On Kant's Reply to Hume

It is one of the accepted traditions of the history of philosophy that Kant made an original — and, as some would add, a conclusive — 'reply to Hume', upon the question of the *a priori* validity of the law of the universal and uniform causation of events. To Kant himself his argument about causality seemed the very core of the *Kritik der reinen Vernunft*; just as Hume's criticisms upon the "idea of necessary connection" were what waked Kant from his dogmatic slumbers, so Kant's own argument for the rehabilitation of that idea was, in the eyes of its author, his great point of originality. What forever differentiated him from Leibniz and Wolff and all 'dogmatic' speculators, Kant felt, was the fact that he had learned from Hume the great insight that all judgments about causation are synthetical, and therefore incapable of being demonstrated by any appeal to the principle of contradiction, by any analysis of the explicit or implicit content of the concepts contained in the judgment. And what, on the other hand, raised him above the mere 'sceptic' and barren denier of the validity of such judgments, was the fact that he had discovered a new, a 'critical', way of establishing their *a priori* rights, — or at least, of establishing the necessity of the general principle of causality. But for the supposed uniqueness and originality of his position with regard to the logical status of this principle, Kant's famous antithesis of 'dogmatism' and 'criticism' would lack its main point.

Now concerning Kant's special argument about causality I desire, in this paper, to make three facts evident regarding, primarily, the relation of this part of Kant's system to the doctrines of his predecessors:

1. That the argument fails to establish any essential difference between Kant's 'critical' view about causality and the 'dogmatism' of his German predecessors, for the reason that one of the two leaders of the 'dogmatists',
Leibniz, fully anticipated Hume's sceptical insight, while the other, Wolff, invented, long before Hume wrote, a new argument upon the subject, from which the substance of Kant's own argument appears to be derived, or with which, at all events, it is in essence identical.

2. That Kant, in adopting the Wolffian device for proving the validity of the principle of causality, at the same time combines therewith an addition of his own, which is not only incongruous with the stock upon which it is grafted, but also, in itself, irrelevant to the problem in connection with which it is introduced; and that, such being the case, it is impossible for any one to analyze or understand aright the course of Kant's reasoning upon the problem, without first carefully discriminating these two distinct and incompatible factors in what Kant presents as a single argument.

3. That, in any case, Kant's reasoning really reduces the law of universal causation to the type of judgment which his own definitions would require us to call 'analytical'; that is to say, his reasoning falls back upon the Principle of Contradiction, in its proper Leibnitian sense for its form and method; and therefore it does not, as Kant supposed, constitute a generically new type of argument which should show us how judgments may, in the Kantian phrase, be 'synthetical' and yet valid a priori for all possible experience.

In order to establish these contentions, it will be necessary for us to come to somewhat close quarters with the details of Kant's ratiocination on the subject, as contained in the proof of the "Second Analogy of Experience". And in so doing we shall be attempting something that - perhaps out of consideration for their readers - historians of philosophy, and even special writers about Kant rather often neglect to do. The readers of philosophical manuals are commonly told with much emphasis that Kant refuted Hume; but an examination of a number of recent books of this sort indicates that the nature of that refutation is somewhat rarely divulged. It amounts to nothing to say that Kant showed that what-
ever is a condition of the possibility of experience as such must be valid a priori for all possible experience, unless one also shows precisely how Kant contrived to connect the special principle of causal uniformity with this general truism - why he held the realization of that principle to be one of the conditions of the possibility of experience. And since Kant's only reasons for such an opinion are to be found in the argument of the Second Analogy, no one who fails to present a careful and thorough-going analysis of that involved, difficult and highly elusive piece of reasoning, can be said to have dealt with Kant's theory of causality at all.

I

But - as Kant himself used to say, after devoting several pages to a subject nun lasst uns zu unserer Aufgabe fortgehen. We are, first of all, to examine into the originality of Kant's argument, and into the degree in which his doctrine of causality diverged from that of the 'dogmatic' Leibnitio-Wolffian school. The first essential, therefore, is to determine precisely what had been the view of the 'dogmatists' themselves about judgments of causality. The principle that every phenomenon in time must have an antecedent determinate cause upon which it follows according to a fixed rule, was involved, for both Leibniz and Wolff, in that general principle of Sufficient Reason, which in the doctrines of both played a part second only to the Principle of Contradiction itself. Leibniz, it is true, usually had in mind, when he spoke of the former principle, final rather than efficient causation; the principle referred primarily to the teleological action of the creative mind in choosing among all the logically possible worlds that one in which the maximum of good was present. But a number of passages, some of which I shall presently quote, make it clear that Leibniz understood his favorite maxim to imply also the universal law of the efficient causation of all temporal phenomena. And Wolff, in so many words, identifies the
law of universal causation and the Principle of Sufficient Reason. Consequently, the views of both philosophers about the logical character of the judgment of causality are to be determined by ascertaining what they held to be the grounds and the scope of the validity of the Principle of Sufficient Reason, in its application to phenomena in time. Now upon this point Leibniz and Wolff differ explicitly; and the difference between them corresponds very closely to the difference between the doctrines of Hume and of Kant in regard to the same issue.

The utterances of Leibniz upon this point vary somewhat, but his main opinion is unmistakable: the Principle of Sufficient Reason, in the sense in which it is equivalent to the principle of the universality and invariableness of the causal nexus, cannot be derived from the Principle of Contradiction, is incapable of any apodictic proof, and gets its justification, which is practically adequate but logically incomplete, only from the fact of its uniform realization in past experience and its indispensability in the guidance of present conduct. Thus in his controversy with Clarke, when the English theologian asks for a proof of this much vaunted principle, Leibniz confesses that, in the strictly logical sense, he has no proof to give. It is not a metaphysical verity; the only, but the sufficient, reasons for accepting it are that it has never yet failed of empirical verification, and that it is necessary in all reasoning about practical matters. "Is this", he asks (Gerhardt VII, p. 419f.) "a principle that needs proving? Is not everybody accustomed to make use of it on a thousand occasions? It is, indeed, true that on many other occasions it has been forgotten through carelessness.... I have often challenged people to cite me a single instance running counter to this great principle, one uncontested case in which it has failed. But they have never been able to do so, and they never will. On the other hand, there is an infinite number of cases in which it has succeeded, — or rather, it has succeeded in every known case in which it has been employed.
This ought reasonably to make us conclude that it will still succeed in the
cases that are not yet known, - following the rule of experimental philosophy,
which proceeds a posteriori, even though such procedure should not be justified
by the pure reason, or a priori." Similarly in a brief paper without date or
title (Gerhardt VII, p. 300), Leibniz insists that, while the principle is of
capital importance, it does not constitute a necessary judgment, since its
grounds are purely a posteriori. "This axiom ought to be esteemed one of the
greatest and most fruitful within the whole range of human knowledge; and a
great part of metaphysical, physical and moral science is founded upon it. In
truth, without it we should be equally unable to prove God's existence from
that of created things; and to reason from cause to effect or from effect to
cause; and to reach any conclusion whatever in regard to affairs of state (in
rebus civilibus quicquam concludi)." Yet this maxim, "of however great force,
nevertheless does not establish the necessity of anything, nor take away con-
tingency; since the contrary conclusion always remains possible per se, and
involves no self-contradiction." And finally, in the Nouveaux Essais (IV, ch.
6, 10, 12), the spokesman of Leibniz recognizes that judgments of this type -
since the relation between their subject and predicate is known, not by the
"convenance ou disconvenance des idées" but by "l'expérience seule" - cannot
attain to metaphysical necessity, but only to a "certitude morale". It is a
fact, then, that, as Mr. Bertrand Russell rightly observes, "Leibniz perceived
as clearly as Hume and Kant that causal connections are synthetic". It should
be added that, upon occasion, Kant himself recognised this fact about his rela-
tion to Leibniz. In his Reply to Eberhard\(^1\) he maintains that his own philo-
sophy is the true continuation of the Leibnitian, just because Leibniz had
seen the Principle of Sufficient Reason to be synthetic (i.e. independent of
the Principle of Contradiction), but had not gone on to discover, as Kant

\(^1\) Über eine Entdeckung, nach der alle neun Kritik der reinen Vernunft durch
eine ältere entbehrlich gemacht werden soll, 1790. In Werke, Ed. Rosenkranz
I, pp. 473-479.
believed that he had himself discovered, any new apodictic justification for
such synthetic judgments. This, however, is tantamount to the admission that,
so far as the problem of causality is concerned, Leibniz belongs, in the Kantian
classification, not among the 'dogmatic', but among the 'sceptical', philosophers.
The temper of Leibniz was, to be sure, essentially affirmative; he had nothing
of Hume's ambition to startle by sensational paradoxes, and he was content,
therefore, with the 'moral' certainty of the law of causal uniformity. But
if we are to consider, not the temperaments of philosophers, but their doctrines,
Leibniz and Hume belong together; and Kant's reproach against the former, as
well as against the latter, is not that he accepted too much as knowledge a
priori, but that he accepted too little.

Is it Wolff, then, who is the representative of the 'dogmatic' way of
dealing with the problem of causal connection? Or, on the other hand, are we
to say that Wolff, too, errs in Kant's eyes rather by being too much of a sceptic
by failing to discover any a priori justification of the causal law? In reality,
Kant is entitled to indict Wolff upon neither score. It is true, certainly,
that Wolff regretted the failure of Leibniz to attempt any sort of logical proof
for the Principle of Sufficient Reason, and that he himself undertook to supply
the deficiency. It is true, also, that he incidentally proposes a reductio ad
absurdum of the position of those who deny that principle - thus appealing, for
the support of the Principle of Causality, to the Principle of Contradiction,
and making the former appear, in Kant's sense, as an analytical judgment. But
the important thing is - though Kant and his many commentators seem to have
forgotten it - that the proof upon which Wolff especially insists, recurring to
it twice in his chief metaphysical treatise,

2) Verunftige Gedanken von Gott, der Welt und der Seele des Menschen, auch

rests upon the same principle as
Kant's own 'transcendental' proof of the validity of the law of causal uni-
formity. In other words, both Wolff and Kant - in contrast with Leibniz and
Hume - attempt an apodictic proof of the Law of Sufficient Reason; and Kant's
proof is little more than an elaborated form of Wolff's, plus two curious inconsistencies of which Wolff was innocent.

Leibniz, says Wolff, 3) "had given no proof of the Principle of Sufficient Reason, even though Clarke demanded one of him." But "a sufficient proof will appear when we show below (§112) that it is through this principle alone that the distinction between reality and dreams, between the real world and the Schlaraffenland, arises." In the subsequent passage referred to, Wolff develops his argument, which, omitting some redundancies, I give in his own words: "Weil alles seinen zureichenden Grund hat, warum es ist, so muss es auch beständig einen zureichenden Grund haben, warum in einfachen Dingen die Veränderungen so und nicht anders auseinander folgen, in zusammengesetzten Dingen die Teile so und nicht anders nebeneinander stehen, auch ihre Veränderungen so und nicht anders auseinander erfolgen. Solchgestalt ist hier eben eine solche Ordnung, als wie sich in dem ordentlichen Vortrage eines Beweises befindet. Da nun dergleichen Ordnung sich im Traume nicht befindet, als wo vermöge der Erfahrung kein Grund angesezen, warum die Dinge bieinander sind und so nebeneinander stehen, auch ihre Veränderungen auseinander erfolgen: so erkennt man hieraus deutlich, dass die Wahrheit von dem Traume durch die Ordnung unterschieden sei. Und ist demnach die Wahrheit nichts anderes als die Ordnung der Veränderungen der Ding: hingegen der Traum 'ist Unordnung in den Veränderungen der Dinge'.

After illustrating his point by a concrete example, Wolff continues: "Wenn man nun die Wahrheit gegen den Traum hält, und dabei Acht hat, worin sie voneinander unterschieden, so wird man keinen anderen Unterschied bestimmen können, als den vorhin gegebenen, nämlich, dass in der Wahrheit alles einander gegründet ist, im Traume nicht, und daher im ersten Falle die Veränderungen eine Ordnung haben, im Traume hingegen lauter Unordnung ist. Wer dieses wohl erwäget, der wird zur Genüge erkennen, dass ohne den Satz des zureichenden Grundes keine Wahrheit sein kann. Ja, es erhellt ferner, dass man die Wahrheit erkennen, wenn man

den Grund versteht, warum dieses oder jenes sein kann, das ist, die Regeln der Ordung, die in den Dingen und ihren Veränderungen anstreffen."

The argument which Wolff thus very crudely but perfectly clearly expresses is, in brief, that the principle that every real "change" or event must have a determinate antecedent upon which it follows according to a rule, gets its validity from the fact that, without the use of it, the distinction - which it is certain, as a fact of experience, that we actually make - between purely subjective phenomena and the world of objective realities, would be impossible. And this is precisely the line of argument to which Kant resorts when he finally reaches, in the "Second Analogy of Experience", his central problem. The thesis of the Second Analogy, it is scarcely necessary to recall, is (First Edition):

"Alles was geschieht (anhetzt zu sein) setzt etwas vorauf, worauf es nach einer Regel folgt." The gist of the exceedingly prolix and repetitious proof which follows is contained in the following sentences:

"Die Apprehension des Mannigfaltigen der Erscheinung ist jederzeit sukzessiv. Die Vorstellungen der Teile folgen aufeinander. Ob sie sich auch im Gegenstande folgen, ist ein zweiter Punkt der Reflexion, der in der ersteren nicht enthalten ist.... Sofern die Erscheinungen nur als Vorstellungen zugleich Gegenstände des Bewusstseins sind, so sind sie von der Apprehension, d.i. der Aufnahme in die Synthesis der Einbildungskraft, gar nicht unterschieden, um man muss also sagen: das Mannigfaltige der Erscheinungen wird im Gemüt jederzeit sukzessive erzeugt.... Man sieht bald, dass Erscheinung, im Gegenverhältnis mit den Vorstellungen der Apprehension, nur dadurch als das davon unterschiedene Objekt derselben könne vorgestellt werden, wenn sie unter einer Regel steht, welche sie von jeder anderen Apprehension unterscheidet und eine Art der Verbindung des Mannigfaltigen notwendig macht.... Man setze, es gehe vor einer Begebenheit nichts vorher, worauf dieselbe nach einer Regel folgen müsste, so wäre alle Folge der Wahrnehmung nur lediglich in der Apprehension, d.i. bloss subjektiv, aber dadurch gar nicht objektiv.

4) Vermühte Gedanken von Gott, der Welt usw., I. Aufl., Halle 1720. The argument continues to appear in subsequent editions up to (at least) the fifth (1733) in the Latin Ontologia it is only rather obscurely suggested. - The italicized passages are to be compared especially with those in the Kant citation below.
bestimmt, welches eigentlich das Vorhergehende und welches das Nachfolgende
der Wahrnehmungen sein müsste.... Es kommt also darauf an, dass wir niemals
selbst in der Erfahrung die Folge (einer Begebenheit, da etwas geschieht, was
vorher nicht war) dem Objekt beilegen und sie von der subjektiven unserer Ap-
prehension unterscheiden, als wenn eine Regel zum Grunde liegt, die uns nötigt,
diese Ordnung der Wahrnehmungen, vielmehr als eine andere, zu beobachten....
WENN WIR UNTERSUCHEN, was denn die Beziehung auf einen Gegenstand unserer Vor-
stellungen für eine neue Beschaffenheit gabe, und welches die Dignität sei, die
sie dadurch erhalten, so finden wir, dass sie nichts weiter tue, als die Ver-
bindung der Vorstellungen auf eine gewisse Art notwendig zu machen, und sie
einer Regel zu unterwerfen; dass umgekehrt nur dadurch, dass eine gewisse
Ordnung in den Zeitverhältnisse unserer Vorstellungen notwendig ist, ihnen
objektive Bedeutung erteilt wird.... Dass also etwas geschieht, ist eine Wahr-
nehmung, die zu einer möglichen Erfahrung gehört, die dadurch wirklich wird,
 wenn ich die Erscheinung ihrer Stelle nach in der Zeit, als bestimmt, mithin
als ein Objekt ansehe, welches nach einer Regel im Zusammenhange der Wahrnehmung
jederzeit gefunden werden kann. Diese Regel aber, etwas der Zeitfolge nach zu
bestimmen, ist: dass in dem, was vorhergeht, die Bedingung anzutreffen sei, unter
welcher die Begebenheit jederzeit (d.i. notwendigerweise) folgt. Also ist der
Satz von zureichenden Grunde der Grund möglicher Erfahrung, nämlich der ob-
jektiven Erkenntnis der Erscheinungen, in Ansehung des Verhältnisses derselben
in der Reihenfolge der Zeit.... Soll also meine Wahrnehmung die Erkenntnis
einer Begebenheit enthalten, da nämlich etwas wirklich geschieht, so muss sie
ein empirisches Urteil sein, in welchem man sich denkt, dass die Folge bestimmt
sei, d.i. dass sie eine andere Erscheinung der Zeit nach voraussetze, worauf sie
notwendig oder nach einer Regel folgt. Widersinnfalls, wenn ich das Vorgehende
setze und die Begebenheit folge nicht darauf notwendig, so würde ich sie nur
für ein subjektives Spiel meiner Einbildungen halten müssen, und stellte ich
mir darunter noch etwas Objektives vor, sie einen blossen Traum nennen."
Kant's language is, for the most part, more technical; it was as characteristic of Wolff to avoid technical phraseology, as it was of Kant to multiply such phraseology praeter necessitatem. Yet the identity of the main argument in the two passages is unmistakable: Kant fully follows Wolff in resting the case for the a priori validity of the causal law upon the supposed fact that without it we should have no criterion for distinguishing the purely subjective from the objective, in the changes of things. And at one or two points Kant even seems to be influenced by a vague reminiscence of the rather infelicitous popular language of Wolff. The question of direct borrowing by Kant is, of course, one which cannot be profitably discussed. Every probability, I confess, seems to me to favor the hypothesis that Kant was reproducing as a novelty of his own a piece of reasoning with which he had long since become acquainted in the principal German metaphysical treatise of the best-known German philosopher of the time in which Kant grew up. That Kant should have made so gross a mistake in all innocence will seem probable enough to any who recall the extraordinary confusions of memory of which Kant was capable, in later life, in regard even to his personal affairs. But whether it be a case of borrowing or of coincidence, the essential fact is clear: that the substance of the argument upon which Kant relied to refute Hume's scepticism about causality, had already been advanced by the most notorious of the so-called 'dogmatists', over sixty years before the *Kritik* was published — and some twenty years before the appearance of Hume's *Treatise.*

The genealogy of the argument of the Second Analogy may, indeed, be traced beyond Wolff. In various writings Leibniz attempted to deal with the question raised by Descartes, how dreams, hallucinations, and other illusory perceptions are to be distinguished from objective realities, and how, in general, we are

6) It is scarcely credible that, in the huge mass of Kant-philology, so significant a fact can have nowhere been noted. But the fact is, at all events, ignored in such representative special studies as Wartenberg’s *Kants Theorie der Kausalität* (1899); Koenig’s *Die Entwicklung des Causalproblems* (1888); Arnsperger’s *Wolff’s Verhaltnis zu Leibniz* (1897); and Laas’ *Kants Analogien der Erfahrung* (1876); in which the lack of originality in Kant’s arguments is especially insisted upon.
to define the marks of objectivity. He observes upon this point that "the more connection (liaison) we find in the things that happen to us, the more are we confirmed in our opinion of the reality of the things that we perceive" (Gerhardt I, p. 373). "The reality (verité) of sensible things consists in nothing but the connexion des phénomènes qui devait avoir sa raison; and it is this that distinguishes them from dreams... The true criterion of reality in the case of objects of sense is the connection of the phenomena, that is to say, the connection of what happens in different times and places, and in the experience of different men, who are themselves, in this regard, very important phenomena to one another" (Nouveaux Essais, I, i, ch. II, §11, Gerhardt V, p. 353). It seems, indeed, to have been a common-place among the Leibnicians that the criterion which differentiates the valid and objective from the purely subjective perception lies in the fact that the former belongs to a context characterized by the causal connectedness and the fixed order of its temporally successive (and also its spatially co-existent) parts. Leibniz himself, however, did not turn the argument about, so as to find a proof for the validity of the law of sufficient reason in just the fact that it is used as such a criterion, the (supposed) fact that without its help the distinction between objectively valid and purely subjective sense-presentations could not be made. It was Wolff who converted this old Leibnizian idea into a new (and exceedingly questionable) argument in defence of the second of the two great Leibnizian principles. And in this, as we have seen, Kant follows him.

II

It is, however, true enough that Kant likewise gives Wolff's argument a new turn of his own; but one must add that it is distinctly a turn for the worse, and also that, even so, it does not essentially differentiate Kant's reasoning about causality from that of his predecessor. To understand the argument of
the Second Analogy at all, it is essential to analyze the interworking of the old and the new factors in Kant’s thought.

Kant, namely, connects the argument – in his more detailed and involved efforts to make it clear – with a peculiar psychological observation of his. It occurs to him as a significant and paradoxical fact that all our perceptions, whether they be of objects that change or of objects that are stationary and immutable, are themselves temporally successive. And reflection upon this fact brings to light what Kant regards as an important psychological conundrum: How is it that we are able, in a series of apprehensions that are constantly successive, to recognize that some of these successions in apprehension correspond to and represent successions in the objects apprehended, and that others do not? How can we get behind the subjective succession so as to discriminate the mutable from the immutable, the moving from the stationary, object; and what is the criterion that we employ in making this discrimination? Kant’s illustrations of this situation are, no doubt, familiar. "For instance, the apprehension of the manifold in the phenomenal appearance of a house that stands before me is successive. The question then arises, whether the manifold of the house be successive by itself, which, of course, no one would admit." That is, I see first the basement, then the walls, then the roof; the question is, why do I not suppose that these parts themselves somehow temporally come after one another? Certainly, in other cases I do infer from the successiveness of my perceptions to the successiveness of the objective phenomena. For example, I see a ship moving down stream; I perceive its successive positions at one point in the stream after another; and I conclude that the ship has changed its position. If, in the case of the house, I regard the successively perceived parts as stationary why do I not regard the successive perceptions of a ship as representing a row of stationary ships? Or vice versa, if I regard the latter series of perceptions as representing a moving and changing object, why do I not regard the former in
the same way?

Here is Kant's great psychological puzzle, upon the momentousness of which he manifestly flatters himself not a little. The answer which he gives for it is this: I distinguish the successive perceptions which represent a succession in the object from those which do not, by virtue of a verifiable difference in the two cases, namely, the difference that, in the case of my successive perception of the really moving object the order of my perceptions is fixed and irreversible, whereas in the case of the stationary object the order is found (upon repetition of the observation of the object, Kant seems to mean) to be reversible at will. "If, in a phenomenon which contains an event, I call the antecedent state of perception A and the consequent B, B can only follow A in my apprehension, and can never precede it. I see for instance a ship gliding down stream. My perception of its place below follows my perception of its place higher up, and it is impossible that the ship should be perceived first below and then above." But with my perception of the parts of a stationary manifold it is different. For example, "in the case of the house, my perceptions could begin at the roof and end in the basement, or begin below and end above; they could apprehend the manifold of the perceived object from right to left, or from left to right. There was therefore no predetermined order in the succession of these perceptions, determining the point where I had to begin in apprehension in order to connect the manifold empirically; while in the apprehension of an event there is always a rule which makes the order of the successive perceptions necessary." Since, without the recognition of this rule, we could not make the distinction between the two kinds of experience, therefore all experience of the objective kind must conform to the rule, which is therefore certain and necessary a priori. That is to say, all events must conform to the rule of causal connection, for the reason that otherwise we could not know them to be events at all (in the sense in which an event is different from a moment in the subjective
succession of states of consciousness). Kant's argument really attempts to reduce the proof of the law of causal connection to an example of Leibniz's Principle of Contradiction: An event is by definition (i.e., by virtue of that which has been shown to be the sole essential mark distinguishing it from an experience that is not an experience of an event) a phenomenon that follows another phenomenon according to a rule; hence, by what is (in Kant's sense - though he fails to see the fact) a purely analytical judgment, it follows that "every event presupposes something upon which it follows according to a rule" - quod erat demonstrandum.

Just how, now, does this reasoning differ from Wolff's? The essential differences are two; and in both, Kant not merely diverges from his original, but also gives his argument a form inconsistent with the main line of proof which he supposes himself to be following.

1. Kant is attempting, as we have seen, to rest the case for the validity of the Principle of Sufficient Reason upon the supposed necessity of assuming that principle as the basis of the distinction between merely subjective and objectively valid perceptions of change, between veridical representations and "mere dream". But in the unlucky turn which Kant gives the argument, the principle really comes to figure rather as the basis of the distinction between perceptions of change and perceptions of permanence, no matter whether the perceptions be 'objective' or purely illusory. This is not what Kant means to argue; but it is precisely what he actually does argue. For what his reasoning comes to is this: that we can distinguish - and, indeed, can conceive of - a moving or changing object, in contrast with the stationary or unchanging - only in so far as we consciously think the succession of perceptions in the former case as following one another according to the law of causal uniformity. In other words, except by a reference to the Principle of Sufficient Reason, we cannot differentiate an experience of moving things from an experience of the unmoved, the variable from the constant. But manifestly we do make this dis-
tinction both in our dreams and out of them, both in our most 'objective' and
veridical judgments of perception and in our private imaginings and hallucina-
tory representations. It is, at all events, not the common experience that in
dreams one is incapable of picking out, within the universal successiveness of
one's subjective representations, those series of perceptions that are repre-
sentations of moving objects, and those that are not. In the "subjective play of
my imagination", I do not ordinarily find any difficulty in discriminating those
sequences of images that "contain an event" from those that - though themselves
successive - image only objects that are thought as permanent and stable.
Throughout the whole range of our perceptual experience - true or false, objec-
tive or subjective, waking or dreaming - we have perceptions alike of motion
and of rest, of change and of fixity. Consequently even if we should attach
any value to Kant's argument that we could not know that the ship moves while
the house is stationary, without a knowledge of the principle of causal con-
nection - we should still be compelled to say that this argument is neither
identical nor compatible with the other argument to which we have seen him giving
expression. The same principle manifestly cannot be both (a) the basis of the
distinction between objective and subjective perceptions of change, and (b) the
basis of another distinction which runs cross-wise through both objective and
subjective perceptions of change. There are, then, two threads of argument in
Kant's proof of the Second Analogy - the Wolffian and his own. The two are
hopelessly inharmonious, but Kant never suspects the fact. It is clearly, as
his language shows, the Wolffian sort of argument that he really intends to
present; but with characteristic confusion of thought he allows this argument,
unobserved, by a subtle metamorphosis resulting essentially from verbal ambi-
guities, to transform itself into something quite incongruous with the proof
that he intends.

7) In order to avoid a discussion unnecessary for the present purpose, I adopt
here Kant's fashion of speaking of consciousness, not as a flowing and continuous
stream, but as a jerky "succession" of discrete perceptual acts.
It is easy, moreover, to discover through just what misapprehensions Kant was led to make this unfortunate transition. In the first place, his seemingly profound problem — that of explaining how a "succession of perceptions" can ever afford a perception of a stable, or non-successive, object — is a problem which exists only for Kant's imagination. In actual perception (not, of course, in mere sensation), so long as our attention to a given object be continuous, objects are directly given as moving or stationary, as altering or retaining their original sensible qualities. All that is necessary in order that a series of sensations should yield a perception of an object characterized by fixed position, is the mind's ability to fixate attention upon an object of which the individuality is assumed to be continuous, to perceive the successive spatial relations of that chosen object of attention to other visible or tangible objects, and to remember and compare these perceptions from moment to moment. Given this much, I can, in the language of common-sense, see the ship move, see that the house is stationary — even though it be a dream-house, or a vessel seen in the imagination of a shipwrecked sailor. And the fact that my perceptions in both cases alike are temporally successive, creates no difficulty and is, psychologically speaking, irrelevant; and there is therefore no occasion for appealing to anything so remote from immediate experience as the Principle of Sufficient Reason for a criterion for distinguishing perceptions of things that move from perceptions of things that stand still.

Kant was still further helped toward this confusion of two distinct and incompatible arguments, by his failure to remark that he was using the expression "in the object" in a highly ambiguous sense. His error, indeed, consisted precisely in transforming the question — Wolff's question —: 'does this my perception of a succession of states of a given object constitute a perception of a truly objective succession?' — into the very different, though verbally similar question: 'Does this succession of my perceptions constitute a perception of
succession in the object? Now, in the ordinary sense, a succession may take place 'in the object', without necessarily being, or being regarded as, in any epistemological sense 'objective': without possessing, or even seeming to possess, any objektive Gültigkeit. For all perception deals with objects, and with objects that, as we have seen, are given as either moving or not moving, as undergoing qualitative change or as qualitatively constant. And, as the last paragraph has shown, it is just this implication of objects in perception that is the explanation of the fact that, within the successiveness of perceptions, we are able to distinguish perceptions of constancy from perceptions of change. Involved in the power of perception is the necessity of thinking of an object that has some sort of separate and continuous identity. Thus a subjective succession of perceptions is distinguished from (i.e., is not confused with) a perception of succession 'in the object', simply because perception is perception of objects, and an object is that which - whatever its metaphysical status - is over against the subject and is somehow taken as identical with itself through the changes of its own states. The marks of this identity of which we commonly make use would, no doubt, be found to be wholly empirical and relative, and to be reducible to certain essentially practical tests. With that matter, however we are not here concerned; we need to bear in mind merely these three points: that what is implied in our distinguishing successive perceptions of succession from successive perceptions of permanence is, not the idea of the uniform causal connectedness of the former sequences, but the idea of the (practical) identity or fixability of the object perceived; that this implication is so immediate that the power to distinguish between objects that change and objects that do not, may be regarded as directly given in perception as such; and that this whole question, concerning permanence or impermanence in the object of perception, is by no means the same as the question concerning the objective validity of our perceptual judgments. Even our least 'objective' perceptions - if they are perceptions at
all, and not merely a flux of unconnected sensations, - are perceptions of objects thought as having some sort of provisional continuity and individuality through successive moments.

2. Yet Kant's reasoning, based upon the supposed difficulty of discriminating a perception of succession from a succession of perceptions, does, after all, prove something. When, however, we note precisely what it is that it proves, we find Kant in a still worse case. For the thing proved has nothing to do with the law of causality or the Principle of Sufficient Reason, has no bearing whatsoever upon the thesis of the Second Analogy. In so far as Kant adds to or transforms Wolff's argument his reasoning becomes irrelevant to the thesis with which he is dealing.

For the real fact of consciousness which is brought out by Kant's reflections concerning the differentia by which, in the succession of our perceptions, we distinguish the permanent from its contrary, is this: that when we conceive of an object as moving or changing, or as having moved or changed, we necessarily imply that the (actual or potential) sequence of our perceptions in observing the object was fixed or irreversible; whereas, when we conceive of an object (or rather of a system of objects, e.g. the several parts of a house) as stationary or unchanged, we necessarily imply that we might (so far as the object is concerned) have observed its parts in any other sequence, as well as in that which we actually followed. In other words, by the logical implications of the concept, a 'changing object' is that system of successive presentations of which the succession must, in any given case, be observed by us, if it is observed at all, in one single order, which is independent of the action of our will, of any shifting of our attention. The stable object, per contra, is, by a similar implication, that system of successive presentations, of which the succession in perception is conceived as depending, in any given experience, upon the movement of the attention of the subject, upon the fixation of attention upon different objects: which, in turn, implies that the order of
our observation, in the supposed instance, might, so far as the object is concerned, have been different. This, I say, is what Kant's arguments, and his illustrations of the irreversibility of the sequence of our perceptions of a moving ship and the indeterminateness of the sequence of our perceptions of the parts of a house, go to prove; and the point, so far, although fairly obvious is perfectly well taken. It makes explicit something that is contained in the meaning of the complex concept of a changing single object, as over against a 'permanent manifold'. The determinateness of the sequence of perceptions of a single object undergoing change or movement, is implied by the fact that we are, by hypothesis, dealing with one object; for then, necessarily, whatever differences appear from moment to moment in the presented content, must belong to the object or to its relations with other objects, since there is assumed to be no new fixation of attention on the part of the subject. In other words, it is found that perception implies an individuated object: and so long as the direction of attention upon one perceptible object is known or assumed to be constant, any inconstancy in the successive perceptions must be independent of the attention of the subject; and hence, in the given experience, the order of those perceptions must be independent of changes in the order of the subject's acts of attention. On the other hand, when the object in successive moments of attention is not assumed to be the same - or, what is the same thing, when there is known or assumed to be a change in the fixation of attention - then the dissimilarities in the successively presented contents of perception are conceived as not belonging to any one of the objects successively attended to, and the order of the succession of the perceptions is conceived to be determined purely by the order of changes in the subject's attention. This last implies that if, on another occasion, the subject should perceive the same system of objects, nothing in the assumed nature of the objects would prevent the subject from apprehending them in quite a different order. In fine, then, Kant shows us
this: that we cannot conceive or define any one object as changing without implying that the sequence of perceptions which would have been had by any subject fixedly attending to that object would have been determined by something 'in the object', and could not at the time have been had by the subject in any reverse order.

But all this has no relation to the law of universal and uniform causation, for the manifest reason that a proof of the irreversibility of the sequence of my perceptions in a single instance of a phenomenon, is not equivalent to a proof of the necessary uniformity of the sequence of my perceptions in repeated instances of a given kind of phenomenon. Yet it is the latter alone that Hume denied and that Kant desires to establish.

Kant's own chosen illustrations may be used, once more, to show the nature of his confusion here. What, according to Kant, enables me to discriminate the house as a stationary object from the ship as a moving one - when in either case my perception involves a succession of subjective states - is the fact that, in the case of the ship, "my perception of its place below follows my perception of its place higher up, and it is impossible in the apprehension of this phenomenon that the ship should be perceived first below and then above"; whereas in the case of the house, my perceptions of the several parts may come indifferently in any order. Now this "impossibility of seeing the ship first below and then above" obviously applies only to the successive - or the continuously changing - positions of a single identical ship on a single occasion. It does not apply at all to all phenomena of the same kind, i.e. to the behavior of all moving ships.

After the given event, I necessarily assume that - inasmuch as I conceive the object, and not merely my subjective attention, as having changed - I could not by an act of will have had the perceptions at that time, in any other order; but this does not in the least imply that all like perceptions will repeat that order. Yet if the thesis of the Second Analogy - that "every event follows upon
an antecedent event according to a rule" - is meant to have any relevancy to Hume's problem, it should mean that every event has some determinate antecedent and that it can be certainly known a priori that the same kind of antecedent will in all instances be followed by the same kind of consequent.

It is, indeed, true that the distinction just made, between the sequences of perception that are "determined by" or depend upon the voluntary movement of our attention, and those that are determined by, or independently given in, the object, already assumes the principle of causality. Certainly, a self-conscious mind can and must distinguish those changes in its experience, those scene-shiftings in the content of its perceptions, which are to be taken as due to its own movements, to the acts of the subject, from those other changes that are merely given from the outside; and in this sense, and to this degree, the applicability of the category of causality to experience is a necessary implication of the fact of self-consciousness. But this is not Kant's argument; and moreover, the point could not be used to prove what Kant desires to prove. That I invoke the notion of causation in distinguishing changes in perception produced by alterations in my own attention, from externally-given changes with which my volition appears to have nothing to do, by no means goes to show that in that realm of externally-caused or non-volitional changes, all phenomena must follow one another according to a rule of uniform and "necessary" connection. It merely shows that those external phenomena are disconnected from, and independent of, that species of causal process which I know inwardly as intentional or purposive control of attention. Whether or not those outer changes follow one another nach einer Regel or not, is a thing that still remains to be found out.

The nature of this non-sequitur in Kant's reasoning - this irrelevancy of his proof to his conclusion - is especially well illustrated in the paragraph (1st Edition, p. 197-198) in which this whole argument about the necessity for
perception of succession, and a succession of perceptions of the non-successive, does turn upon the contrast between a given and irreversible sequence of perceptions, and a sequence determined entirely by the action of the subject, and so potentially reversible. Kant, however, in the paragraph cited, not only sumps abruptly from the idea of the definiteness of the temporal position of an event, to the idea of the irreversibility, in the given instance, of the sequence to which it belongs - but from this in turn to the idea of the necessary uniformity of the sequence in all cases in which the same kind of event appears as antecedent. Here are his words: "Die bestimmte Zeitstelle der Erscheinung in ihren Zeitverhältnisse kann sie nur dadurch bekommen, dass im vorhergehenden Zustände etwas vorausgesetzt wird, worauf es jederzeit, d.i. nach einer Regel folgt; woraus sich denn ergibt, dass ich erstlich nicht die Reihe umkehren, und das, was geschieht, demjenigen voransetzen kann, worauf es folgt; zweitens, dass, wenn der Zuständ, der vorhergeht, gesetzt wird, diese bestimmte Begebenheit unausteillich und notwendig folge." The italicized words express precisely enough what Kant was called upon to prove, if he was to answer Hume; but to the proof of them the argument about the irreversible 'given-ness' of the order in which my perceptions of changes in objects come to me, is wholly incompetent. The sentence I have just quoted, then, seems to me one of the most spectacular examples of the non-aquitur which are to be found in the history of philosophy.

We have thus seen - to recapitulate - that as soon as Kant leaves the main line of the Wolffian reasoning, he makes use of arguments that are irrelevant to the subject with which he is dealing and inconsistent with his proper position. He does not himself perceive their irrelevancy because of two rather gross confusions of ideas into which he falls: (1) He fails to see that the distinction between barely subjective and objectively valid perceptions of succession, is not identical with the distinction between the successive perception of suc-
cession "in the object" and the successive perception of permanence; and he therefore illicitly substitutes the latter for the former. (2) He also fails to see that to prove that the conception of an object as changing necessarily implies that the series of perceptions in an observer of the object is in any given instance irreversible and independent of the observer's subjective changes of attention, - that this is by no means equivalent to a proof that similar changes in objects must at all times follow one another in a fixed and invariable order, such as is indicated by the law of causal uniformity.

We may, however, fairly regard those phases of Kant's proof which are at once the most original and the most illogical, as temporary aberrations from the argument at which he really aims - the argument of Wolff. For, as has already, perhaps, been sufficiently illustrated, Kant always, in the final formulation of his proof, comes round to the Wolffian contention that the Principle of Sufficient Reason can be shown to be valid by showing its indispensableness to the distinction between purely subjective presentations of temporal phenomena and objectively real phenomena. When Kant wishes to express in a single sentence the essential point of his defence of the axiom of causality, he puts it thus: "Also ist das Verhältnis der Ursache zur Wirkung, die Bedingung der objectiven Gültigkeit unserer empirischen Urteile in Ansehung der Reihe der Wahrnehmungen, mithin der empirischen Wahrheit desselben." Taking this Wolffian contention, then, as Kant's essential one, it remains only to consider how far this contention can be justified, and whether even in it there can be found any convincing reply to Hume's doubts.

The answer to this question need not be long. For the sake of clearness, the argument not very lucidly set forth either by Wolff or Kant may be reduced to the two propositions which appear to constitute its logical essence: and we may consider the force of each of these in turn. (1) The only criterion for distinguishing between purely subjective and objectively valid judgments of
and partly because I cannot connect the experiences which I had in it with the
general context of uniformly connected experiences that I had before and have
had since.

We may, then, recognize that there is a certain amount of rather unimportant
truth contained in the first proposition implied by Wolff's and Kant's argument.
The second proposition may be regarded as the major premise of a syllogism of
which the first is the minor; and it may be expressed thus: (2) Whatever prin-
ciple is employed as a criterion for distinguishing subjective illusion from
objectively valid judgments of perception, must necessarily be true a priori
of all possible (objective) experiences. The conclusion, then, to fill out the
syllogistic form, would of course run: the law of causality is thus necessarily
true a priori of all possible (objective) experiences.

The argument, when thus put in order, is not destitute of intelligibility,
nor of a certain plausibility. It becomes fallacious only after we have stricken
out - as we found it necessary to strike out - the word 'only' from the minor
premise. If it were indeed true that all events that can be called objective
must be connected with other events according to a uniform rule, and if they
could be recognized as objective only in so far as they exhibit such a con-
nection - then, truly, I could know a priori that all possible experiences of
objective events will conform to this law of causal connection. The proof of
the law would still be 'analytical', since the truth of the minor premise ob-
viously could be established only by virtue of a definition of what one means
by objective; but if the definition agreed with the common meaning, and corre-
ponded to a real aspect of experience, this premise, and therewith the whole argu-
ment, would be convincing. But since it is not true that perceptions that are,
in the ordinary sense, called objective, can be known to be such only by the cri-
terion of the presence or absence of connection 'according to a rule' in the changes
perceived - then the argument falls to the ground. If one is content, indeed, to
say that one chooses to mean by 'objective event' nothing more or less
than an event following the rule of uniform causality,
one is entitled to hold to the argument; it then becomes, not untrue, but merely empty and tautological. But, although one test of objectivity in phenomena that is commonly applied does depend upon the assumption of the law of uniform causation, we have seen that it is not the sole nor the essential test of the kind of objectivity that is practically significant for us. I know that in the future I shall be willing to call any event objective— even though it be an unmitigated miracle, a sheer violation of all known or conceivable rules of uniformity—provided that my vivid perception of it is corroborated by the perception of other men. And therefore, knowing this, I am unable to know (at least so far as the argument now in question is concerned) by any a priori certainty that all future objective events must comply also with the requirements of Kant's Second Analogy. There is nothing in Kant's argument which tends to show that my habitual assumption that events that are objective will also follow uniform rules of sequence, is anything more than a practical postulate, bred of an illogical but natural habit of expecting nature to repeat herself, and encouraged by past success in prophecies based upon that expectation. This is to say that there is nothing in the argument which in any way replies to Hume. 7)

The present paper, if it has made out its case, has shown, in the central argument of the *Kritik der reinen Vernunft*, both the curious confusion in Kant's thinking, and also its lack of genuine originality. In concluding, I think it worth while to add that the proof of a lack of originality could, if space permitted, be extended to other parts of Kant's system. It is easy, for example, to show that Kant's whole antithesis of 'dogmatism' and 'criticism' involves, when

7) The present paper shows that Kant's attempt to reply to Hume consisted chiefly in reviving an unconvincing argument employed by Wolff many years before Hume wrote. It has already been shown by others, by means of a direct comparison of Hume's own position with Kant's, that Kant neither understood nor refuted the Scotch philosopher. V. especially Dr. L. Stein in "Der soziale Optimismus", pp. 126-150, and Dr. I. Mirkin in "Kantstudien", 1902.
subjected to analysis and to historical comparisons, a misrepresentation of historic facts regarding the nature of the philosophical method employed by his predecessors and the degree of his own divergence from them. The prevalent superstition that between the method of philosophizing in vogue before Kant's time, and that in vogue since, there is a great gulf fixed, has done no little injury to the interests of philosophy. In his conception of philosophical methodology, in his formulation of the ultimate criteria of truth, and in several of his special arguments, Kant not only is far less unlike some of his precursors than he himself, and most historians of philosophy since, have supposed; he is also frequently far less clear and instructive than they. So far as epistemology and the theory of method in metaphysics are concerned, we need not merely to go "back to Kant", but also "back of Kant" - to Leibniz on the one hand, to the English school on the other - to get a clearer and simpler and more just formulation of the fundamental logical problems and a better, if still an insufficient, light upon the real nature and limits of our valid processes of judgment. And so, first of all, in the interest alike of philosophy and of a more accurate history of the development of concepts, - it is amazing, but it is true, that such a thing still requires to be said - we need a fuller and far more precise understanding of the relation between Kant's doctrines and those of his German predecessors.