The Problem of Schematism of Pure Concepts of Understanding in Kant's Critique of Pure Reason

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THE PROBLEM OF SCHEMATISM OF PURE CONCEPTS
OF UNDERSTANDING IN KANT'S
CRITIQUE OF PURE REASON

by

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CHAPTER I

EXPOSITION OF THE PROBLEM

It is much easier to point out the faults and errors in the work of a great mind than to give a distinct and full exposition of its value.

No thinking man today questions the wide-spread influence which the publication of Immanuel Kant’s *Kritik der Reinen Vernunft* had upon the philosophical world. Many great problems have arisen in philosophy and in even the day-to-day life of men as a result of the new realms of thought Kant’s writings uncovered. Many of these problems arose out of the conclusions and implications of his teaching. But many problems also arose in the interpretation of Kant’s writings, in the precise purpose of some of his ideas, and in the very meaning of his words.

Kant’s thought is often of such profundity, so comprehensive in its ramifications, that its expression on paper has seemed to his reader a labyrinth of incomprehensible terminology and flagrant contradictions. But those who have read Kant with an open mind and a willingness to see his view have denied that such

is truly the case. Nevertheless, the quality of his thought is not solely responsible for the confusion so often met in attempting to follow his reasoning. Not infrequently his writing shows the definite marks of a hurried and somewhat careless expression. Both these factors, the quality of his thought and the manner in which it was expressed, have resulted in the tremendous array of Kantian commentary, so diverse and often contradictory, which is available today to the student of Kant.

Not least important in the difficulties of interpretation is the famous passage in the Critique of Pure Reason entitled "The Schematism of the Pure Concepts of the Understanding." At this point in the Critique Kant has proved the existence and necessity of a priori concepts, the categories, which are the constituent elements of all cognitional experience and are limited for their valid use to the realm of sense knowledge.² These categories are pure and a priori (in no wise empirical in origin). Otherwise how could our knowledge be necessary and universal?³ But the intui-

²Or as Kant expressed it, "...there can be no a priori knowledge, except of objects of possible experience." Immanuel Kant, Critique of Pure Reason, trans. Norman Kemp Smith, 2nd ed. (London, 1953), p.174. Italics in original. In Kant's original edition, B 186. All subsequent references to the text of the Critique will include the pagination of both 1st and 2nd editions, A and B respectively, -- if the text is found in both editions. The pagination of the Smith translation will be included in parentheses. Thus a sample reference to the Critique would be simply: "A 139--B 178 (181)." The cited text would be found on page 139 of the original German first edition, on page 178 of the original German second edition, and on page 181 of the Smith translation.

³Cf. B 2-4 (43-44), A 78--B 104 (112), A 137--B 176 (180), and many similar passages.
tional sense experience which these categories make possible and to which they apply in conscious judgment is completely empirical. The categories and sense intuition then are thoroughly heterogeneous. This, with a brevity which makes almost a caricature of the "Deductions", is the development of Kant's thought in the Critique when he sets up the problems for which schematism and the schemata are the answer.

In the "Transcendental Aesthetic" and in the "Analytic of Concepts" of the "Transcendental Analytic" Kant has shown that there must be a priori categories to account for our universal and necessary knowledge, that we apply these categories to objective synthetic a priori judgments of experience, and that such an application is justified.

Now, in the "Analytic of Principles," Kant proposes to show us how these categories are used and applied, the manner in which they hang together with the elements of sensibility. He does this first by showing the sensible conditions under which the categories can be employed, i.e. schematism of the pure understanding,

4 *Intuition* here and throughout this thesis is taken in the Kantian sense of that through which knowledge is immediately related to objects. Cf. A 19-B 33 (65). Almost always in Kant it means sense intuition. In the German, *Anschauung*: intuition or singular representation.

5 A 19-B 33 (65), A 51-B 75 (93), A 27-B 176 (180), et al.

6 The more intimate relationship which schematism has to the metaphysical and transcendental deductions will be discussed in chs. II and III.

7 See Körner, p. 70.
and secondly, in the "Principles of Pure Understanding," he
demonstrates the rules of judgment in which the categories are
applied to experience. 8

It is, of course, the first of these two which involves the
precise problem of this thesis. Since the "deductions" have left
the categories and intuitional experience so heterogeneous, schem-
matism must provide some "third thing, which is homogeneous on
the one hand with the category, and on the other hand with
appearance."9 This third thing is, in summary fashion for the
present, "the transcendental schema,"10 a "transcendental deter-
mination of time,"11 the "product of imagination," a "universal
procedure of imagination in providing an image for a concept,"12
and "a rule of synthesis of the imagination."13 Schematism is the
"procedure of the understanding in these schemata,"14 and an "art
concealed in the depths of the human soul."15 Besides, the
schemata limit the categories to sensibility and are the phenomena

8Cf. Ibid. and A 136-B 175 (179).
9A 138-B 177 (181).
10Ibid. Italics in original.
11A 138-139-B 177-178 (181).
12A 149-B 179 (182).
13A 141-B 180 (182).
14A 140-B 179 (182).
15A 141--B 180 (183).
or sensible concepts of objects in agreement with the categories.

All this, and the chapter on schematism as a whole, are confusing, even to one who has managed to inch his way through the involved passages of the metaphysical and transcendental deductions. But when the brain-weary reader looks to the commentators for some light in his intellectual confusion, he meets only a chaos of diverse and often contradictory interpretations.

Norman Kemp Smith, probably the most widely read English commentator on the Critique in recent times, forms the opinion that Kant's treatment of schematism is highly artificial, an accretion which has been inspired principally by Kant's love for the architectonic of traditional logic. The problem of the heterogeneity of category and intuition is no real problem at all. These two are related like matter and form with correlative yet different natures.

Kant's architectonic has forced him to state the problem in a most misleading manner. For schematism, Smith maintains, is not subsumption but rather creative synthesis whereby the content of knowledge is apprehended in terms of relations. Further, there is no need for a "third thing," the discussion of which is merely the error of comparing the relation of category to intuition to the

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16 A146--B 186 (186). The above quotations include all the essential definitions and descriptions of schematism that Kant offers. They will be analyzed in detail in subsequent chapters.

relation of a class concept to its particulars. 18

Nevertheless, Smith admits that Kant's treatment of schematism has the value of clarifying his doctrine on productive imagination, on the relation of image and concept, and on the nature of the distinction between the categories and the pure forms of understanding. 19 It is evident, though, according to Smith, that Kant's architectonic has forced him to preface these insights with remarks which run entirely counter to the point he was trying to make, viz. the inseparability of conception and intuition. 20 Although Smith's main concern in his comments on schematism is pointing out Kant's errors, the stand he takes on the interpretation of schematism's meaning seems to be a more subjective one. Smith ends by interpreting the schemata as equivalent to the categories! He claims they are nothing more than the pure logical forms as modified through their relation to time. 21

18 Ibid., pp. 334 and 335.
19 Ibid., pp. 336-339.
20 Ibid., p. 340.
21 Ibid., pp. 339-340. It is difficult to show with certitude that Smith's equivalence of Kant's schemata with the categories places him definitely on a subjectivistic interpretation. Smith does not expand the implications of this interpretation. Perhaps it is truer to say that Smith was so concerned with pointing out what he saw to be the errors and difficulties in the chapter on schematism that he never really stood on a subjective interpretation where the schema would be a conditioning process nor on an objective one where the schema would be a characteristic of consciousness.
Judgment as to whether these and other criticisms of Smith are justified, or to what extent, is being reserved till later. Similarly with the other commentators that will be discussed in this introduction. For the objective here is merely to point out the existing opinion on the value and meaning of Kant's chapter on schematism.

One of the most authoritative examples of an opposing opinion on Kant's schematism is that of H.J. Paton. He spends no less than three chapters of his two volume commentary on the first half of the Critique analyzing Kant's reasoning in the chapter on schematism and demonstrating its importance in the Kantian system. Minimizing for the most part Kant's view of the schemata as "universal rules of imagination," Paton's most fundamental view is that the schemata are universal characteristics of experience, belonging precisely to the known objects. Thus at the outset Paton's is a decidedly objective view in the interpretation of schematism. Moreover, he maintains that the chapter on schematism is an essential part of the argument of the Critique and of much more value than merely pointing out Kant's errors.

Admitting the obscurity and artificiality of much of Kant's

22H.J. Paton, Kant's Metaphysic of Experience (New York, 1936), II, 17-20. Especially: "Thus for Kant the transcendental schemata are the universal characteristics which, he hopes to show later, must belong to all objects as objects in time. These universal characteristics belong to objects, not as given to sensation, but as combined by the transcendental synthesis of imagination in one time." Ibid. 19 and 20. Italics in original. For the deliberate overlooking of the "rule of imagination" aspect of schematism, see Ibid., 18, note 2.

23Ibid., 20 and 21.
treatment, Paton is firmly convinced that nevertheless the chapter is by no means superfluous. We need the argument for the imposition of universal characteristics on objects in a synthesis corresponding to the categories. He claims to refute the objections of many commentators, including the matter-form difficulty proposed by Smith which was discussed above. 24

Other characteristics of Paton's position which have not yet been discussed are the following. He gives the reader careful analyses of the text on schematism and weighs in detail the possible interpretations. He goes to great pains in this matter and, as will be seen later, makes careful distinctions in Kant's meaning of schematism which are not noticed by other commentators. These distinctions are the foundation of his favorable interpretation of schematism. 25

The first two commentators just considered are probably the most pointed examples in demonstrating the diversity of interpretation of the schematism passage. The other commentators to be considered, although of lesser importance, will also aid in

24 Ibid., 27 and 28.

25 Besides the passages already referred to, see Ibid., 66, note 2; also section 5 and 6 of ch. 34, Ibid., 75-78. For the enlightening distinctions mentioned (which will enter the arguments of this thesis later) see especially section 10 of ch. 32 and section 1 of ch. 33, Ibid., 39-41 and 42-44; also section 2 of ch. 34, Ibid., 63-70.

If there is any light thrown on the difficult subject of Kant's schematism as a result of this thesis, the author is above all others indebted to Paton for the elucidating arguments of his commentary, as should be evident from subsequent references.
highlighting this diversity.

Before this path leads too great a distance from Paton, the opinion of S. Körner ought to be considered. His interpretation of schematism is not greatly different from Paton's. True, Körner does not attempt the extensive treatment that Paton does. In general he considered schemata as "referential rules" concerning concepts which link them to perception. Non-referential rules concerning concepts tell about the content of the concepts, but without relation to objects. For example, "Being a dog implies being a mammal," is a non-referential rule. On the other hand, a referential rule would make a concept applicable to concrete experience. Since the categories deal with reality as such, their referential rules or schemata must be such as to enable their application, not to particular objects, but to the experience of objects as such. Now the feature which is common to every object of experience including the empirical self is being in time. The schemata are thus the temporal conditions under which the categories are applicable to experience. This interpretation seems to this writer quite similar to Paton's "universal characteristics of experience," and thus Körner also stands for an objective interpretation of schematism.26

26Körner, pp. 70-75. "Of a category, accordingly, the schema, and consequently the referential rules, determine the specific conditions under which it is applicable to any manifold which has the synthetic unity of anything whatever that is an object of experience. Now the only feature which is common to every object of experience, including the empirical self, is its being in time.
There are several of the better known commentators who take a very definite stand for a subjective interpretation of schematism. Most notable among them is Edward Caird. That his position would be a subjective one is not strange since his whole interpretation of Kant is notably Hegelian in tone. For Caird schematism is merely a manner of expressing a problem and the answer for this problem makes it non-existent. The relation of perceptions and conception is such that no mediating factor is really needed and Kant's argument necessarily leads to an alteration of his premises. His scaffolding falls away as unnecessary once his structure of knowledge is built. Analytic and synthetic are but two aspects of the same judgment. Subject and object are inseparable. In judgment we separate for the sake of reunion what was never distinct. Thus, as for Smith, the heterogeneity of category and intuition does not exist. Consequently, the problem of heterogeneity does not exist. Its answer, schematism, was known before the problem was proposed.

The schema of a category, therefore, determines the temporal conditions under which it is applicable to objects of experience in general. In Kant's words, "the schemata (of the Categories) are therefore nothing but temporal determinations a priori in accordance with rules". Ibid., p. 72. Körner is also of the opinion that schematism is a significant part of Kant's system, stating that Kant's position seen in schematism "clarifies the function of conceptual thinking." Ibid., p. 74.


28Ibid., 405 and 406. "Really it would be truer to say that judgment is the differentiation of conception and perception in order to their reunion. As a consequence, we are obliged to conceive the judgment, not as
H.A. Prichard's trenchant criticisms of Kant's Critique also contains a subjectivistic interpretation of schematism, and this interpretation forces Prichard to the opinion that the chapter is based on contradiction and confusion. Although he has less objection with schematism than with the rest of the section on the "Principles," he conceives what he considers to be Kant's characteristics of the schema in general as completely contrary to what the transcendental schemata of the categories must involve.

The characteristics of the schema in general are three:

1. it is a thought of a rule by which we combine the manifold, or a conception that is related to the subject, not to the characteristics of the object;
2. although time is involved, the succession is a subjective construction, not in the object;
3. the schematizing process directly brings the manifold of perception under its conception.29

The transcendental schemata cannot fulfill these characteristics because

(1) the schemata of the categories must relate to objects known,
(2) time must be in the object, and
(3) if the process of schematization actually subsumes the manifold under the

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category, then it performs the very impossibility (joining the heterogeneous) which make it necessary to postulate schematism in the first place. 30

The third commentary we shall consider which proposes a subjective interpretation of schematism is that of Joseph Maréchal, S.J. His excellent commentary on the first Critique is the third volume of his well known Le Point de Départ de la Métaphysique. At the outset the reader might be surprised at a subjectivistic interpretation in Maréchal's view of Kant, since it is characteristic of Maréchal's position to interpret Kant almost as a complete realist. But the point here is not that Maréchal makes a subjectivistic out of Kant, but rather that his interpretation of the meaning of Kant's schematism makes it primarily a subjective process and not essentially the product of imagination nor an objective characteristic of experience.

Exploiting one of Kant's descriptions of schematism, Maréchal defines the schema in general as "a formal and pure condition of sensibility (in casu of time), by which a concept of understanding is restricted (determined) in its objective usage, that is in its application appearances." 31 He supplements this definition with a detailed psychological description of the

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30 Ibid., pp. 253-255. Note the similarity of the latter objection with that of Caird's interpretation just discussed and also with Smith's objection on the false problem of heterogeneity. Obviously this is an important issue that will have to be resolved in this thesis.

31 "Envisage dans ses conditions essentielles, qui relèvent de la Deduction transcendental, le schème doit se définir: une
schematism process. He underscores his subjective view of the schema by telling us that it is a process of imaginative construction in time, that it has no produced representation, that it designates only the method according to which imagination constructs images, that it is a priori with respect to the particular image.\(^{32}\) He emphasizes the position of Kant's productive imagination in schematism, calling the schema the specifying form, the immanent rule of imaginative synthesis.\(^{33}\) And although he tells us that the synthesis involved is an objective one, yet he is certain that both the pure (transcendental) and the empirical schema are intermediary between the unity of consciousness, and, not the object known, but the actual synthesis of imagination.\(^{34}\)

Although when speaking of the schema in general Maréchal has emphasized the subjective imaginative construction involved, his treatment of the schemata of pure reason or the transcendental


\(^{32}\)Ibid., 178 and 180.

\(^{33}\)Ibid., 179-181. Maréchal bases his description of the imaginative process on the synthesis of apprehension and imagination in transcendental apperception as seen in the first edition of the "Transcendental Deduction." A 98-110 (131-138) and A 119-123 (143-146).

\(^{34}\)Maréchal, Ibid., 181-182.
schemata takes a different turn. These schemata are obtained by a process of abstraction. The synthesis which effects the transcendental schema depends upon the influence of past experience, the pure images of space and time, and conditions assuring the native union between intellect and the form of internal sense. In this third aspect the transcendental schema is the dynamic expression of the categories in pure imagination. Maréchal tells us that although the first application of these pure schemata is pre-conscious (and this is certainly consonant with the subjective processes of imagination he described in detail), they are consciously applied to appearances in explicit and objective judgments. The relation of each category to a determinate and characteristic insertion of appearances in time enables the schemata of the categories to be abstracted by the understanding through a process of reflection. This reveals "general signs" in experience and permits the application of these categories to appearances.35

The last main commentator that will be considered here is Roger Daumal. He is unique among the men whose positions have been examined in that he has written a whole volume on schematism. His thesis is that schematism is the key point of all of Kant's

35Ibid., 182-185. The reader is at once aware of the change in position from what Maréchal has told us concerning schemata in general to what he tells us here concerning the schemata of the categories. Recalling Prichard's objection about a change in Kant's position on the same point, this supposes inconsistency will prove to be significant later in this paper. Cf. above p. 11 and Prichard, pp. 252-254.
philosophy and his work is an exhaustive study of the idea of schematism as developed throughout all of Kant's writings, including the Opus Postumum. Consequently, he is even more convinced of the essential value of schematism than is Paton. The unique point of his position is that he holds for neither a subjective interpretation of schematism as do men like Caird, Prichard, and Maréchal, nor for a decidedly objective stand as do Paton and Körner, but says that by schematism Kant intended both positions!

After elucidating discussions of the relations of understanding, productive imagination, and reproductive imagination in Kant's Critique, Daval adopts the following hypothesis as a solution to the great difficulties concerning the schematism passage: concept and schema are, under different aspects, the same law of knowledge. The concept is the determining factor and the schema is the product determined corresponding to the concept or category. He proposes to support his hypothesis with texts, but this does not prove too convincing. Nevertheless, the insight he furnished, the distinctions he proposes, and the synthesis he attempts to formulate are truly praiseworthy. The only criticism of his book as a whole that is valid will have to come from a man more than ordinarily familiar with the whole of Kant's philosophy and writings.36

36Roger Daval, La Métaphysique de Kant (Paris, 1951). For Daval's reasoning on the importance of schematism, see Ibid., pp. 7-8; for the precise relationship of understanding, productive and reproductive imagination, especially pp. 88, 89, 92, 93; for
Now that the reader has ploughed through these dry summaries of secondary material he is probably wondering just what specifically is the problem of this thesis. The diversity of opinion on schematism that we have just reviewed, some praising, some condemning the chapter, a few adopting an objective interpretation, others considering schematism as a subjective condition, furnishes the precise problem of this thesis. What is the correct interpretation of this obscure passage? Is it really superfluous at its place in the Critique? If not, whose view of schematism is the correct one, if any? And what is the reason for the diversity?

What is a possible or probable way out of this intellectual morass?

a clear summary of Daval’s essential hypothesis on schematism see Ibid., 95-96, especially: "Pour repondre à toutes ces questions et préciser la nature du schème, avançons une hypothèse, que nous vérifierons par d'autres textes: concept et schème sont une seule et même loi de l'esprit, mais vue sous deux aspects différents; le concept est un acte mental déterminant, le schème est sa projection, c'est-à-dire le déterminé répondant à ce déterminant. Mais, ne l'oublions pas, déterminant et déterminé coïncident."

For the relation Daval makes between the schemata and phenomena and a clear summary on the comparative functions of intellect and imagination see Ibid., pp. 174-175.

Since this thesis treats only schematism as found in the first Critique, no attempt will be made to correlate or criticize Daval’s analyses of schematism as he interprets it in the ideas of the Critique of Pure Reason and in the rest of Kant’s writings. The reader is referred to the reviews of Daval’s book, especially that of Paton in Philosophical Quarterly, 1952 (2), p. 372.

37 There are other commentaries on Kant’s schematism which might be cited, but because they are of lesser importance and do not say anything that has not been said in one way or another by the authors that have been treated here, they will be simply referred to in the bibliography appended to this thesis.
Certainly, where so many of the best Kantian experts disagree, we cannot hope for certitude. Yet it is the precise point of this thesis to offer an hypothesis that will at once afford as clear an explanation of Kant's obscure chapter as can be hoped for, add light to the place and significance of schematism in the Kantian system of knowledge, and, to a certain degree, reconcile the apparent divergencies among the standard commentators. Clearly, if this hypothesis is proven to be true, an important gain will be attained in the understanding of Kant's critical system.

The key idea of this hypothesis is that Kant meant two different things in the chapter on schematism, the subjective and preconscious conditioning process whereby the schema is produced and the categories are synthesized with the manifold of sense, and, secondly, the objective schemata of consciousness, universal characteristics of reality which are the product of the imaginative process which conditioned them. Because of the obscure terminology Kant employed, the ambiguous way he stated the problem for which schematism was the answer, and because of a confusing exposition of the elements involved in schematism, most of the commentators did not perceive this duality. Or when this solution was seen, it was perceived only vaguely and consequently it was

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38See for example where Prichard rejects in a note (p. 254) the possible objection of an interpretation of schematism that is
not exploited. Only Daval clearly recognized the implications of this solution. 39

The method of proving this thesis will be three-fold. First, since it is an hypothesis, it is proven valid when, and only when, it is shown that this theory and only it, explains the facts. In this case the facts are Kant's text, the obscure definitions and descriptions of schematism which he gives in the chapter on that subject. The hypothesis will explain these facts by offering a clear exegesis and coherent explanation of the problems arising in the text on schematism. It is hoped that this interpretation will provide, or at least aid in providing, a more intelligible explanation of this important subject than has been heretofore given.

Secondly, this hypothesis will be supported by texts from both the metaphysical and the transcendental deductions of the categories, the heart of the Critique of Pure Reason. Any explanation of schematism can only be valid in the light of its consonance with

similar to the one offered in this thesis.

39The similarity between Daval's solution and the one that is proposed in this thesis is at once evident. It is to be noted, however, that the solution of this writer was arrived independently of, and anterior to, discovering M. Daval's hypothesis. Besides, there are notable differences in the two solutions as well as similarities. M. Daval spends a comparatively small amount of time on schematism of the understanding as found in the first Critique since he is writing about schematism in all of Kant's writings. A very small portion of his treatment is spent on proving his hypothesis. Most of his consideration is concerned with expounding the consequences of this solution, or, more exactly, in explaining the notion of schematism in the whole Kantian philosophy.
this center of the critical system.

Thirdly, this hypothesis will be confirmed by reference to the standard commentators, most of whom we have reviewed briefly. Often, even when this thesis disagrees with the interpretation of one or other commentator, we shall find confirmation for a particular point. In some instances, the very diversity among many of the commentators will, because of the synthetic nature of the solution offered by this thesis, support that solution. Those commentators will be most extensively used whose reputation for scholarship is most widely acknowledged, viz., Paton, Maréchal, and Smith. These methods of proof will not be employed successively, but simultaneously for each text analyzed, as instruments ready for the surgeon's hand at each moment of a delicate operation.

Because the terms subjective and objective will come up so frequently in the proof of this thesis, it will be convenient to inclose here a brief definition of both terms, to make clear the subsequent arguments. By subjective is meant all that is logically prior to consciousness. In Kant it involves the categories and the transcendental activities which construct an object of knowledge by synthesizing the materials of sensibility with the determinations of the categories. By objective is meant consciousness of the object just constituted. It involves intellectual awareness of an object terminating in a judgment concerning it. In the example, "Fire causes smoke," the objective side is the conscious positing of such a judgment. On the subjective side, the object about
which I make this judgment is constructed a priori in its intellectual elements and in space and time, because for Kant I know only what appears. Only the sensible content (e.g. flames and smoke) is empirical. In this construction, the categories, imagination, and the materials of sensibility are combined to form an object with characteristics such that consciously I will make the above judgment. But both subjective and objective are one synthetic cognitive act.

After much consideration, it seems best to divide the treatment in the following manner: the second chapter will treat the subjective schematizing process by which, before all experience, the categories are combined with the manifold of sensibility. The third chapter will explain those texts which concern the products of the schematism of the categories, i.e. the transcendental schemata, which as universal characteristics of experience enable the application of the categories to objective experience in conscious judgment. It is true that it will not always be possible to abstract completely the schematism from the schemata, the production from the product. But at least in point of emphasis, and for clarity, this arrangement is better. The fourth and last chapter will show how this interpretation of schematism points up the consistency of Kant's thought. This will be accomplished in a summary of the arguments of the preceding chapters in the context of the "Deductions." Chapter IV will also make a few comparisons between Kant's schematism and Thomistic thought.
CHAPTER II

THE SOLUTION, PART I: THE TRANSCENDENTAL AND PRECONSCIOUS SCHEMATISM OF THE CATEGORIES

"This schematism of our understanding . . . is an art concealed in the depths of the human soul."

The opening words of Kant's chapter on schematism at once puts before the reader Kant's view of judgment as stated in the "Analytic of Principles." Judgments are "subsumptions of an object under a concept . . ." In the introduction to the "Principles" Kant explains this more in detail. The understanding is the faculty which forms rules or concepts, while subsuming under rules belongs to the judgment. The faculty of judgment also distinguishes whether or not a particular object falls under a given concept.

Kant also states in the opening paragraph of the chapter on

1A 137--B 176 (180).

2A 132--B 171 (177). That the "rules" are concepts or categories throughout the transcendental deduction, see e.g. A 105 (135), A 110 (137), A 126 (147), B 163 (172) and many other places.

3Kant's word for judgment is urteilskraft, or the power of judging. Cf. Paton, II, 21, n. 3.
schematism that the representation of the object must be homogeneous with the concept under which it falls. He goes on to give an example. "Thus the empirical concept of a plate is homogeneous with the pure geometrical concept of a circle. The roundness which is thought in the latter can be intuited in the former."

This first paragraph is a sort of prelude to the discussion of schematism. Whether it is an accurate indication of the meaning of schematism Kant offers remains to be seen. At the outset Kant's reader is puzzled by the notion here that judgment is distinct from understanding. He still has fresh in his mind the metaphysical and transcendental deductions. There Kant evidently thought that the precise end of the understanding and the act of forming concepts was found in the placing of a judgment. This apparent contradiction will occupy our discussion shortly.5

In the second paragraph of the schematism chapter Kant poses the problem of heterogeneity which we spoke of briefly in Chapter I. The pure concepts of the understanding do not possess the homogeneity with empirical intuition which empirical concepts do in the example just quoted. For since pure, the categories can never possess anything empirical. No one, Kant maintains, could find anything of causality, for example, intuited in sense or contained in mere appearances. Kant's meaning seems obvious enough:

4Supposedly Kant means the actual object as well as the idea or representation of the object, for he makes such an equivalence later in the paragraph [A 137-138 176 (180)]. Cf. Paton, II, 26, n. 1.
5See pp. 31 and 32.
the intelligibility of causality is not to be found in the sensible characteristics of reality. Therefore how can there be the subsumption of intuition under pure concepts or the application of the categories to appearances?6

The question immediately arises: what is Kant referring to? Is this subsumption of appearance and application of the category to be considered an explicit and conscious judgment, for example, in philosophical judgment: "Causality is a characteristic of human experience," or in the empirical judgment: "Fire causes smoke."?7 Or, on the other hand, is this subsumption to be considered the relation of category and intuition found in the very act of constituting the object of knowledge in experience?8 The former would be an objective and conscious judgment about the already constituted object of knowledge. The latter would be the subjective and a priori constitution of that object. Because of Kant's own statement of his problem here, namely, that of the heterogeneity of category and intuition, the objective and conscious judgment would seem almost certainly to be his meaning.

6A 137-138--B 176-177 (180). Kant makes both of these descriptions equivalent.

7The reason for choosing first an example of an abstract philosophical judgment and then also an empirical one will become evident later in this chapter when discussing the problems of empirical schematism and especially in the discussion of this matter in Ch. III.

8Kant has told us in the "deductions" that the categories make experience possible and impose their laws upon appearances. See for example B 163 (172).
But maybe Kant meant the subjective alternative, or even both the subjective and the objective interpretations. This ambiguity is exactly the fundamental problem of the schematism chapter and is also the beginning of its solution. But before sketching this answer in detail we must hear Kant's own prima facie solution to the problem.

He tells us that a "transcendental" doctrine of judgment is necessary" to answer this very important problem. This is not necessary, Kant tells us, in the other (presumably non-transcendental) sciences. For in these, their concepts are not so completely distinct from the objects to which they are applied and thus no discussion of the applicability of the one to the other is required. This statement of Kant will be the source of many difficulties when a few paragraphs later he begins an unexpected discussion of schematism of empirical and mathematical concepts. The answer, Kant tells us at the beginning of the third paragraph, is "obviously . . . some third thing," which is homogeneous with both the category and appearances and which consequently

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9 The term transcendental is used here and throughout the chapter on schematism and in this paper as well in its most typically Kantian sense of the a priori condition of knowledge. "I entitle transcendental all knowledge which is occupied not so much with objects as with the mode of our knowledge of objects in so far as this mode of knowledge is to be possible a priori." B 25 (59). Cf. Paton, I, 229, n. 3 and 230 as well as Smith's excellent history of the term, pp. 73-76.

10 137-138—B 176-177 (180-181). Again, "those which represent it in concreto" must be considered the object itself, both because of the reasons given above in n. 4 and because the Kantian object is always a representation anyway. Cf. also below pp. 73-74, 80-81, 89-90.
makes the application of the former to the latter possible. This
"third thing" Kant tells us by way of summary and title is a
"mediating representation" which must be both intellectual and
sensible and is in fine, "the transcendental schema."

We have already seen briefly in Chapter I how some of the
standard commentators object to Kant's statement of his problem. Smith tells us that schematism is not subsumption but synthetic
interpretation by which contents are apprehended in terms of func-
tional relations. The category is not used as a predicate in a
judgment but it articulates the whole judgment as such. Similarly,
conceiving the transcendental schema as a "third thing" is treat-
ing the categories as if they were related to appearances in the
same manner in which a universal concept is applied to its par-
ticular.

To Smith's first objection the most pertinent answer is that
Kant does not say that schematism is subsumption. He says it is
a mediating process in subsumption (judgment), and that is a dif-
ferent thing. Nowhere does Kant equate schematism to subsump-
tion of a particular under a universal. But if Smith's first ob-
jection is ultimately leveled at calling the schema a "third

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11 Italics in original.

12 Paton well remarks that to understand Kant we must allow
him to state his problem in his own way. Kant states this problem
sharply with no indication of the proposed solution, one which, in
general, we know from the transcendental deduction to be the doc-
trine according to which objects are combined in the manifold in
time. II, 28.

13 See pp. 5 and 6 of this paper and Smith, pp. 334-335.
thing," as he probably fundamentally intended, then the answer to the first objection is the same as that to the second.

Smith's second objection explicitly concerns the use of a "third thing." And whether the relation of category and intuition admits of such an idea as a "third thing" can only be answered later in this paper, when the meaning of schematism is more fully clarified. It is a question to be solved in this thesis as a whole. This much, though, can be said here for Smith: first, he has touched the center of the whole problem concerning schematism, and secondly, Paton's answers to Smith's objection on this subject are by no means convincing. 14

At this point then in Kant's discussion of schematism the precise problem is this: what did Kant mean by the **transcendental schema**? Is it a mediating factor in the subjective and preconscious synthesis of category and appearance, the **transcendental constitution** of the phenomenal object? Or is it an element in conscious experience, such as when we predicate the categories of that experience? The answer which this thesis proposes is that

14Paton claims that Smith's matter-form interpretation of category and intuition is false and consequently his objection is not valid. The category is the form of thought, not of intuition, whose forms are space and time. This is a bit too facile and does not answer Smith's objection. The categories are not the forms of thought in the way in which form determines matter. They are the forms of thought in the sense they are the different modes of conceptualization and judgment. On the other hand, the deductions lead us to believe that the categories do have a relation to sense intuition or appearances in a manner analogously the same as matter and form. Nor does Smith's objection imply a temporal succession between appearance and category, as Paton maintains. See Paton, II, 27.
Kant fundamentally intended both! We saw that the hypothesis of this thesis is based on a duality in Kant's thought. It is one which is evidenced throughout at least the whole "Transcendental Analytic," a duality which in many instances easily begets confusion. This duality is expressed in the disjunction just outlined in the ambiguity of schematism: the preconscious and transcendental constitution of the object, and the empirical and explicit cognitive experience.

Due to the nature of Kant's purpose in writing the Critique he was much concerned with the former. But since the transcendental processes are a condition for all knowledge and of all experience, as Kant tells us, he cannot avoid speaking about the knowledge or experience itself. Indeed, the complex organization of transcendental conditions and activities are postulated simply to explain and justify the necessary aspects of conscious thought. The metaphysical and transcendental deductions—especially the former—begin with the "given" in conscious experience and from this argue to the transcendental activities which alone can give a sufficient explanation of this experience. Often Kant says things about one pole of this cognitive relationship which he means for the other. This is one of the principal sources of confusion and misunderstanding both in the "Transcendental Analytic" as a whole and in the chapter on schematism in particular.

This correlative duality and it resulting confusion must be kept in mind as the rest of the obscure chapter on schematism is
discussed. It is imperative, therefore, before this is entered upon, that the existence of such a duality in Kant's thought be clearly justified. Only then will its import on the schematism chapter and the schema's correct interpretation stand out clearly.

Because the subsequent arguments of this chapter are necessarily long and sometimes complex, it is necessary that at this point we have a clear map of where our road is heading and over what sort of terrain it lies. We have seen Kant's statement of his own problem, his *prima facie* solution, the problem of this thesis, and lastly, the proposed solution. Before we take up Kant's first definition of the transcendental schema, we must first prove that the duality which is the essence of this thesis is a significant element of Kant's thought. First then this duality will be explained and its existence justified, as a legitimate distinction in philosophy in general and in its particular Kantian development. This latter will be seen in three instances: the "clue" of the metaphysical deduction, the purpose and conclusions of the transcendental deduction, and in the twofold tendency to subjectivism and phenomenalism attributed to Kant. Then, secondly, with this duality clarified, the text of the schematism chapter will again occupy our attention, from the first definition of the schema throughout the remaining texts as Kant presents them. But in this chapter only those texts will be exploited which show the preconscious side of the schematism duality. First to the duality then.
The distinction between the preconscious and the conscious is not peculiar to Kant. The traditional Scholastic philosophy has its own preconscious and "transcendental" activities in the illumination of the agent intellect, the mediation of the phantasm, the activities of the internal senses, etc. The preconscious is often referred to, not only in philosophy, but in poetic inspiration and other artistic endeavors. In his Creative Intuition in Art and Poetry the scholastic philosopher Jacques Maritain makes much of the "spiritual unconscious or preconscious." He maintains that these preconscious activities are not purely unconscious but principally so, or the exact point where the preconscious emerges into the conscious. Poetic inspiration is born at this point.

There are two great domains of the preconscious, Maritain affirms, the spiritual and the blindly instinctive or Freudian. This is not mysticism, whether natural or supernatural, but the functioning of everyday intelligence as seen in scientific discoveries and the inner activities beneath free decisions.\(^\text{15}\) It is evident then that the distinction so important in this thesis is valid also in realms outside of the Kantian critical system.

The first important factor in the Kantian development of this distinction is the "clue" of the metaphysical deduction.\(^\text{16}\) Kant's

\(^{15}\text{Jacques Maritain, Creative Intuition in Art and Poetry, (New York, 1953) pp. 91-95.}\)

\(^{16}\text{Kant gives the name "Metaphysical Deduction" only in the second edition, and then only by reference subsequent to this deduction. "In the metaphysical deduction the a priori origin of the categories has been proved through their complete agreement with the general logical functions of thought." B 159 (170).}\)
purpose in this deduction is to show that the forms of judgment of traditional logic reveal in a hidden manner the categories as a priori sources of these judgments, with a one-to-one correspondence between the types of judgment and each category.\footnote{In the Metaphysical Deduction the a priori origin of the categories is established by their perfect agreement with the universal logical functions (that is, forms) of thought. In the Transcendental Deduction what is shown is their possibility as a priori cognitions of objects of intuition. More precisely, the Metaphysical Deduction is concerned with determining the list of the categories, and explaining their origin in the nature of understanding.” Paton, II, 240. Italics in original.} Admittedly in the opinion of even the most sympathetic commentators the one-to-one correspondence is most artificial and in this point Kant has decidedly failed.\footnote{The one-to-one correspondence is artificial because the forms of judgment are artificial. Paton in treating the metaphysical deduction defends the correspondence between each form and category (I, 293-297), but admits later when speaking of the significance of the transcendental schemes that the table of judgments has been undermined (II, 77-78).} But this does not destroy his point of finding necessary and a priori principles in our cognitive activities which account for the necessary forms of judgment in general. Furthermore it serves to show Kant’s mind on the relation of transcendental activities and the categories to conscious intellectual experience.

After an elaborate introduction\footnote{A 66-79--B 91-104 (104-112).} Kant gives us the "clue" to
the intimate relation between form of judgment and category in the following words: "The same understanding, through the same operations by which in concepts, by means of analytic unity, it produced the logical form of judgment, also introduces a transcendental content into its representation, by means of the synthetic unity of the manifold in intuition in general."\(^{20}\)

The meaning is this. There are two functions to understanding. The one is transcendental and synthetic, the other analytic and characterized by the propositions of general logic. Both are functions of the same unity of understanding and are produced in the same operation. The synthetic unity is prior logically and psychologically (but not temporally) because it is the cause of the analytic unity. The former is the synthesis of the manifold of intuition through the introduction of transcendental content, namely the unity and necessity of the category. In conscious

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\(^{20}\) A 79--B 105 (112). Italics not in original. Paton gives this excellent paraphrase of the "clue": "The same understanding, and by precisely the same acts, produces two results. Firstly in concepts, by means of the analytic unity, it brought into being the logical form of a judgment. Secondly, by means of the synthetic unity of the manifold of intuition in general, it introduces a transcendental content into its ideas. Hence we can call these ideas—presumably the ideas into which the transcendental content has been introduced—pure concepts of the understanding which apply a priori to objects. This is a service which Formal Logic cannot perform." II, 287. Italics in original. Concerning the statement of the final sentence, cf. this paper p. 34, n. 28.
judgment we analyze the object according to the unities of
genral logic. The discovered unities are synthetic ones.21

We recall that in the introduction to the "Analytic of Prin-
ciples" Kant defined judgment as the faculty of subsuming objects
as distinguished from the understanding whose function it was to
form concepts. Here in the metaphysical deduction an apparent
contradiction arises in that the understanding forms judgment
itself. This is not really a contradiction. In the logically
prior constitution of the object the understanding forms the to-
tality which in conscious judgment will either be broken apart
(negation) or separated in order that the parts may be reunited
(affirmation). When speaking of conscious judgments, because the
concepts are empirically abstracted from the object of experience,
we can in a sense "subsume" an object under that concept. But al-
ready here it must be admitted that this concern for subsumption
will be found more a result of Kant's love for the architectonic
of traditional logic than anything else.22

In the sentence immediately preceding the above one elabora-
ting the "clue" Kant tells us what he means by analytic unity and
synthetic unity although he does not give them such names until
the following sentence. "The same function which gives unity to

21 Note the similarity with Caird's analysis of judgment in
conjunction with schematism. See this paper pp. 10-11 and Caird,
I, pp. 405-406.

22Cf. Smith, pp. 332-333. See end of chap. III also.
the various representations in a judgment [analytic unity] also gives unity to the mere synthesis of various representations in an intuition [synthetic unity]; and this unity in its most general expression, we entitle the pure concept of the understanding."23

The analytic unity is the procedure of bringing different ideas of objects under a concept.24 The synthetic unity is, as Paton affirms, the same doctrine elaborated in the transcendental deduction. Every object of knowledge has besides the particular intelligibility which we recognize through empirical concepts an universal structure which is imposed by thought. Paton well remarks that Kant merely asserts this here and intends it as an hypothesis to be established in the transcendental deduction. It must be provisionally accepted here for Kant to show the relationship between the conscious forms of judgment and the categories.25

It should be noted that analytic unity is not the same thing, indeed has nothing whatever to do with the limited class of judgments classed as "analytic judgments." And similarly there is only an analogy between the specific synthetic judgment and the synthetic unity which is found at the basis of all acts of knowledge.26 Here again we have an example of Kant's perplexing use of terminology.

23Paton, I, 283. Concept is considered here, of course, as an empirical concept and not the category.

25Ibid., 283-286.

26Cf. Ibid., 301.
Kant never says that the synthetic unity involved behind our analytic consciousness is preconscious or unconscious. But implicit in all Kant's arguments in this line of thought is the necessary conclusion that at least such unity is not explicitly adverted to. Otherwise why all the long "transcendental" analyses and arguments? It will be necessary to return to this question again.

From what we have seen of the "clue" of the metaphysical deduction it is clear that the duality between the preconscious and conscious is a legitimate and fundamental element in Kant's system.

This fundamental duality is confirmed by the general purposes and conclusions of the transcendental deductions. Kant expresses the purpose of the transcendental deductions in many places in the Critique and in several ways, but probably the most general is put in the form: How can the subjective conditions of thought (the

27 For a good consideration of the relation of the metaphysical deduction to the transcendental deduction and to the transcendental schemata, see Ibid., 295.

28 The duality seen in the metaphysical deduction is the same as that expressed in the distinction between general and transcendental logic. General logic treats of the pure forms of thought without any consideration of either the content or origin of knowledge. On the other hand, transcendental logic deals precisely with the origin and rules of pure thought of an object and how we have a priori knowledge at all. See A 55-56--B 79-80 (95-96), A 131--B 170 (176), and A 135--B 174 (178). This distinction is nothing else than the distinction between the rules of conscious judgment (general logic) and the rules for the constitution of the object of a priori knowledge (transcendental logic).
categories) have objective validity?\textsuperscript{29} The answer is the involved reasonings of the transcendental deductions. It would be well beyond the purpose and scope of this paper to analyze in detail the arguments of the transcendental deductions of both the first and second editions. The objective here is simply to show that the duality between preconscious constitution of the Kantian object and the conscious knowledge of that object is an essential aspect of Kant's critical system. Therefore our procedure will be merely to summarize the fundamental arguments of both the first and second edition versions of the transcendental deductions. Some of Kant's particular analyses will find their way later into this discussion when considering some of the other texts on schematism.

The transcendental deductions can be summarized as follows:

1. I am conscious of an object of knowledge in succeeding moments of time.
2. Subjectively there is required for such consciousness of an object:
   a. that the perceptions of the manifold be synthesized by something prior (logically) to it in the knowing function.

\textsuperscript{29}A 89--B 122 (123-124). Cf. Paton, I, 240: "The Transcendental Deduction, which is a justification rather than a deduction, shows how it is possible, and indeed necessary, for categories of such an origin [the understanding--from the metaphysical deduction] to apply to objects given in intuition. It is, in short, concerned with their objective validity, and so with their extent and with the limits of their legitimate use." Italics in original.
This is synthesis of apprehension in the *a priori form* of inner sense.

b. This synthesis demands a reproduction of the previous representations. Such empirical reproduction could itself be effected only by something prior to it, *viz.* pure synthesis of productive imagination.

c. A recognition of the previous reproductions in the unity of one consciousness.

3. Now there is implied a transcendental synthesis of pure apperception in:

a. The processes of productive imagination just mentioned, which can synthesize perceptions not arbitrarily, but in necessary connection. This synthesis is according to the universal law or norm of transcendental apperception.

b. The recognition of previous reproductions spoken of which demands a unity of consciousness.

c. The constitution of the initial consciousness of an object.

This is expanded in the following step.

4. The consciousness of an object of knowledge implies and demands the conscious unity of transcendental apperception. Reciprocally, consciousness could not be without an object of knowledge. In detail:

a. In knowledge there must be a synthesis of the manifold of experience with the understanding by the application of a unity to that manifold. This unity is not that of the
category, or how could the category itself be synthesized in experience?

b. This unity is none other than the transcendental unity of apperception.

c. There is an analytic unity involved here (I am I). This in turn demands a synthetic unity in the same instant, that of the apperception with the manifold of experience. For again, there could not be consciousness unless there was some content to this unity.

5. Three conclusions necessarily follow from this analysis of apperception:

a. The unity spoken of constitutes an objective unity. For the combining of the representations of a manifold into one consciousness constitutes the relation of these representations to an object.

b. The logical forms of judgment do not merely join concepts, but constitute a union in the object according to the diverse subjective functions which are the categories.

c. The synthesis of apperception with the manifold through the diverse function of the categories limits these categories to the realm of that synthesis, i.e. to sense experience. Consequently the categories are validly used only in the area of that synthesized sense experience. 30

30 The principal sources for this summary outline, according to the divisions of that outline, are as follows:
The duality so important to this thesis is evident in this summary, in the subjective deduction of point two, for example, and in apperception's constitution of the object of knowledge. Even in the repeated emphasis on synthesis as a fundamental basis of thought, we can perceive the difference between the logically prior constitution of the object, and consequent consciousness of that object. 31

The third and last instance which should be considered as pointing out this duality in Kant's thought is the double tendency

1. A 98 (131).
2.
   a. A 98-100 (131-132).
   b. A 100-102 (132-133), A 118 (142-143). B 150-152 (164-165).
   c. A 103-104 (133-134).
3.
   a. A 119-123 (143-146).
   c. B 135 (154-155).
5.
   b. B 140-142 (158-159).
   c. B 143 (160), B 146-149 (161-164).

31 We are not aware of synthesis as such in our conscious experience. If we accept Kant's starting points (and it is beyond the scope of this thesis to challenge them) we will have to discover this as the basis of the unity we find in knowledge. Even outside the Kantian context we must admit that in much of our knowledge we combine some of what is subjective to the given of experience.
to both subjectivism and phenomenalism which Smith attributes to Kant. Paton prefers to call this dual penchant in Kant's thought "empirical realism" and "transcendental idealism." For Smith this is a blind tendency in which Kant constantly vacillates. Subjectivism is predominate when all appearances and empirical objects are mere modifications of subjective sensibility. In this view the synthetic activities are mere cognitive processes of the individual mind. When the phenomenalist tendency is predominate, appearances gain an existence independent of the mind, the synthetic activities take place before consciousness can exist at all, and are of a noumenal character. 32

Paton objects to this interpretation and says that these two "tendencies" instead of being contradictory are mutually dependent. "Transcendental idealism" (subjectivism) is merely Kant's continued emphasis on the fact that human knowledge is not of objects as they are in themselves but as they appear to the human mind. "Empirical realism" (phenomenalism) is merely the fact that human knowledge as the joint union of things and the human mind shows us that real substances and accidents truly interact and are directly present to the human mind. 33

Whichever view is correct, the tendency serves to show that Kant was constantly concerned with both sides of our cognitional

32Smith, pp. 83, 274, 275, 277.
33Paton, I, 582-583.
duality. Not because the double tendency expresses neatly and
directly the dual aspect of cognition, but because in such a tend-
ency we see clearly that Kant was constantly concerned both with
the subjective constitution of the cognitional object and the
human knowing of that object. And if Smith's contentions are cor-
rect, he often confused the two.

Although this duality is certainly a constant element in
Kant's thought, as should be evident after all that was just dis-
cussed, we have not yet seen clearly that the "transcendental"
side of the duality is preconscious. The fact that all these
transcendental activities condition knowledge and "make experience
possible" seems to prove conclusively that they are precon-
scious.34

All this discussion has not been a digression, far removed
from a discussion of schematism. This duality must be clearly

34 This will be settled finally later in this chapter. Even
if this side of the duality was not clearly preconscious, it would
not materially affect the point of this thesis. Since, however,
these activities are to be taken as preconscious ones, then it
would seem that Smith's view instead of Paton's concerning the
double tendency is correct. Moreover, Paton's view of "empirical
realism" is unconvincing and when formulated seems to reduce it-
self either to subjectivism or to the same contradiction attrib-
uted to Kant by Smith. It seems there is no denying this contra-
dictory tendency in Kant, and indeed it was impossible to avoid
once Kant had determined that we do not know the ding an sich.
Consequently, is Smith's view of the transcendental activities as
noumenal also correct? That is a question that it is impossible
to answer here since it would involve unravelling Kant's obscure
and controverted doctrine concerning the noumenon and the "trans-
cendental object." It does not directly affect this thesis and is
outside its limits.
understood and its existence justified before taking up Kant's first definition of the transcendental schema. Further, we shall see that to a large extent schematism is essentially only the transcendental activities which are the productive side of the duality outlined in the deductions.

Kant's first real definition of the transcendental schema occurs in the fourth paragraph of his chapter. It is stated almost in the form of a syllogism. The major is, "The concept of understanding contains pure synthetic unity of the manifold in general." This is a thought which is repeated throughout the Critique, especially in the transcendental deductions. The minor gives the nature of time: "Time, as the formal condition of the manifold of inner sense, and therefore of the connection of all representations, contains an a priori manifold in pure intuition." This repeats what Kant has said about time in the "Aesthetic."36

The conclusion of this syllogism is stated and elaborated upon in the following words:

Now a transcendental determination of time is so far homogeneous with the category, which constitutes its unity, in that it is universal and rests upon an a priori rule. But, on the other hand, it is so far homogeneous with appearance, in that time is contained in every empirical representation of the manifold.

35 See for example, B 144-145 (160-161).

36 Especially A 34--B 50-51 (77) and A 48-49--B 66 (86).
Thus an application of the category to appearances becomes possible by means of the transcendental determination of time, which, as the schema of the concepts of understanding, mediates the subsumption of the appearances under the category. 37

The argument is not difficult to follow. Understanding which functions through the categories is natively orientated to some sort of object or manifold in general. Time is the formal condition of the manifold and is at the same time an a priori rule connecting all representations in succession. Thus it is logical that time should be the mediating factor between the category of thought and the empirical manifold, since it is both a priori and empirical.

But the noteworthy thing about time as the mediating factor is that it is a "transcendental determination of time," or as Paton translates the German word zeitbestimmung more literally, "transcendental time-determination." 38 Now here Kant seems to be explicitly talking about the transcendental schema 39 and not transcendental schematism, the preconscious productive process of the former. But in the present chapter of this paper the preconscious schematism process is to be primarily considered. Should not then the consideration of the transcendental time-determina-

37A 138-139--B 177-178 (181), as for the whole fourth paragraph.
38Paton, II, 29.
39The transcendental schema or time-determination from its objective side will be discussed in ch. III.
tion be relegated to the next chapter? Decidedly not. It was mentioned earlier that it would be difficult to abstract the pre-conscious schematism from its product, the conscious schema. What Kant tells about the latter will teach us much about the former and vice versa. Moreover, as shall be seen, Kant often confuses the two considerations. Thus we must consider some texts in both chapters, but each from its respective point of view.

Thus the transcendental determination of time is explicitly the transcendental schema. The bestimmung of the compound means a determination but can also mean the determining or the actual determination at this moment and not merely its completion. Some dictionaries give the first meaning of bestimmung as a "fixing, fixation," then only a "determination." A German dictionary published in 1811, just twenty-four years after the publication of Kant's second edition gives the first definition of bestimmung as "die handlung des bestimmen," or "the action of the determination or determining." Consequently, there is much to be found concerning the schematism process in the implications of the definition of the schema. Schematism then can be said to be a process which determines time (or acts upon time) in such a way that the

40 Johann C. Adelung, Worterbuch der Hochdeutschen Mundart, 3 vols. (Wien, 1811).

41 Cf. these words about schematism which Kants gives us elsewhere in the Critique: First, "the categories require in addition to the pure concept of understanding, determination of their application to sensibility in general (the schemata)." A 245 (263). Kant also tells us that the "acts of understanding are, without the schemata of sensibility, undetermined." A 664-692 (546). Italics in original.
application of the category to appearances is made possible.\textsuperscript{42} This is an initial definition which will be filled out in the course of subsequent analyses.

Paton interprets this time-determination not as a characteristic of time itself, but as characteristics of objects as temporal and as combined in one time. This leads him to his typical "universal characteristics" interpretation of the schemata.\textsuperscript{43} Although Paton's interpretation contains no positive discrepancy compared with the interpretation to be evolved here, his position excludes the subjective conditioning side of the duality from being found in Kant's text.\textsuperscript{44} Yet from what has been seen above and from what Kant tells us about the transcendental schema in subsequent paragraphs it seems all but absolutely certain that Kant in this definition confusedly meant both sides of the duality, a process of determining in time and the determination of time which results. In another part of the schematism chapter Kant talks about the schemata as "a priori determinations of time in accord-

\textsuperscript{42}Even if Kant had meant only the product here, the determination would have demanded a determining and something to do the determining, and even a form or rule according to which the determined was so effected, and we would still be able to argue much concerning the productive process from a description of its completion.

\textsuperscript{43}\textit{Paton, II, 29.}

\textsuperscript{44}\textit{Cf. below, pp. 67-68.}
ance with rules, "45 which seems to support this subjective determining interpretation. For there must be something determining (an agent in the act of determining) in accordance with the norms of these rules. 46

This interpretation is consistent with what Kant tells us about schematism in the next (fifth) paragraph. After summarizing the conclusions of the transcendental deduction, the limitation to sensibility which the categories involve, Kant tells us that the categories must "contain a priori certain formal conditions of sensibility, namely, those of inner sense." 47 Kant equates these conditions to the transcendental schema by telling us, "These conditions of sensibility constitute the universal condition under which alone the category can be applied to any object. This formal and pure condition of sensibility to which the employment of the concept of understanding is restricted, we shall entitle the schema of the concept. The procedure of understanding

45A 145--B 184 (185).

46 It is strange that with all the emphasis Kant puts upon the definition of the transcendental schema as a time-determination throughout the whole schematism chapter Smith does not consider this even worthy of mention. Maréchal is more concerned with a less mentioned aspect (formal condition of sensibility) and even Davel, who makes schematism so important, does not capitalize upon this definition, as he might well have in his interpretation.

47Gf. A 181--B 224 (212) where Kant tells us that the category "contains the unity of this schema" and that it is substituted for the category when applying the latter to appearances. The schema is the key to the category's employment, "or rather set it alongside the category, as its restricting condition . . . ."
in these schemata we shall entitle the **schematism** of pure understanding."\(^{48}\)

Therefore to summarize Kant's thought here, schematism is the procedure of the understanding whereby the categories are sensibly conditioned (through the formal sensible conditions they contain) so as to limit them to sense experience. What precisely is this formal condition of sensibility which Kant equates to the transcendental schema, and more immediate to the problem of this chapter, what is the "procedure of the understanding" which effects it? Kant himself tells us that it is based on the transcendental deduction. And he has also just told us that the schema of the category is a transcendental determination of time. Indeed there is nothing strange in equating "formal conditions of sensibility" to the "transcendental determination of time." For in the "Aesthetic" Kant does almost this very thing.\(^{49}\) Time is the form of inner sense. But inner sense (time) includes the determinations of outer sense (space) and so is the a *priori* condition of all appearances,—which is another way of saying "the formal conditions of sensibility."

The transcendental schema then is a transcendental determination of time which as the formal condition of sensibility limits the categories to sense experience. All of this is effected by

\(^{48}\) A 139-140--B 178-179 (181-182). The limitation aspect of this paragraph has its proper treatment in ch. III. Here we are only concerned with the "formal condition of sensibility."

\(^{49}\) A 34--B 50-51 (77).
the activities outlined in the transcendental deductions. For Kant implies throughout the fifth paragraph that all he is telling us about the "formal conditions of sensibility" is a repetition or extension of the transcendental deduction. What we saw earlier of this deduction confirms this. That deduction can be summarized essentially as a synthesis of the manifold according to the rules of the categories in apperception. In many places throughout both first and second editions we perceived how the manifold is determined and synthesized through the categories in the unity of apperception, and how as a result the categories receive validity only in the realm of sense intuition, i.e. are thereby limited to this area of experience.50

Maréchal's view of schematism in general falls in completely with this interpretation. We saw already how he bases schematism upon the synthesis of apprehension of the first edition of the transcendental deduction. He tells us the given of external sense is unified by the internal sense of time. Unity in the multiple

50 Typical instances in the transcendental deduction which correspond with the sensible conditioning of the categories and determinations of time as aspects of schematism are the following: A 105 (135), the unity of rule determines the manifold; A 116-118 (141-142), apperception functions through a synthesis of all the manifold; B 143 (160), the manifold is determined by the categories; B 150-151 (164-165), figurative synthesis of the sense manifold conditions a priori knowledge. The following two references are of primary significance: B 160-161 (170-171), categories prescribe laws whereby there is a determined unity of the manifold in accordance with the categories; and B 148-149 (163), without sensible intuition or determination in time knowledge is not valid.
elements of representation is possible through a principle of antecedent unification. Critical reasoning confirms, Maréchal says, his psychological analysis in pointing out the fact that the original synthesis is by no means simple, but supposes a union of complicated associative processes which is constructive imagination.

The unity of consciousness imposes certain conditions upon the objective synthesis just mentioned. From the point of view of the understanding these conditions are the categories, the "antecedent unification" mentioned above. From the point of view of imagination these are the pure transcendental schemata, which as we saw in Chapter I, along with the empirical schemata, mediate between consciousness and the synthesis of imagination. Of all the conditions for objective knowledge, the schema is the soldering point. 51

The content of Maréchal's psychological analysis of schematism appears identical with the transcendental activities outlined in the "deductions." We cannot agree with the whole of Maréchal's interpretation of schematism, 52 but his psychological analysis confirms one very important conclusion which should have been obvious in the correlation pointed out above between schematism

51 Maréchal, III.

52 Especially is there difficulty with his primarily subjective view of the schema, at least as it is described in general. Cf. pp. 12-14 of this paper, and Ch. III.
and the transcendental deduction. It is simply: transcendental schematism, or the procedure of our transcendental activities in limiting the categories through the sensible conditions of time- determinations, is nothing more than the subjective constitution of the object as seen in the transcendental deduction. The implications of what Kant tells us about the transcendental schema demand this. Marsechal's interpretation confirms it. It is utterly consistent with what we saw in the dual aspect and tendency of Kant's system. And it will be confirmed by the rest of the text on schematism.

The meaning of time-determination is a little clearer now. Paton is correct in remarking that it is not a characteristic of time. It is rather the determination of something in time. That something is the object known. The nature of the transcendental schema or time determination taken objectively, from the side of consciousness, will be elaborated upon in the following chapter. Our picture of schematism is necessarily here, but half complete. The important thing is that we perceive in the chapter on schematism the confusing duality so characteristic of Kant: he tells us more about the preconscious constitution of the object when he explicitly treats of its correlative opposite, the conscious object.

In the next section, in the sixth and the first half of the seventh paragraph, Kant is most successful in hiding his meaning.

53See above p. 44.
from his reader and precipitating an endless chaos in interpreting schematism. In the second paragraph which discusses the problem of heterogeneity Kant was quite emphatic in pointing out that there was a need of discussing such a problem only in the instance of the categories. "In none of the other sciences is this necessary."54 How is it then that in this section under consideration Kant gives us an explanation of schematism of empirical and mathematical concepts?

The opening statements of the sixth paragraph are simple enough and presumably concern the transcendental schema. It is a product of the imagination55 and is always distinguished from the image. The reason for the latter is that the synthesis of the imagination in producing the schema aims at no special intuition—the implication is that such would be an image—but merely at unity in the determination of sensibility. There is nothing new here except for the function of imagination in producing the schema (which was implied in what has already been seen concerning the transcendental schema). But in the next sentence Kant goes on to describe the schematism of a mathematical concept, the thinking of the number five or a hundred or larger numbers. Again, in the first half of the seventh paragraph Kant describes the schematism of the geometrical concept of a triangle and its relation to an

54A 138--B 177 (180).

55For the function of imagination in schematism see below pp. 55 to 57.
image of a triangle, and the schematism of the sensible concept of a dog. 56

Now schematism of empirical concepts 57 seems to be outside the limits of this thesis which is concerned only with the schematism of the categories. Moreover, even if this matter falls in the realm of this thesis it would seem better to treat it in the next chapter where we are concerned with the objective schemata of consciousness. It would seem that schematism of empirical concepts would be a conscious process or at least evident upon reflection. Nevertheless, Kant's insertion of this treatment here might involve some significant implications for transcendental schematism. Consequently we must at least determine the purpose of the treatment of the empirical concept. The fact that Kant denied earlier there was any problem in the applicability of empirical concepts to their objects does not necessarily preclude a treatment of schematism of such concepts. It is utterly unlikely that Kant would flatly contradict himself so explicitly within three paragraphs.

But here it is precisely that a great problem arises. Kant does seem apparently to contradict himself. He did say that there

56 A 140-141--B 179-180 (182-183).

57 By empirical concepts without further specifications is meant all mathematical and what Kant calls "sensible concepts." In Scholastic terminology they would roughly correspond with universal ideas, while the categories would correspond, again roughly, with the analogous concepts of metaphysics.
was no problem of heterogeneity for sciences other than transcendental. Schematism was postulated to answer this problem. Why then treat schematism of empirical concepts? Furthermore, the definitions of schemata Kant gives in this passage involving empirical schematism are vague and extremely difficult to analyze. It is here more than elsewhere that the commentators run riot in contradictory exegesis.\textsuperscript{58}

It is evident that no complete or valid explanation of transcendental schematism can be had until these questions are answered. The fact that Kant included a treatment of schematism of empirical concepts must have one of two possible significances. Either the consideration of empirical schematism throws light on schematism in its general aspects and consequently on transcendental schematism as well, or empirical schematism was inserted here as a point of contrast with transcendental schematism, showing negatively what the schematism of the categories involves.

Now since Prichard found very notable contradictions between what he thought to be Kant's treatment of schematism in general and the transcendental schema,\textsuperscript{59} since we saw similar inconsistencies in Maréchal's treatment of the same two subjects,\textsuperscript{60} and

\textsuperscript{58} The diverse opinions outlined in Ch. I are more often than not concerned with the definitions of schematism that Kant gives when describing empirical schematism.

\textsuperscript{59} Prichard, pp. 252-254 and this thesis, pp. 11-12.

\textsuperscript{60} See this paper, pp. 13-14.
since Paton finds that supposed considerations of schematism in general "throw ... little light on the nature of the transcendental schemata," it would seem that Kant's consideration of the schematism of empirical concepts is not directed toward amplifying our knowledge of schematism in general, but rather it is a consideration of what transcendental schematism is not. Such an interpretation would have the advantage of skirting the difficulties outlined above. And since schematism of empirical concepts and all that is involved in its consideration would be negative in its relation to transcendental schematism, no detailed analysis or justification of Kant's treatment would be demanded. But such an interpretation would leave contradictory the texts involved or at least would make quite a dull thinker and poor philosopher out of Kant himself. For explicit considerations of empirical schematism are so interwoven with statements that must regard transcendental schematism, that a negative interpretation of empirical schematism does a complete injustice to the consistency which Kant displays elsewhere. The negative interpretation of empirical schematism cannot, therefore, safely stand. What then of the manifold difficulties outlined above when the statements concerning empirical schematism are regarded as valid for schematism of the categories?

61 Paton, II, 36.

62 For example, the sentence stating that schematism is a "concealed art," A141--B 180-181 (183). It will be discussed below.
A way out of the morass seems to be the following. We will find that Kant's treatment of empirical schematism is indeed intended as a consideration of the general aspects of schematism. It is so in a different context and from a different point of view than it has been usually interpreted. But it is also intended to show that there are some differences between the two schemata. Empirical knowledge in general and empirical schematism in particular as seen in this interpretation will circumvent the difficulties of the commentators mentioned above and leave Kant basically consistent. The carelessness of Kant's expression and not confusion in his thought will be found to be the source of the difficulties in the interpretation of this passage.

Now, it will be seen that empirical schematism falls definitely on the objective and cognitional side of the essential duality of this thesis. Therefore a detailed analysis of Kant's definitions of empirical schematism and the objections to them will be rightly considered in Chapter III. Nevertheless, as was seen above, the general significance of empirical schematism must be here clarified if transcendental schematism from its constitutive side is to be seen in its right perspective. This general consideration will involve two interdependent points: a brief analysis of the function of imagination in schematism in general and the precise place of empirical knowledge (and empirical schematism) in the Kantian system and in the fundamental duality outlined in this paper.
We saw already that the schema was a product of the imagination. Even if Kant did not tell us that throughout the schematization chapter, we would believe that such would be the case after following the arguments of the deductions, especially those of the first edition. There is perhaps nothing in Kant's expositions of the first Critique that is so commonplace and yet so vague as the function of transcendental imagination in producing the Kantian object of knowledge and the schemata as well. Paton tells us that Kant gives us no clear answer to this problem of imagination. Whether transcendental imagination exerts some influence upon the forms of thought as some of Kant's later writings seem to imply, or whether every synthesis of imagination follows a demand of thought, as Kant's words in the Critique repeatedly assert, is a question which it is impossible to settle here. Only this is certain: transcendental imagination concerns synthesis in time and is an aspect of synthesis in judgment.

This much is certainly true also—an impression constantly left by analyses of the transcendental deduction such as was outlined earlier in this chapter—that transcendental imagination (and consequently empirical or reproductive imagination) is inter-

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63 Beginning of sixth paragraph of text. See p. 50 above.
64 For example, A 115-121 (141-144) but also B 151-152 (165).
65 Paton, II, 71-72.
mediary between the categories of understanding and the sense manifold. Among other things this was certainly the burden of synthesis of apprehension and the whole tri-fold synthesis in the first edition deduction. Kant expressed this much more succintly and clearly than he ever did in the Critique in a letter to Beck a few years after the publication of the Critique’s second edition. If intuition provides a manifold for knowledge and if understanding binds and determines knowledge, then it is the function of imagination to structuralize or compose the former according to the determinations of the latter. “For knowledge two sorts of representations are demanded: (1) intuition by which an object is given and (2) the concept by which it is thought. To make these two elements of knowledge one knowledge, an act is still required: to organize the manifold given in intuition, conformed to the synthetic unity of consciousness which the concept expresses.”67 If imagination is intermediary, it is not difficult to see why its product, the schema, is also intermediary. Imagination (specifically transcendental or pure imagination) as well as its produced schema will be seen more and more as this paper progresses to be the central hinge joining the two heterogeneous poles which involve the initial problem of

66A 98-102 (131-133).

67Letter to Beck of January 20, 1892, Kant’s Schriften, Prussian Academy of Science, (Berlin, 1902-1908), XI, 300-302, quoted and commented upon in Daval, p. 90.
schematism. It is also the hinge where meet the two sides of the duality which solves schematism's difficulties.

Returning now to that duality, where does empirical knowledge as distinguished from transcendental knowledge fit into its structure? Empirical knowledge involves the consciously abstracted general concepts of common sense intellectual knowledge. The object of this knowledge is some determinate aspect of the previously conditioned and constituted phenomenon which is the product of all the transcendental activities molding the materials of sensibility. Empirical knowledge is not like transcendental knowledge which is philosophical and does not so much involve abstraction from the known object as reflective insight into it. Transcendental knowledge is of a higher level and more universal, penetrating into the object known; it does not advert to the empirical content of knowledge on the direct empirical level. Thus empirical knowledge (whether it be of "sensible" or mathematical concepts) and the empirical schematism it involves are dependent upon and subordinate to not only the preconscious and transcendental constitution of the known universal object, but also to the conscious philosophical or transcendental knowledge had when applying the categories in conscious judgments. 68

68 The dependence of the empirical part of knowledge upon the a priori is certainly a common aspect of Kant's doctrine. Probably its most trenchant explanation is in the subjective deduction of the first edition transcendental deduction, A 115-119 (141-143). The three elements of knowledge, sense, imagination and intellect, are seen to have parallel functions on both the empirical an
All this is a brief summary of the conclusions of Chapter III the objective side of the Kantian duality. Yet its consideration is demanded to perceive the significance of Kant's insertion of empirical schematism where it is found. Kant can suddenly descend to examples of empirical schemata even when discussing transcendental schematism simply because the act which constitutes and molds the known object, is the same act which enables him to know the categories involved and schematized in this object, and is the same act by which he can abstract a certain part of that object empirically. This latter necessitates an intermediary empirical schema. The difficulties of interpretation arise precisely, we shall see, because the one transcendent act, with its dual aspects of forming the known and knowing it both transcendentally and empirically, could not be clearly perceived in the misleading expression of the schematism chapter and of the definitions and examples of empirical schemata in particular.

A priori sides. In each case the empirical function depends upon the corresponding transcendental one. It should be noted that in the reasonings of the transcendental deductions Kant begins with empirical knowledge, prescinds from its material content to discover the necessary and universal in empirical consciousness, and proceeds to the transcendental activities and the categories as the only legitimate explanation of our intellectual knowledge. But the procedure in constructing the object must be just the opposite (in order of causal function, not of temporal succession): the categories must through imagination synthesize raw experience into the transcendental object (in which the categories, now schematized, lie) and from this object at length the mind can abstract and formulate the concepts of empirical knowledge. Further considerations in this vein are one of the main objects of Ch. III.
Kant must have had this transcendent unity of knowledge in mind when he treated alternately definitions which evidently have only to do with empirical concepts (for example the frequent discussion of the image which empirical schemata make possible) and considerations of transcendental schematism. An instance of the latter is the well known statement of Kant that schematism of the understanding is a hidden art.

Kant never used the term "schematism of the understanding" unless he meant schematism of the pure understanding, i.e. transcendental schematism. The least that can be said is that in its context it must refer to schematism in general, both transcendental and empirical. The sentence is one of Kant's most quoted. "This schematism of our understanding in its application to appearances and their mere form, is an art concealed in the depths of the human soul, whose real modes of activity nature is hardly likely ever to allow us to discover, and to have open to our gaze." 69

This sentence seems to prove what was stated above about the

69A 141--B 180-181 (183). Note that the sentence following brings back the discussion of empirical concepts. If the concealed art sentence is to be interpreted as referring to transcendental schematism primarily, as it seems necessary to do, we can easily perceive the difficulties this paragraph has brought to the interpretation of schematism. This very enigma of Kant's text serves to emphasize the interpretation that the duality of transcendental conditioning and empirical knowing was ever before Kant's mind.
schematism process being preconscious. Now schematism is seen to be preconscious not only because it is equivalent to the transcendental determination of the object as seen in the transcendental deduction, but also because Kant explicitly describes schematism as "concealed in the depths of the soul" etc. This is further confirmed by something Kant said about the synthesis involved in knowledge in the section on metaphysical deduction, words so similar to the present ones as to make one believe that Kant had them explicitly in mind when he wrote the chapter on schematism. "Synthesis in general, as we shall hereafter see, is the mere result of the power of imagination, a blind but indispensable function of the soul, without which we should have no knowledge whatsoever, but of which we are scarcely ever conscious."71

This quotation, found as it is in the midst of the metaphysical deduction, confirms that such synthesis is preconscious. It also strengthens the contention of this thesis that the synthetic activities spoken of in transcendental schematism are the same as those detailed in the transcendental deduction. But it especially shows that these activities are the same as must be implied in the metaphysical deduction where unity is discovered between our modes

70 Cf. Paton, II, 73 and later in the present chapter.
71 A78--B 103 (112).
of judgment and the a priori principles which effect them. 72

In the last section of the lengthy seventh paragraph Kant "slips formally again into a discussion of transcendental schematism. 73 Here we are given a closely packed sentence which, as Paton remarks, Kant is apt to present at a crucial point in an argument. 74 This sentence explicitly gives the characteristics of the transcendental schema as distinguished from other types of schemata. Smith breaks it down well in his translation into several sentences. Because it is so involved, it will be quoted here divided and subordinated according to the sense.

On the other hand, the schema of a pure concept of understanding can never be brought into any image whatever. It is simply the pure synthesis, determined by a rule of that unity, in accordance with concepts, to which the category gives expression. It is a transcendental product of imagination, a product which concerns the determination of inner sense in general according to conditions of its form (time), in respect of all representations, so far as these representations are to be connected a priori in one concept in conformity with the unity of apperception. 75

72 Cf. Paton, I, 263 where he tells us that this passage "is a summary statement of doctrines which will be elaborated in the Transcendental Deduction." Paton bases this statement upon, among other things, Kant's statement in the passage quoted, "as we shall hereafter see." Could not these words of Kant just as well refer to the chapter on schematism, especially since we have noted the similarity between the two statements?

73 A final discussion of empirical schematism follows the concealed art sentence. Cf. n. 69. The fact that the subsequent passage is introduced by "On the other hand" further justifies the distinction between empirical and transcendental schematism. Cf. Ch. III.

74 Paton, II, 37.

75 A 142--B 131 (183).
In interpreting this very difficult passage it is necessary for the most part to follow Paton, who stands alone in attempting to analyze this sentence or even discuss it. According to Paton Kant makes three points, the third of which is subdivided into another three. First the transcendental schema has no corresponding image. This is a fact Kant discusses throughout the whole section on empirical schematism. Only empirical concepts can have images corresponding to them or to their schemata.  

The second point causes more difficulty. Kant seems to be equating the transcendental schema to a synthesis. Paton admits that perhaps the best interpretation of Kant's meaning in the words as given would be that the schema is a rule of imagination as is the empirical schema. He prefers to think that it is a specific kind of a priori combination produced by pure synthesis of imagination and is in conformity with the rule conceived in the category. That fits well with Paton's interpretation of the transcendental schema thus far, but it does not explain Kant's words. If the transcendental schema is a synthesis in an active or operative sense, then we easily perceive the difficulty Paton seems to be trying to explain away: how can the schema be both an activity and its product? But synthesis is an ambiguous word. It can be also taken in a passive sense, namely that which has been synthesized. Such an interpretation avoids the difficulty

76 Paton, II, 37.
77 Ibid., 37-38. Kant says boldly it is a synthesis.
Paton foreshaw as well as renders the Kantian text more consistent and intelligible. The rest of the sentence bears out this interpretation. For it is a synthesis "Determined by a rule of that unity, in accordance with concepts." Moreover, the very ambiguity of the word synthesis in this sentence points out once again that Kant was constantly keeping in mind both sides of the cognitional duality. He talks about the product, the schema, but as something that has been synthesized, has been determined and conditioned by the rule of the category.

This ambiguity seems to be borne out in the third point where after telling us again that the transcendental schema is a product of the imagination he describes what seems to be more the characteristics of the conditioning process of schematism than its product. He speaks of the schema as concerning the determination of time with respect to all representations. This seems to be only a rehashing of the synthesis of the manifold in time so as to constitute experience ("in respect to all representations"). Further he says that these representations are connected a priori in one concept in conformity with the unity of apperception. Does this not seem to be the schematism process as unifying experience in accordance with the laws of apperception (the categories), each

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78 A 142--B 161 (183). Italics not in original.

79 Or, in the hypothesis of this thesis, the transcendental activities of the deductions.
produced schema\(^{80}\) corresponding to one or other of the categories? This is certainly a possible interpretation and it fits in not only with what we have seen of the pure schematism process thus far but also gives us once again evidence of the confusing ambiguity which characterizes Kant's treatment.

In the eighth paragraph Kant makes a transition to a consideration of the transcendental schemata in particular. In the brief paragraphs nine to sixteen inclusive Kant describes each of the transcendental schemata. In the seventeenth paragraph Kant summarizes the transcendental schemata, as we saw, as "transcendental determinations of time in accordance with rules." All of this treats the objective side of the schematism duality exclusively and will therefore be discussed in the next chapter.\(^{81}\)

Then in the beginning of the eighteenth paragraph, Kant gives us a definition of schematism of the understanding based on what he has said about the transcendental schemata as various time-determinations. "It is evident, therefore, that what the schematism of understanding effects by means of transcendental synthesis of imagination is simply the unity of all the manifold of intuition in inner sense, and so indirectly the unity of apperception which

\(80^{\text{With Paton, these are the universal characteristics of experience, as we shall see in the next chapter.}}\)

\(81^{\text{A 142-145 -- B 161-164 (183-185).}}\)
as a function corresponds to the receptivity of inner sense."$^{82}$

This again is telling proof that the function of the schematism process is the same as the constitution of the phenomenal object, or "the unity of all the manifold of intuition." Kant tells us that this is done in inner sense of course, and says that indirectly this effects the unity of apperception. This again is not only consonant with the transcendental deduction but an echo of it. We recall that especially in the second edition deduction Kant pointed out that my having an object of knowledge demands apperception and that in turn I could not have this unity of consciousness unless there was an object conformed to it. $^{83}$ Further, the empirical side of apperceptive consciousness was the receptivity of inner sense.$^{84}$

Immediately after this sentence Kant speaks again about the limitation of the categories which results from transcendental

$^{82}$A 145--B 185 (185-186). Again Paton interprets this with reference to its ultimate result and not what it is in itself or from the point of view of the process which produces it (II, 73-75). He admits the passage is obscure but thinks that Kant means different kinds of unity or combination of the temporal manifold corresponding to the categories. He claims that schematism involves an obscure judgment, 'This product of transcendental synthesis is an instance to which the pure category applies.' It is not explicit in ordinary experience. He denies, as we shall see again, that it is preconscious: "... still less a description of the successive stages which precede experience."

$^{83}$B 131-135 (152-155).

$^{84}$B 152-159 (165-169).
These last sentences of this paragraph and the significance of the limitation aspect of schematism as a whole have their proper treatment on the objective side of schematism in the following chapter. The final paragraph of the chapter, the twentieth, also treats explicitly the transcendental schemata, the objective side of our duality, and will be analyzed later. There is remaining only the one-sentence nineteenth paragraph to discuss, which "serves as an apt summary of the point of this chapter.

"All our knowledge falls within the bounds of possible experience, and just in this universal relation to possible experience consists that transcendental truth which precedes all empirical truth and makes it possible." 87

In the midst of his treatment of the transcendental schemata Kant tells us that transcendental truth precedes and makes possible our knowledge which falls only within the bounds of possible experience. 88 In the metaphysical and transcendental deductions

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85 A 146--B 185 (186).
86 A 146-147--B 185-187 (186-187).
87 A 146--B 185 (186). Italicics not in original.
88 Note the similarity of this paragraph to a statement made by Kant in his treatment of schematism in the Prolegomena to Any Future Metaphysics, trans. Peter G. Lucas (Manchester, 1953), p. 77: "The object conforming to the schema is encountered only in experience (this being the product of the understanding out of the materials of sensibility). Italics not in original. The parenthesis is ambiguous, but context seems more in favor of joining als with the erfahrung making experience the product, not schema."
Kant had told us that there are certain a priori principles and synthetic activities which make possible and constitute the phenomenal object of our knowledge and which account for the unity and necessity of that knowledge. This source of our knowledge which in the radical Kantian sense of the word is transcendental truth is preconscious in its conditioning activity. Kant is telling us the same thing we saw in the deductions in the chapter on schematism, where, we shall see, he is describing for us the universal characteristics of experience which justify the conscious application of the categories to that experience. The schematism process which provides and produces these characteristics is nothing more than the transcendental synthesis of the manifold in general with the unifying and legislating principles involved in apperception. Consequently, this is a preconscious activity. The point of the schematism chapter is that the categories do provide the transcendental schemata in their activities.

The fact that the schematism process is subconscious or preconscious has been repeatedly emphasized throughout this treatment. It may be objected that Kant never explicitly mentions this fact in either the deductions or the chapter on schematism. Paton similarly objects to the interpretation that the concealed art aspect of schematism proves that schematism is unconscious or even

Possibly als refers back even to object,—but this would not essentially change the meaning.
noumenal. Yet from what we saw of this passage above, and from merely the meaning of the word *transcendental*, this writer cannot conceive how such activities could possibly be conscious, at least explicitly so. The final determination of the meaning of the word *preconscious* must be the following. It is that which effects or has some influence on conscious knowledge, but of which I am not explicitly aware. At best, it is implicit in consciousness of an object in such a way that I come to have knowledge of it only after long analyses and reflection concerning that consciousness. That seems to be what Kant was doing in all the transcendental activities outlined in the deductions and implied in the schematism chapter. Consequently, it is certainly not involved in the explicit and direct content of ordinary knowledge.

If the schematizing activities are the same as those outlined in the deductions, then is the chapter on schematism superfluous? That is a question which can only be answered after considering the transcendental schema in the concrete.

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89 Paton, II, 73-75. Cf. p. 64, n. 82. It should be noted that Paton makes much in this section of the point that schematism is not unconscious. Yet he makes no attempt to prove this. The final issue of the position of Paton's general interpretation of schematism will be considered later.

90 Kant implies that we do sometimes have awareness of such activities when he says that we rarely if ever are aware of the schematizing activity. A 141-3 160-61 (183).
CHAPTER III

THE SOLUTION, PART II: THE OBJECTIVE
SHEMATA OF CONSCIOUSNESS

"Phenomena are nothing more than the pure concepts schematized . . . and the world of science is a world of schemata . . ." 1

The task of this chapter is to demonstrate the objective side of the duality which is the essence of this thesis. Our consideration must now turn to the products of the transcendental schematizing process. These are the characteristics of our conscious experience which enable us to apply the categories to appearances. The accomplishment of this task will be considerably less laborious than in the preceding chapter, because the investigation must concern itself more with Kant's explicit and prima facie statements concerning schemata, and it is not so necessary to delve extensively into the transcendental implications of some of his obscure definitions.

In the first half of the solution of the problem of schematism Kant's statements were considered principally in the order in which he presented them to us. This was, in a sense, necessary

lest by juxtaposition of certain unrelated texts a misinterpreta-
tion of the continuity of his argument might result. But now
since the general lines of his argument have been outlined, the
goal of this chapter will be much more clearly accomplished by
dividing the arguments and Kant's texts under five important head-
ings. All of Kant's essential statements concerning the schemata
will be treated somewhere in those five sections. Those headings
are: (1) the transcendental schema in general as the solution to
the problem of heterogeneity, (2) the transcendental schemata in
particular, (3) the schemata as limitations of the categories,
(4) the function of empirical schemata, and (5) the significance
of the transcendental schemata in the Kantian system.

First, to the transcendental schema as Kant's solution to the
problem of heterogeneity. Pure category and sense appearances are
too completely diverse in their respective natures to allow an un-
mediated application of the former to the latter. Therefore Kant
calls upon a transcendental time-determination as a mediating fac-
tor, because time is both a priori and thus homogeneous with the
pure category, and the form of sense manifold and thus homogene-
cous with appearances. ²

In concrete conscious judgments what does this mean? Kant
has proven in the Metaphysical and Transcendental Deductions that
the categories as listed in the former are the only things which

²A 137-139--B 176-178 (180-181) and above, pp. 22-25 and 40-
44.
make experience possible and bring unity, necessity, and universality to our knowledge. How then, can I say empirically, "Fire causes smoke."? How can Newton’s laws, so important for Kant, necessary and universal as they are, be applied to the purely sensible characteristics of experience? Or, philosophically, how can I say that causality or substance or unity are verifiable in the objects I know?

All the above are examples of "the subsumption of intuitions under pure concepts, the application of a category to appearances." Kant answers in the schematism chapter that we can apply the categories to sense experience in such judgments because the transcendental time-determinations, as mediating factors, are universal characteristics of the known object which enable our mind consciously to apply the categories to these objects so characterized.

Now to the proof of this statement. We saw in the preceding chapter that the transcendental time-determination which mediates the subsumption of appearances under the category was first, "determined by a rule of that unity ... to which the category gives expression." We saw that the transcendental schema was a "transcendental product of the imagination, a product which concerns the determination of inner sense in general ... in respect of all representations ... in conformity with the unity of appercep-

3A 158--B 177 (180).
4A 169--B 178 (181).
tion." Secondly, we saw that "what the schematism of understanding effects by means of the transcendental synthesis of imagination is simply the unity of all the manifold of intuition in inner sense . . . ." 6

We saw both these texts previously from the aspect of the a priori, constitutive construction of the object of knowledge. Now we can see in the same texts an objective product which the category as a rule expresses, a determination of time which concerns all representations. With Paton 7 these two texts must be interpreted as pointing out that the transcendental schemata are objective characteristics of objects, which, since produced by the imagination according to the categories as rules, allow these same categories to be applied to such objects. 8 For the expression which the category effects is not merely a subjective product in the imagination, but rather the imagination produces this schema in the synthesis of the objective manifold.

Further, the categories, Kant tells us in the context of the schemata, "serve only to subordinate appearances to universal rules of synthesis, and thus to fit them for thoroughgoing connection

5A 142--B 181 (183) and cf. this paper pp. 60-63.

6A 145--B 185 (185-186) and cf. this paper pp. 63-64.

7Paton, II, 37-39 and 74-75.

8Cf. also as we saw previously (in Ch. I) Daval's double aspect of the schema as a concept determining, and the determined, projected schema, pp. 95-96.
in one experience." ⁹ And since Kant has repeatedly told us throughout the transcendental deductions that one of the main functions of the categories is to objectify the manifold of sense, this subordination of appearances Kant speaks of must certainly be an objective one.

There is one more text within the schematism chapter which especially demonstrates that Kant meant by the transcendental schema an objective aspect of the known, even the universal characteristics of experience. "But it is also evident that although the schemata of sensibility first realize the categories, they at the same time restrict them, that is, limit them to conditions which lie outside the understanding, and are due to sensibility. The schema is, properly, only the phenomenon or sensible concept of an object in agreement with the category." ¹⁰

The limitation aspect of this quotation will, of course, be considered in the third part of this chapter's considerations. What attracts our interest here are Kant's words: "the schemata of sensibility first realize the categories" and "The schema is, properly, only the phenomenon or sensible concept of an object in agreement with the category." ¹¹ First, the fact that the schema is called an aspect of sensibility objectifies it, for even though

⁹A 146--B 185 (186).
¹⁰A 146--B 186 (186).
¹¹Ibid. Italics not in original.
the forms of appearances, space, and time, are a priori, sensibility is nonetheless objective in so far as it is the only passive element in Kant's knowledge. Secondly, the fact that sensibility first realizes or manifests the category seems to objectify the schema. Thirdly, the fact that the schema is called a phenomenon in agreement with the category points out this objective characteristic likewise. Admittedly, there is difficulty in calling the transcendental schema a concept. But Paton well points out that the schema like any other sensible characteristic is capable of being conceived. Further, as we adverted to earlier and as will be especially seen again below with respect to empirical schemata, Kant often, indeed, is almost necessitated to give a representational nomenclature to his object. But shortly the schema as a representation as well as a characteristic of the object will prove to be not quite so enigmatic. The point here is that Kant has equivalated the transcendental schema to the phenomenon, which, Kant elsewhere tells us, is the appearance so far as it is thought under the unity of the categories. This is as objective as one can be in Kant's system. Clearly then, at this

12 Or, more properly perhaps, the schematized category. See the discussion of this term below.

13 Paton, II, p. 69, n. 4. Paton also confirms the objective interpretation of this text. Cf. also Ibid., p. 62.

14 See above, p. 24, n. 10.

15 "Appearances, so far as they are thought as objects according to the unity of the categories, are called phenomena." A 249 (265). Cf. the distinction between appearance (Erscheinung) and phenomenon which Smith has brought to light in his
point in our argument, the transcendental schemata are at least one aspect of the object, known intellectually through the categories.\(^{16}\)

Before passing formally to the commentators who subscribe to the above interpretation, one last and perhaps most important text may be considered. Before the schematism chapter itself, in the introduction to the "Analytic of Principles," Kant is discussing the difference again between general and transcendental logic. General logic, since it considers only the forms of thought without content, can supply no rules for subsumption in judgment.\(^{17}\) But transcendental logic can give not only the rules of judgment, but "it can also specify a priori the instance to which the rule is to be applied." Further, he says that the transcendental science "must formulate by means of universal but sufficient marks

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English translation and in his Commentary, p. 83. Meiklejohn and Muller had mistranslated Erscheinung in their translations as "phenomenon."

\(^{16}\)Cf. Weldon, p. 94, who maintains that one of the reasons for the confusion in the interpretation of the chapter on schematism is that Kant did not make clear what is a real intention in his system, namely, the notion of phenomenon as the objective order of things. He is also author of the opinion quoted at the head of this chapter and here quoted in full—an apt summary of the point being made in the present argument: "Phenomena are nothing more than the pure concepts schematized by the transcendental faculty of imagination, and the world of science is a world of schemata, generated in a sense by our own activity but none the less objective in contrast to the 'subjective play of representations' which makes up our unreflective consciousness." \textit{Ibid.}, p.95.

\(^{17}\)Cf. Paton on general and transcendental logic, II, p. 21.
the condition under which objects can be given in harmony with these concepts [the categories]."18 It would seem that the aspect of transcendental schemata as universal characteristics has its most explicit textual verification outside the formal treatment of schematism. This fact should not be strange to a reader familiar with Kant. In this instance he is talking about the "Analytic of Principles" as a whole, and we shall see there is an intimate connection between the schemata and the "Principles," or doctrine of judgment in particular.

A number of reputable commentators have pointed out this objective and universal characteristics aspect of the transcendental schema. Foremost among them is, of course, Paton, and this is the most significant aspect of his interpretation of schematism. He sees this interpretation as the only clear solution throughout the twisting definitions Kant gives in the schematism chapter. He drives his point home throughout all three chapters in which he treats explicitly of schematism. For instance, as a summary of his position: "Thus for Kant the transcendental schemata are universal characteristics which, he hopes to show later [in the "Principles"], must belong to all objects as objects in time. These universal characteristics belong to objects, not as given to sensation, but as combined by the transcendental synthesis of imagination in one time. What we have to do at present is to learn

what these transcendental schemata are, and to see, if we can, whether each transcendental schema falls under its corresponding category."19

There is one other instance in Paton's treatment which we must consider if we are to do justice to his interpretation and it will add light to the arguments of this thesis. Speaking of the schematism process, and referring to the use of this term in other of Kant's writings, Paton calls transcendental schematism a kind of exhibition of the object to which the category applies.20 It seems to this writer that this is a very apt summary of the relation of schematism to the transcendental schemata. The a priori construction of the object in conformity with the category results in the exhibition of that category in the envelopment of sense data, a universal characteristic of that object, the transcendental schema.21

In this first and most important argument of this chapter,

19Paton, II, 19-20. Italics in original. See also pp.21-24, 37, 39-41, and 73.

20Ibid., 73.

21Besides Paton, Daval, Maréchal, and Weldon hold positions which are similar to an "universal characteristics" interpretation in considering the transcendental schema an objective reality. For Daval productive imagination joins the forms of understanding to that of intuition, incarnating the former in the latter. The result is the schema. (pp. 92-93). The schema is the concept returned and transmuted in experience and is synonymous with the phenomenon. (pp. 100 and 101). For Maréchal the transcendental schema reveals the constant relation of the categories to experience in the recognizable general signs for this application. (III, p. 184). This is an insight very near to Paton's. Yet the conflict of such a statement with Maréchal's earlier interpreta-
there remains only to consider precisely what the consciousness of the transcendental schema involves. We are considering the objective and conscious side of the schematism duality and before looking at Kant's descriptions of the individual schemata, it will be well to perceive more clearly how the transcendental schemata enter into our judgments.

We saw above examples of philosophical judgments in which the transcendental schema would provide an intermediary representation as an answer to the problem of heterogeneity. Now we have seen that the schema is objective and that specifically it provides the universal characteristics which allow the application of the category. Let us look again at the three types of judgments used as examples earlier. First, two empirical judgments in which the categories are involved, the first explicitly, the second implicitly: "Fire causes smoke;" and "That tree changes colors." The category of causality is evident in the first judgment and that of substance is latent in the second. The empirical concepts involved -- tree, fire, smoke -- have their own respective empirical schemata but these will be considered below. Both these empirical judgments involve analysis and abstraction from previously constituted experience, perhaps over a long succession of temporal moments. I have learned from that experience that it possesses...
certain characteristics of necessary succession\(^\text{22}\) which enable me to apply the category of cause to this datum of experience. Thus I formulate the proposition that smoke is caused by, and follows in necessary succession from fire. Similarly, my analyzable experience has shown me that that which is the subject of change is subsistent, because I have recognized the general characteristic of permanence in the changing state of the tree. Thus I implicitly apply the category of substance to the datum I call "tree."

True, there are other, indeed all, categories implicit in these and other judgments. That is certainly Kant's mind.\(^\text{23}\) The point here is that the categories are involved even in empirical judgments, and they are applied because of the universal characteristics which Kant gives us in the list of the transcendental schemata.

This same point is true of what Kant would consider the synthetic a priori judgments of Newtonian physics. "In all . . . motion action and reaction must always be equal."\(^\text{24}\) Cause, substance, actuality, etc. are implicitly involved in such a law and are applied to experience because of the universal characteristics which are found imbedded in the object as known.

But this is above all evident in the philosophical or explicit transcendental judgments such as, "Everything which happens has its cause,"\(^\text{25}\) or "Substances and causality are elements found in

\(^{\text{22}}\) See the transcendental schema for causality below, p. 83.

\(^{\text{23}}\) See Paton, II, 43-44.

\(^{\text{24}}\) B 17 (54).

\(^{\text{25}}\) A 9--B 13 (50).
human experience." In these the categories are seen in the objects of experience because of the universal characteristics of such experience, and thus we are able to apply the categories to those objects explicitly and fully.

But here is the point which is of prime importance: the transcendental schema, as a phenomenon, is both the universal characteristic of the object known, empowering the knower to apply the category to that object, and is also the vehicle of that category as known, the phantasm in which the category is consciously expressed within the knower. The representational note found so frequently in Kant's object no longer puzzles us. It is an essential characteristic of Kant's critical system and the precise proof of the point being made here. Thus, we see why the transcendental schema is the hinge, the meeting place, and the soldering point,26 between the preconscious and synthetic constitution of the object on the one hand, and the analytic and conscious expression of that knowledge on the other.

In this identity between the characteristic of the object and the subjective carrier27 in which the category is first known ("the schemata ... first realize the categories"28) we see once

26Maréchal, III, 182.

27Cf. Prolegomena (Lucas, trans.), p. 77 where Kant talks about the "object conforming to the schema" encountered in experience, and the schema as being substituted for the category in its application, "or rather set it along side the category ..." in the "Principles" --A 181--B 224 (212).

28A 146--B 185-186 (136).
again the fence Kant is attempting to straddle between pure subjectivism and phenomenalism. We are never certain in Kant exactly where subjective knower ends and phenomenal object begins. The typically Kantian dual tendency to subjectivism and phenomenalism shows us here more than elsewhere the essential Kantian duality which this thesis proposes. It seems that the schema as known and as an objective characteristic is what Paton was getting at in the distinction he postulates between transcendental schema and schematized category. Kant never uses such a term. Paton maintains it is implicit in his doctrine and describes it as a concept of a synthesis of an object in time, where the category unschematized would be the pure synthesis without involving the time element. This writer does not see any necessity for such a new element and it is difficult to see exactly what Paton means by the term. The use of the terminology "schematized category" though, seems to be an excellent way of referring to the schema (and the category) as known, or to the category as limited in time. Paton seems to have been forced to postulate such a new element to avoid the subjectivism which is latent in Kant's system and thus put the critical thinker on a firm phenomenalist foundation.


30 See especially, Paton, II, 41-43.

31 With regard to the schematized category mention should be made of Paton's criticisms of what he thinks are Smith's identification of the schemata with the categories. In referring to this matter, Paton seems to include an at least seeming contradiction to his own criticism of Smith, in the interval between the first
The first and most important argument of this chapter has been demonstrated: it has been shown that, in general, the objective side of the schematism duality consists in the transcendental schema involving the universal characteristics of the known object enabling the mind consciously to apply the categories to these objects in conformity with them, and that the schema, as a phenomenon, is not only the exhibition of the category in the object, but the vehicle of its being known in the subject. The question immediately follows: what are these universal characteristics in conformity with the respective categories?

The various schemata Kant lists are logical imaginative constructions of the respective categories in the successive moments of time. The treatment this paper will give to them will hardly be more than an abbreviated paraphrase of Kant's list. The reason for this is sound. Kant's list of the individual schemata is admittedly artificial in the extreme, and its artificiality is that of the metaphysical deduction. Paton, Kant's most sympathetic commentator, implicitly admits this when he attempts to reconstruct Kant's doctrine of schematism. The various transcendental schemata (and the categories) are based upon the judgments of formal logic as well as upon the nature of time. The former seems to have fallen. What is important is that the categories effect

and second volume of his work. The whole issue is at best confusing and does not seem to be of moment for the purposes of this thesis. See Smith, pp. 339-340 and Paton, I, 298; II, 41, 53-54, 68-69.
certain kinds of characteristics of objects to conform with them. If the twelve categories and their particular schemata are a bit artificial, the general doctrine involving the unifying principles of understanding still remains. Therefore the analysis of the various schemata found here will be sufficient merely to show the general characteristics of objects synthesized in time, as confirmation of the general doctrine of the schema outlined above.

The transcendental schema for the three categories of quantity is number, the generation of successive unity in time. The schema of the three categories of quality is the successive filling up and emptying of sensation in an object in time. That of substance is the permanence of an object through successive changes in time, of causality it is the necessary succession according to rule, of community it is the coexistence according to a universal rule of the determination of different substances. The schema of possibility is the agreement of the synthesis of representation with the general conditions of time, of actuality it is existence in some determinate time, of necessity it is the existence of an object at all times.

Even so cursory a summary reveals the artificiality of the

32 Paton, II, 75-78.
33 Cf. Körner, p. 73 and Smith, p. 341.
individual schemata. Kant seems to be forcing the temporal aspect. That quality, for example, should be bound to successive moments of time for its objective verification is difficult to accept, even in Kant. Paton points out that quantity and quality as described seem to have more of synthesis about them than universal characteristics of an object. But he adds that Kant's summary at the close of the list of schemata appears to retain the view that such schemata are objective products. 35

In that summary of the list of the transcendental schemata Kant tells us that the schemata of quantity relate the order of time-series; of quality, time-content; of relation, time-order; and of modality, the scope of time in respect of all possible objects. 36 Smith points out that Kant gives only one schema for the three categories of quality and one for the three of quantity, while he gives a different schema for each of the three categories of relation and modality. He uses this as an example to show that Kant is silent when his architectonic has failed, although he is most vociferous when it corresponds. 37 Paton offers somewhat unconvincing arguments to justify this. 38 Granting the artificiality of the list, the dispute does not have much consequence. In


36 A 145--B 184 (185).

37 Smith, p. 341.

38 Paton, II, 63-65.
general, it would seem that the list of individual schemata is an anticipation of the "Principles" where Kant's purpose is to give the rules for the application of the categories in judgment and the *a priori* judgments themselves. The purpose of the schematism chapter is rather to show the **conditions** (the schemata in general) for such application and to demonstrate how these universal characteristics result from imagination in conformity with the categories.

The third main point of our consideration in this chapter is Kant's recurrent insistence that the transcendental schemata limit the categories to the manifold of sense experience. We saw in the preceding chapter how the categories are limited to sensibility because the former "contain *a priori* certain formal conditions of sensibility, namely, those of inner sense." Then follows a definition of the schemata as the conditions to which the category is restricted. Later Kant tells us that the transcendental schemata are the only conditions under which the categories obtain objective significance. Therefore their employment is limited to the empirical. His most trenchant proof of this aspect of the

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40 A 139-140--B 179 (182). "This formal and pure condition of sensibility to which the employment of the concept of understanding is restricted, we shall entitle the schema of the concept." (Ibid.) Cf. above, pp. 44-46 and Paton II, 31-32.

41 A 146--B 185 (186). "The schemata of the pure concepts of understanding are thus the true and sole conditions under which
schemata seems to be the passage quoted earlier where the schema is equivalent to the phenomenon: "But it is also evident that although the schemata of sensibility first realize the categories, they at the same time restrict them, that is, limit them to conditions which lie outside the understanding, and are due to sensibility. The schema is, properly, only the phenomenon, or sensible concept, of an object in agreement with the category." 42

The reasoning is not difficult to follow. Schematism effects the expression of the categories (phenomenon, realization of the category) in the sensible characteristics of the object. This sensible expression is the schema. But the schemata as the solution to the problem of heterogeneity are the conditions which alone make the application of the categories to sensible objects possible. Therefore the only legitimate object for such categories (or, Kant might say, the representation of such an object) are the sensible objects so conditioned.

From such limitation Kant draws some conclusions similar to the ones expressed in the chapter on the phenomena and noumena. Apart from the conditions of the transcendental schemata, the categories apply to things as they are, while the schemata "represent them only as they appear." 43 It would seem, therefore, that

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42 A 146--B 185-186 (186).
43 A 146-147--B 186 (186). Again we see the transcendental
the pure categories give a much wider knowledge. Such is not really the case. For the meaning of such categories is merely logical and thus has no objective content. "The categories, therefore, without schemata, are merely functions of the understanding for concepts; and represent no object. This objective meaning they acquire from sensibility, which realises the understanding in the very process of restricting it."\textsuperscript{44}

The fourth subject to be considered as pointing out the meaning of the objective schemata of consciousness is a final settlement of the problems of the empirical schemata. That Kant really intended such a distinction from the transcendental schemata is clear from the text and this will be pointed out during the analysis of the sixth and seventh paragraphs where Kant's doctrine on such schemata is contained. The real significance of such empirical schematism is by no means so clear, as we saw in the preceding chapter. The present treatment will be divided into two parts: what the empirical schema is in its own significance and the relation of the empirical schema to the transcendental one.

\textsuperscript{44}A 147--B 186-187 (186-187). Cf. Smith, p. 342. Cf. also the Prolegomena, p. 77: "The senses only provide the pure concepts of the understanding in concreto." This latter ambiguous phrase in context must mean the thing as thought, i.e. the unknowable ding an sich. John Watson has a very good explanation of how the schemata limit the categories, in Kant and His English Critics (Glasgow, 1881), p. 91.
First, it is clear that the empirical schema, along with the transcendental one, is a product of the imagination and is distinguished from the image. If I have five dots alongside of one another, I have an image of the number five. But on the other hand, if I think of the number five or any other number, say a hundred, I need something more than an individual image. Let us also take the example Kant used a little later, of the empirical concept of a dog. If I have only an image of an individual dog, it is clear that I cannot think the empirical concept of dog in general with the aid of such an image. In the case of both the number and the dog, there is no comparison between the individual dog or image of the number five and the universal concepts. Thus Kant gives us his definition of the empirical schema: it is "the representation of a method whereby a multiplicity, for instance a thousand, may be represented in an image in conformity with a certain concept" or the "representation of a universal procedure of imagination in providing an image for a concept."45

Kant must be using the word image in two different senses in this paragraph. First there is the individual image from which Kant distinguishes the schema and to which the empirical concept is not adequate. Secondly, Kant used the word image as the general structure of the schema itself in which the imagination represents its method or procedure adequate to and in conformity with a

45A 140--B 179 (132).
certain concept. This is evident from the following paragraph. Kant should have distinguished the individual image (product of reproductive imagination) from the schematic image (product of productive imagination).

In the beginning of the seventh paragraph Kant clarifies the relation of the empirical schema to the individual image and/or individual object. The disjunction of this last sentence is intended and must be established before further consideration of the schema's relation to such an object or image. There was occasion to mention earlier, that at times Kant gives a representational note to the object. We saw this in the identification of the transcendental schema with the phenomenon and in even calling it a "sensible concept" conformed to the category. We saw this also in the preceding chapter where Kant in setting up the problem of heterogeneity says that non-transcendental sciences do not possess general concepts so heterogeneous from those "which represent it [the object] in concreto." It was remarked that, because of Kant's denial of any knowledge of things as they are—we know only their appearances—Kant is almost necessitated to such a position. It is in the consideration of empirical schemata that this is evident more than elsewhere. This peculiar Kantian ambiguity is established here between the image of an individual object and the object itself. For Kant tells us after stating the incongruity

46A 138—B 177 (180).
between a geometric concept and its image that "[i]t is less is an object of experience or its image ever adequate to the empirical concept." This ambiguity is confirmed by the best commentators. Daval points out that the image corresponding to empirical concepts is really the example or instance of such concepts and says that this is confirmed in Kant's Critique of Judgment. Prichard comments that Kant unquestionably makes an image out of what should have been an instance or individual of the concept. Therefore when Kant is talking about an individual image in the context of the empirical schemata he can be just as well interpreted as referring to the individual object.

Returning now to the relation of empirical schema to individual image, we discover Kant telling us that "it is schemata, not images of objects which underlie our pure sensible concepts." He proves this by the example that no image could ever be adequate to the concept of a triangle in general. For an individual tri-

47 A 141--B 180 (182). Italics not in original.

48 Daval, pp. 102-103.


50 There is an apparent difficulty in having mathematical concepts among empirical ones. Is not quantity one of the categories? The answer, of course, is that the category of quantity effects the schema or universal characteristic of extension as a necessary characteristic of all objects, while the empirical, mathematical concepts are abstracted, analyzed from the transcendentally schematized experience. Daval makes much of Kant's theory of mathematics based on his descriptions of the empirical schema. See pp. 105-165.
angle could not express the universality of the concept of triangle which makes it valid and adequate for all types of triangles, whether right-angled, obtuse-angled, or acute-angled. Continuing the example, he tells us that its schema can exist nowhere but in thought and that it is a rule of synthesis of imagination. Further, as regards pure empirical concepts as distinguished from the mathematical ones, he describes the schema "as a rule for the determination of our intuition, in accordance with some specific universal concept." Then he cites the example of the dog, showing how our imagination must delineate some vague figure of a four-footed animal in order to think of dog in contrast with some particular dog of experience.

To the definition of the empirical schema Kant gave previously he has added the notion of synthesis according to rule, which gives more content to the "method" or "procedure" of imagination of the previous description. Further, the fact that an individual is not an adequate object for a universal concept is continually emphasized by Kant, no doubt as being the reason for the existence of empirical schema. Thus it is that the empirical schemata "underlie our concepts" in the sense that they are subjective

51 As was noted earlier, the term "empirical concept" has been used throughout this paper in the wide sense of all non-transcendental concepts, which includes both mathematical concepts and strict empirical or what Kant sometimes calls "sensible" concepts. At times Kant also seems to use the term empirical concept in its wider significance.

52 A 140-B 180 (182-183). Italics not in original.
instruments in which we can think and by which we can apply empirical concepts.

Kant in his final consideration of the empirical schemata tells us that these schemata make images possible. The productive imagination results in the schemata, the reproductive results in images, but only through the instrumentality of the corresponding schema. Kant tells us that the empirical schema is a "monogram of pure a priori imagination, through which, and in accordance with which, images themselves first become possible."53

A few interesting corollaries follow from this final description by Kant. First, Paton tells us54 that, from the meaning monogram had in Kant's time, the empirical schema must be a sort of wavering or schematic image. Secondly, the fact that these schemata make images possible and enable the connection of concepts with such images proves the distinction between transcendental and empirical schemata. For the categories, Kant has told us, have no corresponding intuition among appearances. This distinction is confirmed by the words immediately following the final description of empirical schemata that we have been considering. "On the other hand, the schema of a pure concept of understanding can never be brought into any image whatsoever."55 The empirical schema is then, finally, a product of a priori imagination which

53A 141-142--B 181 (183).
54Paton, II, 35-36.
55A 142--B 181 (183). With exception of "pure" italics not in original.
consists of a schematic synthesis or method of that imagination whereby I can think empirical concepts and apply them to their individual instances or images. The latter, products of reproductive imagination, are possible only because of the general constructive model of the schema.\footnote{Since the individual image and the instance or object of an empirical concept have been equivalated, and since the empirical scheme makes images possible, does the empirical scheme make the object of the concept possible? Yes, if one remembers that both empirical schema and object depend on transcendental schematism (as equivalent to the constitution of knowledge) and there is only one unified act of knowing, no matter on what level it is directed.}

Now that we have specified more in detail the exact nature of the empirical schema in itself and have seen in detail the nature of the transcendental schema, the question of the relation between these two demands a more precise answer than the one that could be given in the preceding chapter.

First of all, how do the transcendental schema and the empirical schema differ from one another? The transcendental schema is essentially a characteristic of the phenomenal object while the empirical schema is a subjective rule of imagination. It is true that the present analysis has emphasized the fact that the transcendental schema is also the vehicle of the category as known, and is therefore in a sense subjective as well. If such a thing is even possible, drawing a clear line between the subject knowing and the known object in Kant's system is, at best, difficult in the extreme. Here, we saw, is evidenced precisely Kant's double
tendency to subjectivism and phenomenalism. Nevertheless, despite the ambiguous character of the transcendental schema, greatest emphasis seems to be placed by Kant on its objective characteristics, the temporal aspects of what is intellectually known, and therefore, in this respect the transcendental schema is to be distinguished from the empirical.

The second point of difference between the two types of schemata is the poles between which each is intermediary. The empirical schema is intermediary between any universal concept ("sensible" or mathematical) obtained from the manifold of experience by analysis and abstraction, and an instance of that concept or its image. The transcendental schema has two pairs of poles between which it mediates. On the subjective or preconscious side, in the moment of the constitution of the object of knowledge, the schema is intermediary between the pure category and the unconditioned manifold of sense appearances. In this case, the transcendental schema is time in general, in the very act of being determined. On the conscious side of the duality, the transcendental schema mediates the category in its application in judgment to conditioned sense appearances. In this instance, the transcendental schema points two ways: to the object known in the particular time-determinations which are characteristics of the object, and to the knowing subject as the vehicle of the knowledge of that category. All this is a summary of what we have seen about both types of schemata.
The transcendental and empirical schema share in being products of the imagination, as temporal, and as elements of conscious experience that mediate the application of some sort of intelligibility to sense appearances. In a sense it can be said that one schematism effects both types of schemata. In the preceding chapter we for all practical purposes identified transcendental schematism with the transcendental activities which construct the object of knowledge. Since the same categories effect the phenomenon, no matter what the formal aspect of it known, whether it be empirical or the category, and since the categories are all present implicitly in every object of knowledge, even the most empirical, such a synthesis seems to have clear validity.57

This unity in schematism despite the diversified schemata essentially contains the answer to the difficulties some of the commentators presented, as we saw earlier, in what they thought were the contradictions between schematism in general and the transcendental schemata. We are now in a better position to answer those difficulties. Prichard, we recall, listed characteristics of what he thought to be the schema in general which did not square with the demands of the transcendental schemata. First, the rule of imagination is subjective, while the transcendental schemata must relate to objects known. Secondly, time seems to be subjective in the "general" consideration, while objective for the transcendental

57 Cf. Daval, p. 167 on the dependence of empirical schematism upon transcendental schematism.
schema. 58 We see now that these descriptions of general schematism were really characteristics of the empirical schema, and thus subjective, as we saw in the distinctions made above. There was no contradiction with the transcendental schemata, because such empirical characteristics had nothing to do with the transcendental schema. Prichard's third objection resolves itself into the familiar objection to the schema as a "third thing" and will be answered shortly.

Similarly, Maréchal's change of position from the subjectivist description of the schema in general to the rather objectivist analysis of the transcendental schemata, 59 and Paton's remarks that considerations of the schema in general throw little light on the transcendental schema, 60 are both based on the interpretation that the descriptions of the schema as a rule of imagination, as a monogram, and as a method of presenting an image to a concept, were to be applied to transcendental schemata as well as to empirical ones. Such an interpretation is certainly excusable seeing the confusing order of Kant's treatment. 61 But the

58 Cf. Prichard, pp. 252-254 and this paper, pp. 11-12.
60 Cf. Paton, II, 36.
61 Smith could also be listed among these men. He did not perceive the contradiction between what the others thought to be the schema in general and the transcendental schema, but he conceived the rule of imagination aspect as primarily descriptive of the transcendental schema. He does, though, consider that any treatment by Kant of sensible concepts is out of place. Cf. Smith, pp. 338-339.
position adopted here seems to be far nearer the truth: Kant mixed in examples of empirical schemata and their definitions with considerations of transcendental schematism, first, because of the common characteristics which we saw above, and secondly, because both types of schemata result from one unified act of knowledge in transcendental apperception. But Kant also wanted to show how the empirical schemata differed from the transcendental ones. With all this in Kant's terse expression, ambiguity and confusion of interpretation was certain to result.

The above suffices as a justification of the position adopted here on the empirical schemata and their relation to transcendental schemata. The fifth and final portion of this chapter must give a general view of the significance of the transcendental schemata in Kant's Critique. Our purpose at this moment is not to give the final analysis of schematism—that is the task of the following chapter—but simply to show that the objective side of the duality involved in schematism is an integral part of Kant's system.

Probably the most trenchant objection to the significance of the transcendental schema is the position of Smith, Prichard, and Caird, that no schema or "third thing" was necessary to mediate category and appearances. Therefore the problem is false and the answer unnecessary. The answer to such objections was implied in the distinctions made above, but formal treatment of this important question has been reserved till now.
We recall that Smith leveled two objections against the whole structure of the schematism problem: (1) schematism is not a process of subsumption, and (2) the schema is not a "third thing." Both of these mistakes are forced upon Kant by his architectonic. We also saw that the first objection reduced itself to the second, since Kant never says that schematism is subsumption.62

To Smith's second objection we must reply: Kant says that the transcendental schema is a third thing and he is correct. Indeed, it is such, as we saw above, in a dual manner. On the transcendental and preconscious side time mediates as a third thing between the pure category and the manifold of sense data to be determined into an act of knowledge. This is evident from the transcendental deduction alone and should be clear from the preceding chapter of this thesis. On the conscious side, in determinate judgments, the transcendental schema is the third thing between the category and the now determinate and conditioned sense appearances. On this side of the duality the transcendental schema has a double life; it involves universal characteristics of the object and is the vehicle of the category as known. This ambiguity heightens the point of the schema as a third thing. As to the influence of Kant's architectonic upon his arguments, the final determination of such an issue is being reserved till next chapter.

Caird's position, similar to Smith's, we recall, holds that the relation of perception and conception is such that no third thing is really needed. The act of knowledge is so unified that schematism is no longer necessary to give the categories synthetic value. Thus, his argument necessarily leads to an alteration of the premise of the heterogeneity problem.63 Prichard likewise, in the third discrepancy he claims to exist between general schematism and the transcendental schemata, says that since the process of schematism actually subsumes the manifold under the category, it performs the very impossibility for which the schematism was postulated in the first place.64

The answer to Caird's and Prichard's objection, besides the answer just given to Smith, lies truly in the whole duality that has been outlined throughout this paper. Kant stated his problem in terms of subsumption, i.e. judgment, and therefore in terms more of the conscious side of this duality. He answered it in terms that were sometimes echoes of the transcendental deduction and thus in terms of the preconscious, constitutive side of knowledge. Yet in other parts of his chapter Kant answered it in terms of objective characteristics of conscious knowledge in judgment. At best his argument was difficult to follow. Consequently the objections of the commentators are understandable.65

64 Prichard, pp. 254-255. Cf. above, pp. 11-12.
65 A final resume of the significance of all the standard commentators will be found in the final chapter below.
Nevertheless, the schematism chapter contained a very essential link in the critical system. Kant had proven in the deductions that the categories were the source and ultimate explanation of our intellectual experience. He knew that the content of such categories must ultimately be, and could only legitimately be, sense intuitions. But he had not yet answered the problem of how the one was to be connected to the other. Therefore he looked to the transcendental activities and the categories he had outlined in the deductions. He saw that in constituting the object of knowledge, the categories and imagination must produce an effect upon the object such that these categories could be legitimately applied to it. They must produce certain characteristics in that object, "third things" between the pure intelligibility of the category and the indeterminate mass of appearances. These universal characteristics are the transcendental schemata, a whole greater than the two constitutive parts. The subjective transcendental activities outlined in the deductions, when looked at under the aspect of producing such characteristics conformed to the categories, were called transcendental schematism, the products, transcendental schemata.

At the conclusion of the last chapter we asked if the schematism chapter was superfluous, since the constitution of the object of the transcendental deduction was the same as the activities implied in the schematism chapter. It is clear now that the chapter on schematism was not superfluous. Kant needed the transcendental schemata to cap the arguments of the deductions.
CHAPTER IV

EPILOGUE

The writing of the illustrious sage of Koenigsberg,
The founder of the Critical Philosophy, more than any
other work, at once invigorated and disciplined my
understanding. The originality, the depth, ... the
adamantine chain of logic, and I will venture to add
(paradox as it will appear to those who have taken
their notion of Immanuel Kant from Reviewers and
Frenchmen), the clearness and evidence of the Critique
of Pure Reason ... took possession of me with a
giant's hand."

--Coleridge

The purpose of this paper has not been to instill an opinion
as vehemently favorable to Kant as the one Coleridge expresses
here. But it is hoped that this thesis has shown that there is a
logic and inner consistency in Kant's Critique which, if it were
more widely recognized, would embarrass those commentators who
claim to find so much that is inconsistent and contradictory in
Kant's thought, especially in regard to the problem of schematism.

The initial pages of this paper pointed out a few of those un-
favorable opinions concerning the significance and interpretation
of Kant's chapter on schematism. This doctrine was supposedly
formulated to answer the problem of the complete heterogeneity of

1Quoted in Paton, Kant's Metaphysic of Experience, I, 13.
category and sense intuition. But for the objectors that heterogeneity does not even exist; these two are reciprocally orientated and no intermediary is needed. Schematism is postulated simply to fill out the parallel with the architectonic structure of traditional logic and is, consequently, artificial in the extreme. Schematism is the answer to a non-existent problem. Or if the problem has any significance, the answer as Kant formulates it is so involved with contradiction and obscurity that the chapter is ultimately meaningless and of no value.

This has been seen all too frequently, but it bears repetition here so that a summary significance of schematism can be perceived in clear contrast. On the contrary, this paper has maintained that the chapter on schematism is an integral part of Kant's argument and the purpose of the Critique. And the key to the understanding of that significance lies in a dualistic outlook which is the center of Kant's critical system. Kant needed the a priori categories to save science from Human scepticism and sensism in general; he needed to limit the knowledge engendered by these categories to the realm of sense experience to save the mind from the metaphysical pitfalls of rationalism. But the discussion of such categories demanded a duality such as that pointed out in this paper. To prove conclusively the existence and necessity of a priori concepts, Kant had to refer to the content of human knowledge and show that the categories explain these facts of knowledge. But since the categories are a priori, i.e. prior to the
given of experience, he had to delve deeply into an explanation of "transcendental" activities, syntheses, operations of pure and reproductive imagination, pure intuitions of space and time, and a dozen other elements which entered into and aided the construction of our knowledge, even before we were aware of it.

It was shown how the duality between the subjective constitution of the object of knowledge and the conscious awareness of this object is implicit in a very poignant way in the metaphysical and transcendental deductions of the categories. It can be said that it was the precise purpose of both these deductions, especially the latter, to demonstrate the a priori, preconscious side of Kant's cognitional duality. It was likewise shown that the oft discussed double tendency of Kant to subjectivism and phenomenalism, where knowledge is regarded merely as the product or modification of subjective apprehension on the one hand, or where the products of the transcendental activities take on some sort of existence of their own on the other, significantly reflects this duality.

Only with it in mind could the schematism chapter be intelligibly and consistently interpreted. Time and its determinations were proposed by Kant as the third thing which would mediate category and intuition. But time-determinations were seen to be ambiguous. As products of a synthesis they would later be seen as kinds of temporal determinations, universal characteristics of the object. As the form of inner sense and the formal condition of
sensibility, these time-determinations implied an a priori synthesis conformed to a rule. This rule could only be the category, and the synthesis of schematism was the synthesis which was the heart of the transcendental deduction. The fact that the schematizing process is a hidden art pointed to the preconscious and subjective side of the duality and its relation to the transcendental syntheses. This was confirmed by Kant's emphasis in the schematism chapter on the word synthesis itself and on conformity with or determination by a rule. The fact that schematism effects "all representations" and the unity of the manifold of intuition likewise implied the a priori constitution of the object. Schematism can be said to limit the category only because it must involve some a priori construction in the object. Lastly, schematism was seen to be connected with the "transcendental truth" which precedes empirical truth and makes experience possible.

If such is schematism, what of the transcendental schema? Schematism was seen to have an effect upon the object, upon all representation; this effect was an expression of the category. This, the text calling the schema a phenomenon, and especially the statements before the schematism chapter that it would deal with the instance and the universal marks, sufficed to prove that the transcendental schema must involve universal characteristics of the object. Only in this way could schematism be said to enable us to apply the categories to that object. Kant's list of the individual schemata, artificial as they might be, confirmed that
the schemata were objective grounds for the category's application.

But if the transcendental schemata were objective, the problem of Kant's descriptions of the schemata of empirical concepts as subjective syntheses according to a rule, procedures of the imagination in providing an image to a concept, was a Gordian knot that had to be untied. In as much as the empirical schema is part of objective consciousness, it can in Kant be considered objective, but it was essentially a subjective schematizing process providing a vehicle for the thinking of an abstract universal, empirical concept. It was, as it were, a by-product of the transcendental schema from which it was to be distinguished. The reason for this was that the latter involved the universal characteristics of all objects, prior to any abstraction. Since these characteristics are implicitly known in any object, no matter how empirical, it must be involved in the objective, intelligible content of any concept that is abstracted by analysis from that object. The transcendental schema, nevertheless, had a significance all its own since it alone provided the objective reference which allowed the application of the category to objects, closed the gap between pure category and appearances, and fulfilled the anticipations of the deductions.

Having seen this summary of the arguments of this thesis, the necessary background is provided for a final answer to the objections of the commentators.

Norman Kemp Smith's objections, probably the most persuasive
of all, merit first consideration. It has already been shown that the transcendental schema is a third thing and that the relation of category to intuition does not preclude such a mediating factor. Yet his objection is not a superficial criticism; it is based on a deep understanding of Kant’s thought. Smith’s insistence that category and intuition are related as form and matter, and are therefore mutually orientated toward each other, is precisely the subjective and a priori side of the duality emphasized in this thesis. Even on this side, time could, it was shown, be considered a third thing. But the far greater oversight on Smith’s part was the fact that he failed to see that Kant must answer the problem of heterogeneity on the objective, conscious side as well.

In the metaphysical deduction Kant had gone from the logical forms of judgment to the categories which must be a priori to experience. In the transcendental deduction he went from the necessary elements of conscious experience, both subjective and objective, to these same a priori categories. Now, in the "Principles," Kant had to make the step back from the a priori and preconscious into the realm of explicitly conscious judgments, to see precisely how these categories entered into knowledge. Smith failed to see that Kant’s purpose in the schematism chapter was to point out the objective grounds which the subjective and transcendental orientation of category and intuition must construct, the products of these transcendental activities. Without such grounds, there would be no conceivable way of justifying the application of such
categories to objects in the judgments of consciousness.

The failure on Smith's part to see the necessity of Kant returning to judgment through schematism is also partially the cause of his repeated calling upon an artificial architectonic as the real basis of Kant's chapter on schematism. Furthermore, it would seem, as Paton maintains, Smith was too greatly and easily influenced by Adickes on this point.² Far from being an arbitrary accretion to match the chapter on judgment in formal logic, the schemata were a necessary complement, as has been shown, to the deductions. Lastly, the view that Smith held that the transcendental schema was the rule or procedure of imagination, a description which, as was seen, Kant used only for empirical schemata, led him to look upon the schema as a purely subjective thing, preventing him from seeing Kant's real intention.

Similarly, Edward Caird considered schematism unnecessary because he was so deeply engrossed in the subjective, constitutive side of the duality. It is Caird's great merit to have perceived with deep penetration the duality between construction and consciousness, which he preferred to express in the Kantian terms of synthetic and analytic knowledge. Much more profoundly than Smith he perceived the native relation of category and perception and the synthetic unity between the two. Too much so, it seems, since he looked upon a discussion of judgment and the schemata merely

²See Paton, II, 66, n. 2. Cf. also Ibid., 76.
as a dialectical manner of speaking about the synthetic union involved in Kantian knowledge, so that once such considerations have been accomplished, the premise (of heterogeneity) which aroused the discussion becomes unnecessary. Despite his penetrating analyses of the Kantian duality, Caird has failed in one fundamental point: he has not perceived the essential and radical differentiation between sense and intellect, between empirical, intuitive experience and unifying intelligence. It was this that Kant was trying to get at in the schematism chapter. Caird has, in effect, reduced the Kantian duality to a subjective identity. It might be ventured that Caird did this because he interpreted Kant in terms of Hegel who followed him, and he too facilely synthesized the antithesis Kant had constructed between knowledge as active intelligence and knowledge as passive intuition.

H.A. Prichard's less profound but trenchant criticisms have been dealt with for the most part in the concluding section of the previous chapter. He too, as was pointed out, saw no necessity for schematism if the categories actually did subsume intuitive experience under them. Like Smith, he failed to perceive that the synthesis of category and intuition must result in some characteristic of the object, or there is no foundation for applying the category to the object. The supposed contradictions he finds between the "schema in general" and the transcendental schemata have been dealt with sufficiently in Chapter III. Moreover, Paton points out that Prichard, like Caird, was ill-advised in using a
Kantian commentary to expound his own philosophy. 3

The interpretation of Joseph Maréchal, S.J., has the great merit of expounding what he believes to be the psychological genesis of the schema, truly a synthesis of the chapter on schematism with the subjective transcendental deduction of the first edition of the Critique. But like Prichard he implied that Kant's descriptions of the schemata of empirical concepts, necessarily subjective methods of imaginative construction, are equally applicable to the transcendental schemata. As was seen, this cannot be accepted. And even though he ends up, somewhat contrary to his initial position, seemingly attempting to objectify the transcendental schemata by recognizing them as universal signs for the application of categories, they still seem to remain in the end pure expressions of the categories in imagination and not an aspect of the object known. Nevertheless, Maréchal's treatment is fraught with keen insights into the subjective and synthetic aspects of Kant's construction of the phenomenon. This writer is primarily indebted to Maréchal's treatment—despite its apparent defects—for the insight into the subjective and preconscious side of the duality emphasized in this thesis.

Daval's approach to the problem of schematism, it is recalled, is greatly similar to the one proposed here. Clearly then, he was not an objector to the significance of schematism and he need not

3 See Paton, I, 17.
be reckoned with here. He was, for the most part, merely referred to as confirming the basic insight proposed in these arguments. As was mentioned, he does not take great efforts to prove his hypothesis, other than to show how schematism gives a unified view not only of Kant's first *Critique*, but also of all his writings.

The last man who merits particular consideration here is H.J. Paton. His view of the transcendental schemata more than all others has been evidenced throughout these pages. The greatest contribution he offers to the schematism problem—besides the initial willingness to see Kant's view—is the continued emphasis he places upon the transcendental schemata as the universal characteristics of experience. Kant himself did not emphasize this sufficiently and it took Paton's insight into the whole of Kant's critical view of knowledge to bring to sufficient light this important aspect of the schematism chapter. In the view of this writer, only in one thing has Paton failed to do justice to the interpretation of schematism: that is in overlooking the subjective and constitutive side of schematism and in his denial that the transcendental activities and the construction of the object of knowledge is preconscious.\(^4\) All this may be an unintentional effort on Paton's part to avoid a particularly subjectivistic interpretation of Kant. This writer would maintain that if Paton

\(^4\) Cf. Paton, II, 25 and 73-75.
had had as keen a penetration into the duality involved in the Kantian system as Caird had, his interpretation of schematism would not differ essentially from that proposed in this thesis. As it is, if there is anything lacking in Paton's interpretation, it is more by omission than by contradiction. Moreover, in any event, Paton's continued emphasis upon the schemata as universal characteristics has brought more light to the difficult chapter than seems to have been had before. The crowning corollary of such an interpretation is, as was demonstrated at the conclusion of the last chapter and elsewhere, that it vividly points out the consistency and logicality of not only the schematism chapter, but Kant's whole purpose and accomplishment in the first half of the Critique of Pure Reason.

Therefore one conclusion must necessarily follow from the point of this thesis. With Paton, the chapter on schematism must be considered to have "more than the value of throwing light on Kant's errors," and "is essential to an understanding of the Critical Philosophy." With Paton too, schematism must be considered to have little or nothing of the perversity attributed to it by his critics. It is true that the derivation of the categories—and consequently the specific schemata—from the forms of judgment "is . . . a trifle ingenuous." But Kant's doctrine does

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not rest exclusively on such a derivation.\footnote{Even so, Paton defends the plausibility of such a derivation. "To treat the derivation of the categories from the forms of judgment as wrong-headed and inexcusable pedantry indicates, to my mind, only the failure of the critic to think himself into Kant's point of view." \textit{Ibid.}, 75.} Besides the dependence upon the forms of judgments (which after all only gives the specific nature of the various schemata) the categorical characteristics of objects are derived from the fact that all objects are temporal; in this there is a good bit of truth. "The connexion of the categories with the synthesis of imagination and the form of time is the most important, and the least artificial part of the Critical Philosophy."\footnote{\textit{Ibid.}}, 75

This does not excuse Kant from the mistakes that are evident in the chapter. The obscurity of his terminology, the brevity of his treatment, and according to the interpretation of this thesis, the lack of clarity on Kant's part in pointing out the significance of his descriptions of schemata of empirical concepts, all have contributed to the confusion that has arisen in the interpretation of this important chapter.\footnote{\textit{Ibid.}, 76. Paton again points out in this section the lack of validity of the objections based on Kant's architectonic.} Besides this, the failure of Kant to make clear the essential duality which is implicit in his system, between the \textit{a priori} constitution of the object and the experience of that object, has contributed in a most significant way to the confusion that has surrounded schematism. In this chapter Kant was building the bridge from the transcendental and
preconscious side of his system to conscious experience in judgment, from the categories to the universal characteristics of experience which justify the application of the former. If both sides of the critical divide were not perceived, naturally the bridge of schematism seemed insignificant.

But, as was pointed out above, even the objections of the critics are not without merit, since they serve to point out one or other aspect of Kant's doctrine on schematism. Smith's emphasis on the correlation of category and intuition, as matter and form, structure and content, serves to emphasize the preconscious and constitutive side of the duality. Caird clearly perceived the duality, even if he reduced it to a sort of Hegelian identity. Prichard's criticisms share some of Smith's merits and besides, point up the difficulties arising from an erroneous interpretation of the empirical schemata. Maréchal has pointed unintentionally to both sides of the duality. And Paton, of course, has given us the clear picture of the objective side of schematism and its total significance. The very diversity of the commentators has aided in pointing out the duality which is the essence of the present interpretation of schematism.

It has been outside the predetermined limits of this thesis to criticize Kant's doctrines from the point of view of a realist, a Scholastic, or a Thomist. The purpose here, after all, was to clarify a small but important point in the thought of a great philosopher, and not to point out the errors in his whole system.
Yet, granting all the possible criticisms that have been leveled at the critical system, and there have been many--some that are penetrating and quite valid, others that do Kant a great injustice--there will still be much of value in Kant's thought. Like all great thinkers, in his errors he veered very near the truth. It may be permitted therefore, to point out a few comparisons between what has been seen in the interpretation of schematism and elements of a more realistic and even Thomist philosophy. This will not be done very extensively nor profoundly, but as a sort of obiter dicta to throw an interesting sidelight on the consistency of Kant's thought. If his thought has parallels with more traditional philosophy, it cannot be so utterly false and inconsistent.

A rather obvious comparison may be the one between the empirical schema and the Scholastic phantasm. Both are general schematic images which permit the thought of an universal concept and its predication of an instance of that concept. Similarly, as the empirical schema presupposes the transcendental one, and since the categories are all involved implicitly in every object of knowledge as the source of what is intelligible, so the schemata of these categories, the universal characteristics of reality, can

\[\text{Cf. J. T., I, 84, 7c., S. Thomae Aquinatis, Summa Theologiae,}\n\[\text{Marietti edition (Paurini, 1950): "Impossibile est intellectus nostrum . . . aliquid intelligere in actu, nisi convertendo ad phantasmata." The content of an empirical concept and thus its schema could be correlated with what St. Thomas calls "common matter," i.e. the material or empirical notes which are common to all the individuals of a species. Recall Kant's example of the schema of the empirical concept of a dog as the imaginative delineation of the figure of a four-footed animal in some general manner. Cf. S. T., I, 75, 4c.}\]
be equated to the vague phantasms which one's imagination must formulate to think such concepts as cause, substance, etc. Only in Kant, because of his inherent subjectivism, the medium in which the category or intelligibility is known is identified with the characteristics of the object itself. And as the schemata are determinations in time (a prime characteristic of sensibility even for the Scholastic) and the schemata limit the categories to sensibility, so whatever is known intellectually by a Thomist, is known only in and by reference to the sensible phantasm.¹⁰

In the introduction to the "Principles" Kant tells us that skill in being able to tell the particular applications of the rules of judgment is an inborn talent.¹¹ This and Kant's insistence that schematism is a "concealed art" can be roughly corre-

¹⁰Cf. Marechal, V, "Le Thomisme devant la Philosophie Critique," pp. 163 and 164 and n. The reason why we know only by converting to a phantasm is seen further in the same article of S.T., I, 84, 7 c.: "Intellectus autem humani, qui est conjunctus corpori, proprium objectum est quidditas sive natura in materia corporali existens; et per huiusmodi naturas visibilium rerum etiam in invisibilibus rerum aliqualem cognitionem ascendit . . . sicut de ratione naturalis lapidis est quod sit in hoc lapide . . . Unde natura lapidis, vel cuiuscumque materialis rei, cognoscit non potest complete et vere nisi secundum quod cognoscitur in particu-

¹¹A 133--B 172 (177-178).
lated to St. Thomas' proof by the experience of the use of examples for the dependence of our intellectual knowledge upon phantasm. Kant mentions that the use of examples may be of great help to sharpen this skill in applying a universal rule, but that "correctness and precision of intellectual insight ... they more usually somewhat impair." For examples are the "go-cart of judgment" and cannot be dispensed with by those lacking in natural talent.

It would seem that for Kant the talented can dispense with examples precisely because of the a priori nature of the categories. And if one may be permitted to expand Kant's hypothesis for a moment, the more talented would be those whose unity of apperception (as the concomitant awareness of personal thought) is more deeply present throughout all the a priori syntheses of knowledge. Thus, because of the intimacy of this preconscious union, such men can more readily perceive the correspondence between the intelligibility they think (the categories schematized) and the objects in which their thought is grounded (the schemata as the universal characteristics of objects). In such an hypothe-

12"Secundo, quia hoc quilibet in seipso experiri potest, quod quando aliquid intelligere, format aliqua phantasmata sibi per modum exemplorum, in quibus quasi inspiciat quod intelligere studet. Et inde est etiam quod quando alium volumus facere aliquid intelligere, proponimus ei exempla, ex quibus sibi phantasmata formare possit ad intelligendum." S.T., I, 84, 7 c.

13A 134-B 173-174 (178).
thesis, the dual nature of the transcendental schema as both characteristics of the phenomenal object and subjective vehicle of the category as known takes on greater significance. First, the categories have been hidden, preconscious elements in the subjective knower. Secondly, in the a priori synthesis with the manifold, the categories become, as it were, imbedded in the object, as its universal characteristics, the transcendental schemata. Thirdly, the subject knowing recognizes these characteristics as the grounds for the application of the categories. In this recognition the category is first consciously known (i.e. the schematized category in the schema) and as such, returns to the subjective knower. The application of the category in judgment follows necessarily. The movement has been from a priori, to synthesis of the object, back to subjective recognition of the schematized category for the latter's application in judgment. In such recognition and judgment the schema is the conscious expression of the category, the middle point between the heterogeneous poles which have been also the termini of the category's transformation and progression.  

All this may have seemed mere airy speculation and a point-

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less digression, but it does help to underscore the particular point of this chapter, that Kant's thought, with all its confusing terminology and expression, and despite its manifest errors, has a deep consistency which makes it applicable to and parallel with much philosophical truth. The clearness and evidence of the Critique of Pure Reason may not have taken possession of either the reader or this writer with the giant's hand with which it did Coleridge. But it is hoped that it is at least a little better understood why Coleridge and so many others have been so profoundly impressed by the logic and consistency of the philosophy of Immanuel Kant.
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The thesis submitted by John E. Dister, S.J. has been read and approved by three members of the Department of Philosophy.

The final copies have been examined by the director of the thesis and the signature which appears below verifies the fact that any necessary changes have been incorporated, and that the thesis is now given final approval with reference to content, form, and mechanical accuracy.

The thesis is therefore accepted in partial fulfillment of the requirements for the degree of Master of Arts.

March 28, 1959
Date

Joseph F. Wulfshagen, S.J.
Signature of Adviser