establishment of Criticism is to be found, all that precedes being merely preliminary and provisional. I am quite willing to accept this view of the case: and propose accordingly to criticise separately the argument of the 'Transcendental Analytic' in a subsequent article. And I shall be quite content with the effect of the present paper if the readers of it will come with me to the discussion of the 'Analytic' in a perfectly neutral state of mind, as regards the "transcendental identity" of Space and Time: since if these have not been shown to be forms of Sense *before* the argument of the 'Analytic' is entered upon, I am confident that this conclusion cannot be validly established in the course of that argument; and therefore that the complex hypothesis of faculties which Kant there puts forward to explain the fact of knowledge will be found to be generally unwarrantable, as well as forced and fallacious in details.

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(To be continued.)