

## ARTICLE II.

KANT'S THEORY OF THE "FORMS OF  
THOUGHT."

BY JAMES B. PETERSON.

AMONG the philosophers of modern Europe, Immanuel Kant has held a conspicuous place. It is now more than a century since his philosophy was given to the world, and the popularity which it speedily attained in the land of its birth has continued to the present day; and, though it has never been equally popular elsewhere, it has long been recognized as one of the leading systems of modern thought. Kant himself believed that he had wrought a revolution in philosophy comparable to that of Copernicus in astronomy; and his admirers have used even stronger expressions to indicate their estimate of the value of his work. Professor Max Müller, in the preface to his translation of the "Critique of Pure Reason," gives some of these expressions, a few of which may be cited here. Goethe declared that "on reading Kant we feel like stepping into a lighted room"; Fichte believed that "Kant's philosophy will in time overshadow the whole human race"; and Schopenhauer pronounced the "Critique of Pure Reason" "the highest achievement of human reflection."<sup>1</sup> Still more enthusiastic is the estimate given by Professor Ludwig Noiré at the close of the sketch of the history of philosophy which he contributed to the first edition of Professor Müller's trans-

<sup>1</sup>Critique, Vol. i. (translator's preface, pp. xxix-xxx, xl, xli). My quotations are all from Professor Müller's translation (1st ed., in two vols.).

lation: "It is therefore not too much to say that Kant is the greatest philosophical genius that has ever dwelt upon earth, and the 'Critique of Pure Reason' the highest achievement of human wisdom."<sup>1</sup>

Whether these estimates of Kant's work are correct or not is the question I now propose to consider. For this purpose, however, it will not be necessary to review his whole system nor even the whole of his principal work, the "Critique of Pure Reason"; for his philosophy, far more than that of any other thinker, depends on one fundamental doctrine, our acceptance or rejection of which will determine our attitude towards the whole system. I allude, of course, to his theory of the "forms of thought."

First of all, however, we must be sure that we understand the doctrine itself; for Kant's disciples have often accused his opponents of misunderstanding him, and no man has the right to criticise a doctrine that he misunderstands. It must be said, though, that Kant himself is largely to blame for such misunderstanding of his doctrines as may have occurred; for not only is his thought often confused and obscure, but his mode of expression aggravates the difficulty of understanding him. The "Critique of Pure Reason," in truth, is written in the most horrible jargon that perverted ingenuity ever devised, and parts of the work are admitted, even by his own disciples, to be unintelligible. Happily for our present purpose, though, those parts of it that we are here concerned with are in the main better expressed than some of the rest, and there is, I believe, no real dispute as to their meaning.

The theory we have to examine is, briefly, this: That time and space, substances and their attributes, cause and effect, and other elementary constituents of the world in which we live, are not realities at all, as we suppose them to be, but mere forms of our thought, created by our

<sup>1</sup>i. 359.

minds and existing only in our minds. Time and space are forms of perception, while substance, cause, and the other so-called "categories of the understanding" are forms of conception. What Kant means by "form" is thus stated: "In a phenomenon I call that which corresponds to the sensation its *matter*; but that which causes the manifold matter of the phenomenon to be perceived as arranged in a certain order, I call its *form*. . . . The matter only of all phenomena is given us *a posteriori*; but their form must be ready for them in the mind *a priori*, and must therefore be capable of being considered as separate from all sensations."<sup>1</sup> He then goes on to argue that time and space are not realities nor relations among real things, but mere forms of our sensuous intuition, modes of our perception, having no existence apart from our thought. Time is the form of internal sense, and space the form of external sense. Objects as they are in themselves are neither in space nor in time; but when objects are presented to our senses, we produce space and time from our own mental resources, and view objects under those forms. Hence our knowledge is valid only for human intelligence, and other intelligent beings may know things in some entirely different way. Kant sums up his doctrine of space and time as follows: "What we meant to say was this, that all our intuition is nothing but the representation of phenomena; that things which we see are not by themselves what we see, nor their relations by themselves such as they appear to us; so that, if we drop our subject or the subjective form of our senses, all qualities, all relations of objects in space and time, nay, space and time themselves, would vanish. They cannot, as phenomena, exist by themselves, but in us only. It remains completely unknown to us what objects may be by themselves and apart from the receptivity of our senses. We know nothing but

<sup>1</sup> ii. 18.

our manner of perceiving them, that manner being peculiar to us, and not necessarily shared in by every being, though, no doubt, by every human being."<sup>1</sup>

But sensuous intuition is not the only source of our knowledge; there is another, namely, understanding. "We call *sensibility* the *receptivity* of our soul, or its power of receiving representations whenever it is in any wise affected; while the *understanding*, on the contrary, is with us the power of producing representations, or the *spontaneity* of knowledge. . . . Without sensibility objects would not be given to us, without understanding they would not be thought by us. *Thoughts without contents are empty, intuitions without concepts are blind.*"<sup>2</sup> Kant then proceeds to what he calls "a dissection of the faculty of the understanding itself, with the sole object of discovering the possibility of concepts *a priori*, by looking for them nowhere but in the understanding itself as their birthplace."<sup>3</sup> The concepts which he thus discovers are such things as substance, cause, quantity, quality, and so forth, which he calls "categories of the understanding," and which, we are expected to believe, "spring pure and unmixed from the understanding"<sup>4</sup> itself. When our sensibility receives impressions from objects, the understanding produces these concepts, and applies them to the impressions, thus completing the process by which our knowledge is obtained. Kant does not mean simply that the *ideas* of cause, substance, and so forth, together with those of space and time, originate in the mind, for that is admitted by all; he means that cause and substance themselves, with space and time, exist nowhere but in the mind, being, in fact, products of the mind itself. Hence it follows, and is expressly maintained by Kant himself, that the understanding is the source of what we call the laws of nature. "Although experience teaches us many laws, yet these are only particular determinations

<sup>1</sup> ii. 37.   <sup>2</sup> ii. 45.   <sup>3</sup> ii. 58.   <sup>4</sup> ii. 59.

of higher laws, the highest of them, to which all others are subject, springing *a priori* from the understanding; not being derived from experience, but, on the contrary, imparting to the phenomena their regularity, and thus making experience possible. The understanding, therefore, is not only a power of making rules by a comparison of phenomena, it is itself the lawgiver of nature."<sup>1</sup>

Such is the theory we have to examine; and if it is true, some very important consequences necessarily flow from it. If time and space and the categories are mere "forms of thought,"<sup>2</sup> to which nothing in the real world corresponds, the objects of our knowledge, as we know them, are virtually constructed by our own minds. Thus we know nothing but phenomena, by which term Kant always means representations in the mind; while of things as they really are in their own nature we can know nothing. Kant's utterances on this point are explicit and unmistakable. He maintained, indeed, that "things in themselves" exist external to the mind; "for how," he asks, "should the faculty of knowledge be called into activity, if not by objects which affect our senses, and which either produce representations by themselves, or rouse the activity of our understanding to compare, to connect, or to separate them."<sup>3</sup> But though objects thus exist independent of our minds, we know nothing of their real nature, because we can only know them under the forms of space and time, and so forth, which transform them into something totally unlike the objects themselves. Kant's doctrine, therefore, is one of complete skepticism, so far as the main objects of philosophic thought are concerned; and this was expressly admitted, or rather proclaimed, by Kant himself. "There arises," he says, "from this deduction of our faculty of knowing *a priori*, as given in the first part of metaphysic, a somewhat startling result, apparently

<sup>1</sup> ii. 110-111.   <sup>2</sup> i. 448, 487.   <sup>3</sup> i. 398.

most detrimental to the objects of metaphysic that have to be treated in the second part, namely, the impossibility of going with it beyond the frontier of possible experience, which is precisely the most essential purpose of metaphysical science. But here we have exactly the experiment which, by disproving the opposite, establishes the truth of our first estimate of the knowledge of reason *a priori*, namely, that it can refer to phenomena only, but must leave the thing by itself as unknown to us, though as existing by itself."<sup>1</sup> The objects of metaphysic, which he here alludes to, are elsewhere said to be "the freedom of the will, the immortality of the soul, and the existence of God,"<sup>2</sup> the second and third of which are certainly beyond the range of our experience, and therefore, on his theory, forever unknowable by us.

Thus the outcome of Kant's philosophy is essentially the same as that of Hume's. His disciples, indeed, tell us that he has "answered" Hume; but in what the answer consists I am unable to see. To be sure, he held, as we shall see, that we have a kind of knowledge independent of experience, which Hume denied; but he maintained that even such knowledge was limited to objects of experience, and the final result of his philosophy is a skepticism as complete, though not as profound, as that of Hume himself. In his ethical works, indeed, he argued that on moral grounds we were justified in believing in God, freedom, and immortality; but he admitted that they can only be objects of faith, not of knowledge<sup>3</sup>; so that in this respect also he agrees with Hume.<sup>4</sup> Indeed, if Kant's theory of knowledge and of space and time is true, the ultimate problems of philosophy are forever insoluble, and the only use of philosophy is to show that they are so; and we have now to consider whether the evidence for that theory

<sup>1</sup>i. 372-373.   <sup>2</sup>ii. 684-685.   <sup>3</sup>i. 380; ii. 638.

<sup>4</sup>Hume, Inquiry, Part ii. sect. 10.

is so convincing that we are obliged to accept it. Kant himself seems to have felt perfectly sure of its truth; for he says in one place that "there is no danger of its being refuted, though there is of its being misunderstood"<sup>1</sup>; and his followers, who include most of the German philosophers, have adopted and advocated the theory with an enthusiasm that is quite remarkable. I trust I have shown that I don't misunderstand the theory, and we will now inquire whether it admits of being refuted.

When a thinker announces a doctrine that is new and strange, we expect him to present some cogent evidence of its truth; and as this doctrine of Kant is not only strange but paradoxical, the evidence for it ought to be more than usually strong and clear. The evidence presented by Kant consists of a single argument, the gist of which is that, if space and time and the categories were objective realities, we could not have a *priori* knowledge, that is, knowledge independent of experience. Yet we have, he maintains, a knowledge of certain truths which are universal and necessary, such as the law of causation and the axioms of mathematics; and these cannot have been derived from experience, because, as all thinkers admit, experience cannot assure us that any truth is either universal or necessary, but only that so far as we have observed there is no exception to it. These truths, therefore, must be *a priori*.<sup>2</sup> He then goes on to argue that there is no way by which we could attain to the knowledge of truths *a priori* except by ourselves creating the objects to which they relate.<sup>3</sup> His meaning is that whatever we produce by the action of our own minds must be perfectly known to us, while objective realities, such as space and time are commonly supposed to be, can only be known imperfectly; and he expressly says that "we do not know of things anything *a priori*, except what we ourselves have put into them."<sup>4</sup>

<sup>1</sup>i. 388-399. <sup>2</sup>ii. 1-2, and elsewhere. <sup>3</sup>ii. 41-43; i. 398 ff. <sup>4</sup>i. 372.

Hence he concludes that space and time, together with causation and the other concepts of the understanding, can be nothing but subjective forms of our thought and knowledge.

Such is the argument; and its validity obviously depends on the assumption that there is no way to get knowledge *a priori* except by the method that Kant suggests. Yet there has long been a theory prevalent in philosophy, and commonly known as the intuitional theory, which gives a much more reasonable account of such knowledge than he has given. What he calls *a priori* knowledge is the perception of certain necessary relations in the objects of experience, and the intuitionists hold that these relations are discovered by reason in the objects themselves. We are not born with a knowledge of those relations in our minds, as the old doctrine of innate ideas implied, neither do we create them ourselves, as Kant teaches; but when the objects in which those relations exist are presented in experience, our reason discovers the relations, and perceives their necessity. This theory, which is that of Aristotle and the Scotch philosophers, is certainly more reasonable than Kant's; for it must surely be easier for the mind to discover relations in nature than to create them. Kant, however, seems to have been either ignorant or unmindful of this theory, for I do not find any reference to it in his discussion of *a priori* knowledge. Yet unless it can be disproved, his own doctrine cannot be established; for what the mind can discover, it has no need to create.

On the other hand, the objections to the Kantian doctrine are weighty and, in my opinion, insuperable. It is certainly strange that mankind should have lived on earth some thousands of years without ever suspecting that time and space and most of the other things they know are nothing but products of their own minds, and that it should



have been left for Kant at so late a day to find out what they really are. But as Kant and his followers have always treated the common beliefs of mankind with contempt, I will not dwell upon that point. It may be justly objected, however, to the Kantian doctrine of space and time, that it is inconsistent with the infinity of those objects. That they are infinite Kant himself explicitly affirms. "Space," he says, "is represented as an infinite given quantity. . . . All parts of space exist simultaneously *ad infinitum*."<sup>1</sup> By an infinite given quantity he evidently means an infinite actual quantity, as distinguished from a mere potentiality. With regard to time he remarks: "To say that time is infinite means no more than that every definite quantity of time is possible only by limitations of one time which forms the foundation of all times. The original representation of time must therefore be given as unlimited."<sup>2</sup>

But surely, if space and time are infinite, they cannot be mere forms of human thought nor products of the human mind. The human mind is a finite cause, and therefore cannot produce infinite effects; and even if it could produce them, it could not contain them. The little mind of man with two infinities in it would be a curious spectacle. Obviously, whatever is infinite must be external to the human mind and independent of human thought. Finally, I must add that the admitted infinity of space and time is inconsistent with the Kantian doctrine that our knowledge is limited to objects of experience; for we have certainly no experience of infinity.

The foregoing arguments are effective against that part of Kant's theory that relates to space and time; but there is a fatal defect in the theory as a whole, though, so far as I know, it has never been noticed. The theory is admittedly based on the alleged fact that the forms of thought,

<sup>1</sup>i. 414.   <sup>2</sup>ii. 28.

including causation, substance, and the rest of the categories, are produced, or created, by an act of the mind. But what is the nature of that mental act? Surely it is a fact of causation, and, as surely, it cannot be a form of thought, for it takes place before any form of thought has come into existence. It is the cause of all the forms of thought, and the cause cannot be one of its *own* effects. That mental act, therefore, if it ever really takes place, is a case of objective causation. Moreover, the category of cause is not the only one involved in the case; all the rest, except those of space, are likewise present. Causation, as Kant himself affirms, takes place only in time, the cause preceding, the effect following; therefore the mental act which produced the forms of thought must have occurred in objective time. And since the mind thus acts as an objective cause in objective time, it must be a substantial entity of some sort, with causality and existence in time among its attributes; therefore substance and attribute are objective realities. Yet, according to the Kantian theory, substance and cause and time can be nothing but subjective forms of thought; and thus the theory is suicidal.

There is no escape from this conclusion. It cannot be maintained that the act of mind which produces the forms of thought is itself one of those forms; for that would imply that the forms of thought are created by one of themselves, which is too absurd an idea to be entertained. It may, perhaps, be said that we can conceive ourselves as having been present when the mental act in question took place, and that, if we had been, we should have viewed it as a form of our own thinking, the observation being regarded as a hypothetical extension of our experience. But such a hypothetical experience is impossible, because experience cannot begin until the forms of thought have been produced. But perhaps some follower of Kant may try to get out of the difficulty by means of the distinction, so

prominent in his philosophy, between phenomena and things in themselves. Kant himself, in his ethical works, made use of this distinction in his attempt to prove the freedom of the will. He admitted that in the world of experience the will is subject to the law of causation, but contended that in the extra-phenomenal world the will is a thing in itself, and, as such, not subject to law. And so his disciples might now argue that, though as an object of experience, the causality of the mind is nothing but a subjective form of thought, yet as a thing in itself the mind may act as an objective cause, and do anything else that the Kantians may require it to do. But that argument is inadmissible, being, in fact, a vicious circle. The distinction between phenomena and things in themselves is based on the theory of the forms of thought, and therefore cannot be employed to support that theory. The distinction has no existence except for those who accept the Kantian doctrine, and they cannot be allowed to beg the question. They must first establish their theory of the forms of thought, and not till they have done so can they assume the distinction between phenomena and things in themselves; hence they cannot invoke that distinction to remove the contradiction from their theory. That subterfuge is not available, nor is there any means whatever to make the Kantian doctrine consistent with itself.

There is also in Kant's doctrine another and very palpable inconsistency, which his own disciples have pointed out; I mean his assumption of objects external to the mind and acting upon the mind. To the assumption itself I have no objection; but its inconsistency with his theory of the forms of thought is obvious; for in the action of objects upon the senses causation and all the other categories, including those of space, are involved. Kant's followers, accordingly, have endeavored, though with poor success, to get rid of this "thing in itself," the external

object, and to prove that the mind creates not only the forms of its knowledge, but also the objects that it knows. But whatever may be thought of those attempts, the assumption of causation by the mind prior to the existence of any form of thought is just as inconsistent with the Kantian doctrine as the existence of external objects is; yet it cannot be got rid of, because it is the necessary foundation of the doctrine itself. Causation and the other categories are nothing but subjective forms of human thought; yet one case of objective causation is necessary to bring the forms into existence. Thus the Kantian theory of the forms of thought contains an inherent contradiction, which no sophistry can hide, and no ingenuity explain away; and so the theory perishes by philosophical suicide.

I must add that Kant's whole procedure in constructing and supporting that theory was illegitimate, it being an attempt to make consciousness contradict itself. His theory involves the absurdity that our consciousness is mistaken in regard to itself, taking its own attributes for objective realities; and such a mistake is impossible. Our knowledge is just what we know it to be; its being consists in being known, and it cannot possibly be unknown nor falsely apprehended. The idea, which underlies Kant's theory, that we do not know our own knowledge, but mistake its elements and forms for something else, is the most preposterous idea that has ever appeared in philosophy. Let us hope that it may never appear again.

The outcome of our discussion is that Kant's theory of the forms of thought is untenable; but if that is so, what becomes of his philosophy? The whole system is avowedly based on that theory, and must stand or fall with it. Most of the skeptical doctrines with which his works abound have been derived from that source, and if that has to be abandoned, there will be little left of the Kantian "criticism." It is obviously unnecessary for one who

rejects that theory to spend much time in discussing the rest of Kant's philosophy; the more so as that is by no means the only illogical doctrine his works contain. For instance, the "antinomies," by which he undertakes to show that human reason is in conflict with itself, are vitiated by a palpable absurdity running through them all; namely, the attempt to make an infinite out of a series of finites. Other fallacies occur in the same discussion. Thus, in the antithesis of the first antinomy he argues that the world cannot be limited in extent or in duration, because, if it was so, it must be limited by empty space and empty time, and that such a limitation is nothing. But if, as most philosophers hold, and as Kant himself believed, there exists an Infinite and Eternal Cause, from which the world has proceeded and on which it depends, the world is limited both in space and in time by the Infinite Cause. Kant's argument, therefore, is an *ignoratio elenchi*.

That there are many things in his writings that are true and valuable, I do not deny; but they relate to special points only, and are independent of his peculiar doctrine of the forms of thought. His system as a whole, however, since it rests on that doctrine, seems to me a complete failure. As Kuno Fischer says: "Kant's doctrine of space and time is the foundation of his doctrine of knowledge and the way to his doctrine of freedom. Nothing, therefore, would remain of the Critical philosophy if *this* doctrine be rejected."<sup>1</sup> Nor is his own system the only thing whose fate depends on that of his "forms of thought"; the whole German philosophy hangs on that peg, and if that gives way, the entire system must fall. But if the German philosophers have based their philosophy on a falsehood, they must take the consequences; and I do not know that the rest of the world will have any reason to mourn. How much of their work will remain as a per-

<sup>1</sup> Critique of Kant, trans. by W. S. Hough, p. 15.

manent contribution to human thought, time only can tell; but it will be vastly less than they and their partisans suppose.

But whatever may be the fate of their ideas, it is certain that their mode of expressing them, which originated with Kant, will not permanently endure. Professor Max Müller, indeed, says: "Kant's language, and by language I mean more than mere words, has become the *Lingua franca* of modern philosophy."<sup>1</sup> That it is a *Lingua franca* I am not disposed to deny; certainly it is not the language of civilized life. But that it is, or ever can be, the language of true philosophy I cannot admit; on the contrary, it seems to me all that the language of philosophy ought not to be. Not only is it disagreeable to read and hard to understand, but it covers and conceals a vast amount of sophistry and commonplace. Indeed, if it is true, as Talleyrand said, that language was given us to conceal our thoughts, the German philosophers are the greatest masters of human speech; for they seldom fail of concealing their thoughts except when they have no thought to conceal. The style of German philosophy can never be popular except with those who mistake obscurity for profundity; a mistake which philosophers, of all men, ought never to make. Deep waters are clear, but muddy streams are shallow; and the thinker who cannot or will not express himself intelligibly may justly be suspected of both shallowness and sophistry. I believe that the German philosophers are chargeable with both, and that the "light" which they shed in the world of thought is little better than "darkness visible."

But I must bring these remarks to a close. In his "Prolegomena to any Future Metaphysic," Kant says: "He that undertakes to judge, or still more to construct, a system of Metaphysic must satisfy the demands here made,

<sup>1</sup> Vol. i. (Translator's Preface) xiv.

either by adopting my solution, or by thoroughly refuting it and substituting another. To evade it is impossible."<sup>1</sup> I now return the compliment, and invite the adherents of the Kantian doctrine either to refute my arguments or accept their logical consequences.

<sup>1</sup> Prolegomena (trans. by J. P. Mahaffy), p. 11.