THE COMBINATION OF SENSIBILITY AND UNDERSTANDING
IN KANT'S
CRITIQUE OF PURE REASON

by

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A thesis submitted in conformity with the requirements
for the degree of Doctor of Philosophy
Graduate Department of Philosophy
University of Toronto

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Since intuitions and concepts, the two elements that constitute knowledge, derive from two completely distinct sources, sensibility and understanding respectively, intuitions and concepts are themselves completely heterogeneous. This gives rise to the problem with which Kant concerns himself in the Schematism of the first Critique. Kant asks: How, given the heterogeneity between categories and appearances, is the application of the former to the latter possible? The solution he provides is the schema, which functions as a mediating representation in this application. The source of the schema, however, is imagination. Thus, I argue, in order to understand how the schema functions as mediator between intuitions and concepts, we must understand how imagination functions as mediator between sensibility and understanding.

Imagination is able to mediate between sensibility and understanding since its activity manifests features in common with both. With sensibility, it shares the feature of receptivity;
with understanding, it shares the feature of spontaneity. In the application of categories to appearances, imagination brings the *unity* of the categories to the mere *synthesis* of the manifold of intuition. Unity is achieved in the manifold of intuition only through the mediating activity of imagination, which brings the manifold of intuition into connection with the rules of the understanding. This process is referred to as *combination*.

It is in the act of combination that imagination manifests both its receptive and spontaneous functions. For combination does not consist of a single act but rather a *continuous series* of acts - those toward the beginning of the series being more closely associated with receptivity, and those toward the end being more closely associated with spontaneity - as demonstrated in the production of the various transcendental schemata. Understood as a continuous series of acts, the combination that imagination carries out results in the continuity of the receptive and spontaneous functions of the faculties of sensibility and understanding. I conclude that it is this continuity of the faculties, achieved through the workings of the imagination in its activity of *combination*, that renders quite plausible Kant's solution to the problem of the Schematism.
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INTRODUCTION

Part of Kant's program in the *Critique of Pure Reason*¹ is to explain how the operations of the two functions² of our cognitive apparatus - sensibility and understanding - bring about the synthetic a priori knowledge that makes possible all empirical knowledge of objects. In his explanation of the matter, it is quite evident that these two faculties of the mind are always regarded as distinct. Never in the whole of the first *Critique* does Kant intimate that these faculties may be considered identical to one another, or that one may be reduced to the other or derived from the other (A 51-52 / B 75-76).³ Nonetheless, that some

¹Immanuel Kant, *Critique of Pure Reason*, trans. Norman Kemp Smith, p. B xx. All subsequent citations to this text will be given parenthetically, and all further references to it will be abbreviated "CPR."

²I will be employing the term "function" both in Kant's technical sense, which will be explained in a later chapter, and in the ordinary sense, as a purposive operation, process or activity. Unless otherwise stated, the term may be taken in its ordinary sense.

³Of course Kant does mention at A 15 / B 29 that "there are two stems of human knowledge, namely sensibility and understanding, which perhaps spring from a common, but to us unknown root." To say that two things have a common root, however, is not equivalent to saying that they are identical. Evidence outside the CPR that Kant did not view the identity of sensibility and understanding as probable may be found in the *Anthropologe*, p. 177, where he states that the identity view could not be true, or at least, that it is inconceivable for us how two heterogenous
kind of relationship exists between them is also evident. To describe this relationship is essentially the task of the section of the CPR entitled The Transcendental Analytic. It is the aim of this study to examine the relationship between the faculties of sensibility and understanding, mainly as presented in that portion of the CPR.

It will be argued that the relationship between sensibility and understanding can best be understood when considered in conjunction with the activity of another faculty - that of the imagination - that mediates between sensibility and understanding. It will ultimately be shown that it is the continuous series of transcendental acts of the imagination that renders possible the relationship that holds between the functions of sensibility and understanding in the production of experience, from the view of Kant's transcendental idealism. The foundations for this theory are established in connection with my explanation of the solution that Kant presents to the problem of the application of the categories to appearances, as expounded in the Schematism chapter. My investigation of this subject arises from Kant's discussion of the most relevant issues pertaining to this problem as developed in the Transcendental Deduction. In my analysis of this section of the text, I will concern myself with Kant's

things could spring from one and the same root.

*This does not imply, however, that sensibility and understanding are not distinct faculties. I am only defending the view that despite the fact that they are indeed distinct, their functions may be rendered continuous in such a way as to make possible the subsumption of the products of sensibility - intuitions - under the products of the understanding - the categories. Gibbons refers to this as "adaptability": "None the less, I do not wish - and certainly Kant did not wish - to dispense with the heterogeneity of thought and intuition altogether: the adaptability of each to the other is not the same as their identity" (Sarah L. Gibbons, Kant's Theory of the Imagination, p. 6).

²H.J. de Vleeschauwer, La Deduction Transcendantale dans l'Oeuvre de Kant, vol. 3, p. 441, states explicitly that the schematism constitutes the foundation of the harmony of the faculties of knowledge with respect to the formal constitution of experience.
account of the imagination, and of the nature of the relationship between the faculties of sensibility and understanding as offered there.

An important issue with which I begin is that both a priori knowledge and empirical knowledge have as their foundation the transcendental acts of sensibility and understanding, which are ultimately grounded in the transcendental acts of the imagination. How a priori knowledge results from the transcendental acts of the mind does not appear odd to us, since, in this case, both the transcendental acts and the knowledge to which these acts give rise are pure a priori; but the case for empirical knowledge might not appear as compelling. For, in this case, the transcendental acts of the mind, which are pure a priori, are giving rise to a species of knowledge that is not itself pure a priori, since it involves sensation. How is this possible? What Kant will ultimately have to show is how the faculties of sensibility and understanding work together in order to accommodate both the pure and the empirical elements of our knowledge.

Kant demonstrates that empirical knowledge is what results from a certain application of a species of a priori knowledge that is at our disposal. To have empirical knowledge

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6Kant discusses various uses of the term "a priori" in B 2 - B4. Because of these various uses, he determines the need to qualify the items of knowledge that he is interested in as "pure a priori."

7G.J. Warnock, "Concepts and Schematism," p. 82, thinks the schematism of the categories is impossible. The fact that Kant saw it as possible results from the fact that Kant mistakenly supposes that "a process 'in the mind' can somehow explain the same process in the world of objects."

8The distinction I discuss between a priori knowledge and empirical knowledge is of course based upon the distinction that Kant makes between the various kinds of possible judgments: a priori and a posteriori; and analytic and synthetic. Lewis White Beck, "On the Meta-Semantics of the Problem of the Synthetic A Priori," p. 93, explains the crucial point that Kant makes with respect to the classification of judgments: "We can classify judgments in two ways: (a) according
entails having the representation of empirical objects; to have representations of empirical objects requires that it be possible for us to have a certain kind of a priori knowledge, which Kant refers to as *synthetic a priori knowledge* (B 5). This synthetic a priori knowledge that Kant thinks is requisite for the representation of empirical objects is precisely that body of knowledge that he regards as *metaphysics*.\(^9\) His central goal in the CPR is thus to demonstrate how metaphysics, as a science, is possible, and ultimately to show that representation of empirical objects is possible *because* synthetic a priori knowledge is possible (B 19). Given this, the empirical is not *in all cases* the opposite of the pure, and therefore is not directly opposed to it.\(^10\) Rather, Kant asserts a crucial relationship between the pure and to their epistemic status, as necessary or contingent; and (b) according to some aspect of them which belongs to the judgments themselves without respect to their relation to a system of other judgments, the rest of experience, or our sense of assurance of their truth. The first gives the classification into a priori and a posteriori judgments: the latter gives the classification of judgments as analytic or synthetic. The former is an epistemological distinction, the latter a logical distinction. If we recognize that there are two principles of division, we are prevented from solving the problem of whether there are a priori synthetic judgments by deduction from the definitions of the four kinds of judgments." Just how Kant does prove that there indeed are synthetic a priori judgments is much more involved. One of the points that will be developed in this thesis is to show how Kant's proof of the existence of synthetic a priori judgments demonstrates an interesting relationship between a priori knowledge and empirical knowledge.

\(^9\)In the introduction to the CPR Kant explains his conception of "metaphysics": "Metaphysics, even if we look upon it as having hitherto failed in all its endeavours, is yet, owing to the nature of human reason, a quite indispensable science, and ought to contain a priori synthetic knowledge. For its business is not merely to analyze concepts which we make for ourselves a priori of things, and thereby to clarify them analytically, but to extend our a priori knowledge" (B 18). Kant's narrower use of the term "metaphysics," however, includes the study of essentially three ontological issues: God, Freedom and Immortality (A 337 / B 395 n. a, and A 841 / B 869).

\(^10\)This might at first appear to contradict directly what Kant tells us in the introduction to the CPR in B 2: "In what follows, therefore, we shall understand by a priori knowledge, not
the empirical when he states: "Pure a priori concepts, if such exist, cannot indeed contain anything empirical; yet, none the less, they can serve solely as a priori conditions of possible experience. Upon this ground alone can their objective reality rest" (A 95). What this essentially will amount to is that empirical judgments of experience are a consequence of pure synthetic judgments applied in a certain way, specifically, as applied to sense data. Keeping this in mind, we may approach, in a more appropriate manner, the problem presented in the Schematism chapter regarding the application of the categories to appearances.

Kant states there that the problem is due to the heterogeneity between the pure concepts of the understanding and appearances (A 137 / B 176). In the course of his solution to the problem, however, it becomes clear that this heterogeneity can be dealt with, given that the imagination steps in to mediate this application by means of schema production. It might appear then that Kant has only provided an explanation for an artificial problem. This, however, is not the case. Rather, what Kant does in the Schematism chapter is provide an account of how the imagination is able to mediate the application in question, as this had not been fully explained in the Transcendental Deduction. If his account in the Schematism chapter seems unsatisfactory, as many scholars claim, it is because Kant does not provide a knowledge independent of this or that experience, but knowledge absolutely independent of all experience. Opposed to it is empirical knowledge, which is knowledge possible only a posteriori that is through experience. A priori modes of knowledge are entitled pure when there is no admixture of experience." For Kant here explicitly states that that which is "a priori" is opposed to that which is empirical; he also speaks of that which is "pure" as being that which does not contain anything empirical. But what B 2 claims is simply that experience plays no role in the production of pure a priori knowledge; it does not in any way claim that a priori elements are not involved in empirical knowledge. Thus to say that empirical knowledge involves experience is not to say that it does not involve a priori forms or categories. This point will be elaborated upon in Chapter two.
very smooth transition from the Deduction to the Schematism chapter, and therefore does not fill in many of the gaps in the argument that develops over these sections. What I intend is to provide a smoothing out of this transition, and to show that Kant does indeed provide a genuine solution to what would otherwise have been a genuine problem.

The view that Kant develops in the CPR regarding the faculties of the mind is that there are three genuinely distinct faculties: sensibility, understanding and reason (A 11, A 15 / B 29, A 50 / B 74, B 355).11 The term "faculty" here is being taken to mean "a source of knowledge" deriving from the mind. Interpreted in this way, it is most consistent with Kant's general position to assert that there are three such faculties.12 With respect to the production of experience, however, reason does not really play a direct role (A 307 / B 356). It may be said, then, that in the production of experience, only the faculties of sensibility and understanding come into play. For Kant repeatedly tells us throughout the CPR that there are two basic elements that constitute knowledge - intuitions and concepts, and that these elements are products of the faculties of sensibility (receptivity) and understanding (spontaneity) (A 50 / B 74). In the Dissertation, the difference between the faculties of sensibility and understanding was based on the view that two distinct kinds of knowledge

11 Of course Kant categorizes the faculties in another way when he discusses the division of the *higher faculties* of knowledge. At this level, the faculties are divided into: understanding, judgment and reason.

12 It is interesting to note Gordon Nagel's observation (*The Structure of Experience*, p. 39) regarding the views of most scholars who take issue with Kant's cognitive theory. He maintains that "while it is impossible to attribute a single philosophical position to all Kant's critics, there is an approach to unanimity in their tacit acceptance of a two-element model of the mind. One element is reason. The other is sense experience. . . . Kant, by contrast, employs a three-element model of the mind. To *reason* and *sensibility*, Kant adds *understanding* as a third faculty that mediates between the other two."
were possible, sensible and intellectual, depending on the object of knowledge and whether it was sensible or intellectual. In the CPR Kant rules out the possibility of having intellectual knowledge of the kind described in the Dissertation, demonstrating that the only knowledge possible for rational beings is sensible knowledge. He then sets out to show how both sensibility and understanding operate together to yield only one kind of knowledge - the only one possible for us - sensible knowledge. Yet because intuition may be both empirical or pure, this makes possible knowledge of empirical objects and knowledge of pure objects a priori (A 51 / B 75).

The main difference between Kant's views in the Dissertation and his views in the CPR that is of interest to us here is that in the Dissertation, Kant maintained that each faculty on its own could give rise to a distinct species of knowledge, whereas in the CPR knowledge requires work of the two faculties together. As stated earlier, Kant's view in the CPR is not that the two faculties are really one, or that one can be reduced to the other, or that one can perform the function of the other (A 51 / B 75). Nonetheless Kant is undoubtedly asserting a relationship between these two faculties which entails that it would not be appropriate to regard their functions as completely segregated from one another (A 124, B 152-52, B 164). That the faculties of sensibility and understanding are indeed two distinct faculties is

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13"It is thus clear that things which are thought sensitively are representations of things as they appear while things which are intellectual are representations of things as they are" (Immanuel Kant, Inaugural Dissertation 1770: On the Form and Principles of the Sensible and the Intelligible World, sec. 2., p. 384).

14D.P. Dryer, Kant's Solution for Verification in Metaphysics, p. 219, makes a pertinent remark: "If we are to bring to light the determinations of things generally that enable knowledge to be got of them, we have to find determinations that serve for the application of categorial concepts to them; they must be determinate connections immediately found in what is observed;
not a point that will be disputed in this study. My aim is, rather, to show that because Kant
points out that there are many other functions of the mind which do not, strictly speaking,
fall *exclusively* under the faculty of sensibility or the faculty of understanding, and which also
are not, strictly speaking, faculties in their own right, they can best be understood as acts in
between the function of sensibility and the function of understanding, that is, as intermediate
functions between these faculties; these are the acts of the imagination.

As intermediate functions between sensibility and understanding, the acts of the
imagination are neither purely receptive nor purely spontaneous. Rather, these functions
manifest *degrees* of receptivity and spontaneity.\(^\text{15}\) Because there are various functions of the
imagination, and because these functions vary in terms of their degree of receptivity and
spontaneity, this suggests that there might be a continuous series of arbitrarily many acts in
between the acts of sensibility and understanding. Some of these acts, and in fact those that
are pivotal in the production of experience, are exhibited in the imagination's production of
schemata, as will be shown. Kant firmly maintains that sensibility is pure receptivity, and is
in no way spontaneous, and that understanding is pure spontaneity and is in no way receptive
\((A 51 / B 75)\). This claim, however, will have to be construed in light of the fact that,
evertheless, the functions of the imagination that mediate between the functions of sensibility

\(^{15}\)Michael Young, "Kant's View of Imagination," p. 164, compares the spontaneity of the
understanding with that of the imagination. He writes: "This is what Kant means, I suggest,
when he says that the understanding is *the* active or spontaneous faculty. The point is not
necessarily that the imagination is not an active or spontaneous faculty at all, but that the degree
or grade of activity exhibited in imagination is lower." This point will be shown to be crucial
in establishing the grounds for the solution to the heterogeneity problem.
and understanding are not themselves purely receptive or purely spontaneous. What will ultimately be presented is a theory of the relationship between sensibility and understanding that takes into serious consideration the implications of the mediating principle of the imagination.

What this study will demonstrate is that the transcendental acts of the imagination are what give rise to the mediating function of the imagination - a function that results precisely from the fact that these acts are neither purely receptive nor purely spontaneous, but rather manifest varying degrees of both. Its having something in common with both sensibility and understanding in the manner described above is what enables the imagination to mediate between sensibility and understanding; this feature of the imagination is what grounds the process of schematism, and what thereby gives rise to the continuity of the functions of sensibility and understanding that makes experience possible. This continuity is achieved through the imagination's activity of combination, which consists of a continuous series of multifarious acts - revealing the presence of the imagination at each and every level of experience.

This theory has two main advantages. The first is that, by viewing the mediation of the imagination as carried out in a continuous series of arbitrarily many acts, as opposed to just one act, it provides an account of how the imagination is able to give rise to a variety of types of schemata, and how, in the production of each of these types of schemata, the functions of sensibility and understanding are rendered continuous. The continuity between these two heterogenous functions is precisely what gives unity to the whole of cognition, and thus what makes knowledge of objects possible. The second advantage this theory offers is
that it also helps explain how we may undergo cognitive processes that do not result in knowledge of objects. In this case, the cognitive process is, in a certain sense, aborted, as it is not brought to completion. This occurs when only some, but not all, of the relevant imaginative acts in the series of acts constituting the activity of combination are carried through by the perceiving subject. In this situation, only some of the types of schemata come into play, and thus the appearances are only partially determined, but not determined enough to give rise to objects of experience.

The general argument of my dissertation will consist of five parts: 1) an explication of Kant’s formulation of the heterogeneity problem involved in the application of the categories to appearances as presented in the Schematism chapter, 2) an examination of the general relationship between sensibility and understanding and the sense in which they may be viewed as distinct, 3) an investigation into the nature of the imagination, showing how it is able to resolve the schematism problem through its function of mediation between the faculties of sensibility and understanding, 4) an account of the various acts of the imagination in its production of schemata, and 5) a description of the kind of continuity that is achieved through the workings of the imagination in its activity of combination.
There is only one experience (A 110). Such an assertion is practically unintelligible to the contemporary mind, yet it serves as the corner stone of Kant's theory of cognition in the CPR. What is the intent of this assertion, and how does it come to have such status? The full meaning of this claim is brought to light in The Schematism of the Pure Concepts of Understanding. Kant presents in this section a problem that results from his considerations in the Transcendental Deduction. Kant recognizes that an explanation must be provided for the operations he describes in the Deduction.
In the Schematism chapter Kant poses the question: "How, then, is the subsumption of intuitions under pure concepts, the application of a category to appearances, possible?" (A 138 / B 177). We require, says Kant, some mediating representation:

This mediating representation must be pure, that is, void of all empirical content, and yet at the same time, while it must in one respect be intellectual it must in another be sensible (A 138 / B 177).

He calls this representation the "transcendental schema," and he goes on to explain how a transcendental determination of time is that which functions as the transcendental schema.

Despite the subsequent explanation of time and how a transcendental determination of it performs this function, however, the Schematism has still left many scholars completely bewildered as to the precise nature of the schema. Some, though recognizing the need for such a representation, regard Kant's attempts to provide one as unsatisfactory. Upon this

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1Ernst Curtius, "Das Schematismuskapitel in der Kritik der Reinen Vernunft," provides a catalogue of complaints launched by various scholars who have wrestled with the schematism chapter, up to his time. For example, Schopenhauer maintains that the Schematism chapter is renowned for its deep obscurity, as no one can make head or tail of it. Curtius reports H.H. Williams' survey in his article "Kant's Doctrine of the Schemata": Green describes the schematism chapter as a surplus of distinctions; Caird also views the schematism chapter as superfluous, and Adickes notes in his edition of the CPR that the schematism chapter is the most obscure part of the CPR and therefore has been regarded by many to be the most profound. According to J.S. Beck, the schematism chapter reads like a metaphysical novel. Curtius also points out that the literature on the schematism, at least the specialized literature, is not very extensive. He notes the 1878 dissertation by P.S. Neide, which is described as just a paraphrase of the Kantian text. In 1894 H.H. Williams brought out an article on the doctrine of the Schemata. The interpretation of the schema as "type of experience" presented in this work, however, though original, is not thought to be Kantian. Curtius notes Zschokke's work on the schematism in Kant-Studien 12 (1907) as being of incomparable value, though it too has its limitations. Though Curtius only describes the extent of the scholarship on the schematism up to his own time - 1914, the issue has not received a vast amount of special attention even in the literature since then. I mention some more contemporary treatments below.

2For example, H. A. Prichard, Kant's Theory of Knowledge, p. 255, maintains that "the process [of schematism] said to be necessary because a certain other process is impossible is the
view, the nature of the transcendental schema still remains a mystery.

One of the reasons this solution has left many unsatisfied is that Kant appears to be dealing with the problem merely on the level of language and is not really tackling the problem in a genuine way. How the application actually occurs is still left unexplained, for now we feel a need to account for the manner in which a transcendental determination of time functions as this mediating factor. Furthermore, there is nothing about this explanation that renders it conclusive that time alone is a sufficient factor in dealing with the problem. Yet, although many think that Kant has not dealt with the problem in a genuine way, they do not indicate exactly what it would mean to solve the problem in a genuine way - what would count as genuine. My strategy in unveiling one aspect of this mystery is to examine what Kant says elsewhere in the CPR to determine if there is anything there that may provide more basis than the Schematism chapter itself does for a more precise sense of what the Transcendental Schematism is actually about. I think Kant gives us much to go on.

We would do well to clarify what Kant himself regards as his task in the section on the Schematism. It is important to be very clear on what exactly it is that Kant sees as his very process said to be impossible."

3In particular, G.J. Warnock, "Concepts and Schematism," pp. 80-81, views the problem of the schematism, and concept application in general, as one that is primarily linguistic. He writes: "Perhaps, then, Kant's question 'How is it possible to apply pure concepts?' may be put as follows: 'How do we learn to use words, for which the complete conditions of their correct use cannot be exhibited by the act (or any sequence of acts) of pointing to something that we intuit?' And this question is, at least, intelligible."

Though Warnock goes on to show that Kant fails to answer this question.
problem. Kant explicitly states that, in general, concept application is not problematic. Besides the concepts themselves and "mother-wit" or a natural talent for judgment (A 133 / B 172), nothing further is required to apply ordinary concepts to their objects. It is neither necessary nor possible to determine a rule or set of rules for the application of ordinary concepts. The attempt to introduce these additional rules would just lead to an infinite regress. For concepts are themselves rules, and if rules were required with respect to their application, then further rules might be required to govern the application of those rules, and so forth, ad infinitum (A 133 / B 172).

There is something special, however, about the application of the pure concepts of the understanding (A 137 / B 176). For in this case, and this case only, not only is it possible but it is also necessary that there be certain rules, i.e. schemata, that contribute a content in addition to and distinct from the content contained in those concepts. Whereas the pure concepts of the understanding merely specify a priori a rule or the universal condition of rules, the schemata "specify a priori the instance to which the rule is to be applied" (A 135 / B 174). Schemata are required in the case of the pure concepts of the understanding because of the heterogeneity of these concepts with the intuitions to which they are to be applied. For in order for an object to be subsumed under a concept, the concept must be homogeneous.

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Paul Guyer, *Kant and the Claims of Knowledge*, p. 179, mentions an interesting general point which we ought to consider when trying to come to grips with the nature of Kant's task in the Schematism, though I think Guyer underestimates the purpose of the Schematism: "When he comes to the central paragraph of this introduction to the principles, Kant does not write as though there had been no Transcendental Deduction at all. But he certainly does write as though the Deduction had established at most the very general point that experience or empirical knowledge requires the concept of an object, and as if the schematism had added only the equally general point that this must be the concept of an object capable of being given by means of the kind of sensibility we possess."
with the representation of the subsumed object. This amounts to saying that "the concept must contain something which is represented in the object" (A 137 / B 176).³

Kant tells us exactly what would be required in a form of subsumption in which the thing to be subsumed is heterogeneous with the thing under which it is subsumed:

There must be some third thing, which is homogeneous on the one hand with the category, and on the other hand with the appearance, and which thus makes the application of the former to the latter possible. This mediating representation must be pure, that is, void of all empirical content, and yet at the same time, while it must in one respect be intellectual, it must in another be sensible. Such a representation is the transcendental schema (A 138 / B 177).⁴

Kant presents it as obvious that there exists what he refers to as "some third thing" that is homogeneous with both the pure concept of the understanding - the category - and with the appearance; and by the mediation of this third thing, the application of the category to the

³Robert Paul Wolff, Kant's Theory of Mental Activity, pp. 216-17, has reported the vastly differing views of Paton and Kemp Smith on the general notion of a schema. Specifically, he explains that whereas Paton (The Metaphysics of Experience, vol. 2, pp. 17-78) distinguishes between: a) pure categories, b) schematized categories, c) transcendental schemata and d) the functions of judgment, Kemp Smith (A Commentary to Kant's Critique of Pure Reason, p. 340) holds that the distinction between categories and schemata is completely artificial, and that they are really identical. Wolff thinks Paton's view would have been consonant with Kant's architectonic, but that its meaning is unclear; whereas Kemp Smith's makes philosophic sense, but does not seem to square with the text. I definitely think Paton's distinctions are valid.

⁴Ernst Curtius, "Das Schematismuskapitel in der Kritik der reinen Vernunft," p. 344, points out that Kant has a double manner of speaking when referring to that to which the categories are applied. Kant seems to employ synonymously 1) the subsumption of "empirical (generally sensible) intuitions" under the categories (B 176), and 2) the subsumption of "appearances" under the categories (B 178). "Appearances" and "intuitions" are therefore used synonymously. Consequently, only the comparison between categories and intuitions is really accurate, since "appearance" is often synonymous with "object," and this term is not applicable here. (cf. Krausser's definitions of the two senses of "appearance," in sec. ii below.)
appearance is rendered possible (A 138 / B 177). He eventually tells us that that which may function as the schema is a transcendental determination of time, i.e., a number of parts of time brought into combination and conceived of as a synthetic whole. The reason a transcendental determination of time is suitable for the above task is that such a representation is a) homogeneous with the category, as it possesses a form of unity in accordance with one of the categories, and b) homogeneous with appearance, since it is temporal, as are all empirical representations of the manifold of appearance (A 138-39 / B 177-78). Kant's line of thought here seems to involve the idea that two things whose nature are completely distinct from one another may nonetheless be related - in this case through the relation of subsumption - provided that each of these things are related to some further thing.

Because the appearances to which the categories are applied are heterogenous from the categories, the representation of the object could not be "met with in any intuition" - an essential requirement for the subsumption of an object under a concept (A 137 / B 176). It is mistaken, however, to presume that the heterogeneity that Kant views as problematic consists in the categories' being pure and the appearances' being empirical. Kant misleadingly

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7Lewis White Beck, "Can Kant's Synthetic Judgments be Made Analytic," p. 17, reminds us, however, that a proper definition of a category cannot be given. The schematization of a category is the sensible conditions under which a category is applicable, but this is not equivalent to a definition of the category. As Beck puts it: "Schematizing a category is very different from defining it."

8This claim is suggestive of the reasoning we find in Spinoza's Axiom 5 in The Ethics, p. 32: "Things which have nothing in common with each other cannot be understood through each other; that is, the conception of the one does not involve the conception of the other." By demonstrating that, in fact, categories and intuitions do have something in common - their relation to a schema - we may understand the one through the other in the sense that we may understand how the two may be related to one another.
presents the situation as though this were the case, but he never explicitly states the problem in this way. In fact, he drops a very understated, though crucial, hint that ought to divert our attention from the "empiricality" of the appearances. That is to say, the heterogeneity between the category and the appearance that Kant views as problematic for the application of the former to the latter is not that the category is pure and the appearance is empirical. For Kant clearly states that the categories are heterogeneous not only from empirical but from any sensible intuition. He writes: "But pure concepts of understanding being quite heterogeneous from empirical intuitions, and indeed from all sensible intuitions, can never be met with in any intuition" (A 137 / B 176). What Kant is saying here is that the categories are not only heterogeneous with *empirical* intuitions but also with *pure* intuitions. Kant obviously claims, however, that the heterogeneity he speaks of is resolvable. We should consider then what it is that both empirical intuition and pure intuition have in common, as it could only be some shared feature that is relevant here. The obvious feature is, of course, the fact of their both arising from sensibility, which is a purely receptive faculty of our knowledge. The categories, on the other hand, arise from understanding, which is a purely spontaneous faculty of our knowledge; *this* difference between the category and the appearance is the most critical. It is highly probable then that this is the feature that constitutes the heterogeneity involved in the application of categories to appearances that Kant attempts to resolve. It is *this* disparity between sensibility and understanding, therefore, that merits attention.

Now if we consider again the condition that Kant lays down as necessary for the subsumption of an appearance under a category, that "the concept must contain something which is represented in the object that is subsumed under it" (A 137 / B 176), it seems that
the subsumption of an appearance under a category would certainly be problematic if there is nothing that could serve as a mediator for the process. Kant says of this mediating representation that "while it must in one respect be intellectual, it must in another be sensible." Kant asserts that the transcendental schema can serve this function. This he concludes from the following:

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 (A 138-39 / B 177-78).

It can hardly be said that what Kant provides here is an argument - at least not as it stands. But if we bring to this passage those features of Kant's position presented elsewhere in the text, an argument may be pieced together that both develops and clarifies his discussion of the matter. Kant begins with the notion that both the categories and the appearances are related in some way to time. Appearances are always presented to us in a manifold of sensible intuition; the categories are responsible for bringing pure synthetic unity to a manifold of representations in intuition. Now because the synthetic unity that the categories

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9Richard E. Aquila, Matter in Mind, p. 57, explains, in a manner different from the one suggested here, how concepts, in general, are applied to intuitions: "This is not intended to deny that there is such a thing as applying concepts to an intuition. It is only to say that doing so is nothing other than an intuition's elevation, through the elevation of some material in it, to a specifically conceptualized status. The elevating factor is attributable wholly to something 'formal.' But as Kant himself tells us, the formal factor is just consciousness itself, insofar as the latter constitutes 'merely subjective form of all our concepts (A 361)." Aquila's notion of "elevation," however, does not fully appreciate the role of synthesis in this process.

10For a general discussion of the nature of judgments in connection with the notion of synthesis which we have been examining, see Dieter Henrich, "Identity and Objectivity: An Inquiry into Kant's Transcendental Deduction," p. 139.
bring about is *pure*, the only way they can produce such unity is if in that on which they operate there is also something that is pure; since, this unity is termed "*pure* synthetic unity" precisely because it is a unity of something that is *pure*.¹¹ That is to say, it is a unity that is brought about a priori on something that is itself a priori. What this something is is *time*. For time is "the formal condition of the manifold of inner sense," which is the manifold in which all appearances are represented. By "formal" Kant, of course, means "pure." Thus to say that time is the "formal condition" of the manifold is to say that time is the "pure condition" of the manifold, that is, time "contains" or gives rise to a *pure manifold of intuition*.¹²

The appearances, however, being empirical, do not consist entirely of pure elements. Thus it would not seem possible that the categories could be applied to them, in the sense of bringing about a pure synthetic unity of them, unless it were the case that that to which they are applied is through that aspect of the appearance which is pure. This, as has been

¹¹Michael Young, "Synthesis and the Content of Pure Concepts in Kant’s First Critique," pp. 353-54, explains that "concepts have content only insofar as they involve the synthesis of a sensible manifold, and only insofar as they have matter. He does not identify the notions of content and matter, however. A concept’s content is provided by the universal rule of synthesis, which he also calls the concept’s schema. Its matter consists of particular sensible or imagined things that conform to that rule, which Kant also calls images. The connection between the two is close, of course, since the schema, as we have seen, is a rule for the construction or recognition of a sensible image. The closeness of the connection is what accounts for the fact that Kant so frequently links the two notions. The point remains that the notions themselves are distinct." This view that the pure a priori synthesis, and not just the matter, contributes to the content of the concept is indicative of the fact that a significant part of the concept’s content is pure. My analysis partly tries to explain how this pure element comes to constitute the content of the concept.

¹²Mikel Dufrenne, *The Notion of the A Priori*, p. 57, notes the influence that Kant exerted on his successors in their attempt to establish the notion of a "material a priori," though Kant himself never maintained anything like this.
explained, can only be the formal condition of the manifold of appearances, that is, time.\(^{13}\) The crucial move that Kant makes at this point is to assert that a \textit{transcendental determination of time}, i.e. a transcendental schema, could function as a mediating representation by which the categories may be applied to appearances. What this transcendental determination of time consists in is a \textit{determination} of the pure manifold of intuition, which Kant later tells us is carried out by the mediating function of the imagination, and which represents the most general sensible form of the appearance.\(^{14}\) For example, if the appearance is something to which the category of \textit{substance} is applied, the most general sensible form of this appearance is "permanence of the real in time," since this is the transcendental time determination, i.e. the transcendental schema, corresponding to the category of substance (A 143 / B 183). It will be noted, that although the transcendental schema is the most \textit{general} sensible form of the appearance, it is also the most \textit{particular} manifestation of the category. To assert this, however, is not equivalent to asserting that this particular appearance is an \textit{instance} of the category. For Kant has argued that the categories themselves can never be met with in any intuition (A 137 / B 176). But by means of the transcendental schema, the particular appearances in intuition may acquire a determinate form.

\footnote{\textit{"That is because, as Kant has already stated (B 49), time is the form of the 'inner' sense . . . .The inner sense is the site of rational thought. Consequently any emissaries from understanding will run into time before they run into anything else" Julian Roberts, \textit{German Philosophy}, p. 22.}}

\footnote{\textit{"Richard Aquila, \textit{Matter in Mind}, pp. 87-88, points out that "Kant is in fact not merely concerned with imaginative association \textit{simpliciter}. If he were, then it would indeed be difficult to establish a connection with the corresponding transcendental reflections. What we must assume is that Kant means to deal from the start with that particular \textit{form} of association that is - or will at least eventually be - required as a foundation for understanding, hence for any relevant sort of unity of consciousness."}}
of their a priori constitution. It should be noted, that the first formulation of the criterion for subsumption that Kant lays down - that "the concept must contain something which is represented in the object that is to be subsumed under it" - expresses the criterion for ordinary concepts (A 137 / B 176). Given that this criterion cannot be met by the categories, Kant formulates another criterion for these special concepts - the existence of a mediating representation which itself possesses some feature that renders it homogeneous with the category and some feature that renders it homogeneous with the appearance (A 138 / B 177). Thus the second formulation of the criterion is a legitimate substitute for the first, given that the first cannot be met. How is it that the transcendental schema can meet the second formulation of the criterion?

If we consider that the transcendental schema is a transcendental determination of time, we find that, as Kant says, it is on the one hand homogeneous with the category, in that it is universal and rests upon an a priori rule; and on the other hand it is homogeneous with appearance in that time is contained in every sensible representation of the manifold, even empirical ones (A 138-39 / B 177-78). We may conclude from this that the transcendental schema is homogeneous with the category in that it manifests some degree of universality,

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1C. Thomas Powell, Kant's Theory of Self-Consciousness, pp. 60-61, stresses an important point: "We do not intuit a bare 'this,' but rather a 'this blue pen' or 'this loud sound,' in which the concept informs the intuition - admittedly to a greater or lesser extent - as it is experienced. For Kant, all our thought is of particular somethings experienced such that they are thought of as being of such a kind." Thus to say that the schema is only applied to the a priori aspect of the appearance is not to say that what actually confronts us in experience is only the a priori aspect; the appearance is always presented to us in its empirical form, though this empirical form is not fully determined until the schematism process has taken place.
and is homogeneous with the appearance in that it manifests some degree of particularity.  

Thus the transcendental schema - as a product of the mediating function of the imagination - may also be viewed as a representation of something that mediates between the category - which, as pure universality, does not admit of particularity, and the appearance - which, as pure particularity, does not admit of universality.

Now it is certainly true that Kant really doesn't say much about how the mediation between categories and appearances takes place. I also think, however, that there is a good reason for this. This is that, although Kant certainly does intimate a kind of mediation

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16"H.W.B. Joseph accuses Kant of not having distinguished two problems in Schematism: how the universal is related to the particular (which would still remain a conceptual problem, wholly within the confines of intellectual understanding, and thus not needing anything like Schematism), and how the intelligible is related to the sensible (which does indeed raise the question of a connected link, but Kant's answer then seems to imply an infinite regress of mediators - the Third Man all over again.)" Eva Schaper, "Kant's Schematism Reconsidered," p. 271. The comment is made in reference to H.W.B. Joseph, "The Schematism of the Categories in Kant's Critique of Pure Reason, pp. 266-302. In the manner that I address the issue, these two problems are viewed as two aspects of one general problem which admits of one general solution.

17Sarah Gibbons, Kant's Theory of Imagination, p. 50, also notes the important role of the imagination in bringing about a connection between the universal and particular aspects of judgment: "In the human case, the determination of inner sense by imagination makes possible the experience of an individuated judging subject, one whose judgment is perspectival, not wholly universal. The particular and the universal, the perspectival and the general, are thus two necessary aspects of judgement."

18As Eva Schaper, "Kant's Schematism Reconsidered," p. 271, points out, some scholars even assert that Kant is engaged in working out a solution to a pseudo problem. Furthermore, when attempting to deal with Kant on this issue, they often demonstrate that they have an axe to grind. She remarks: "More recently, and more bluntly, G. J. Warnock has spoken of Kant's repetition of the question 'How can categories be applied to the given?' in Schematism as a 'silly question.' By 'different axes to grind,' I mean that Prichard is measuring Kant by the requirements of pure constructionalism, and then finds Kant failing to meet them consistently, while Joseph weighs and criticizes Kant's doctrine against the conclusions of conceptual Platonism. Warnock raises the issue still differently as one of the misuse of language."
between intuitions and appearances, he is not really concerned about the nature of this mediation on this level. Rather, he concerns himself with the mediation on another level that renders the mediation on the level of intuitions and appearances possible. This concern is similar in kind to all of Kant's other concerns in the CPR; it is a concern about origins (A 78/B 103). Although Kant does not explore in great depth the mediation on the level of intuitions and appearances, he does explore this mediation extensively on the level of the origins or sources of these things, i.e., on the level of the functions that produce them - sensibility and understanding. In fact the rest of the CPR is taken up with examining the nature of these functions and their relation with one another, and ultimately their mutual dependence upon one another as necessary components in the formation of experience.

It should be stressed that schematism ought not to be regarded as a process distinct from the general processes already mentioned in the Deduction, and initiated in the Aesthetic. Some scholars, however, regard the Schematism chapter as superfluous, if indeed the Deduction really does accomplish the task that Kant set out to accomplish in that part of the text. In contrast, I maintain that the Schematism chapter elaborates on the function of the imagination which makes the activity discussed in the Deduction possible.

What Kant focuses on in the Schematism chapter is what the schematism process represents: a

\[\text{In Schematism, Kant implicitly sets out to do the work of the Aesthetic all over again, by showing if not explicitly saying so, that we think in categories what is given in sense, not because the synthesis of the understanding superimposes its forms upon that which is given under the synthesis of sense, but because the 'synthesis of imagination' produces schemata in the given which make application of one to the other possible" (Eva Schaper, "Kant's Schematism Reconsidered," pp. 278-79).}\]

\[\text{H.A. Prichard, Kant's Theory of Knowledge, p. 246, remarks: "It seems clear that if the first part [the Deduction] is successful, the second [Schematism] must be unnecessary."}\]
mediation between the intuitive and the intellectual faculties - sensibility and understanding.\textsuperscript{21} What he is concerned to establish in this chapter is simply that such mediation does occur.\textsuperscript{22}

It is the mediation between the functions of these two faculties that makes possible the mediation between the products of these two faculties - intuitions and concepts - which ultimately allows for the application of the one to the other. This mediating function of course is the imagination (A 140 / B 179). In mediating between the intuitive and intellectual faculties the imagination makes possible the kind of subsumption that is required for the application of concepts to intuitions.\textsuperscript{23} This mediating function is able to do this because it brings about the homogeneity - that seemed to be lacking - required for this subsumption to

\begin{footnotesize}
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\item[\textsuperscript{21}]Wolfgang Carl, \textit{Die transzendentale Deduktion der Kategorien}, pp. 79-94, offers a very thorough account of Kant's use of the term "faculty," meaning, generally, a power of cognition. Carl points out that, for Kant, a cognitive faculty is a source or origin of representations, and that there are no representations, and, moreover, no items of knowledge, for which a source cannot be determined. More will be said on the nature of a cognitive faculty in Chapters, II, III and IV.

\item[\textsuperscript{22}]This, however, should not be taken to mean that Kant had already accomplished in earlier parts of the CPR what he sets out to accomplish in the Schematism chapter. Eva Schaper, "Kant's Schematism Reconsidered," p. 274, makes some interesting points along these lines: "1) Kant proposes schemata as exhibited by the productive imagination, \textit{not} by understanding, sense, or even reason (the distinctions in mental activity which had so far found systematic exposition in the \textit{Critique}); and 2) Kant thinks of schemata as pure time-determinations (though time had so far figured ambiguously, once as a pure form of sensibility, once as an acknowledged \textit{integratum} in the Deduction). To take the view that all Kant needs is already given before Schematism would be to place too strong an emphasis altogether on the implications of Kant's admittedly explicit statements that understanding, sensibility, and reason, \textit{i.e.} the human mind in its formal structure alone, is the home of all formality and structure."

\item[\textsuperscript{23}]See Ernst Curtius, "Das SchematismusKapitel in der Kritik der reinen Vernunft," pp. 338-66, for a detailed discussion of the notion of subsumption in the Schematism chapter.
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take place. That it, in fact, is not lacking is what this study will demonstrate.

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24 Leo Freuler, "Schematismus und Deduktion in Kants Kritik der reinen Vernunft," p. 399, stresses that by "homogeneity" Kant does not mean "similarity" or "resemblance," which is what is involved in the case of images; it is for this reason that he is able to resolve the problem of abstract images that Berkeley raises. To say that the concept and the intuition are homogeneous is to say that the two have something in common - the schema - which is not an image, but a procedure for the construction of images (A 140-41 / B 179-80). Consequently, schemata do not have to be similar to or resemble the concepts or intuitions between which they are mediating. As Freuler explains, this allows Kant to respond to Berkeley quite simply, namely, by asserting that: "The idea of the construction of a triangle need not itself be a triangle."
Section ii

Transcendental Time Determination

What our senses actually encounter in sensation are not the raw sense data themselves, but formed sense data, specifically, temporally and sometimes spatially formed sense data. In other words, what we encounter is already an appearance, though not a fully determined one. In the subsumption of the appearance under the concept, the appearance is further determined as the synthesis of the manifold of intuition is brought to the concept, to be unified according to a specific rule. Thus although subsumption normally involves the application of universals to particular instances of those universals (A 137 / B 176), in the present case Kant seems to have in mind a significantly different form of subsumption.

Despite the fact that Kant does not explicitly state what this form of subsumption is, we may

25 H.J. De Vleeschauwer, The Development of Kantian Thought, p. 95, writes: "In itself matter cannot be represented and therefore does not occur as a factor in the analysis of knowledge in its autonomy and in its ontological independence. Matter can only be represented in the phenomenon, that is, in the structure which emanates from the synthetic act effected by the knowing subject."

26 H. Vaihinger, Commentar zu Kants Kritik der reinen Vernunft, p. 165, describes experience as "the first product of the understanding," since experience is that which comes to be through the work of the understanding on the raw material of sensation.

27 Several problems arise for the kind of subsumption that Kant has in mind in the Schematism chapter. Kemp Smith, Wolff, Walsh, Warnock and Wilkerson in particular have launched rather pointed attacks on the issue. Their main objections are outlined and dealt with by Gordon Nagel in The Structure of Experience, pp. 71-74.
glean from his lean remarks on the subject that it is a process that involves an a priori synthesis that enables us to combine a set of intuitions in accordance with a rule of unity of the understanding. This is what is suggested by the following description of the schematism process:

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 (A 142 / B 181).

An understanding of this kind of subsumption, therefore, requires an analysis of this form of synthesis. This will be provided in the chapters to follow.

An issue that is very relevant to the one noted above is what exactly Kant means by "appearances" in his description of the schematism process. Krausser draws a crucial distinction between two senses of "appearance" that I think is helpful here. He explains:

The concept of "appearance" (call it appearance1,) which Kant uses in A 138 and 139 / B 177 and 178 is not the concept of appearance (call it appearance2) which he uses in the Transcendental Aesthetic, where it explicitly means "things which we take as objects of our senses" (A 34 / B 51). It is impossible that the "appearances1," in A 138 and 139 / B 177 and 178 refers to things or objects, because these are products of the application of the categories, whereas what Kant refers to here is something to which the categories are first to be applied. The concept "appearances2," therefore, must be the concept of a result of an epistemological analysis of and abstraction from appearances1; abstraction being made from all those structural features of the appearances1, which the appearances2, can have only through being products of a processing according to the categories. What analytically remains thus are rudimentarily temporal and spatial (see B 291 to 292) manifolds of sensible material, and this is the abstractum to which Kant unfortunately also refers with the term "appearances" (= appearances1).28

Krausser has effectively traced the development of Kant's argument in the passage under discussion; this allows him to explain with remarkable precision the shifts in meaning of the terminology Kant's employs, specifically, the notion of an object before it has been fully determined through the process of schematism, and the notion of an object after it has been so determined. Because these shifts are so subtle, I do not think Kant can be accused of equivocation of an illegitimate kind. This is especially true if we take into serious consideration the fact that Kant is trying to explain the manner in which objects come to be known by us. In this process an object that is undetermined gradually becomes more and more determined, to the point where it may be regarded an object of experience for us. As Kant explains, "the undetermined object of an empirical intuition is entitled appearance" (A 20 / B 34), understood as "appearances." Transcendental time determination - schematism - is the foundation for the determination of the object, in the sense of appearances, and thus foundational for the possibility of experience (A 147 / B 186-87). From this perspective then, although the categories are certainly being applied to something empirical, the empirical objects to which they are being applied are not yet determined as empirical objects for consciousness. Thus it is more appropriate to say that the categories are being applied to

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29Paul Guyer in *Kant and the Claims of Knowledge*, p. 168, presents quite an original presentation of the schematism. As demonstrated in the following passage, Guyer stresses the importance of the role of space in the application of the categories to appearances. He writes: "Though the contents of the transcendental schemata of the categories are supplied by the several transcendental determinations of time, the use of these schemata - and thus of the categories themselves - requires objects in space. The spaciality of objects of appearances will be the ultimate condition for the objective validity of the categories, even if it does not figure in the actual schematization of them." Guyer finds much evidence for this position in the Refutation of Idealism. What Guyer says is certainly of significance, though I think the emphasis he places on the use of schemata detracts somewhat from the central issues in Kant's own presentation.
those undetermined appearances which, upon being fully determined, will become empirical objects of experience.\textsuperscript{30} Appearances in the first sense and appearances in the second sense both denote the same object from the perspective of the object, but not from the perspective of consciousness. For, in the first sense of appearance, the object has not been taken up into consciousness as a fully determined object of experience whereas in the second sense it has.\textsuperscript{31} Thus by distinguishing between these two senses of "appearances," many claims in the Schematism chapter become more intelligible.

Kant also describes the schema as limiting the categories. He writes:

But it is also evident that although the schemata of sensibility first realise 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 (A 146 / B 186).

Thus the schema should be viewed both as being related to sensibility and as being limited by it. In fact, Kant describes the establishment of this view as one of the central goals of transcendental philosophy. He writes: "[Transcendental philosophy] must formulate by means of universal but sufficient marks the conditions under which objects can be given in harmony with these concepts" (A 136 / B 175). We can only assume that the universal aspect of these marks refers to the categories and that the contribution of the categories is only rendered sufficient when they are schematised, as it is in becoming schematized that they are able to relate to a content. As Kant explains, "otherwise the concepts would be void of all content,

\textsuperscript{30}Kant, \textit{Prolegomena}, sec. 20.

\textsuperscript{31}I argue throughout this study that by "empirical," in the strict sense, Kant means "of or pertaining to a fully determined object of experience."
and therefore mere logical forms, not pure concepts of the understanding" (A 136 / B 175).

In fact, we may say that a judgment's being related to a given content is one of the necessary conditions for its being an objective judgment.

Whether a judgment is objectively valid or not also depends upon other judgments that may be made about that appearance and how that judgment fits into the whole of knowledge. If it does not accord with other judgments and with the whole of knowledge, then the judgment is merely subjective; if it does, then it is objectively valid (A 216 / B 263). This view guards against some of the possible perils of idealism - the problem of complete subjectivity, and the problem of degrading bodies to mere illusion, as Kant accuses Berkeley of doing (B 71). By presenting schematism - transcendental time determination - as the mediating factor for the application of the categories to appearances given in intuition, Kant leaves the sense data unchanged and unchangeable - just as "the given" ought to be. For this is largely what being given entails for an intuition that is only sensible. Only an intellectual intuition can produce and thus contribute to the nature of its objects in a spontaneous manner. For subjects possessing only a sensible intuition the given must remain static.

32For an interesting discussion comparing Berkeley and Kant on the problem of the schematism, see Joseph Moreau, "Berkeley et le schematisme." I think, however, that Moreau over-emphasises the similarities between them.

33McDowell, in Mind and World, presents a theory of knowledge that makes peculiar use of some Kantian tenets. Certain of his claims, however, are rather striking, as they cast the problem of the relationship of the faculties of the mind in an interesting light. With respect to the relationship between receptivity and spontaneity McDowell describes his position in the following manner: "I have stressed that experience is passive (lecture 1, sec. 5). In that respect the position I have been recommending coincides with the Myth of the Given. The passivity of experience allows us to acknowledge an external control over our empirical thinking, if passivity will cohere with an involvement of spontaneity" (John McDowell, Mind and World, lecture 5, p.89).
But if the given is static, then how can its sensible form be dynamic, that is to say, how can its sensible form be susceptible to alteration, as when it is determined by the categories as outlined in A 212-13 / B 259-60? In fact, the sensible form is not really altered by having concepts applied to it, in the sense of its being turned into something different from what it was originally; rather, it becomes more determined, and determined in such a way that the entire intuition, of which it is the sensible form, becomes more unified with experience as a whole. For if we consider what intuition is, it will be noted that essentially it is the presentation of a manifold. By "manifold" Kant means a diversity, or the presentation of many things. A concept, on the other hand, is a rule that brings about unity in the manifold by indicating how the manifold is to be united to yield experience - particular objectively valid objects (A 68 / B 93). Now what this might leave us wondering is if the concepts contribute unity by virtue of their contributing determinate form, then why are space and time not themselves categories? Why does Kant have two kinds of forms - the categories and the forms of intuition? Clearly there must be a significant difference between the kind of form understanding provides and the kind of form sensibility provides.

We may begin by noting that if the understanding, by means of the categories, provides specific forms, then sensibility, space and time, provide a general form. But we must also take into consideration that the concepts of the understanding are universal, whereas intuitions are particular. Thus, on the one hand, the categories, though universal, provide a

34"For, so soon as we have realized that we cannot know things in themselves, and that, therefore, 'object' can only mean that which has existence for a conscious self, we must also recognise that objectivity is nothing but universal validity or validity for 'consciousness in general'" (Edward Caird, The Critical Philosophy of Immanuel Kant, vol. 1, p. 432).
particular form; on the other hand, space and time, though particular, provide a general form. The situation appears to be somewhat paradoxical. (In consideration of this problem I will only discuss the relationship between the categories and time, since time is contained in all intuitions and space only in some. It will be understood that whatever is said of time will apply to space as well with regard to spatial intuitions.) What must be grasped in order for the paradox to disappear is the fact that whereas time is one singular form, its function is to receive many representations (A 30-32 / B 46-48). But surely we must ask: How can that which is one receive, or be the form of, many things? This is possible only if those things are ordered, and ordered in such a way as to preserve the unity, or singularity, of time. It is the function of the categories to carry out precisely this task.

The categories are universal in that they are general concepts that may be applied to many instances, but in their application to intuitions they impose upon those intuitions a particular form. Because that to which they are being applied is the form of sensibility, they have the effect of unifying, and thereby making more determined, the form of sensibility as it is affected by some particular sense data, thus bringing about particular objects that may be experienced by the subject (A 103). Thus, in outline, if any object appears before me, the categories determine a priori that my intuitions of it will have certain mathematical features (quantities and qualities), that it will be an abiding material substance, in causal relations with other objects which all exist and interact in one general community of substances, etc., as explained in the Analytic of Principles (A 148-218 / B 187-265). Now certainly what particular kinds of qualities an object possesses and to what specific degree it possesses them, and what particular effects it causes under certain conditions and so on, is not dictated by the
categories, nor is it dictated by sensibility. That can only be determined by the empirical object itself. But by the "object itself" (in the sense of appearance, as Krausser describes above), is not meant here only the sense data comprising the object, but rather the sense data that have had the form of intuition of time imposed upon them (A 98-99). Once this has occurred, that is to say, once the sense data have been received by sensibility, the result is an empirical intuition. This intuition constitutes the content or matter, so to speak, upon which the categories operate.
Section iii

Concepts and Their Employment

In the Clue to the Discovery of all Pure Concepts of the Understanding Kant provides what ought to serve as the guiding principle of the entire Deduction and what, I propose, also ought to be carried over to an examination of the Schematism chapter. Many of the problems that arise with regard to the interpretation of that chapter are due to the fact that this guiding principle is forgotten. Kant presents this guiding feature of his program in the following:

Concepts are based on the spontaneity of thought, sensible intuitions on the receptivity of impressions. Now the only use which the understanding can make of these concepts is to judge by means of them. Since no representation, save when it is an intuition, is in immediate relation to an object, no concept is ever related to an object immediately, but to some other representation of it, be that other representation an intuition, or itself a concept. Judgment is therefore the mediate knowledge of an object, that is, the representation of a representation of it. In every judgement there is a concept which holds of many representations, and among them of a given representation that is immediately related to an object . . . The functions of judgment of the understanding can, therefore, be discovered if we can give an exhaustive statement of the functions of unity in judgments (B 93).

Thus right from the start Kant indicates that whatever knowledge we have of objects will always be mediated knowledge, since we cannot apply concepts immediately to objects, but only to the intuitions we have of those objects (and in some cases to concepts of those objects); this results in a judgment. Judgments, however, can only arise from an act of synthesis. Thus whatever the subsumption of the categories is going to involve, it will
somehow have to be related to the notion of synthesis.\textsuperscript{35} Firstly, it is important to note that, as Kant says, the only use that the understanding can make of concepts is to judge by means of them. This claim implies that a certain relationship holds between the having of a concept and the using of a concept. It seems that Kant wants to maintain that the having of a concept and the using of a concept are two very different things, and that the using of a concept involves more than just the having of it. Kant doesn't fully explain what else is required for the use of a concept, but he does mention some of the conditions that are required. The most important is, of course, the one described above, that is, that concepts need to be applied to intuitions, either pure or empirical.\textsuperscript{36} He specifies further how this works in the last few lines of the passage quoted above: "In every judgment there is a concept which holds of many representations, and among them of a given representation that is immediately related to an object" (B 93). The first of these conditions refers to the having of the concept, the second, to the use of the concept. For to have a concept is simply to have a representation of many representations; to use a concept is to relate that concept to a given representation that is immediately related to an object. It seems then that the crucial thing to be explained in all of this is how a representation that holds of many representations can come to be related to a

\textsuperscript{35}Ernst Curtius, "Das Schematismuskapitel in der Kritik der reinen Vernunft," p. 365, goes as far as saying that it is misleading if we think of the schematism only in terms of subsumption and not synthesis.

\textsuperscript{36}Robert Pippin, \textit{Kant's Theory of Form}, pp. 88-89, observes: "One essential element in Kant's ability to maintain the theory of formality he does in his separation between "spontaneity" (in both the understanding and pure intuition) and receptivity, or sensation. But there would be quite a gap - indeed, an abyss - in his theory if he could not successfully bring these elements 'back together again,' and if he could not explain the relation between the formal, a priori requirements for 'thinking anything at all' and 'thinking this or that' in particular."
representation that is immediately related to a single object. This is the problem of the application of concepts to intuitions in general. The application of the pure concepts of the understanding to intuitions is a special instance of this general problem. To provide a solution for this latter problem would be to provide a solution to the subsumption problem as presented in the Schematism. Of course whatever Kant does provide in the Deduction, it will be just the general form of this solution. The problem is re-introduced as a problem in the chapter on the Schematism simply because some important details have not been worked out in the Deduction. Let us now examine how far Kant does go in providing a solution to the problem in the Deduction.

What is very interesting is the manner in which Kant expresses the point in B 93, examined above. He states that among the many representations of which the concept holds, one of those representations is immediately related to an object. The reason this is significant is that it suggests that we do not require some extra thing in order to relate the concept with the intuition. Rather, the intuition to which the concept is applied is already among the set of representations of which the concept holds. This certainly lessens the gap that is normally thought to exist between concepts and intuitions. We discover in the Schematism chapter, however, that this point applies differently in the case of the categories than it does in the case of empirical concepts. For with the categories, it is not the case that among the many representations of which the categories hold there is a representation that is immediately related to an object. For example, with respect to the empirical concept "cat" as appears in

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37 See S. Körner, Kant, p.70, for a succinct discussion of the distinction between the application of the categories in synthetic a priori judgments and of the application of a posteriori concepts and mathematical concepts to things that are perceived.
the statement: "Tigger is a cat," "cat" is the concept that holds of many representations and among these representations is the representation of Tigger. With respect to the categories, however, this is not exactly the case. We may take as an example the statement: "fire is a cause of heat," cause is a concept that holds of many representations, but among these representations is not included the representation fire, at least not as an immediate object of that representation. The reason for this is that, not only is this particular representation of fire as cause not a representation of an object, but no representation of any object at all can be a representation of a cause. Moreover, even if the rule of a certain cause-effect relationship can be discovered in experience, the necessity of the sequence which is precisely what characterises it as a cause-effect relationship can never be discovered in experience (A 90-92 / B 122-24). This does not, however, imply that no representation whatsoever may serve as the representation of a cause. There certainly is such a representation and it is, of course, the transcendental schema of cause: "the succession of the manifold insofar as that succession is subject to a rule (A 144 / B 183)." 38

What Kant seems to do in the Deduction, therefore, is outline an explanation of concept application as it applies in its most general respect both to empirical concepts and to the categories, and then reserve his investigation into the differences between the two for the Schematism chapter. For the time being, therefore, what has been said above may be taken to refer both to empirical concepts and to the categories, so long as it is taken in its most

38W.H. Walsh, "Kant's Schematism," pp. 74-75, maintains that: "It was to deal with this problem of the meaning and reference of a priori ideas, left conspicuously vague in the inaugural Dissertation, that the doctrine of Schematism was devised. . . . [Kant's] aim was to show that categories, despite their non-empirical origin and remoteness from sense, can nevertheless be shown to have a sort of empirical reference and therefore to be capable of genuine application."
general sense. It will be interesting to see how, in what follows, Kant develops his program in the Deduction of the Categories from the general principle outlined in B 93 for the purpose of deducing the categories, and then how he swerves from this principle in the Schematism chapter in order to provide greater detail of the nature and operation of the categories.39 (See also A 138 / B 177 and A 141 / B 180 for a discussion of schemata for empirical concepts.) At present, I will continue with my examination of the Transcendental Deduction.

The entire argument of the Transcendental Deduction is summed up in a single paragraph that appears in section 20. The conclusion that this paragraph supports is that all sensible intuitions are subject to the categories, as these categories serve as the fundamental conditions and the sole conditions that allow for their manifold to become combined in one consciousness (B 143). I will cite the passage in its entirety:

The manifold given in a sensible intuition is necessarily subject to the original synthetic unity of apperception, because in no other way is the unity of intuition possible (sec. 17). But that act of understanding by which the manifold of given representations (be they intuitions or concepts) is brought under one apperception, is the logical function of judgment (cf. sec. 19). All the manifold, therefore, so far as it is given in a single empirical intuition, is determined in respect of one of the logical functions of judgment, and is thereby brought into one consciousness. Now the categories are just these functions of judgment, in so far as they are employed in determination of the manifold of a given intuition (cf. sec. 13). Consequently, the manifold in a given intuition is necessarily subject to the categories (B 143).40

39Otfried Hoffe, *Immanuel Kant*, pp. 86-87, comments on an important feature of Kant's theory of schematism: "although Kant deals with the schemata of pure concepts, the basic idea also becomes clear if we consider empirical concepts. One can even go so far as to claim that there can be transcendental schemata as intermediaries for pure concepts only if all concepts require schemata due to the fundamental necessity of a mediating representation between intuition and concept."

40The above is actually a summary of the Transcendental Deduction of the second edition. The extent to which it also summarizes the argument of the first edition version is a disputed
Aside from summing up concisely the argument of the entire Deduction, this passage also contains a crucial point that is vital for the avoidance of a common problem that many have thought to plague the Schematism chapter. This is that the logical function of judgment described in this passage is an act of the understanding that brings under one apperception a manifold of given representations, and that these representations may be either intuitions or concepts. That either intuitions or concepts can constitute the manifold upon which these logical functions of judgment operate is of utmost significance. For, this being the case, it is clear that the logical forms of judgment, i.e., the categories, can also be applied to representations that are concepts only, and that do not involve any representations received in intuition - only this application of the categories does not give rise to knowledge. Kant also makes this point quite emphatically in the section on Phenomena and Noumena (A 253).

The realization of this fact avoids several potential problems, among which is the problem of the employment of the categories to things other than representations that have been received in intuition, for example, the thing-in-itself. Kant sometimes speaks of the thing-in-itself as the "cause" of appearances, but at the same time as something about which we can never have knowledge, as we can only have knowledge about things that are presented to us in sensible intuition (A 249-52). The following passage from the Concepts of Reflection is particularly striking:

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matter, as noted by Paul Guyer, "The Transcendental Deduction of the Categories," p. 123: "But in spite of Kant's efforts at clarification, the intervening two centuries have brought little agreement in the interpretation of the deduction, even on the fundamental question of whether the two editions of the Critique, in 1781 and 1787, try to answer the same question by means of the same argument. The last three decades alone have brought forth dozens of competing interpretations or 'reconstructions' of Kant's transcendental deduction."
Understanding accordingly limits sensibility, but does not thereby extend its own sphere. In the process of warning the latter that it must not presume to claim applicability to things-in-themselves but only to appearances, it does indeed think for itself an object in itself, but only as transcendental object, which is the cause of appearance and therefore not itself appearance, and which can be thought neither as quantity nor as reality nor as substance, etc. (because these concepts always require sensible forms in which they determine an object) (A 288 / B 344).

That we can think such objects without having knowledge of them sounds paradoxical. The problem, however, vanishes if the point mentioned above is taken seriously. For if it is the case that the categories are also applicable to concepts alone in addition to intuitions, then it is possible to apply the category of causality to the concept of the thing-in-itself, as a transcendental object, in such a way as to formulate intelligible judgments about it, while at the same time recognizing that those judgments are not items of genuine knowledge, as they do not involve intuitions.

For this reason, then, describing the categories as "logical functions of judgment" is quite apt, as this emphasizes their role as operations of logic, that is, as pertaining to the understanding, and therefore as capable of being thought in relations to things other than intuitions, even if thinking them in this manner does not yield knowledge in the technical sense (A 254 / B 309). What is required for knowledge in the technical sense is the application of concepts to intuitions, which involves the process of schematism that Kant fully expounds in a later chapter. It should be noted, however, that when one of the categories is employed only with respect to concepts, it is not really appropriate to refer to it as a "category." "Category" is a term specifically reserved to refer to these pure concepts of the understanding insofar as they are employed in the determination of the manifold of given intuitions (B 143). This case is just one example of the importance of recognizing the various
ways in which the categories may be employed; the clarification of this point prevents misconstruing passages like the one cited above as contradicting one of Kant’s central epistemological claims: that knowledge requires both concepts and intuitions. For if this claim were threatened, then everything Kant says about the function of schemata would be threatened.
Section iv

The Relation between the Pure and the Empirical

In section three of the A edition of the Transcendental Deduction, what has become known as the "Objective Deduction," Kant claims to bring together systematically what he has expounded throughout the preceding parts of the text. He describes here sense, imagination and apperception as the three subjective sources of experience of objects and of our knowledge of them (A 115). When these are applied to appearances they are viewed as empirical; but he stresses that, nonetheless, in order for the empirical employment of these sources to be at all possible, they must also be viewed as transcendental, as they are the a priori elements serving as the foundation of this empirical employment. He explains the empirical employment of these sources in the following passage: "sense represents appearances empirically in perception, imagination in association (and reproduction),

"With respect to the interpretation of the three-fold synthesis, and the CPR as a whole, S. Körner, *Kant*, p. 60, makes a crucial point: "Kant's language . . . is that of introspective psychology describing processes as they follow each other in time. His point, however, is to analyze the structure of a connected manifold by distinguishing its characteristics and exhibiting their logical relations. Thus, in particular, the three notions involved in synthetic unity of the manifold are not to be understood as different stages in a temporal development. The use of the language of introspective psychology in the Transcendental Logic, which was to be concerned with the possibility of objective experience and not with its natural history, might easily lead to a confusion of its subject matter with that of psychology. Against such confusion Kant issues frequent and forceful warnings." Numerous analytic philosophers of the twentieth century, however, fail to note this vital point."
apperception in the empirical consciousness of the identity of the reproduced representations with the appearances whereby they were given, that is, in recognition" (A 115). He then explains the transcendental or a priori ground of each of these:

But all perceptions are grounded a priori in pure intuition (in time, the form of their inner intuition as representations), association in pure synthesis of imagination, and empirical consciousness in pure apperception, that is, in the thoroughgoing identity of the self in all possible representations (A 116).

What Kant demonstrates here is a very interesting point about the relationship between the pure and the empirical that is clouded throughout the entire preceding discussion of this material. This is that that which may be termed empirical, be it an intuition, concept, consciousness, synthesis or object, is really just the result of the application of the transcendental acts of the mind to appearances, by means of the pure elements involved in cognition. Specifically, empirical intuition is just the result of given representations with sensuous content being taken up into pure intuition and being synthesised according to the operations of sense, imagination and apperception.42

In this light, pure intuition, that consists of the forms of sensibility, is revealed to be

42Robert Paul Wolff, Kant’s Theory of Mental Activity, p. 221, n. 1, has made some interesting observations regarding the question of whether it is possible for perceptions which have not been synthesized to enter consciousness: "The double view of perception, as not only matter for concepts but also a combination of pure intuition and sensation, helps to explain Kant’s vacillations on the possibility of unsynthesized perceptions entering consciousness. In so far as they are merely matter for cognition, perceptions cannot be apprehended until a conceptual form has been impressed upon them. But viewed as sensations which have already acquired a spatio-temporal ordering, perceptions seem quite adequate candidates for contents of consciousness. This confusion dates back to the Dissertation, where space and time are considered products of mental activity rather than passivity. The relativity of all such form-matter, active-passive distinctions allows Kant to maintain many incompatible doctrines in an uneasy suspension." The views advanced in this study serve to explain the various conditions under which something can enter consciousness and the various products that result. (See also Section 1 of the A edition of the Transcendental Deduction.)
more closely linked to the intellectual faculty than seemed possible, as it is shown to be the first step in bringing the sense data of appearances in relation to the pure concepts of the understanding. The reason it is possible for pure intuition to be related to understanding in such a way as to render the pure concepts of the understanding applicable to appearances containing sense data that will ultimately give rise to empirical intuition, is that pure intuition is not really opposed to empirical intuition in the sense that pure intuition is the opposite of empirical intuition; rather, pure intuition is that which gives rise to empirical intuition, when sense data has been presented to it. Thus empirical intuition is merely the employment of pure intuition in a certain way, specifically, in its application to sensations.\footnote{It should be stressed, however, that it is certainly possible to have a pure intuition, or formal intuition, as Kant sometimes calls it, that does not give rise to an empirical intuition. This occurs in a case where the appearance does not contain any sense data, for example, the pure intuition of a triangle. The possibility of having such intuitions is what renders possible knowledge of geometry (A 25 / B 40-41).}

In the Schematism chapter Kant presents the application of the pure concepts of the understanding to empirical intuitions as problematic in a way that the application of empirical concepts to empirical intuitions is not. (A 137 / B 176) But the purpose of the entire chapter and of the entire Analytic of Principles is to show that, nonetheless, this heterogeneity is the result of a relationship between them that not only makes possible this application, but also provides the grounds for the application of empirical concepts to empirical intuitions. The implication is that homogeneity of the kind that holds between empirical concepts and empirical intuitions is not sufficient to allow for the application of the one to the other. What Kant refers to as an "inner ground" provides the ultimate condition for this operation. This, of course, is pure apperception, which Kant describes as the point upon which all connection
of representations have to converge if they are to acquire the unity of knowledge that gives rise to a possible experience (B 137-39). As the unity of the manifold in the individual subject that gives rise to this knowledge is synthetic, a synthesis must be presupposed, along with a principle governing this synthesis; and in order for the synthetic unity to be a priori necessary, the synthesis must be pure. That which carries out this pure synthesis is imagination, and its ground, or principle, is the transcendental unity of apperception (A 118). The nature of the imagination will be discussed in detail in Chapter III.

Imagination, as described by Kant is "the faculty of representing in intuition an object that is not itself present" (B 152). The first thing that ought to be remarked on in connection with this point is that Kant is not using the term "faculty" here in the strict sense. If we consider the implications of this, we realize how intricate the function of the imagination really is. In its act of representing in intuition an object that is not itself present, it is not merely representing a concept of the non-present object in the understanding. Rather, it is representing something more in the way of an image (A 140 / B 180). For this representation occurs, as Kant says, on the level of empirical intuition, not on the level of the understanding (A 141 / B 181). This point anticipates Kant's introduction of the notion of the schema, which is very closely linked with the assertion being made here, though the specific instance of the schematization here is not the one Kant regards as problematic, and therefore not the one that receives full attention in the Schematism chapter. For this schematization is merely the schematization that brings about images of empirical concepts (A 141 / B 181). This interpretation gains support from the fact that what Kant is trying to show in the Transcendental Deduction is how the categories are valid for empirical objects, and for this
we require the production of images of the empirical concepts of those objects, as explained in (A 141 / B 181). It might be objected at this point that the categories themselves are not empirical concepts but rather pure concepts, and thus if Kant is trying to show how the categories are valid for objects of experience, he ought to be engaged in showing how pure concepts, specifically, the categories, can be schematized - which is his main concern in the Schematism chapter.

This is true enough. But Kant attempts to carry out this program in stages, as he cannot possibly do it all at once. In the Transcendental Deduction he focuses on the first stage; in the Schematism chapter he focuses on the second. In both stages, however, Kant is providing an explanation of a transcendental procedure. The first stage consists of the transcendental function of the categories in the production of schemata for empirical concepts - by means of the schema of sensible concepts - to yield empirical knowledge; the second stage consists in the transcendental function of the categories in the production of schemata for the pure concepts of the understanding to yield synthetic a priori knowledge.

Both together are required for a full explanation of Kant's theory of cognition. "Only the first, however, is required for a deduction of the validity of the categories in their application to empirical objects. For all that the Deduction must show is that the categories in general are required for the production of empirical knowledge, in other words, that they are required for

"We should keep in mind, with respect to this point, what Andrew Brook, *Kant and the Mind*, pp. 97-98, notes: "Whether we have objective knowledge was just not something that Kant saw any reason to doubt. Even when he does confront skeptics such as Hume (as he does in the second edition, e.g. at B 20), the skeptical arguments he discusses are arguments that the kind of knowledge in question (in this case, a priori truths about causes) is impossible, and in response he is quite content to show merely that it is possible. He feels no need to show, in addition, that it actually exists."
the schematization of empirical concepts. How each one of the categories themselves must be schematized in order for it to be able to bring about this schematization on an empirical level is the project of the Schematism chapter.

We should, however, note here the peculiar ability of the imagination to give rise both to schemata and images - two elements that Kant clearly distinguishes. After a humble and rather disturbing confession regarding the mysterious nature of the schema, Kant writes:

This much only we can assert: the image is a product of the empirical faculty of productive imagination; the schema of sensible concepts, such as of figures in space, is a product and, as it were, a monogram, of pure a priori imagination, through which, and in accordance with which, images themselves first become possible (B 181).

Thus here again we see Kant establishing the connection between the empirical and the pure elements in cognition by explaining that we could not have images of empirical objects were it not for schemata that give rise to them, which are produced a priori. It is also important to distinguish between various kinds of schemata. Kant speaks of transcendental schemata, schemata of the pure concepts of the understanding, which "can never be brought into any

"Norman Kemp Smith's edition of the CPR follows Vaihinger's emendation "reproductive" for "productive" in B 181. I, however, preserve the original text, as I think it would still render the passage consistent with everything he says elsewhere, provided that we interpret "faculty" here to mean "employment." This interpretation of the term is warranted as a) Kant certainly speaks of the imagination as having both an empirical employment and a transcendental employment; the empirical employment being associated with reproductive imagination (A 121) and the transcendental employment being associated with productive imagination (A 118) and b) productive imagination is not itself a faculty in its own right (which is what I argue throughout this study). When we consider both of these points, it is quite legitimate to interpret "the image is a product of the empirical faculty of productive imagination" to mean "the image is a product of the empirical employment of productive imagination." But as "the empirical employment of productive imagination" is precisely that which Kant calls "reproductive imagination," the latter expression in the previous sentence is equivalent to "the image is a product of reproductive imagination."
image whatsoever" (these will be examined in Chapter IV); he also speaks of schemata of pure sensible concepts "through which, and in accordance with which, images themselves first become possible" (A 142 / B 181). An example of the latter is the schema of a pure sensible concept such as a triangle. These kinds of schemata ought not to be confused with the image of an empirical concept. Images of empirical concepts may certainly be had, but Kant speaks in such a way that suggests that empirical concepts do not have their own schemata; they get their schemata by means of the pure sensible concepts. Thus in the same way that we may not have images of pure sensible concepts, we do not, strictly speaking, have schemata of empirical concepts (A 141 / B 180). Images of empirical concepts are produced by reproductive imagination, as it is an empirical faculty. Productive imagination produces only schemata that make images of empirical concepts possible by virtue of the fact that an empirical concept "always stands in immediate relation to the schema of . . . some

As Rudolf Makkreel, *Imagination and Interpretation in Kant*, p. 30, explains, the task of the imagination in its production of transcendental schemata is "to mediate between the conceptual universality of the categories and the empirical particularity of sensible intuition. It does so by applying the categories to the most universal condition of sense, namely, the form of time. The imagination schematizes by translating the rules implicit in the categories into a temporally ordered set of instructions for constructing an objectively determinate nature."

A.C. Ewing, *A Short Commentary on Kant's Critique of Pure Reason*, pp. 132-33, makes an important point about Kant's terminology in the Schematism chapter. Reporting Paton's position, he explains that: "Professor Paton makes a further distinction between the transcendental schema and the schematized category, and his view is supported by the fact that Kant habitually applies different names to the two with each category. According to Professor Paton the difference is that, while the schematized category includes the schema, it also includes an element which is present in the pure category but not in the schema, the schema being not the whole category as applied to phenomena but only the additional element beyond the pure category which is necessary for its application."

Roger Duval, *La Metaphysique De Kant*, p. 102, states that the intuitive reality corresponding to an empirical concept is an example, and that corresponding to a pure concept is a schema.
specific universal concept" (A 141 / B 180). This is what, in fact, occurs when a universal concept is applied to an empirical concept. This has significant implications for the schematism issue, as it is indicative of the fact that, somehow, the homogeneity that exists between empirical concept and empirical intuition is not sufficient to bring about the application of the former to the latter; some relation to a schema is still required. Thus, whatever homogeneity exists between empirical concept and empirical intuition, it is not the relevant homogeneity; this relevant homogeneity can only arise through schema production.
Section v

Objectivity:

Validity, Reality and Meaning

In consideration of the notion of objectivity, scholars have distinguished between: objective validity, objective reality and objective meaning. Kant’s whole discussion of schematism can be best understood if the distinction between these three notions is clarified. Two scholars who have contributed a great deal to these issues are Henry Allison and, more recently, Rudolf Makkreel. Their remarks on this subject aid in clarifying what it is about the Schematism chapter that makes it a significant portion of Kant’s overall project in the CPR, and not just a set of superfluous pages. Thus their views merit particular attention.

Makkreel views the process of schematism as that process by which the categories acquire objective meaning. As it is the imagination that is responsible for carrying out this process, it is the imagination that is responsible for the objective meaning of the categories. Kant stresses that were it not for schemata the categories would merely be functions of the understanding for concepts; they would not, in this way, be able to represent objects. Inability to represent an object is, for Kant, equivalent to lacking meaning (Bedeutung).49 The categories can only acquire this meaning by standing in some relation to sensibility:

49Kant, Prolegomena, sec. 34.
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 realizes the understanding in the very process of restricting it (A 147 / B 187).

The fact that sensibility realizes the understanding, while at the same time restricting it, indicates that the categories proceeding from the understanding are dependent upon sensibility for their reality. Since it is only by being related to sensibility in some way that the categories can represent objects and thereby attain reality, we may say, then, that it is only in being connected to sensibility that the categories have objective reality or objective meaning.

The notion of objective meaning should, however, be distinguished from logical meaning. In their unschematized form, the categories possess logical meaning only. The function of the imagination by which the categories acquire objective meaning, schematism, becomes, therefore, fundamental in Kant's account. Its importance is more evident in the B Deduction where Kant discusses the figurative synthesis of the imagination and how this synthesis is involved in bringing about schematism. Once the activity of the imagination is fully brought to light, the issue of schematism unfolds in a rather different way, and in such a way that the activity of synthesis of the imagination is at the foundation of the subsumption problem posed by the Schematism chapter. In fact, once it is seen how the synthesis of the imagination carries out the application of the categories to intuitions, the issue of subsumption becomes, in a sense, of secondary importance. (This will be examined in detail in Chapter III)

Makkreel observes that, in the B Deduction, Kant's method of indicating when he is referring to logical meaning and when to objective meaning is to employ two different German terms for "object." He explains:
early in the B Deduction, Kant defines the transcendental unity of apperception as "that unity through which all the manifold in an intuition is united in a concept of the object (Objekt)" (CI, B 139; III, 113). Subsequently when referring to the objective meaning of the categories Kant speaks of Gegenstand instead of Objekt. The categories must be related "to objects (Gegenstände) of intuition in general, whether that intuition be our own or any other, provided only it be sensible" (CI, B 150; III, 119).50

Makkreel draws our attention to the fact that Allison and a few other scholars have also noted that Kant employs the terms Objekt and Gegenstand in importantly distinct ways. What Allison makes of the distinction, however, is significantly different from what Makkreel makes of it.

Allison holds that Kant distinguishes between the "objective validity" of the categories and their "objective reality," and that, in the B Deduction, Kant's task really has two parts. Kant first seeks to demonstrate the objective validity of the categories and then to demonstrate their objective reality. Makkreel outlines Allison's position in the following manner:

"Objective validity," he writes, "goes together with a judgmental or logical conception of an object (Objekt)" whereas "objective reality" is connected with a "real" sense of object (Gegenstand). According to Allison's step by step account of the B Deduction, Kant does not actually connect the categories to the Gegenstand of human sensibility until sec. 26, where he introduces the synthesis of apprehension, which deals with real objects. This is because the transcendental synthesis discussed in sec. 24 is interpreted to apply only to the "forms of human sensibility," while the synthesis of apprehension applies to the "empirical content" of human sensibility.51

Makkreel offers an alternative interpretation. He maintains that what Allison regards as an issue concerning "objective reality" can just as easily be viewed as one regarding "objective meaning." Makkreel, therefore, views the imagination, in its activity of figurative synthesis,

50Rudolf Makkreel, Imagination and Interpretation in Kant, p. 39.

51Ibid., p. 40.
as that faculty that invests the categories with objective meaning.\textsuperscript{52} Furthermore, Makkreel argues that the distinction Allison draws between \textit{Objekt} and \textit{Gegenstand} cannot simply be that between logical objects and real objects. He cites several passages which serve as instances that do not fall neatly within the boundaries that Allison draws:

Kant also speaks of an "\textit{Objekt} distinct from me" (CI, B 158) and of "an \textit{Objekt} of intuition" (CI, B 156). This indicates that an \textit{Objekt} need not be merely logical; it can be just as real as a \textit{Gegenstand}. On the one extreme, the term \textit{Objekt} is referred to a pure logical object, and on the other extreme, to whatever is given to me as mere material. For example, the understanding is said to arrange "the material of knowledge, that is, the intuition which must be given to it by the \textit{Objekt}" (CI, B 145; III, 116). Thus anything either merely thought or merely sensed would be an \textit{Objekt} and becomes a \textit{Gegenstand} - an object of experience - only through the mediation of the imagination. The difference between \textit{Objekt} and \textit{Gegenstand} is between an unmediated object and an object mediated by the schemata of the imagination.\textsuperscript{53}

I think Makkreel effectively demonstrates the strength of his position over that of Allison's, though the notions of "objective reality" and "objective meaning" are close enough in spirit.

Another interesting aspect of Makkreel's discussion of schematism is his claim that the schemata allow for the "reading of nature" in that they act as "semantical rules that determine the conformity of the \textit{Gegenstand} to the categories by specifying its possible empirical predicates."\textsuperscript{54} Employing the linguistic metaphors, Robert Butts argues that schemata are semantic in character while the categories are syntactic:

\textsuperscript{52}H.J. De Vleeschauwer makes a similar point in \textit{La Deduction Transcendante dans L'Oeuvre de Kant}, vol. 2, p. 412. De Vleeschauwer explains that the categories, though conditions of the object and of \textit{possible} experience, are not conditions of objects or of \textit{actual} experience or of the given manifold. In order to be conditions of objects in the latter sense, they need to be schematized.

\textsuperscript{53}Rudolf Makkreel, \textit{Imagination and Interpretation in Kant}, p. 41.

\textsuperscript{54}Ibid., p. 41.
Categories are grammatical forms; to supply meanings that will take these forms something else is required, namely rules that tell us to what the forms shall be applied. . . . The schemata specify in general terms what kinds of observation predicates are permitted given the epistemic form of the system. 55

As semantical rules the schemata determine what will and what will not count as predicates:

If the categories provide the grammatical rules whereby we order the manifold of sense in terms of certain basic formal patterns such as the subject-predicate relation, then the schemata of the imagination can be said to anticipate these patterns in terms of particular types of object-attribute relations. Whatever the sensuous manifold tells us about the object, the schemata teach us to select that which is measurable. 56

It is in this sense, Makkreel explains, that the schemata restrict the understanding in the very process of realizing it, thus bringing about the objective meaning of the categories. As the schemata anticipate possible objects of experience, they in this way realize the categories; as the schemata determine from the manifold of sense which types of empirical concepts are "eligible to be applied" to these objects, that is, which types of empirical concepts can be made "scientifically meaningful," they in this way restrict the understanding.

Makkreel has, I think, provided much evidence for the view that the Schematism chapter is not a superfluous section of the CPR. Rather, it develops the argument begun in the Deduction in a very important way, without rendering the portion of the argument presented in the Deduction incomplete for the purposes it is intended to serve in that part of the text. Makkreel has also effectively demonstrated the crucial respect in which the categories must be related to sensibility if they are to have any objective meaning. Everything that Makkreel suggests rests on the categories' being able to apply to sensibility. How it is

56Rudolf Makkreel, Imagination and Interpretation in Kant, p. 41.
possible for this application to come about, despite the fact that the intuitions to which the categories are to be applied are heterogeneous with the categories themselves, is a matter that Makkreel does not tackle. In the chapters to follow, I provide a theory as to how this application can occur.

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In this chapter, we have explored several features of the process of schematism that are particularly pertinent to the present investigation. In particular, we have demonstrated the need for a mediating representation to render possible the application of the categories to appearances, because of the heterogeneity between them. As Kant explains, this mediating representation is the transcendental schema, which is a transcendental determination of time, i.e., a synthetic unity of the parts of time in accordance with one of the rules of unity of the understanding. One of the guiding assumptions adopted to explain just how the schema carries out this mediation is to view the source of the schema - the imagination - as bringing about a mediation on another level: the level of the faculties of sensibility and understanding. Before we examine the grounds for this assumption, however, a few remarks about the general nature of these faculties would be useful.
The single most important point that must be acknowledged is that it is the same apparatus, that is, the same set of faculties, that produces both a priori knowledge and empirical knowledge. For knowledge of any sort requires combination of a manifold, and this process of combining a manifold is carried out by the understanding, both in its production of a priori knowledge and in its production of empirical knowledge (B 129-30). The question, it seems, is: How can the very same set of faculties give rise to such

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¹"All combination - be we conscious of it or not, be it a combination of the manifold of intuition, empirical or non-empirical, or of various concepts - is an act of the understanding." I endorse Mellin's emendation here, *empirischen oder nicht empirischen* for *sinnlichen oder nicht*
distinct modes of knowledge? Once it is explained how this is possible, it will become clearer how it is possible for a pure a priori concept to subsume under it an empirical intuition - the process of schematism described in the previous chapter.

At the very beginning of the Transcendental Deduction Kant speaks of an "agreement" between the concepts that proceed from sensibility and the concepts that proceed from the understanding. He writes:

We are already in possession of concepts which are of two quite different kinds, and which yet agree in that they relate to objects in a completely a priori manner, namely, the concepts of space and time as forms of sensibility, and the categories as concepts of understanding (A 85 / B 118).

This "agreement" is precisely the notion that Kant will develop throughout the rest of the text. What will emerge is an explanation of this "agreement" in terms of what Kant calls "synthetic unity." We may take as our beginning the fact that there is something that a priori knowledge and empirical knowledge have in common - they both have an a priori foundation (A 2 / B 2); and it is this a priori foundation that a) makes each of these types of knowledge at all possible, and b) makes each of these types of knowledge derivable from the

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`sinnlichen`, used in the Kemp Smith translation. Kant's use of the terms "sensible" and "not sensible" is too loose in this passage to express clearly the point he wants to make, as it may give rise to a misinterpretation of the statement in question that actually contradicts one of Kant's main tenets. The claim that the understanding is responsible for all combination of a manifold of intuition be it sensible or not sensible is misleading in that it seems to suggest that it is possible for us to have an intuition that is not sensible, i.e., intellectual, whereas, in fact, Kant states quite explicitly that this is not possible (B 308). Thus it is far more in keeping with the general spirit of Kant's project to interpret the distinction being made here as one that is within sensible intuition itself, and the only distinction possible here is that between empirical intuition and non-empirical intuition, i.e., pure intuition.

2As D.P. Dryer, *Kant's Solution for Verification in Metaphysics*, p. 190, maintains, "empirical intuition is possible only by means of the pure intuition of space and of time."
combination of the same set of faculties. Perhaps the strongest clue as to how the whole picture fits together is given to us in the following passage: "If each representation were completely foreign to every other, standing apart in isolation, no such thing as knowledge would ever arise. For knowledge is [essentially] a whole in which representations stand compared and connected" (A 97). The very fact that Kant regards knowledge as a whole ought certainly to be of significance to us. The implication here is not that empirical knowledge is a whole and a priori knowledge is another whole and that these wholes are distinct from one another; this would, I think, be a rather odd interpretation of the term "whole" here. Clearly what Kant is getting at is that anything that may be called an item of knowledge of any kind whatsoever must be regarded as belonging to the whole of all knowledge, and simply could not be an item of knowledge unless it belonged to that whole.

Kant's view in the CPR differs significantly in this respect from his former view as expressed in the Dissertation - the view that there are two different kinds of knowledge sensible and intellectual. In fact, a significant aspect of the project of the whole CPR is Kant's demonstration of his rejection of that view. Kant also clearly rejects, in the CPR, absolute idealism of the Berkelian kind (B 69-71). The distinguishing feature between Kant's idealism and Berkeley's consists in the qualification of Kant's idealism as "transcendental" (A 27-28 / B 43-44). Kant writes:

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3For a concise outline of the main stages in the development of Kant's philosophical views up until the publication of the first Critique, see Frederick C. Beiser's 'Kant's Intellectual Development: 1746-1781,' pp. 26-27.

4One of the main features of Berkeley's idealism (which Kant calls dogmatic idealism), that distinguishes it from that of Kant, is that Berkeley's idealism views space, and all that of which it is the condition, to be in itself impossible. This view, according to Kant at least, renders
By *transcendental idealism* I mean the doctrine that appearances are to be regarded as being, one and all, representations only, not things in themselves, and that time and space are therefore only sensible forms of our intuition, not determinations given as existing by themselves, nor conditions of objects viewed as things in themselves (A 369).  

Of course, how, *precisely*, this general formulation of Kant's position is to be interpreted is highly controversial, and determining exactly what it involves will not be attempted in this study. It is important, however, to be clear at least about what it does not involve, i.e., the two views noted above, in order to avoid misconstrual of the general position presented here.

What Kant regards as his main problem is how a concept produced a priori could possibly relate to an object (A 57 / B 82). He explains that the only way that this is possible spatial objects "imaginary entities." By accepting, however, the position presented in the Aesthetic - that space is not a property belonging to things in themselves - Berkeley's idealism, Kant claims, can be avoided (B 274).

In connection with this point, Charles Parsons, "The Transcendental Aesthetic," p.83, notes a comment Kant makes in defence of the transcendental ideality of time and space: "If, in an imaginative thought experiment, I have an intuition from which formal properties of objects can be learned, the only assurance that these properties will obtain for subsequent empirical intuitions of what was imagined is if the form is contributed by me," and, it should be added, if I (my cognitive apparatus) continues to work in the same way.

See ibid., pp. 80-91, for an outline of some of the various lines of interpretation of the transcendental idealism claim. Among some of the interpretations he discusses are: the direct-presentation view, the phenomenological-presence view, the neglected alternative, the distortion picture, the subjectivist view and the intensional view.

As Charles Parsons, ibid., p. 62-63, explains: "It is part of Kant's philosophy that not only judgments but also concepts and intuitions can be a priori." Parsons also points out, however, that the apriority of concepts and intuitions consists in something different from that of judgments: "In the case of a priori judgments, it seems clear that being a priori implies that no particular facts verified by experience and observation are to be appealed to in their justification. Kant holds that necessity and universality are criteria of apriority in a judgment, and clearly this depends on the claim that appeal to facts of experience could not justify a judgment made as necessary and universal." With respect to concepts and intuitions, Kant offers the explanation that they are a priori in the sense that "they are contributions of our minds to knowledge, 'prior' to experience because they are brought to experience by the mind." To this Parsons adds that "for
is if that concept is itself contained in the concept of possible experience or consists of elements of a possible experience. (A 95) If these conditions do not hold, then the concept would have no content, since there would be no intuition corresponding to it, which is equivalent to saying that it could not relate to an object. For intuitions are the means by which objects can be given to us, and in this sense "they constitute the field, the whole object of possible experience" (A 95). This ought to strike us as a weighty claim. Intuition in general is presented here as the field of possible experience, and as the whole object. This manner of speaking is characteristic of Kant's entire account throughout the CPR; he speaks of one object (A 95), one knowledge (A 108, A 118), one concept (A 67 / B 92), one experience (A 108, A 110). I think Kant is doing a lot more than just speaking figuratively or loosely when he does this. This ought to be kept in mind as we proceed.

Kant ultimately ends up defending a species of idealism based on the view that time and space are not things in themselves but structures of our cognitive apparatus. According to this position, the objects that we experience are phenomena that appear to us under the form of space and time (A 42 / B 59-60). The fact that space and time themselves are forms in the representation to be a priori it must not contain any reference to the content of particular experiences or to objects whose existence is known only by experience. A priori concepts and intuitions are in a way necessary and universal in their application (so that their content is spelled out in a priori judgments).

Sarah Gibbons explains that "the second step [of the B deduction] describes the way in which human intuition is unified so that it may be 'given' to thought. Correlatively, the second step further characterizes thought and apperception, at least indirectly, to explain what it is that allows a discursive intelligence to receive the given. This step indicates that the necessary unity of thought (as conceptual) is insufficient for cognition, if thought cannot be connected to the material given to intuition. It is this 'connection' (via imagination) which implies the commonality of the unity of apperception and the unity of intuition as a 'common, but to us unknown root' (A 15/B 29) beneath the two 'stems' of our knowledge." (pp. 49-50).
cognizing subject renders a priori knowledge of these objects possible for us. What this position demonstrates is that there is a crucial link between the a priori and the phenomenal. Windelband goes as far as saying that Kant regards these notions as interchangeable.⁹

We should also note that the distinction being discussed here is not between correct knowledge claims and incorrect ones; a priori knowledge is stuff that just goes on in the mind, but this does not make it any less able to access truth than empirical knowledge. A priori knowledge is just as correct and just as real as empirical knowledge; were it not so, it could not properly be called knowledge. A question arises in connection with this point: How are we to account for the pure knowledge that we seem to possess, such as mathematics, which, being a priori knowledge, is not, strictly speaking, knowledge of objects of experience? Kant recognizes this, but points out that so long as this a priori "knowledge" has application to objects of experience, then in this sense it may be regarded as knowledge:

Through the determination of pure intuition we can acquire a priori knowledge of objects, as in mathematics, but only in regard to their form, as appearances; whether there can be things which must be intuited in this form, is still left undecided. Mathematical concepts are not, therefore, by themselves knowledge, except on the supposition that there are things which allow of being presented to us only in accordance with the form of that pure sensible intuition (B 147).

But could it then be said that Kant does not hold that a priori knowledge and empirical knowledge are on a par? Kant refers to mathematical knowledge in his example, but the same

⁹"Were space and time themselves things or real properties and relations of things, then we could know of them only through experience, and, therefore, never in a universal and necessary way. This last mode of knowledge is possible only if they are nothing but the Form under which all things in our perception must appear. According to this principle the a priori and the phenomenal become for Kant interchangeable conceptions. The only universal element in man's knowledge is the Form under which things appear in it." Wilhelm Windelband, A History of Philosophy, vol. 2, p. 540.
ought certainly to hold true for other types of pure a priori knowledge, for example, metaphysical knowledge. There is an important difference between the manner in which mathematical knowledge falls short of being knowledge in the technical sense, and the manner in which metaphysical knowledge falls short of being knowledge in the technical sense. Nevertheless, mathematical knowledge may be considered knowledge in the sense that it has application to empirical intuition; metaphysical knowledge, of the kind that Kant describes, is knowledge in the sense that it makes empirical intuitions, and therewith experience of objects, possible; thus he refers to it as "transcendental knowledge." This is, at least, what is implied by his discussion of related issues in A 95.

Furthermore, just because a priori knowledge is only stuff that goes on in the mind of the subject, this does not make it any less objective than empirical knowledge. What this implies is that the criterion of truth does not consist in some idea in the mind matching up with or corresponding to something in the empirical world, or the world of nature. Kant's theory of truth is not a simple correspondence theory of this sort. To assume this is to ignore completely the force of the Copernican turn. Also a strict correspondence theory of truth is concerned mainly with the matter of our judgments, whereas Kant's main concern is the form of judgments (A 58-60 / B 82-84). This is not to say, however, that Kant's notion of truth

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10Roger Daval, La Metaphysique De Kant, pp. 120-22, reminds us of another manner in which philosophy and mathematics are distinguished by Kant. Whereas the former proceeds according to concepts, the latter proceeds according to the construction of concepts. This latter point is discussed at length by Daval in the above cited text in connection with the schematism.

11There is, however, a problem with the notion of an "a priori intuition" that does not arise with the notion of an "a priori concept." For a general discussion of this issue, see Henry Allison, Kant's Transcendental Idealism, pp. 104-106.
does not involve any relationship at all between what goes on in the mind of the subject and what goes on in the world. Also, Kant is not just presenting a simple coherence theory of truth, as it regards a lot more than just the fitting together of knowledge claims in a coherent fashion as the criterion of truth; this could easily serve as the theory of truth entailed by absolute idealism, but not transcendental idealism. The reason these two basic theories of truth are not accurate representations of Kant's theory of truth is that, for Kant, the criterion of truth does not simply involve the knowledge claims themselves, and their relation to objects or to one another; it also involves the relation between the sources of those knowledge claims, which, for Kant, are the faculties of sensibility and understanding.  

Ultimately, what Kant will show is that the connection of these faculties is grounded in their connection to the unity of transcendental apperception. The unity of transcendental apperception is what a judgment must relate to in order for that judgment to be rendered an item of knowledge. For, knowing is achieved by the thinking subject. But a subject can think many things that would not be deemed knowledge. Specifically, Kant stresses the distinction between knowledge and mere thoughts. He maintains:

To think an object and to know an object are thus by no means the same thing. Knowledge involves two factors: first, the concept, through which an object in general is thought (the category); and secondly, the intuition, through which it is given. For if no intuition could be given corresponding to the concept, the concept would still indeed be a thought, so far as its form is concerned, but would be without any object, and no knowledge of anything would be possible by means of it (B 146).  

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12 Ernst Cassirer, *Kant's Life and Thought*, p.131, makes a noteworthy remark concerning the distinction between the kind of metaphysics that Kant was doing in the first *Critique* and that of his predecessors. He writes: "Whereas all previous metaphysics had begun with the "what" of the object, Kant begins with the "how" of judgment about objects;" and the how of judgment will certainly concern itself with the sources of judgment.
Furthermore in order for a subject to regard certain judgments as items of knowledge, those judgments must be connected to the transcendental unity of apperception, as it is in being so connected that a judgment may acquire objectivity. A judgment, however, may only be so connected to the unity of apperception by virtue of the faculties from which the judgment derives. The upshot of Kant's argument is that it is the relation between sensibility and understanding, and their connection to the unity of apperception, that grounds the connection between the judgment and apperception. It is only when a judgment achieves this connection with apperception that the aforementioned criteria of knowledge - the relation between a judgment and an object, and the relation between a judgment and other judgments - become applicable as criteria of knowledge.¹³

¹³Vilem Mudroch, "Die Anschauungsformen und das Schematismuskapitel," p. 405, makes a noteworthy remark to the effect that a significant difference exists between the first and second editions of the CPR. While in the first edition time holds a remarkably dominant position, in the second edition the role of space is significantly enhanced. Mudroch stresses, however, that one of the few sections in the revised text that remains untouched is the Schematism chapter (Alexis Philonenko also shares this view). This fact, Mudroch argues, is explainable in two ways. On the one hand, it is conceivable that it is simply due to some negligence on Kant's part, and that had he had more time for the revision of the CPR, he would have assigned a more important role to space in the Schematism chapter as he does in the other sections of the text. On the other hand, it is also possible that Kant intentionally left the Schematism chapter unmodified because it already fulfilled, in the original version, the requirements of the critical philosophy in the best possible way. The aim of Mudroch's paper is to demonstrate that, contrary to the view of most commentators, the second of the above mentioned positions is more plausible.
Section ii

Particularity and Universality in the Kantian Framework

Kant reminds us that if pure a priori concepts exist at all, they certainly cannot contain anything empirical. Despite this, and in fact precisely because of this, however, it is certainly possible for them to serve as the a priori conditions of a possible experience (A 95), that is, of any possible experience whatsoever. It is due to this that these concepts may be regarded as objectively real. It is clear, therefore, that a priori concepts are not just necessary conditions for pure a priori knowledge, but also for empirical knowledge (A 95-96). The intimate relationship between a priori knowledge and empirical knowledge is a unique feature of Kant's transcendental idealism - the theory that was to put an end to the queries of both the rationalists and the empiricists.

Those before him who tried to work out the problem of knowledge from an empirical standpoint tried to show that all our knowledge comes from experience (A 94 / B 127, A 271 / B 327). Now since, as they were aware, knowledge consists of both particular and universal concepts, their task was to show that both these kinds of concepts are derived from experience. But as it seemed indisputable that particular concepts are derived from experience, the bulk of their task was really only to show that universal concepts are also derived from experience. The rationalists, on the other hand, wanted to show that although
particular concepts are derived from experience, some universal concepts are not. Kant’s insight was to view both universal and particular concepts as having their foundation in the mind. It was this insight that allowed him to be woken from the dogmatic slumber that both the rationalism and the empiricism of his time had induced in him. Kant’s view may also be contrasted to the nominalist’s; whereas the nominalist maintains that there are no universals presented to us by experience but only particulars, Kant maintains that there are neither universals nor particulars presented to us by experience alone (A 1-2 / B 1-2). But does this amount to denying the existence of both universals and particulars in the world? And does one then have to take the stance of either an idealist or a nihilist? Kant, of course, thinks that we needn’t seek refuge in either of these two positions. There is another alternative: transcendental idealism. Part of what this position entails is that neither universals nor particulars are presented to us solely by experience, but that both are products of the mind’s cognitive apparatus. It is only after a certain combination of universal concepts, combined with the material presented to our senses, that particulars - that is, particular objects - may appear to us in experience (A 1-2 / B 1-2).

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14“"In connection with this frequently mentioned confession of Kant, it is for the most part disregarded that he characterised as ‘dogmatic’ not only rationalism, but also the empiricism of the earlier theory of knowledge, and that the classical passage at which he uses this expression (in the preface to the Prolegomena, W., III. 170 f.) does not contrast Hume with Wolff, but with Locke, Reid, and Beattie only. The dogmatism from which, therefore, Kant declared that he had been freed through Hume was that of empiricism." Wilhelm Windelband, A History of Western Philosophy, Vol. II, p. 537.

15Windelband makes an interesting remark in connection with this point. He states that when Kant is distinguishing between formal logic and transcendental logic, a distinguishing feature between his own position and that of Greek epistemological theory that had prevailed up to Kant’s time is that "the Greek Theory assumed ‘the objects’ as ‘given’ independently of thought, and regarded the intellectual process as entirely dependent upon the objects; at most it was the
If we consider what it is that characterizes empirical knowledge, it will be noted that one of its essential features is that it has to do with particular objects presented to the senses. A priori knowledge, is chiefly characterized by its connection with universals. We begin to see that the two must somehow be linked when we realize that the knowledge of universals that constitutes much a priori knowledge is of the universal features of particular objects that may actually be presented to our senses.\textsuperscript{16} What ought to be noted, however, is that the a priori knowledge involving the categories differs from the a priori knowledge involving empirical concepts in a highly significant way. For Kant, the former, unlike the latter, is not acquired by the process of abstraction from the particular objects presented to our senses, or by induction (A 2 / B 2-3), as is the usual empiricist stance. Rather, it is a condition for the experience of objects presented to our senses; the process of schematism, then, could be regarded as the condition of this condition. That is to say, the process of schematism is the very process by which the pure a priori judgments involving the categories become applicable to empirical objects, and furthermore, applicable in such a way as to actually bring about our experience of those objects. Knowledge of the conditions and processes by which this kind of pure a priori knowledge is brought about Kant calls "transcendental knowledge."

\begin{quote}
mission of the intellectual process to reproduce these objects by way of copy, or allow themselves to be guided by them. Kant discovered that the objects of thought are none other than the products of thought itself. This spontaneity of reason forms the deepest kernel of his transcendental idealism" (ibid., p. 543).
\end{quote}

\begin{quote}
\textsuperscript{16}"Metaphysics can find what holds of things generally by finding conditions which make possible empirical knowledge of things generally. These it can find only by ascertaining a priori necessary conditions to which imagination is subject in combining what is presented to yield an observation of any object or in combining one observation with another" (D.P. Dryer, \textit{Kant's Solution for Verification in Metaphysics}, p. 302).
\end{quote}
It appears odd that such knowledge actually comes to be, given that there is a marked distinction between intuitions and concepts, as described in the "Clue to the Discovery of all Pure Concepts of the Understanding." Kant states: "Whereas all intuitions as sensible, rest on affections, concepts rest on functions. By 'function' I mean the unity of the act of bringing various representations under one common representation" (A 68 / B 93). Intuitions rest on affections in the sense that intuitions are brought about when sensibility is affected with sense data; concepts rest on functions in the sense that concepts are brought about when various representations are brought under one common representation by means of one unified act (A 68 / B 93). When sensibility is affected with sense data, it is so in such a way as to give rise to a variety of representations, that is, a manifold of representations. Once these representations are received by sensibility, that is, once they have received the form that sensibility imposes upon them, they may be termed intuitions. Having received the form of sensibility, i.e. having been rendered temporal, these representations may be further synthesised by being brought under one common representation. This common representation under which the intuition is brought or subsumed, is a category. In this process, a further form is being imposed upon the temporally (and in some cases, spatially) formed intuitions. This latter form that a certain set of intuitions acquires is what allows that set of intuitions to become a particular object. In section 24, Kant summarizes all of the basic elements involved in cognition in a concise manner:

17 Of course there can be sensibilities different from ours, but throughout this study "sensibility" will be taken to refer only to ours, that is, to a sensibility that is spatial and temporal - though the main focus will be on its temporal aspect.
But since there lies in us a certain form of a priori sensible intuition, which depends on the receptivity of the faculty of representation (sensibility), the understanding, as spontaneity, is able to determine inner sense through the manifold of given representations, in accordance with the synthetic unity of apperception, and so to think synthetic unity of the apperception of the manifold of a priori sensible intuition - that being the condition under which all objects of our human intuition must necessarily stand. In this way the categories, in themselves mere forms of thought, obtain objective reality, that is, application to objects which can be given us in intuition. These objects, however, are only appearances, for it is solely of appearances that we can have a priori intuition (B 150).

The passage stresses the central claim that Kant strives to defend throughout the Analytic - that the categories are indeed applicable to objects that are given to us in intuition.

What I will show throughout this study is that this is due essentially to the fact that the manifold that is given to us by sensibility is ultimately a manifold that a) is conditioned by the features of our sensibility, b) determined by our understanding and c) gives rise to knowledge only in so far as the function of sensibility and the function of understanding are mediated by the function of the imagination.

As noted, in order for a set of representations to acquire the status of particular empirical objects, these representations must have two basic kinds of forms imposed upon them - that contributed by sensibility and that contributed by understanding. The form that understanding provides is one that renders the representations particular by determining that they are single instances of one general representation; the form that sensibility provides is one that renders the representations particular by giving each its own unique place in the single manifold of sensibility. Thus both sensibility and understanding contribute to the
particularity that the object achieves. Yet the mere possession of these faculties and the mere presence of the sense data do not suffice to initiate their activity in conjunction with one another. Each faculty on its own can start doing its thing, that is, sensibility can receive sense data without the aid of concepts, and understanding can think concepts without sense data; in this sense the two are each self-subsistent. But in order for the understanding to think concepts with relation to the actual sense data received by sensibility, i.e. with relation to intuitions, some other activity is required which, so to speak, directs what is thought to what is intuited; this activity, of course, is that of the imagination. Thus although the faculties of sensibility and understanding are distinct, in that they are each self-subsistent, their functions are, nonetheless, brought into connection through the activity of the imagination.

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18Susan Neiman, *The Unity of Reason*, p. 48, makes an important historical point concerning the relationship of the faculties: "The development of a taxonomy of the human mind was a common project of seventeenth- and eighteenth-century philosophy; both empiricists and rationalists developed detailed, albeit fluid, distinctions between activities variously described as judging, deducing, reasoning, understanding, and so on. Most of those writers viewed these distinctions in modal rather than ontological terms: to say that the mind has a faculty to do something is simply to say that it is able to do it. Kant's division of the mind into three faculties is, in part, a continuation of these projects, whose purpose he holds to be almost self-explanatory."

19Eva Schaper, "Kant's Schematism Reconsidered," pp. 279-280, draws our attention to the metaphor that Kant employs to describe the work of the imagination: "an art concealed in the depths of the human soul." Schaper maintains that this metaphor invites us to "jettison the systematic distinction, so far proposed in the *Critique*, between sense, understanding and reason. This distinction emerges now as insufficient for the purpose of accounting for the connection of thought and sense in a given act of experience. The 'determinations of time according to rules,' i.e., intellectual determination of the pure form of sensibility, are not the work of either understanding or sense in their a priori aspects - though we can describe the connection when achieved as 'understanding made applicable to sense.' The agency responsible for the achievement, however, is pure imagination - which has so far not figured importantly in the *Critique* at all." Schaper is correct at pointing to the vital function of the imagination to achieve the connection in question, though she goes much too far in viewing the distinction between sense, understanding and reason as having to be jettisoned for this reason. That the distinction
Moreover, when thought is directed to intuition in the manner described above, more than concepts are required to yield meaningful thought about those intuitions. What this essentially amounts to is the requirement of some ground for the direction of thought to intuition. This ground is the product of the imagination's activity - the transcendental schema.  

The transcendental schema is indicative of the fact that the action of sensibility is such that it is conducive to the action of understanding and vice versa. This appears clearer if we consider that the fundamental aspect of our sensibility is time, and the fundamental feature of the concepts of understanding is that they are rules for the unification of a temporal manifold, which, in connection with the activity of the imagination, order this manifold. Thus regarded, the concepts, by means of the schema, determine the temporal aspect of intuitions (B 158-59). But the concepts can only do this when the pure synthesis of intuition is can still be maintained, even in light of the function of the imagination, is what this study intends to demonstrate.

20The possibility of there being pure concepts which, nonetheless, do not have any "sense or significance" was one that bothered Kant before he even embarked on the project of the Critique. "It was to deal with this problem of the meaning and reference of a priori ideas, left conspicuously vague in the inaugural Dissertation, that the doctrine of schematism was devised" (W.H. Walsh, "Schematism," p. 74).

21D.P. Dryer, Kant's Solution for Verification in Metaphysics, states: "Kant argues that concepts of temporal determinations are therefore the basic concepts available for metaphysical knowledge. Yet it is by imagination that we become conscious of the temporal determinations of objects that enable us to acquire knowledge of them by the categories. Metaphysics therefore cannot enlarge our knowledge of things generally without reckoning with conditions by which imagination is bound in unifying what our senses present us with" (p.265).

22Johann Schultz, Exposition of Kant's Critique of Pure Reason, pp. 25-26, in the attempt to be as loyal to Kant's text as perhaps a commentator can be, asserts in one instance that the "schema is time" and in another instance that the schema is "the determination of time." Both assertions are, of course, correct, though it should be stressed that the latter is more precise as a definition.
presented to them (A 78 / B 103). The key part of this clause is "presented to them." For it is one thing for intuitions to be presented, and quite another for them to be presented to concepts. For, intuitions can be represented which are not taken up into consciousness, and which therefore do not have the concepts applied to them. Only, in this case, knowledge would not result (A 113). For the production of knowledge the intuitions must be presented to the concepts of the understanding. Once the intuitions are presented to concepts, the concepts are applied to them simply by virtue of the fact that they are rules for time determination and when something temporal is brought to them, they determine the particular temporal form of that thing. But some other activity must come into play in order for the intuitions to be presented to concepts in the way just described. This, of course, is the activity of the imagination, which will be further examined in Chapter III.
Some General Features of Sensibility and Understanding

Kant insists from the start on the distinction between sensibility and understanding. He expresses this conviction in the following:

These two powers or capacities cannot exchange their functions. The understanding can intuit nothing, the senses can think nothing. Only through their union can knowledge arise. But that is no reason for confounding the contribution of either with that of the other; rather, is it a strong reason for carefully separating and distinguishing the one from the other. We therefore distinguish the science of the rules of sensibility in general, that is, aesthetic, from the science of the rules of the understanding in general, that is, logic (A 51-52).

We see from this that right from the very beginning of the Transcendental Logic Kant warns us about not confounding the functions of sensibility and understanding as their contributions are so utterly distinct from one another. When studying their operations, therefore, one must take care that this distinction of contributions is preserved. Equally important, however, is the fact that these faculties have a common feature. In section one of the Transcendental

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Jonathan Bennett, *Kant's Analytic*, pp. 54-55, provides a concise outline of the way in which Kant's view of the distinction between the sensory and the intellectual differs from that of his predecessors: "Kant's mild tendency to think of concepts as introspectible particulars does not, at any rate, take the pernicious form of identifying concepts with something in the nature of sensory states. Some philosophers have said that intellectual activity is the manipulation of 'ideas' which are mental particulars pretty much like sense-data. Descartes and Locke used the word 'idea' to stand indifferently for sense-data and for whatever one 'has in mind' when one thinks or understands. Spinoza assimilated sensing to thinking: seeing something happen is, in
Deduction Kant discusses this common feature:

We are already in possession of concepts which are of two quite different kinds, and which yet agree in that they relate to objects in a completely a priori manner, namely, the concepts of space and time as forms of sensibility, and the categories as concepts of understanding. To seek an empirical deduction of either would be labour entirely lost. For their distinguishing feature consists just in this, that they relate to their objects without having borrowed from experience anything that can serve in the representation of these objects. If, therefore, a deduction of such concepts is indispensable, it must in any case be transcendental (B 118 / A 86).

Kant informs us in this passage that although the forms of intuition and the pure concepts of the understanding are concepts of a radically different kind, they nonetheless "agree" with one another in that they both relate to objects in a completely a priori manner. This point will be very significant for the solution to the problem of the Schematism.  

We should also note that, whatever else the schematism process involves, the relation between the categories and objects of experience rests upon the relation between the faculties themselves, and not just the products of these faculties. Kant asserts: "But the possibility, indeed the necessity, of these categories rests on the relation in which our entire sensibility, his view, a mental operation which does not differ in kind from drawing a conclusion. Hume assimilated thinking to sensing: according to his theory of belief, to judge that the sun is shining is 'vividly' to picture the shining sun. Not only Spinoza versus Hume, but also Leibniz versus Locke, as Kant saw: 'Leibniz intellectualized appearances, just as Locke...sensualised all concepts of the understanding.' With the possible exception of the chapter on schematism, the Critique is completely free of both rationalist and empiricist forms of the conflation of the sensory state with the intellectual...In [Kant's predecessors] we can see how astonishingly serviceable is the view that concepts and sensory states are species of a single genus, differing from one another not at all (Berkeley) or differing only in degree of clarity (Descartes), or reliability (Spinoza), or detailedness (Locke), or vividness (Hume)." The crucial point here is that Bennet regards the schematism chapter as a possible exception for this general claim; that this is not a minor issue will become evident in the course of this chapter.  

24See also A 236-37 / B 296.
and with it all possible appearances, stand to original apperception" (A 111). The necessary application of the categories to appearances thus rests upon the relation that holds between the entire faculty of sensibility and apperception. Because this relation between the faculties essentially arises from the universal functions of synthesis carried out by another faculty (the imagination), the application of the categories to appearances ultimately depends upon more than just the categories and the appearances themselves; it depends upon the functions of synthesis that bring about the relation between these faculties.25

According to this view the concept of a cause, for example, can be reduced to a synthesis according to concepts (of one appearance in the time-series with another appearance that follows it in the same time-series). Kant concludes: "Without such unity, which has its a priori rule, and which subjects the appearances to itself, no thoroughgoing, universal, and therefore necessary, unity of consciousness would be met with in the manifold of perceptions" (A 112). It seems in this passage that the categories, which provide the a priori rules, are the pre-condition for the unity of apperception. This, however, is not an accurate interpretation of Kant's line of argument here. It would be more appropriate to say that the unity of apperception is presented here as it always is, that is, as the ultimate condition for all

25C.D. Broad, *Kant, An Introduction*, p. 84, has provided a modified version of the view I am presenting in his consideration of what it is that is actually being synthesised when Kant speaks of synthesis. Broad, in the following passage, discusses the relationship between synthesis of the forms of intuition and synthesis of the sense data that get taken up by the forms of intuition, and eventually by the categories. He maintains that "the categories get their hold on the empirical data, given to us by sensation, only at second hand. All these sense-given data are automatically provided by the mind with positions in its innate time-system. And all those which belong to what Kant calls the 'outer sense' are also automatically provided by the mind with positions in its innate space-system. So, in synthesizing these two systems out of purely innate data, in accordance with the categories, we *ipso facto* synthesise their contingent sense-given contents on the same plan."
other sources of unity (A 107), and, indeed, that upon which all other connection of
representations must converge (A 116). The reason Kant says here that without the categories
no unity of consciousness would be met with in the manifold of perceptions is that the
categories allow us to become aware of the unity of consciousness, not that they are the
condition for the existence of this unity of consciousness. The categories simply allow us to
come to know that we possess such unity of consciousness.\textsuperscript{26} Thus the situation may be
described as follows: the unity of apperception gives rise to the categories, and the categories
give rise to the subject's awareness of the unity of apperception. The relation is, in a sense,
reciprocal, though not strictly so, since the categories give rise only to consciousness of the
unity of consciousness, not the unity of consciousness itself. This somewhat intricate
relationship is at the basis of Kant's notion of "transcendental." This three-term relation
indicates how transcendentality plays itself out. The unity of apperception gives rise to the
categories, which provide the a priori rules for the unity necessary in the experience or
knowledge of empirical objects that arise from the manifold of sensible intuition. But at the
same time, the categories are also the means by which we have pure a priori knowledge of
apperception, and along with it, of the categories themselves. Thus we may conclude that the
same spontaneity that gives rise to empirical knowledge is also involved in the production of
transcendental knowledge.

\textsuperscript{26}Edward Caird, \textit{The Critical Philosophy of Immanuel Kant}, vol. 1, p. 433, makes a pertinent
point with respect to this issue: "It is the same act of consciousness whereby the conception is
distinguished from and related to, the perception, which also gives such determination to the
latter that it can be recognised as a case of the former, and to the former such determination that
it can be recognised as the principle of unity in the latter." The relationship Caird refers to here
is, of course, the relationship between the category and the intuition to which it is applied.
By the end of the A edition of the Transcendental Deduction Kant has firmly established the connection between what we refer to as "laws of nature", that is, rules governing empirical objects, and the unity of apperception. Kant refers to the ground of the possibility of the association of the manifold of appearances in a law governed manner as the "affinity of the manifold" (A 122). This term refers specifically to the association of the manifold in so far as it lies in the object. His ultimate conclusion is that this thoroughgoing affinity of appearances, by means of which the appearances are made to stand necessarily under a fixed set of laws rests on the fact that: "All possible appearances, as representations, belong to the totality of a possible self-consciousness" (A 113), which is a transcendental representation. It follows from this that the appearances involved in any synthesis that is to yield empirical knowledge are subject to a priori conditions to which the synthesis of their apprehension must conform. Kant sums up his position very succintly in the following: "Thus all appearances stand in thoroughgoing connection according to necessary laws, and therefore in a transcendental affinity, of which the empirical is a mere consequence" (A 113-)

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27 Allison explains an important distinction in connection with this point. He maintains that Kant conflates two goals which he really ought to have distinguished. Referring to B 21 and B 145 in the first Critique Allison states: "The first passage defines the problem in terms of demonstrating a connection between the categories and empirical intuition, through which alone we can have access to an actual empirical object (Gegenstand). The second passage obviously goes considerably beyond this, indicating that what must really be done is to show that the categories function to make nature possible. Since by 'nature' is here meant the totality of appearances or objects of possible experience (natura materialiter spectata), this is really equivalent to demonstrating that they make experience possible...Kant should have distinguished between these goals, but the main point is that neither of them was achieved by the first part of the Deduction." Henry E. Allison, Kant's Transcendental Idealism, p. 159.

28 Fred Wilson, Hume's Defence of Causal Inference, pp. 132-35, attempts to demonstrate the shortcomings of Kant's position and to show that what Hume offers as an explanation of "laws of nature" and the "principle of causality" may be defended against Kant's criticism.
Thus Kant explicitly states here that the empirical is what *results* from the transcendental affinity in which all appearances stand. It is not inappropriate, therefore, to view the empirical as (at least in part) the product of the a priori functions of the mind - specifically, as the product of a special kind of a priori synthesis: that involved in the process of schematism.²⁹

²⁹Lewis White Beck, "Can Kant's Synthetic Judgements Be Made Analytic?," p. 22, explains that "Kant saw in mathematics a clue to the objectivity of all a priori knowledge, both analytic and what he considered to be synthetic. This is indeed the sense of the Copernican Revolution: even empirical objects are constructions; and their necessary conditions are geometrical."
Section iv

The Two Features of Sensibility

We have been examining the relation between sensibility and understanding and how this relation grounds the schematism process. Yet we have not devoted much attention to the fact that sensibility consists of two aspects: inner intuition - time, and outer intuition - space. It is a mistake simply to regard Kant as equating the inner with that which goes on in the mind of the subject alone, and the outer with that which goes on outside the mind of the subject, and as happening in the empirical world, that is, the physical world. This simple picture is not Kant's picture. The distinction between the inner and the outer is, for Kant, much more complex. Grayeff stresses that, for Kant, inner sense is nothing more than "an indeterminate manifold of representations." He notes Kant's first footnote to section 26 of the B edition of the Transcendental Deduction which demonstrates Kant's view that a

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30 Charles Parsons, "The Transcendental Aesthetic," p. 67, provides a concise account of the development of Kant's conception of space: "Early in his career Kant's view of space was relationalist and basically Leibnizian. This was what one would expect from the domination of German philosophy in Kant's early years by Christian Wolff's version of Leibniz's philosophy. Kant was, of course, influenced from the beginning by Newton and was never an orthodox Wolffian. In 1768 in Regions in Space, he changed his view of space in a more Newtonian direction; this was the first step in the formation of his final view, which is in essentials set forth in the Dissertation of 1770."

31 Felix Grayeff, Kant's Theoretical Philosophy, pp. 180-181.
spontaneous act of synthesis is required even for the awareness, on the part of the subject, of any successive arrangement of the representations given to us by the manifold of sensibility (B 160). Determinacy of any kind, for Kant, necessarily implies spontaneity.

What is very special, of course, about the role of inner sense in Kant's program is its function in the schematism of the categories, as we have seen. Thus, the aspect of sensibility that has always been thought to be most pertinent to the problem of schematism is time. Paul Guyer, however, has argued differently. Guyer admits that the schematism provides a content that is sufficient for the empirical use of the categories, and that this consists in determining temporal or spatial correlates for the logical features and relations of judgement. He sees the schematism as essentially the process of transcendental time determination - the process by which the categories order and determine time in such a way as to give significance to these concepts when employed in judgments about objects. Guyer argues, however, that space is not left entirely out of the picture in all of this. He explains:

Though the contents of the transcendental schemata of the categories are supplied by the several transcendental determinations of time, the use of these schemata - and thus of the categories themselves - requires objects in space. The spatiality of objects of appearances will be the ultimate condition for the objective validity of the categories, even if it does not figure in the actual schematization of them.\(^{32}\)

Guyer reminds us of the reason Kant regards the essential nature of the schemata to be temporality rather than spatiality. The reason, of course, is that "time is ubiquitous in a way that space is not,"\(^{33}\) that is, every representation is temporal - even purely subjective ones -

\(^{32}\)Paul Guyer, *Kant and the Claims of Knowledge*, p. 168.

\(^{33}\)Ibid.
though not every representation is spatial. But relation to spatial objects, Guyer maintains, is what renders judgments about these representations objectively valid:

By beginning with the premise that the categories can be interpreted in the purely temporal forms of inner sense, but then arguing that the determinate temporal relations of subjective states thus called for can be judged only if those states are also linked to independent objects in space, Kant can show that the categories can be given empirical sense in terms of knowledge which even the skeptic must concede - knowledge of the temporal structure of subjective states themselves - but that they can be used only if knowledge of external reality is also conceded.\(^{34}\)

Guyer argues that, because time cannot itself be directly perceived, spatiality constitutes the indispensable condition of the actual use of the categories.\(^{35}\) That is, while temporal relations constitute the content of schemata, outer intuitions constitute the condition for the use of schemata.\(^{36}\)

Guyer's point is certainly a strong one, though it should also be stressed that it is not only empirical objects that can be perceived as existing in time and space; pure objects may also be perceived in time and space, that is, objects in both the pure intuition of time and the

\(^{34}\)Ibid.

\(^{35}\)Joseph Moreau, "Berkeley et le schematisme," p. 289, comments on the fact that, nonetheless, the representation of time does not really amount to an intuition in the way that space does. For, unlike space, time is not given all at once; rather, time is the apprehension of an infinite succession. It is for this reason that, whereas geometry constructs figures a priori and is able to demonstrate their necessary properties, physics can not completely determine the laws of nature a priori; it must await the teachings of experience.

\(^{36}\)Vilem Mudroch, "Die Anschauungsformen und das Schematismuskapitel," p. 411, maintains, however, that, despite the fact that space is given a higher valuation in the second edition of the CPR in general, the scope of its applicability is still significantly more restricted than that of time, as it is only the a priori condition of outer intuition, whereas time remains the a priori condition of all intuition. Given this, even if coupled with the fact that space serves as the condition for the use of schemata, overall, time still has a far greater roll to play than does space.
pure intuition of space (A 25 / B 40-41). The point is that space is not just the form of
intuition of empirical objects, i.e., external objects; it is also the form of intuition of pure
objects having spatial dimensions. This latter gives rise to what Kant refers to as "formal
intuition" which is the kind of intuition involved in geometry and which is, in fact,
indispensable to geometry (B 40, 160, esp. n to B 160). 37 When the geometer conceives of a
triangle in his mind, he is not just perceiving that triangle in time, that is, inner intuition, he
is also perceiving it in space, that is, outer intuition - despite the fact that his representation
of the triangle is not outside his body. 38 For, since the triangle is a spatial object it must be
conceived in space. Outer intuition is precisely that form of intuition that allows me to
perceive an object as spatial, whether that object be empirical or pure. But, for the reasons
stated above, to perceive an object as spatial is not a sufficient condition for perceiving it as
external or empirical. We must not, therefore, misconstrue Guyer's position to mean that
spatiality is a sufficient condition for externality or empiric activity.

Spatiality is also not a sufficient condition for objectivity. When we ask: "How do we
make the leap from the subjective to the objective?" it is not enough to say that our
representations contain admixtures of sense data and that these sense data are intuited in outer

37 Lewis White Beck, "Kant's Theory of Definition," p. 31, is correct in maintaining that
"mathematical entities are not arbitrary logical products of compatible logical predicates; the
concepts have objective validity (in pure intuition) shown through the presentation of the
 corresponding determination. If the presentation is a product of the productive imagination, the
construction is called schematic or pure, as of a figure (no matter how roughly drawn) used in
a geometrical proof."

38 Charles Parsons, "The Transcendental Aesthetic," p. 67, supports this view: "'Outside us'
cannot have as its primary meaning just outside our bodies, because the body is in space and
what is inside it is equally an object of outer sense."
intuition. What is further required is synthesis. But this synthesis is not carried out by the senses; this synthesis is carried out by the imagination. Kant explains this in the following:

Psychologists have hitherto failed to realise that imagination is a necessary ingredient of perception itself. This is due partly to the fact that that faculty has been limited to reproduction, partly to the belief that the senses not only supply impressions but also combine them so as to generate images of objects. For that purpose something more than the mere receptivity of impressions is undoubtedly required, namely, a function for the synthesis of them (A 121).

This function of synthesis is of course the imagination, not simply as bringing about the reproduction of representations, but also as contributing to their production (A 118, B 155). It is the realization of this other function of the imagination - its productive function - that allows us to appreciate fully the role of the imagination in the process of schematism. And it is only then that we may understand why Kant places such an emphasis on inner intuition and time determination in the experience of empirical objects, and why his comments regarding the contribution of space do not loom quite as large in his explanation of the schematism process. It is the function of imagination in the schematism process, a process essentially involving time determination, that grounds the objectivity that characterises empirical objects.

In order for an object to be empirical, it must be more than just sensuous and spatial, it must be objective. The sense data provide the material of an empirical object; the form of outer intuition provides the spatiality of an empirical object; it is the process of transcendental time determination and all that it involves that completes the set of conditions required for experience of an empirical object, as it is that which provides the grounds for its objectivity.

Thus in order to perceive an empirical object we not only require the impressions presented to us by our senses; what is also required is that these sense impressions be combined in a manner that gives rise to images of objects. Kant rejects the view that the
senses themselves are capable of bringing about this combination and asserts that it is the imagination that performs this function (A 116, B 155, B 160). In the chapters that follow, I will describe this process in greater detail. Presently, I will only provide an outline of how it basically works. Time determination, in its four various forms: the time-series, the time-content, the time-order and the scope of time, is the process by which our perceptions are rendered objective - objectivity being the crucial element in the experience of an empirical object (A 145 / B 184). With respect to the time-series and the time content, the principles involved are the constitutive principles: the axioms of intuition and the anticipations of perception. These are the principles that invoke the use of the categories of quantity and quality. These principles operate indirectly on the matter of sensation given to the senses to yield perceptions of empirical objects.

But these perceptions remain merely subjective, that is, they hold only for the perceiving subject and not all other subjects, if they are not further determined by the categories evoked by the analogies. It is only when and if these subjective perceptions can be fitted together by the rules provided by the analogies - one of the two sets of the regulative principles - that an experience of an empirical object results. That is, if the perceptions in question can be seen as existing either in a relation of subsistence, a relation of cause and effect, or in a reciprocal relation with other perceptions, can these perceptions be regarded as objective. And it is only when they are so regarded that they can be regarded as empirical objects. Thus, it is not mainly their externality or their spatiality that renders these objects empirical, but rather their ability to be ordered together in a coherent fashion with other perceptions. This fundamental ordering, however, takes place in time at the level of the
regulative principles of the analogies.

The ordering provided by space only occurs at the level of the constitutive principles having to do with the time-series and the time-content, since the constitutive principles make use of the categories that operate indirectly on the matter of sensation which is given to us in space; but this ordering can, at most, give rise to subjective perceptions. To render these perceptions objective, and therefore to give rise to experience of an empirical object, the ordering provided by time alone at the level of the first set of the regulative principles, the analogies, is what ultimately constitutes the empirical aspect of empirical objects (A 179-80 / B 222-23).

Guyer gives much attention to the fundamental role of the analogies in rendering perceptions objective; in fact, the task of his entire text is to stress the importance of the analogies in Kant's theory of experience in his works before and after the CPR, arguing that the CPR strays significantly from the views expressed in those other works, and that his position in the CPR is not the one that he ultimately clung to. Guyer also argues that the emphasis Kant places on the form of outer intuition in the second edition - especially in the Refutation of Idealism - points in the new direction in which Kant eventually takes his theory in his later works, which is, in fact, the direction in which he was originally headed: a species of realism.

Section v

The Distinction between Synthesis and Combination

In the previous section, mention was made of the a priori synthesis that underlies the schematism process. In fact, it is a priori synthesis that is at the core of Kant's whole program in the CPR. Because the contexts in which he discusses this crucial notion, however, are so various, it is hardly possible to examine every notable feature of this synthesis in the present study. I will limit myself, therefore, to only a very few of those features that are most pertinent to this enquiry. What I will demonstrate is how this particular type of a priori synthesis renders possible the process of schematism, and thereby resolves the difficulties of the heterogeneity problem outlined in Chapter I (A 142 / B 181).

In The Clue to the Discovery of all Pure Concepts of the Understanding, Kant notes that the function that brings about the unity in a judgment is identical to the function that brings about the unity of what he refers to as "the mere synthesis of various representations in an intuition" (A 79 / B 105).⁴⁰ Given that sensibility is viewed by Kant as admitting of

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⁴⁰Sarah Gibbons, *Kant's Theory of Imagination*, p. 31, argues that: "The difficulty in calling the synthesis of imagination concept-guided is that it assumes that there is no broader synthesizing activity which gives order to a sensibly intuited manifold other than that of the application of a single concept (or cluster of concepts) that issues in a determinant judgment". Gibbons maintains that in order for the Kantian project to work, there must be a type of synthesis which is extraconceptual. The distinction I draw later in this section between synthesis and unity no longer renders Gibbon's point relevant.
synthesis, let us examine the manner in which it may be said to do this. It seems that sensibility contributes to the synthesis of the manifold of intuition by providing the material for this synthesis. This material, however, is not just the raw material of sense, but spatially and temporally formed sense data. Having some temporal and spatial form, this material may be further determined by the understanding when the understanding operates on its form according to its rules of unity.⁴¹

Before we proceed any further, we must first be clear on what Kant means by "synthesis." Kant writes: "By synthesis, in its most general sense, I understand the act of putting different representations together, and of grasping what is manifold in them in one [act of] knowledge" (A 77 / B 103).⁴² Now the most striking thing about Kant's account is that we discover a form of synthesis on three different levels, which nonetheless amount to one general function. These three kinds of synthesis are of course: the synthesis of apprehension in intuition, the synthesis of reproduction in imagination, and the synthesis of recognition in a concept (A 98 - A 110). These headings, however, can be quite misleading if

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⁴¹Ralf Meerbote, "Kant on Intuitivity," p. 211, points out the ambiguity pertaining to Kant's notion of "form," in his various discussions of it. Meerbote maintains that "although it must be admitted that there are in turn serious problems with Kant's varying conception of form, problems which make it difficult to fathom precisely how he would distinguish between a priori applied geometrical properties, contingently applied ones, and non-geometrical qualitative looks of things, it is reasonably clear that he more often than not conceives of schemata specifically as geometrical properties." I think, however, that Meerbote is led to this conclusion because he considers mainly the schemata of sensible concepts - what Makkreel refers to as "monogrammatic" schemata.

⁴²Lewis White Beck, Studies in the Philosophy of Kant, p. 102, writes: "Certainly Kant's use of 'synthetic' as having one meaning in transcendental logic, another in general logic, and still another in methodology is unfortunate." The above mentioned text, pp. 102-4, provides a detailed discussion of Kant's various uses of the term "synthetic."
we proceed along the lines that when Kant refers to these syntheses he is speaking of each of them as independently complete. He is not. Perhaps the most important thing of all is to understand that what Kant really means when he speaks of these various forms of synthesis is that they are, in a sense, only potential syntheses on their own, and that, in order to be complete, they must all operate on one another. Kant does not make this explicit here, but given what he says later on in the Analytic, it is, I think, abundantly clear that this must be the case, if what he says in the Deduction is to be rendered consistent with what he says in those other sections. This claim will find more support in Chapter III.

Kant maintains, in the Transcendental Deduction of the A edition, that every intuition contains a manifold which can only be represented as a manifold in virtue of the fact that the mind is able to distinguish the time in the sequence of perceived impressions. The reason for this is that each of our representations, if regarded as contained in a single moment, can be nothing but an absolute unity. Furthermore, all representations, since they are modifications of the mind, are in inner sense. He states: "All our knowledge is thus finally subject to time, the formal condition of inner sense. In it they must all be ordered, connected, and brought into relation" (A 99). To yield knowledge, therefore, our representations must fulfil these three conditions: they must be ordered, they must be connected, and they must be brought into relation (A 99). They are ordered in intuition or sensibility; they are connected

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43Moltke S. Gram reports the debate between Vaihinger and Paton regarding the question of the unity of the argument in the first edition of the Transcendental Deduction. See Moltke S. Gram, Kant: Disputed Questions, p. 20, for a discussion of the distinction between the notions of "synthesis" and "combination."
by means of the imagination; and they are brought into relation by means of understanding."

In the B edition of the Transcendental Deduction, Kant's emphasis is on the notion of *combination* rather than *synthesis*, and he stresses an important distinction between the two. He states that *combination* may generally be referred to as *synthesis* (B 130), but synthesis of a special kind. What combination involves is synthesis plus unity. Kant explains:

But the concept of combination includes, besides the concept of the manifold and of its synthesis, also the concept of the unity of the manifold. Combination is representation of the *synthetic unity* of the manifold. The representation of this unity cannot, therefore arise out of the combination. On the contrary, it is what, by adding itself to the representation of the manifold, first makes possible the concept of the combination (B 130-31).

We also find that in B 130 Kant assigns the function of combination to the understanding:

"All combination - be we conscious of it or not, be it a combination of the manifold of intuition, empirical or non-empirical, or of various concepts - is an act of the understanding. To this act the general title 'synthesis' may be assigned." Kant even goes as far as saying that all forms of synthesis, including those that make possible perception, are ultimately subject to the categories (B 161). This point, of course, will have to be understood in light of Kant's claim that it is ultimately the imagination that carries out the function of both synthesis and combination. The relation between imagination and understanding will be developed as we proceed. At present, suffice it to say that what Kant is mainly concerned to establish is that it is not the case that sensibility provides unity of one kind and the understanding provides unity of another kind. Rather, the function of unity occurs on the highest level of synthesis alone,

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"Norman Kemp Smith, *Commentary to Kant's Critique of Pure Reason*, p. 234-48, provides an illuminating account of the significance of the Subjective Deduction in the CPR."
which involves understanding, and simply doesn't occur on the level of sensibility before it is determined by the understanding. Kant refers to this function of unity as *combination*. Thus synthesis and combination may be differentiated in very general terms on the basis that synthesis is a term denoting a genus, and combination a species. Specifically, combination is, for Kant, a kind of synthesis that involves unity, as it makes use of the categories of the understanding which are rules of unity.\(^4\)

This, however, must not be construed to mean that the synthesis described here is the category of unity, but rather, another kind of unity that is prior to any concept of combination whatsoever (B 131). The reason Kant gives for this is that "all categories are grounded in logical functions of judgment, and in these functions combination, and therefore unity of given concepts, is already thought" (B 131). The point here is that the unity governing all possible knowledge is not one that is grounded in the unity of its parts but rather in the unity of the whole to which it belongs.\(^5\)

Ultimately what Kant is concerned to explain here is how "the many" in our experience can be grasped as "one." The "manyness," he explains, could only be represented as a "manyness" in so far as the mind is able to draw a distinction in the point in time in which we receive representations (A 99). We regard, on the other hand, as an absolute unity, that which appears to us as contained in a single instant, that is, in a period of time within

\(^4\)We see this in Benno Erdmann's comment (*Kant's Kriticismus*, p. 22) to the effect that the categories are nothing other than universally, represented manners of synthesis, in so far as through them unity is brought to our representations.

\(^5\)See Richard E. Aquila, "Categories, Schematism and Forms of Judgment," for an illuminating treatment of some of the issues discussed above in more direct connection with the nature and function of schematism.
which we cannot perceive any intermediate intervals of time (A 99). (I do not think that what Kant intends to say here is that there are no intermediate intervals, but only that there do not appear to us to be any - thus rendering the unity all the more of our own making.) What brings about this unity from this manifold is the synthesis of apprehension, the process by which the representations presented to sensibility are "run through and held together" as Kant says (A 99). It should be noted, however, that despite the fact that this act is referred to as the "synthesis of apprehension in intuition" this is not to say that the act is being carried out by intuition, rather, it is carried out in intuition. That is to say, this synthesis is a synthesis of the many representations presented to the subject at the level of intuition. Kant states this clearly when he says: "This act I name the synthesis of apprehension, because it is directed immediately upon intuition" (A 99).

Further support for this view is the fact that Kant repeatedly says that spontaneity is responsible for all forms of synthesis whatsoever. For example, he writes: "Receptivity can only make knowledge possible when combined with spontaneity. Now this spontaneity is the ground of a threefold synthesis which must necessarily be found in all knowledge" (A 97). Of course since it is the understanding that is spontaneous, the understanding is what is ultimately responsible for all synthesis. By breaking down what is essentially one act of synthesis performed by the understanding in its three basic phases, Kant is only trying to demonstrate the intricacies of this one unified act. We should not, however, conclude from this that there are various parts of the mind that are each performing their own unifying
acts.\(^7\) The fact that there is only one original apperception constitutes substantial evidence for this view.\(^8\) (Further evidence of this will be provided in the chapter to follow.)

In his discussion of the unity of apperception, Kant draws a parallel between sensibility and apperception. He writes: "Appearances in experience must stand under the conditions of the necessary unity of apperception, just as in mere intuition they must be subject to the formal conditions of space and of time" (A 110). Apperception and intuition are described here as providing requisite conditions, but these conditions are requisite for different things. Space and time are the requisite conditions for appearances in intuition, apperception the requisite condition for appearances in experience. Of course by distinguishing between intuition and experience Kant is distinguishing between an earlier stage in cognition and a later stage in cognition. Now Kant maintains that intuition is a requisite condition for experience; but he does not maintain that apperception is a necessary condition for intuition. What this implies is that it is possible to intuit appearances that never get taken up into consciousness in such a way that they may yield knowledge of objects of experience. How is this to be explained? In such cases, the appearances would receive the a priori structure of sensibility but not the unity according to concepts that apperception, and only

\(^7\)H.J. Paton, *Kant’s Metaphysic of Experience*, vol. 2, p. 44, holds a similar view: "There is only one synthesis which combines the given manifold, whatever be its empirical character, in one time and space, although that synthesis has different aspects and imposes different characteristics on the objects combined."

\(^8\)John Watson, *The Philosophy of Kant Explained*, p. 137, also gives expression to this view: "Consciousness must, therefore, be itself a unity. If we supposed it broken up into a number of distinct and independent states, it is obvious that we should never have knowledge in the sense of a connected system of perceptions. The perception of an object involves the presence to consciousness of various elements, which are viewed as a single whole or totality."
apperception, can provide. In cases where genuine knowledge of objects is produced, apperception acts on intuition and provides the unity required for such knowledge.\(^4\)

This unity, as was stated, consists in the combination of representations with one another according to concepts, but this is not all that it consists in. For in order for a set of representations to be united to one another, they must also be united to apperception itself. In fact, the representations' being united to *apperception* is a precondition for their being united to *one another*. This is expressed in the following:

There can be in us no modes of knowledge, no connection or unity of one mode of knowledge with another, without that unity of consciousness which precedes all data of intuitions, and by relation to which representation of objects is alone possible. This pure and original unchangeable consciousness I shall name *transcendental apperception* (A 107).

The claim that is being made here is the one from which stems the leading argument that is to be featured in the Schematism chapter. We see that Kant mentions here what will be further developed in that chapter - the relation between concepts and intuitions - as he establishes the need for intuition to be "related to" apperception in order to yield knowledge of objects that is to be regarded as universal and necessary (A 93-94 / B 125-26, A 103-7).\(^5\)

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\(^4\)Referring to a section of the *Prolegomena*, Wilhelm Windelband, *A History of Philosophy*, vol. II, p. 533, explains: "Kant here distinguishes judgments of perception, i.e. those in which only the relation of sensations in space and time for the individual consciousness is expressed, and judgments of experience, i.e., those in which such a relation is asserted as objectively valid, as given in the object; and he finds the difference in epistemological value between them to be, that in the judgment of experience the spatial or temporal relation is regulated and grounded by a category, a conceptual connection, whereas in the mere judgment of perception this is lacking." I present a different view in Chapter IV.

\(^5\)This point refutes George Schrader's remark, "Kant's Theory of Concepts," p. 148, that "in empirical concepts the necessity lies more on the side of the data than on the side of the concept." For the necessity in any concept, whether pure or empirical, comes solely through the connection of that concept with the unity of apperception. Kant always associates necessity with
The conclusion that Kant arrives at in the section of the Deduction under examination is that the synthesis of apprehension, which is "the combination of the manifold in empirical intuition" (B 160), and which is therefore empirical, is dependent upon the synthesis of apperception, which is a priori. Now since the synthesis of apprehension gives rise to perception, which Kant defines as: "empirical consciousness of the intuition (as appearance)" (B 160), the connection of perceptions must be subject to apperception. This is inferred from the fact that the unity of the synthesis of the manifold in both inner and outer intuition and also the combination to which all intuitions must conform are given a priori. Kant clearly tells us that this synthetic unity, which is a feature that we find in our particular empirical intuitions is, in fact, the "unity of the combination of the manifold of a given intuition in general in an original consciousness in accordance with the categories" (B 161). This original consciousness is, of course, the unity of apperception. He writes: "All synthesis, therefore, even that which renders perception possible, is subject to the categories; and since experience is knowledge by means of connected perceptions, the categories are conditions of the possibility of experience, and are therefore valid a priori for all objects of experience" (B 161). It is in this way that Kant makes the connection between a priori synthesis and empirical synthesis, holding the former as the condition of the latter. This, however, does not

that which is a priori, as the transcendental unity of apperception is, and as the sense data are not. It would be more accurate to say, therefore, that the specific determinations come from the sense data, but that these specific determinations will necessarily be represented at all times and in all instances in the same way is not guaranteed by the sense data themselves; this necessity can only come from the relation of the empirical concept to the unity of apperception.

The transcendental unity of apperception is ultimately what allows us to distinguish between a mere "judgment of perception" and a "judgment of experience." For a more extensive discussion of this issue, see Jonathan Bennett, Kant's Analytic, pp. 132-33.
imply that there are, in fact, two distinct acts of synthesis; rather the distinction between a priori synthesis and empirical synthesis refers to the general character of that which is being synthesized.\textsuperscript{52} The act that is involved in both kinds of synthesis is essentially one.\textsuperscript{53} How this is so will be more fully explained in the chapter to follow.

\textsuperscript{52}This is the view defended by D. Morgan Pierce, \textit{Kant's Metaphysical Deduction}, pp. 117-18: "The distinction between empirical and pure synthesis must be taken as a distinction of the aspects of what is synthesized, not as a distinction of the two acts. The synthesis of time (space) is a priori in that it expresses what is true of all experiences, whereas the empirical synthesis is of the same act of synthesis, but in regard to its sensory content. The empirical synthesis therefore expresses the contingent element of any synthesis, since the consciousness of the sensory content of intuitions is subject to empirical conditions."

\textsuperscript{53}Frank Pierobon, \textit{Systeme et representation: La deduction transcendantale des categories dans La Critique de la raison pure}, p. 132, goes as far as saying that empirical apperception cannot be radically distinct from pure apperception due to the continuity between the two. It is for this reason, Pierobon claims, that Kant may establish the synthetic unity of the manifold of intuition.
It has been explained that synthesis of the manifold of intuition, when it occurs without the involvement of the categories, does not involve unity, as sensibility does not have any rules of unity of its own; it can only receive unity when making use of the categories that it borrows, so to speak, from the understanding, by means of its standing in some relation with apperception. When indeed sensibility does make use of the unity of the categories, the particular kind of synthesis that takes place is referred to as "combination." We will now examine another feature of the distinction between synthesis and combination. This feature is not one that Kant makes explicit, but rather, one that may be gleaned from his use of these terms. The term "synthesis" seems to refer essentially to the connection of the representations presented in intuition; thus this term is usually used by Kant to express the process that occurs between the particular intuitions themselves. The term "combination" seems to be applicable to (a) the connection between concepts, (b) the connection between intuitions and concepts and (c) the connection between the faculties that give rise to intuitions and concepts, sensibility and understanding respectively. Essentially, combination is the process by means of which the synthesis of intuitions becomes represented to consciousness as a unity. This will be demonstrated in what follows.
Kant maintains that experience of particular objects involves forming judgments about them, and forming judgments about them involves the combination of universal concepts (A 68 / B 93). The combination of universal concepts into a judgment, however, does not, on its own, yield knowledge of objects. What is further required is that these concepts be combined into something that is particular. Here is where the crux of the problem lies. The combination of universal concepts is required to yield knowledge of particular objects; now this combination of concepts must be further combined with something that is itself particular but which is not what may properly be understood as an object. Rather, that to which the concept must be combined is intuition (B 150). But how this could take place is not immediately obvious. The problem ceases to be a problem when we realize that the specific concepts that are capable of this kind of combination are not just empirical concepts, or even just any kind of pure concepts; they are only those pure concepts of the understanding that Kant terms "the categories." What is unique to these concepts is that, unlike any other concepts, these may be combined with intuitions. That is to say, all other concepts can be

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54 Falkenstein, *Kant's Intuitionism*, pp. 98-99, points out certain important features of Kant's notion of "combination." Falkenstein distinguishes between the combination involved in assembling a jigsaw puzzle and the combination involved in describing or outlining objects in a picture book. It is the latter of these senses of "combination" that is carried out by the imagination in the application of the categories to intuitions.

55 As J. Michael Young, "Functions of Thought and the Synthesis of Intuitions," p. 113, puts it: "Kant is not merely stipulating that concepts will be said to have content only if things of the kind conceived are given in intuition. His claim is rather that things intuited somehow figure in an essential way in the concept itself. Apart from this relation to things intuited, the concept would be merely an empty shell, which could not serve as a basis for knowledge. In thinking it we would merely have 'played with representations' (A 155 / B 195)." Young's general point here is certainly correct, but he fails to explain precisely what he means by his claim that the things we intuit *figure* in the concept itself.
combined only with other concepts. But the categories cannot just be combined with other concepts, they can also be combined with intuitions. It is precisely in the unique ability of the pure concepts of the understanding to actually combine with intuitions that they are able to bring about knowledge of particular objects. In the case of other concepts, it is possible for particular objects to be subsumed under them, but it is not possible for these particular objects to be actually combined with them. "Combination" is a technical term for Kant and it is not to be equated with synthesis or subsumption or any other term of the sort. According to Kant, there can be (a) combination of a concept and another concept, or (b) combination of a concept and an intuition; but that which grounds the latter of these is (c) combination of the faculties of sensibility and understanding. Thus there can be combination of two elements that are homogeneous, as in (a), or of two elements that are heterogeneous, as in (b) and (c), specifically, that of intuitions and concepts and of the faculties that produce them. In the Schematism chapter, Kant's intention is to give us as deep an insight as it is possible to attain with respect to the nature of the combination involved in (b) by means of the combination involved in (c). The key is not simply to regard the process of schematism as the application of the categories to intuitions, but as the pure synthesis, in the sense of combination of the faculties of sensibility and understanding, that renders this application possible.  

What I maintain is that Kant's notion of combination in the sense of (c) above is what grounds the process of schematism. The reason Kant's presentation of schematism appears so

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66Daniel O. Dahlstrom, "Transzendentale Schemata, Kategorien und Erkenntnisarten," p. 48, also stresses this point in his assertion that the schema is described by Kant as not only the application of the category and as a rule of the understanding, but also as a pure synthesis, and a transcendental product of the imagination."
mysterious in the Schematism chapter is that Kant does not bother to repeat in that chapter what he has already discussed throughout much of the Deduction with respect to the notion of combination. One of the points he emphasizes in this section of the CPR is the relationship between the intellectual faculty and sensibility, that grounds the application of the categories to intuitions. In the Schematism chapter Kant does not reiterate at length his discussion of this ground, and so we are left feeling that there is more to be explained with respect to the possibility of the application of the categories to intuitions. If such explanation is sought, one of its kernels can be found in B 135: "For through the 'I', as simple representation, nothing manifold is given; only in intuition, which is distinct from the 'I', can a manifold be given; and only through combination in one consciousness can it be thought" (B 135). What Kant does here is stress not only the relationship between the intellectual and the intuitive faculties, but also the interdependence of both faculties upon one another in the production of knowledge. He clearly asserts a distinction between them, but, nonetheless, maintains that transcendental apperception is the ultimate principle of unity and therefore the ground of the synthetic unity of any representations received through intuition. Yet the fact that apperception could not carry out its function of unity unless it had a manifold to work on, and that only through intuition can a manifold be given, at the very least renders the function

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Sarah L. Gibbons, Kant's Theory of Imagination, p. 49, suggests a relationship between the intuitive faculty and the spontaneous faculty that goes beyond the requirement for knowledge of objects: "The suggestion is that spontaneity and receptivity, conceptual thought and sensible intuition, mutually require each other, not just for the sake of knowledge of objects, but much more fundamentally in the interconstitution of these two faculties in a judging subject and for the possibility of the self-awareness (indeed, the constitution) of the active (and, therefore, cognizing) self."
of transcendental apperception *correlative* with the function of sensibility.\(^5^8\) This correlativity of functions is at the heart of the schematism process.\(^5^9\)

Of course this correlativity of functions is not sufficient to carry out schematism; the imagination must, by means of another synthesis, mediate the action of apperception and intuition.\(^6^0\) Kant reminds us of this in the following passage:

> This amounts to saying that I am conscious to myself a priori of a necessary synthesis of representations - to be entitled the original synthetic unity of apperception - under which all representations that are given to me must stand, but under which they have also first to be brought by means of a synthesis (B 135).

The very last portion of this assertion indicates the need for another synthesis that actually *brings* the representations to apperception to be unified by it. This Kant will designate the action of the imagination. But if this synthesis is brought to apperception specifically for the

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\(^5^8\)The importance of this point is explained by Bernard Freydberg, *Imagination and Depth in Kant's Critique of Pure Reason*, p. 73, "That the manifold is given cannot be proven, nor can one abstract it from this fact. It is simply a condition to which human beings are always bound. This means that the givenness of intuition is an essential part of the proof. Take way the givenness of intuition, and there is no transcendental deduction. More precisely, we can form no image of what any human apprehension would be like without the givenness of intuition."

\(^5^9\)Though schematism is required in the acquisition of knowledge, "schematism has no place in the theory of Ethics because Ethical Reason is fundamentally out of contact with the sensuous datum" (Nathan Rotenstreich, "Kant's Schematism in its Context," p. 21).

\(^6^0\)Nathan Rotenstreich, ibid., p. 18, contrasts Kant and Plato in their views of the contributions of sensibility and understanding in the production of the content of experience. Rotenstreich explains that: *Eidos* in Plato connoted the full content. The schemes in Kant implying the imaginative element connote full content as well. But full content for Plato was the *ideal* content, since nowhere in the empirical world does one find the full realization of the ideal content. For Kant the conceptual moment itself is not and cannot be the full content; since the conceptual moment is a partial one within the whole of a synthesis, while the full content can be envisaged in the meeting between the conceptual moment and the given one, that is to say in the schemes."
purpose of having unity "added" to it, as it were, then clearly this synthesis that the imagination brings about is not one that itself involves unity of the same kind that understanding brings about. The very intriguing question then arises: What is the distinction between the nature of unity that the imagination is able to bring about and the nature of that unity that understanding brings about? This issue will be addressed in detail in Chapter III. At present, only a few remarks will be made with respect to the role of the imagination in giving rise to synthesis.

Though Kant distinguishes between synthesis and the unity of synthesis, he does say of both that they are capable of being transcendental. But it is difficult to see how just synthesis on its own, without unity, could be transcendental, since it could not bring about knowledge unless it involved unity. Kant, however, provides an explanation as to the particular respect in which the two may be viewed as transcendental. He states:

We entitle the synthesis of the manifold in imagination transcendental, if without distinction of intuitions it is directed exclusively to the a priori combination of the manifold; and the unity of this synthesis is called transcendental, if it is represented as a priori necessary in relation to the original unity of apperception (A 118).

The first part of this passage clearly refers to productive imagination, as it involves a function directed on pure intuition; again, what Kant describes here seems to be precisely that function of the imagination involved in the process of schematism, as that process consists precisely in the action of imagination on sensibility, and thus brings about a priori combination of the manifold of intuition. The second part of the passage raises a more complex point. Because the unity of this synthesis can only be regarded as transcendental if

\[\text{[Footnote]}\]

\[\text{[Footnote]}\] I will discuss the notion of productive imagination in greater detail in Chapter III, sec. ii.
"it is represented as a priori necessary in relation to the original unity of apperception," this implies that the process of schematism can only be regarded as transcendental if it is represented as a priori necessary in relation to the original unity of apperception, since the process of schematism essentially consists of this a priori synthetic unity.\textsuperscript{a2} Kant places no other condition on the sufficiency of this process to bring about knowledge.

A central issue in dealing with the complexities that arise from this view concerns Kant's remark in the Subjective Deduction regarding his initial formulation of the three-fold synthesis. Kant asserts there that all representations must be "ordered and connected and brought into relation in time," and that this should be our guiding thought throughout the entire discussion of the syntheses (A 99). Makkreel points out that

here Kant may be taken to mean that the three syntheses can be placed in a \textit{cumulative} sequence in which intuitive apprehension orders, imaginative reproduction connects, and conceptual recognition unifies. However, Kant's descriptions also suggest that the relationship among the three syntheses is \textit{presuppositional}. The synthesis of apprehension is said to be 'inseparably bound up with the synthesis of reproduction' (A 102), which itself 'would be useless' without the synthesis of recognition (A 103).\textsuperscript{a3}

Thus according to Makkreel, the Subjective Deduction taken on its own allows for both interpretations. For he explains that the claim that our representations must be "ordered,

\begin{footnotesize}
\footnote{In other words, the products of the imaginative schematic procedure, the schemata, must be conjoined with the 'I think, substance, cause, etc.' 'This might seem to suggest a joining together of isolated elements, a suggestion which is perhaps characteristic of Kant. But it makes little sense when it is realized that transcendental apperception is the representation of a unity and this unity is formed by the transcendental imagination - and this we can interpret to be the real nature of the synthetic act. This act does not consist in the juxtaposition of isolated elements which are external to each other but is a synthetic act of objectification brought about through the medium of imagination" (Michael Woods, "Kant's Transcendental Schematism," p. 215).}

\footnote{Rudolf Makkreel, \textit{Imagination and Interpretation in Kant}, p. 26.}
\end{footnotesize}
connected and brought into relation" may be explained in a manner other than a cumulative sequence of the three syntheses. The cumulative sequence interpretation may be avoided if, for example, we regard "ordering," "connecting" and "bringing into relation" as synonymous expressions of a synthesis of recognition prior to these three syntheses. Among those who reflect the dominant view on this matter are H.J. Paton and A. C. Ewing, as they hold that there is, in fact, one overall conceptual synthesis of which the three syntheses are only aspects. Norman Kemp Smith is a supporter of the presuppositional theory, as he maintains that "reproduction conditions apprehension and both rest on recognition". Kemp Smith further holds that viewing the situation as one that proceeds from apprehension to reproduction to recognition distorts the real situation as it reverses what is really going on.

Makkreel maintains that there is another way to defend the cumulative thesis that differs significantly from those mentioned above. He suggests that we regard

the synthesis of apprehension as a gathering synthesis, the synthesis of imaginative reproduction as an associative synthesis, and the synthesis of recognition as a connecting or unifying synthesis. Each synthesis then would be slightly more specific than its predecessor.

Makkreel notes that contradictory evidence of this might seem to be found in the A Deduction at A 119 where Kant again seems to suggest with his use of the expression "starting from below," that apprehension constitutes the basis for imaginative reproduction, which lays the foundation for the synthesis of recognition. Moreover, the summary presented

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64Ibid., p. 27.

65Ibid.

66Norman Kemp Smith, Commentary to Kant's Critique of Pure Reason, p. 246.

67Rudolf Makkreel, Imagination and Interpretation in Kant, p. 27.
in the Objective Deduction seems to defend both the cumulative and the presuppositional thesis. Kant asserts:

> Actual experience, which is constituted by apprehension, association (reproduction), and finally recognition of appearances, contains in recognition, the last and highest of these merely empirical elements of experience, certain concepts which render possible the formal unity of experience, and therewith all objective validity (truth) of empirical knowledge (A 124-25).

In a passage that follows, however, which identifies these concepts as the categories, Kant speaks of the syntheses in such a way that suggests that they actually occur in the reverse order from the one he outlined previously: "Upon them [the categories] is based not only all formal unity in the synthesis of imagination, but also . . . all its empirical employment (in recognition, reproduction, association, apprehension)" (A 125). Makkreel asserts that if we consider both presentations of the syntheses together, the two sequences are indicative of a circular process, with the sequence that begins with apprehension as the sequence whereby the content of experience is provided, and the sequence that begins with recognition as the sequence whereby the formal unity of this content is provided. Moreover, Makkreel argues that Kant's description of the threefold synthesis as a sequence from below only makes sense if interpreted in the language of formation (Bildung) which Kant employed in expressing his theory of the imagination in his precritical writings. Makkreel stresses, however, that when the threefold synthesis is considered with respect to the overall view of synthesis as presented in the CPR, it becomes clear that the sequence beginning with the synthesis of recognition must prevail. What this demonstrates, Makkreel concludes, is that: "ultimately all synthesis is a function of the understanding and its categories. This is the
conclusion that Kant arrives at in the Objective Deduction.” In fact, Makkreel holds that Kant’s final position was certainly that all intuitive and imaginative syntheses rest on the concepts of the understanding. He concludes thus:

All syntheses of apprehension are to be interpreted as empirical applications of the transcendental synthesis made possible by the understanding. Kant is explicitly rejecting the view of the Subjective Deduction that there can be transcendental syntheses of apprehension and reproduction independent of the categories. Now both are considered as empirical applications of the categories.

Makkreel himself notes, however, that there is one passage that Kant retains in the second edition that seems to contradict his position explained above, as it presents the imagination as an independent source of synthesis - the view expressed in his earlier works. The passage appears at A 78 and B 103: “Synthesis in general, as we shall 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.” Makkreel thinks, however, that the occurrence of this passage in the B edition can simply be explained as an oversight on Kant’s part, and that Kant’s predominant view was that imaginative synthesis, along with all other forms of synthesis, depend on the understanding. The central goal of the next chapter will be to explain what the relationship is between imagination and understanding, and how each contributes to the synthesis involved in cognition.

Kant draws another important distinction in the following passage:

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Ibid., p.28

Ibid., p. 28.
The same understanding, through the same operations by which in concepts, by means of analytic unity, it produced the logical form of a judgment, also introduces a transcendental content into its representations, by means of the synthetic unity of the manifold in intuition in general (A 79 / B 105).

Kant distinguishes here between "analytic unity" and "synthetic unity." The former contributes the form of our knowledge, the latter contributes the content. But since both these unities derive from the understanding, the conclusion to be drawn is that the understanding is in some sense responsible both for the form and the content of that which it unifies. It provides the form as it is equipped with concepts, and it provides the content as it brings about a synthetic unity in the manifold of intuition in general. The implication is that the manifold of intuition is not really a content unless there is brought to it the synthetic unity of the representations in it. This, of course, is not to say that the understanding produces its content entirely on its own, for it certainly cannot produce its own intuitions; for this it must resort to sensibility (B 72, B 159, B 307). What is meant here is that the intuitions that sensibility provides must nonetheless be unified by the understanding, and only after they have been so unified can the understanding make use of them as content for the concepts.

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70With reference to the distinction between the unity involved in a logical judgment, and the unity involved in the synthesis of a manifold of intuition, Kemp Smith, Commentary to Kant's Critique of Pure Reason, p. 177, explains that "in the one employment the understanding, by creative synthetic activities, generates from the given manifold the complex objects of sense-experience. In so doing it interprets and organizes the manifold through concepts which originate from within itself. By the other it discriminates and compares, and thereby derives from the content of sense-experience the generic concepts of the traditional logic." Having recognized this crucial point, it is odd that Kemp Smith fails to recognize Kant's purpose in distinguishing between the concepts and the schemata. For this distinction between concepts and schemata is intended to reflect precisely the distinction between these two different employments of the understanding.
which it imposes on them to bring about further unity in the sensible manifold. What this suggests is that the unification that goes on in the production of objects of experience, and in the judgments of those objects, takes place in various stages, consisting of various acts, as will be further demonstrated in the chapter to follow.

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7Robert Paul Wolff, *Kant's Theory of Mental Activity*, pp. 219-20, notes an important point: "In the *Critique*, intuition is frequently identified with the content, or material element, of cognition, and concepts with the formal element. . . . At the same time, however, the distinction between form and matter can be carried into the manifold of intuition itself, where the pure form - be it space or time - is distinguished from the matter, namely sensation [cf. B 34]. . . . Thus it appears that the manifold of intuition, which is, matter for concepts, is itself a combination of matter and form, at several different levels." For the most part this position is correct, though what Wolff refers to here as "combination" should technically be referred to as "synthesis."
Section vii

Towards a Unifying Theory of Unity

It has been demonstrated above that, because synthetic unity of the manifold of intuitions presupposes apperception, apperception is to be regarded as the ground of this synthetic unity. In the passage that follows, however, this point seems, prima facie, to be contradicted. The passage reads: "Synthetic unity of the manifold of intuitions, as generated a priori, is thus the ground of the identity of apperception itself, which precedes a priori all my determinate thought" (B 134). For this passage seems to assert that, in fact, it is the synthetic unity that grounds apperception. The problem is resolved when we realise that the apperception which Kant asserts to be grounded upon this synthetic unity is empirical apperception, whereas the apperception which he asserts to be the ground of the synthetic unity is transcendental apperception. This is clear from what he says in the lines following the above passage, in which he ascribes the activity of combination specifically to transcendental apperception. Thus he maintains:

Combination does not, however, lie in the objects, and cannot be borrowed from them, and so through perception, first taken up into the understanding. On the contrary, it is an affair of the understanding alone, which itself is nothing but the faculty of combining a priori, and of bringing the manifold of given representations under the unity of apperception. The principle of apperception is the highest principle in the whole sphere of human knowledge (B 135).
The significance of the distinction made earlier regarding the difference between synthesis and combination is manifested most clearly perhaps in precisely this passage.

The origin of the synthetic unity described above is also mentioned in the footnote to the passage just noted. The last part of the footnote reads:

The synthetic unity of apperception is therefore that highest point, to which we must ascribe all employment of the understanding, even the whole logic, and conformably therewith, transcendental philosophy. Indeed this faculty of apperception is the understanding itself (B 134).

Kant seems to be asserting here the identity of apperception with understanding. This comment strikes one as odd only if one ignores the fact that all the various functions of the intellectual faculty really just constitute one faculty, and each title that is given to these various functions reflects the particular employment to which the faculty is put. This constitutes further confirmation of the view that, although there can be mere synthesis of the manifold of intuition between the various representations given in intuition, combination, that is, synthetic unity, which is the represented unity of this synthesis of intuited representations, requires the application of a concept to these representations.

At this point one might question why, if all synthesis derives from the understanding, does Kant distinguish between the synthesis of intuitions and the combination of concepts. The reason, of course, is that we are capable of knowing objects and thinking objects. The former involves the synthesis of intuition, made possible by the combination of concepts and intuitions, whereas the latter involves the combination only of concepts, and does not yield knowledge of objects, since knowledge always requires a manifold of intuition. The human understanding can only perform the operation of thinking its objects; it cannot perform the
operation of *intuiting* its objects. To perform the operation of this latter act the human cognitive apparatus is equipped with a faculty of intuition that is sensible. The only representation that the human understanding can think that does not involve a manifold is the representation "I am" or "I think," which is an analytic judgment, in other words, "apperception." Kant adds that it must be possible to accompany every representation with apperception. He stresses that just as all sensible intuitions as representations must belong to a pure inner intuition, all consciousness must belong to an all-comprehensive pure apperception (A 123-24). The unity of apperception, however, should be carefully distinguished from inner sense. That the two ought not to be regarded as identical may simply be deemed from the fact that inner sense consists of the form of intuition and the sensations with which it is affected, and thus constitutes the intuitive faculty, while apperception is a unity that is logically prior even to intuition and constitutes the intellectual faculty. To yield knowledge of objects, however, apperception must bring about synthetic unity of the manifold of intuition.

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72Daniel O. Dahlstrom, "Transzendentale Schemata, Kategorien und Erkenntnisarten," p. 49, reminds us that Kant also draws a distinction between thinking and knowing. Dahlstrom explains that the difference between thinking and knowing corresponds to the distinction between the possession of an empirical concept and the application of an empirical concept respectively. Such a difference, Dahlstrom maintains, is not only significant, it is an essential presupposition of Kantian theory of knowledge. We can think without knowing; for example, when we formulate a hypothesis, or when we employ an expression in a language game, without that expression's relating to any object outside that language game.

73Terence C. Williams, *The Unity of Kant's Critique of Pure Reason*, Studies in the History of Philosophy, vol. 4, p.71, makes an interesting remark about the nature of the transcendental unity of apperception. He maintains that: "apperception, in the primary sense in which it is conceived by Kant as an unanalyzable spontaneity, is not to be regarded as a fumbling extension of the causal theory of inner sense. Rather, it is to be viewed as the central feature in a bold acceptance by Kant of the fact that the problem of the ultimate basis of experience, of (propositional) knowledge and of self-consciousness as such, is expressible - not in causal terms - but only in the limiting terms of a transcendental model."
Kant maintains that it is possible that there may be other kinds of understanding that do not require an act of synthesis of a manifold in order to bring about the unity of consciousness (A 27, B 72, B 159, B 307). Such an understanding would be one that could supply for itself a manifold of intuition merely through its self consciousness. For this understanding, the representation of its objects would bring about the very existence of those objects. An understanding such as ours, however, being unable to supply for itself its own manifold of intuition, must be given a manifold of intuition. The very fact of its being given to understanding renders this manifold receptive, or sensible. A manifold that some type of understanding could possess on its own without its having to be given to that understanding would not be receptive or sensible but rather intellectual. For this kind of understanding a deduction of the applicability of its concepts to its objects would not be necessary, as its concepts would be identical to its intuitions which ultimately constitute its objects. But for an understanding such as ours, whose concepts are not identical to the intuitions that are constitutive of its objects, but rather stem from a different source than those intuitions, a deduction is required. An appreciation of this kind of deduction is facilitated by a serious consideration of the above mentioned claim that through the representation of apperception, nothing manifold is given.

\[\text{With respect to the given, however, George Schrader, "Kant's Theory of Concepts," p. 147, points out that we never encounter a pure given or pure forms of thought. Schrader writes: "Pure thought has already compromised itself in the specification of categories. It compromised itself still further as it moves toward a more intimate contact with the sensible manifold. Empirical concepts may represent the ultimate compromise which the understanding makes with intuition. The compromise is so great that we are hard pressed to distinguish the conceptual form from the intuited content. But if Kant is correct, the form is there and the fundamental distinction between intuition and conception must be maintained." Schrader regards the schema as indicative of this compromise, as he explains on pp. 148-51 of the above mentioned paper.}\]
A crucial distinction that Kant draws in connection with the above point is that between *objective unity* and *subjective unity*. He states:

The transcendental unity of apperception is that unity through which all the manifold given in an intuition is united in a concept of the object. It is therefore entitled *objective*, and must be distinguished from the *subjective* unity of consciousness, which is a *determination of inner sense* - through which the manifold of intuition for such [objective] combination is empirically given (B 139).

The former refers to the unity provided by apperception in its concept of the transcendental object, which could be described as the set of rules to which any particular set of intuitions must conform if they are to give rise to knowledge of an empirical object, independently of the empirical conditions of the subject; thus it is objectively valid.\(^7\) The latter refers to the unity of consciousness that results from a determination of inner sense in such a way as to bring about an empirical manifold that conforms to the combination brought about by apperception; because this latter unity is grounded in the former type of unity, and moreover, because its concrete manifestation is contingent upon the empirical conditions of the subject, it does not involve necessity, and thus is only subjectively valid. It is only by being grounded in the transcendental unity of apperception that the synthesis of representations in empirical intuition achieves necessity in empirical apperception. This is as close as Kant comes to making explicit the manner in which objective unity grounds subjective unity, and

\(^7\)What is essentially involved in this process is transcendental time determination, described by Henry E. Allison, "Transcendental Schematism and the Problem of the Synthetic A Priori," p. 70, in the following manner: "A transcendental determination of time must be a conceptualization of time in accordance with an a priori concept, which refers time to an object or objectifies it, while also providing objective reality for the concept involved. To objectify time means to represent a temporal order as an intersubjectively valid order of events in the phenomenal world, in contrast to a merely subjective or 'subjectively valid' order or representations in an individual consciousness."
establishing the connection between pure apperception and empirical apperception.

Kant demonstrates the inextricable link between understanding and unity in another way. He speaks of it as arising from consciousness of the object of knowledge. This link is brought to our attention in the following passage in which Kant discusses the *necessity* that is involved in knowledge of objects:

Now we find that our thought of the relation of all knowledge to its object carries with it an element of necessity; the object is viewed as that which prevents our modes of knowledge from being haphazard or arbitrary, and which determines them a priori in some definite fashion. For in so far as they are to relate to an object, they must necessarily agree with one another, that is, must possess that unity which constitutes the concept of an object. But it is clear that, since we have to deal only with the manifold of our representations, and since that x (the object) which corresponds to them is nothing to us - being, as it is, something that has to be distinct from all our representations - the unity which the object makes necessary can be nothing else than the formal unity of consciousness in the synthesis of the manifold of representations (A 104-105).

The first crucial point being made here is that knowledge is of objects. The second most important point is that the object is what makes our knowledge definite and determinate, as opposed to haphazard and arbitrary; this determination constitutes the unity of the object of knowledge. The third chief point is that such unity must be necessary; for otherwise, it would not be anything determinate, and thus not anything in particular for us. The fourth point is that in order for any necessity to be possible, some a priori element must be involved. The very interesting move that Kant makes at this stage is to assign this necessary, a priori unity to consciousness instead of the object. Thus, not only is all unity of *sensibility* derived from understanding, but all unity of the *object of our knowledge* as well - whether knowledge of
pure objects or empirical objects. \(^{76}\)

Let us now consider what arises from the comparison that Kant draws between apperception and sensibility in the A edition. He writes: "The numerical unity of this apperception is thus the a priori ground of all concepts, just as the manifoldness of space and time is the a priori ground of the intuitions of sensibility" (A 107). Apperception and sensibility are similar in that they are both a priori features of knowledge and thus fundamental conditions of all our knowledge; they are different in that transcendental apperception is associated with unity and sensibility with manifoldness. Kant certainly does not mean by this that there is a manifold of sensibilities, for he repeatedly states that there is only one space and time. Rather, because space and time are infinitely divisible, they contain a manifold of parts. It is in this way that time and space make possible the intuition of a manifold of representations. \(^{77}\)

As we have seen, Kant attributes all forms of unity whatsoever to the intellectual faculty, namely, transcendental apperception; sensibility does not contribute any unity of its own to the intuitions it receives. This is clear evidence that receptivity does

\(^{76}\)John Watson, *The Philosophy of Kant Explained*, p. 156, remarks: "The supreme condition of objectivity, as we have seen, is the necessary unity of self-consciousness in the combination of given elements. This is true, whether the elements combined are pure or empirical, i.e., whether we are dealing with determinations of space and time, as in the mathematical sciences, or with particular sensible objects." This latter point is of particular interest to the present study.

\(^{77}\)Nathan Rotenstreich, "Kant's Schematism in its Context," p. 16, provides an illuminating comparison between Kant's conception of time and those of his predecessors. He writes: "But Kant does not follow Plato's line against Parmenides' and Spinoza's evaluation of the position of time. The epistemological consideration impels him to look for the points of departure in his search for rationality. Time contains this point of departure because of its phenomenological nature as a series. The ontological consideration of time stressed either the aspect of *transitionality or that of extension*, while Kant stresses the aspect of *order* implicit in time, that order which is capable of serving as the medium between the datum and the concepts bestowing an order on datum."
not in any way involve unity, and is, therefore, something entirely distinct from spontaneity. In order for synthetic unity to be brought about, however, combination must be possible between the faculties of receptivity and spontaneity.

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The synthetic unity that constitutes the basis for schematism, has been shown to result from the function of combination, which is a special kind of synthesis. The special feature of combination consists in the fact that it can occur between heterogeneous things, such as pure concepts of the understanding and intuitions. Combination may also occur between the faculties that give rise to concepts and intuitions: the faculties of sensibility and understanding. Only through combination can what Kant refers to as synthetic unity be achieved; and only if synthetic unity can be achieved is schematism possible. What now remains to be shown is how combination is actually carried out. Clearly, combination - in the strict sense - is not a function that either sensibility or understanding can carry out on their own, for it is a function that necessarily involves both faculties. Thus it seems that this function could only be carried out by another faculty. In fact, this is precisely what Kant claims. Brief mention was made throughout this chapter, and the preceding one, that Kant introduces the imagination as mediator between the faculties of sensibility and understanding, and as that which renders combination possible. The next chapter will demonstrate that it is
the very nature of the imagination itself that allows for combination, and therefore schematism, to occur.
CHAPTER III

THE MEDIATING FUNCTION OF THE IMAGINATION

Section i

The Imagination of Transcendental Idealism

Having established that an a priori synthesis - specifically, combination - is required for schematism, an investigation into how this combination actually occurs is very much called for. In this chapter, it will be shown that it is, in fact, the imagination that carries out this combination. What will be advanced is a view of the imagination as a function that is at once both receptive and spontaneous, and as therefore able to establish, through the act of combination, a relationship between sensibility and understanding that renders plausible Kant's solution to the heterogeneity problem in the application of the categories to intuitions.

It is in the "Clue to the Discovery of all Pure Concepts of the Understanding," known as the Metaphysical Deduction, that the imagination makes its first appearance as a
fundamental source in the production of knowledge (A 78 / B 103), and if proper attention is given to each of the crucial features of cognition described throughout the CPR, we find that the activity of the imagination is lurking in the background at practically every turn - though Kant may not always make explicit reference to it. Eva Schaper observes that there is an "elusive but almost omnipresent reference to 'imagination,' operating between sense and understanding - not itself a 'faculty.' though Kant often gives it that name, illegitimately by his own analysis; it operates somehow as a mode of conjoint working of sense and intellect."¹ If we follow carefully how Kant develops his line of thought with respect to the function of the imagination, a crucial feature of its nature begins to emerge. This feature, however, has not been given its due attention in the literature on this subject. It is mistaken, I think, to approach Kant's theory of cognition as one in which he tries to account for the workings of the mind by listing all the elements involved, and stipulating that certain relations hold between these elements. This is particularly the approach taken with respect to the Schematism chapter.² What this approach implies is that the machinery of the mind that brings about knowledge is static. I maintain, however, that there is ample evidence in the text to warrant the claim that one of the fundamental features of cognition that Kant tries to explain is that the process of cognition is dynamic. That this is, in fact, the case may be documented by many sections of the CPR but none is as significant in demonstrating this feature of cognition as his account of the imagination. What Kant does is begin by listing the chief elements involved in cognition: intuitions and concepts; he later asserts the manner in


²I discuss briefly the views of some scholars who seem to take this approach in Chapter I.
which these elements are related to one another in the Transcendental Analytic; in addition, he explains the processes that go on which allow for these relations. In the course of this explanation, the whole discussion is significantly transformed, as it is raised to another level. Specifically, it is raised to the level of the sources of the elements involved, that is, to the level of the faculties that give rise to these elements: sensibility and understanding. Once raised to this level, we see that what goes on on this level is processes. Cognition is very much a matter of activity, and not just the presence of certain elements standing in some relation to one another, as will be demonstrated in what follows.

The point is that these relations do not arise just from the nature of the elements involved. The relations arise by virtue of the fact that these elements are synthesized, to use Kant's term. But this synthesis is not brought about by those elements because the synthesis is not, strictly speaking, a synthesis of those elements; it is, rather, a synthesis of the sources of those elements - the faculties of sensibility and understanding. It is only because of the synthesis that goes on on this level - the synthesis between the faculties - that any of the relations which Kant asserts between the products of these faculties may be said to hold. But again, it is not just the mere presence of these faculties that allows for this synthesis; the synthesis requires an impetus. This impetus is the imagination (A 78 / B 103); it is the imagination that synthesizes. \(^1\)

\(^1\) My interpretation of Kant's theory of mind in general accords more closely with that of Andrew Brook than with the view advanced by Patricia Kitcher. Part of Brook's objection to Kitcher's view consists in the fact that by stressing that the mind is essentially a system of contentually interdependent states, she radically understates the self-activating, initiating powers that Kant attributes to the mind (Andrew Brook, *Kant and the Mind* [Cambridge: Cambridge University Press, 1994], p. 240). I stress here that these self-activating, initiating powers are particularly crucial in appreciating the function of synthesis of the imagination.
The imagination itself, however, does not consist of, or involve, any elements of its own that may serve as rules in guiding its operation in the way that the understanding does. The understanding is equipped with concepts, but the imagination is equipped with nothing of the kind. If we consider sensibility, we find that, like understanding, it consists of certain elements - intuitions. The imagination, on the other hand, just doesn't have its own elements to contribute to the process of cognition. Sensibility brings with it intuitions which, though blind, may be guided by rules supplied by the understanding. The understanding brings with it concepts, that are precisely those rules by which it guides intuitions. But imagination brings with it nothing of its very own. The imagination is certainly associated with schemata, but not in the same sense in which sensibility is associated with intuitions and understanding with concepts. For imagination only gives rise to schemata. That is to say, schemata are the products of the imagination (A 140 / B 179); they are not elements that the imagination already comes equipped with. Moreover, the imagination must produce schemata from other elements, in particular, from intuitions and concepts - elements produced by other faculties (A 142 / B 181). This point is of crucial significance as its implications play a principal role in the solution to the problem of the application of categories to intuitions. As will be shown, the fact that the imagination has to produce its product from the combination of intuitions and concepts is indicative of the fact that the operation of the imagination is very different in kind from that of the other two faculties, and this difference renders the imagination a mediator.

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'Eva Schaper, "Kant's Schematism Reconsidered," p. 283, observes this point as well: "Productive imagination does not impose its own forms - there are no formal a priori features belonging to it, since, strictly speaking, it is not a 'faculty.'"
between faculties rather than an actual faculty itself. Moreover, the fact that a mediator exists between the faculties of sensibility and understanding is indicative of a certain relationship that holds between the functions of these two faculties; and acknowledging this relationship gives us greater insight into how these faculties may carry out the functions Kant attributes to them.

Throughout the Transcendental Deduction and the Schematism chapter, the imagination is described as functioning in various ways. In A 123 of the Deduction Kant ties everything up by summarizing the activity of the imagination and emphasizing some of its key features. In its function as a faculty of a priori synthesis, that is, as "productive imagination" or "transcendental imagination," it carries out the central function involved in the entire process of cognition. Kant summarizes as follows:

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Kant's basic conception of the imagination as something distinct from both sensibility and understanding may be traced back to Aristotle. In De Anima 427 b 14-19 Aristotle writes: "Imagination is different from either perceiving or discursive thinking, though it is not found without sensation, or judgment without it." The reasons Aristotle offers for this, however, are significantly different from the ones Kant offers. Another difference is that Aristotle did not conceive of the imagination as mediator between sensibility and understanding, or sensation and opinion, as he puts it. He rules out this possibility in De Anima 428 a 18 - 428 b 7: "It is clear then that imagination cannot, again, be opinion plus sensation, or opinion mediated by sensation, or a blend of opinion and sensation." The reason Aristotle provides in support of this claim is that in order for the imagination to function as mediator between sensation and opinion it would require that the content of the opinion and the content of the sensation be the same, which he finds problematic. He explains: "I mean that imagination must be the blending of the perception of white with the opinion that it is white: it could scarcely be a blend of the opinion that it is good with the perception that it is white: to imagine is therefore (on this view) identical with the thinking of exactly the same as what one perceives non-incidentally." Another problem that Aristotle finds with this view is that we may sometimes imagine that which is false, though we may have a contemporaneous judgment about it that is true. To some extent, Kant may have been trying to address these problems with the view of the imagination as performing a mediating function through his introduction of the schema as the product of the imagination through which the mediation occurs, since the schema constitutes the common content, in some sense, or at least the common ground, that Aristotle thought this view demanded.
That the affinity of appearances, and with it their association, and through this, in turn, their reproduction according to laws, and so [as involving these various factors] experience itself, should only be possible by means of this transcendental function of imagination, is indeed strange, but is none the less an obvious consequence of the preceding argument. For without this transcendental function no concepts of objects would together make up a unitary experience (A 123).

The complex role of transcendental imagination begins to reveal itself here. A bit later, Kant emphasises the imagination's mediating function. The following passage is the clearest evidence of this feature of the imagination.

A pure imagination, which conditions all a priori knowledge, is thus one of the fundamental faculties of the human soul. By its means we bring the manifold of intuition on the one side, into connection with the condition of the necessary unity of pure apperception on the other. The two extremes, namely sensibility and understanding, must stand in necessary connection with each other through the mediation of this transcendental function of imagination, because otherwise the former, though indeed yielding appearances, would supply no objects of empirical knowledge, and consequently no experience (A 124).

That the imagination does indeed function as a mediator between sensibility and

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6The complexity is further developed as Kant attempts to explain the relation of the imagination to apperception. Michael Woods, "Kant's Transcendental Schematism," p. 214, remarks on this below: "Nevertheless, Kant says repeatedly that imagination 'relates to' or is 'in relation to' the transcendental unity of apperception, the 'pure unchangeable original consciousness. This relation is expressed in a number of often conflicting ways - for example, although apperception is 'original,' transcendental imagination is prior to (it) '... and is the ground for the possibility of all knowledge,' Moreover, apperception is 'presupposed' by transcendental imagination and this itself is 'finally subject to time.' The explication of the relationship, if it can be so called, between time and the transcendental imagination, and between time and the transcendental unity of apperception, the 'I' think substance, cause, etc. is replete with half suggestion and apparent contradiction. And it is evident that this is more a reflection of the difficulty of the problem than carelessness in expression."

7Dieter Henrich, "Die Beweisstruktur von Kants transzendentaler Deduktion," p. 92, regards the two "extremes" of understanding and sensibility as indicative of a hierarchy of cognitive faculties, with the understanding at the top, sensibility at the very bottom and the imagination operating between these in such a way as to establish a connection between them.
understanding is certainly suggested by this passage, as Kant explicitly states here that sensibility and understanding are brought into necessary connection by means of (vermittelst) the transcendental function of imagination. The passage also establishes that the mediation Kant speaks of occurs essentially on the level of the faculties themselves, and thus only derivatively on the level of the products of these faculties, as he speaks of "sensibility" and "understanding" as opposed to "intuitions" and "concepts."

Kant stresses that, although the synthesis of imagination is exercised a priori, it is, nonetheless, always in itself sensible (A 124). The reason for this is that the synthesis of imagination connects the manifold only as it appears in intuition. Thus what we are dealing with here is something which is sensible but which, in a particular kind of employment, may be rendered intellectual. The particular kind of employment that renders the imagination intellectual is its pure a priori employment and this occurs when, and only when, apperception is, as Kant says, "added" to it. That is to say, imagination is only able to operate in an a priori manner when it operates in combination with apperception (A 124, A 142 / B 181, B 151-52). In the note to B 161 Kant explains the connection between the synthesis of apprehension, which is carried out by the imagination on an empirical level, and the synthesis of apperception, which is always a priori:

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8Michael Woods, "Kant's Transcendental Schematism," p. 215, explains this point in the following: "Hence the precise nature of the imagination: it makes provision for the unity of all appearances whatsoever by apprehending them in succession. We may then be said to have presentations, one after another. But in order that this series of presentations be thought, it must be recognized, and we must therefore be conscious of an objective whole. Kant says, then, that to the result of the transcendental imagination 'must be added' transcendental apperception."

9For an interesting account of the relation between apperception and productive imagination see Felix Grayeff, Kant's Theoretical Philosophy, p. 218.
In this manner it is proved that the synthesis of apprehension, which is empirical, must necessarily be in conformity with the synthesis of apperception, which is intellectual and is contained in the category completely a priori. It is one and the same spontaneity, which in the one case, under the title of imagination, and in the other case, under the title of understanding, brings combination into the manifold of intuition (B 161).

Kant here is concerned to establish the connection between the synthesis of apprehension and the synthesis of apperception and not just the connection of the former with one of the categories. That is to say, the synthesis of apprehension, which is a synthesis on the level of sensibility, is described as being brought into connection with the synthesis of apperception, which occurs on the level of understanding. This connection, then, is again revealed to be one between the faculties of sensibility and understanding themselves, and not just between the products of these faculties. What is of particular interest in this note is the fact that Kant seems to identify understanding with imagination as two aspects or manifestations of the same function - that of spontaneity. I do not think, however, that Kant views the relationship between understanding and imagination to be one of strict identity.\(^\text{10}\) For, as was shown

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\(^{10}\)Despite the fact that Kant does not identify the imagination with understanding, however, he does not regard the imagination as opposed to the understanding or as inhibiting the understanding in any way, at least not in its transcendent function. In this sense Kant's view of the imagination differs from that of Spinoza, whose conception of the imagination as that function which allows for the perception of the \textit{modes} of substance renders the imagination capable of leading us astray in our understanding of the nature of substance as one and indivisible: "If I am now asked why we have this natural inclination to divide quantity, I reply that we conceive quantity in two ways to wit, abstractly, or superficially - in other words, as represented in the imagination - or as substance, which we do only through the intellect. If therefore we consider quantity as it is presented in the imagination - and this is what we more frequently and readily do - we find it to be finite, divisible, and made up of parts. But if we consider it intellectually and conceive it in so far as it is substance - and this is very difficult - then it will be found to be infinite, one, and indivisible, as we have already sufficiently proved. This will be quite clear to those who can distinguish between imagination and the intellect, especially if this point also is stressed, that matter is everywhere the same, and there are no distinct parts in it except in so far as we conceive matter as modified in various ways. Then its
above, Kant explicitly states that the imagination is that function which mediates between sensibility and understanding. If imagination were identical to understanding, it would be difficult to see how it could possibly mediate between itself and something else. This issue will be resumed later.11

Not only does Kant point to the imagination as that which produces the synthesis required to bring about experience of particular empirical objects, but also as that which renders possible knowledge of the laws governing the objects of experience. He maintains that the categories make possible not only the apprehension of individual objects but also the apprehension of the general relations between those objects. The categories are therefore said to prescribe laws to appearances a priori, and thus to nature itself, since nature is precisely the sum of all appearances (B 163). But when the question is posed as to how the categories can determine the laws governing the combination of the manifold of nature a priori without at all being derived from experience, the answer, according to Kant, will, as it unfolds, involve the imagination. In B 164 Kant begins his explanation of this point:

parts are distinct, not really but only modally” (Spinoza, Ethics, p. 42).

11Henry E. Allison, Kant’s Transcendental Idealism, p. 164, makes some very illuminating remarks on this point while tying them up effectively with other central issues that arise in connection with this problem: “This apparent identification of the imagination with the understanding serves to underscore the main point of the argument: that the transcendental synthesis of the imagination is in accordance with the conditions of the unity of apperception and, therefore, with the categories. Nevertheless, we have also seen that it is equally important for the argument of the Deduction that the extraconceptual, figurative nature of the transcendental synthesis be recognized. This is necessary if the categories are to be brought into connection with the forms of human sensibility, and through these forms to the actual content of human experience (empirical intuition). The real question at issue is not to which psychological faculty the figurative synthesis is to be assigned; it is rather whether the determination of time requires a synthesis that is governed by the categories, but yet differs from the purely intellectual synthesis that occurs in judgment in that it is also conditioned by the form of inner sense."
That the laws of appearances in nature must agree with the understanding and its a priori form, that is, with the faculty of combining the manifold in general, is no more surprising than that the appearances themselves must agree with the form of a priori sensible intuition. For just as the appearances do not exist in themselves but only relatively to the subject in which, so far as it has senses, they inhere, so the laws do not exist in the appearances but only relatively to this same being, so far as it has understanding (B 164).

Thus because the objects of our knowledge are only appearances, conforming as they must to our sensible intuition, the laws governing the relations between these objects will be ones that, with respect to their general form, must agree with the understanding - even though the particular features of these laws are determined by the objects themselves. If these laws were determined entirely by the objects themselves, then there would be no way that we could ever come to know these laws, since there would be no way that we could ever come to know those objects in the first place. As mere appearances, the objects that can be known to us are subject to those laws of connection that our faculties prescribe to them. When reiterating in the final sections of the B edition Deduction what the process of connection consists in, Kant, again, puts the imagination at the centre of things:

Now it is imagination that connects the manifold of sensible intuition; and imagination is dependent for the unity of its intellectual synthesis upon the understanding, and for the manifoldness of its apprehension upon sensibility. All possible perception is thus dependent upon synthesis of apprehension, and this empirical synthesis in turn upon transcendental synthesis, and therefore upon the categories. Consequently, all possible perceptions, and therefore

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12 As George Schrader, "Kant's Theory of Concepts," p. 154, puts it: "knowledge is a compromise of thought with intuition throughout experience."

13 Ercole Chiari, La Deduzione Trascendentale Delle Categorie Nella Critica Della Ragion Pura, p. 49, argues that the doctrine that the synthesis of imagination is strictly regulated by the categories, which Kant presents in the A edition (but which is not developed in the Schematism), is omitted in the B edition. Only a few traces of it remain in B 162-63, yet, even there, Kant dwells mainly on the fact that the products of the imagination (phenomena), as opposed to the
everything that can come to empirical consciousness, that is, all appearances of nature, must, so far as their connection is concerned, be subject to the categories (B 164-65). In the above citation, Kant asserts that imagination is linked to the understanding in that the imagination depends upon the understanding for the unity of its intellectual synthesis; imagination is dependent upon sensibility for the manifoldness of its apprehension. This is clearly a strikingly different manner of describing these relationships from that mentioned earlier in the note to B 161, where Kant spoke in such a manner as to intimate that imagination and understanding are identical. I think more weight should be placed on the account of the situation as presented in this passage, as it yields a more consistent picture when considered together with other parts of the text, another example of which I will now consider.

In the metaphysical deduction Kant writes: "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" (A 78/ B 103). If we consider what Kant says both here and in various passages of the Transcendental Deduction and the Schematism chapter, it is clear, I think, that he never really meant to say much more about the imagination than that it is simply that power that makes synthesis in general possible. Once this general synthesis has occurred, imagination itself, conform to the rules of the understanding (categories) - since the imagination, and not just the categories, belongs to the faculty of spontaneity.

For a discussion of the distinction between what sensibility provides and what is provided by understanding, and the distinction entailed by this between data of sense and phenomenal objects, see Graham Bird, *Kant's Theory of Knowledge*, pp. 54-60.
Kant explains, the understanding then comes into play, "bringing" this synthesis to concepts; in so doing, the understanding makes it possible to obtain knowledge proper. This gives us a strong hint as to the nature of the relationship between the function of the imagination and the function of the understanding as just described. Despite the fact that imagination and understanding operate in conjunction with one another, their functions are, nonetheless, different enough not to render them identical. More discussion on the manner in which they differ will be provided in section iii below.

Kant makes a very interesting connection at A 119 between the faculties he has been discussing. He writes: "The unity of apperception in relation to the synthesis of imagination is the understanding; and this same unity, with reference to the transcendental synthesis of the imagination, the pure understanding" (A 119). The question is: What is the most accurate interpretation of "is" here? My view is that what Kant really means to say is that the unity of apperception when indeed it is brought into relation with the synthesis of imagination yields the understanding. That is to say, Kant seems to be describing understanding here not as a source of knowledge, but as the product of other functions. This is not to diminish its status as a faculty, but only to emphasise that nonetheless this faculty has component parts, the proper activity of which must be carried out in order for the faculty as a whole to function in the way it was designed to function. As Kant says, when we consider this same unity apart from its empirical content, that is, with reference only to the transcendental synthesis of the imagination, we are considering the pure understanding. Now clearly Kant does not mean by this that the pure understanding is another faculty in addition to the faculty of understanding, but only that same faculty of understanding considered in its pure employment. As the
understanding has been shown to have this pure employment, Kant concludes that the understanding involves pure a priori modes of knowledge that contain "the necessary unity of the pure synthesis of imagination in respect of all possible appearances" (A 119). These modes of knowledge are, of course, the categories.

We realize, from the above, that Kant is in the habit of employing the term "faculty" rather loosely. We should be particularly cautious of attaching too much significance to this term when employed with respect to the imagination. For the imagination performs a function that is quite distinct in kind from that of either sensibility or understanding. But although Kant employs the term "faculty" to describe each of these, I think we are entitled to use this term in the strict sense only for sensibility and understanding (and of course reason, though this faculty is not discussed in this study). For only sensibility and understanding are treated as being on a par in the most crucial respects in Kant's discussion of them throughout the text, as evidenced in this and the preceding chapters, since it was shown that Kant views the imagination as a mediator between faculties. As mediator between faculties, the imagination is hardly a faculty in the same sense as are sensibility and understanding. Imagination is a function linking two other functions, and may therefore be thought of as a second order function. But as a second order function it takes on quite a different nature than that of a first order function - and indeed it must, if an infinite regress of orders of functions is to be avoided.15 Furthermore, the relation that sensibility is able to have with understanding by

15Eva Schaper. "Kant's Schematism Reconsidered," p. 283, explains: "In a way it is, therefore, legitimate to say that the 'third thing,' that which mediates between sense and understanding, is not a third faculty, imagination, nor a third formal component, not even a 'something' at all, but the given in its fittedness for sense and understanding taken jointly. When Kant calls the schemata pure time-determinations, and schematized categories 'temporalized'
means of the imagination is, needless to say, unlike any kind of relation that may hold between any intuitions themselves or any concepts themselves. Thus we ought to expect an explanation of this relation to be significantly different in kind from that of any relation holding between particular intuitions or particular concepts.

categories, he points to imagination not as a third level of mind, but as the joint function of mental activity in coping with experience."
That the synthesis between concepts and intuitions described above is carried out by the imagination appears to be a fairly straightforward claim. That, in fact, the role of the imagination is far more complex is revealed when we take into consideration how it actually carries out this task. What makes the process quite an involved one is, as was mentioned earlier, the fact that the imagination has a double function. This double function manifests itself in productive synthesis and reproductive synthesis. Kant distinguishes them here in the following way: "Only the productive synthesis of the imagination can take place a priori; the reproductive rests upon empirical conditions." (A 118). Now if we consider this point in conjunction with the point that was established in earlier chapters - that empirical intuition is the result of pure intuition having been affected with sense data - it is reasonable to infer that productive imagination is the mechanism that operates on pure intuition in such a way as to yield the determined manifold of empirical intuition; reproductive imagination is the

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\(^{16}\)Italo Mancini, *Guida alla Critica della ragion pura*, vol. 2, p. 115, explains that the distinction between productive and reproductive imagination originated with Aristotle, though Aristotle himself did not employ these same terms to draw this distinction.
mechanism that operates on empirical intuition to bring about the association of perceptions.  

Productive imagination in its activity only employs the pure concepts of the understanding in relation to intuition; reproductive imagination in its activity employs only empirical concepts as directly applied to intuition, but, of course, since its function presupposes the function of productive imagination, it may be said to employ the pure concepts of the understanding in an indirect way. Kant concludes: "Thus the principle of the necessary unity of pure (productive) synthesis of imagination, prior to [empirical]."

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17 The processes described here are closely linked to the processes described by Adickes' theory of double affection. A concise summary of some of the most crucial points of this theory is outlined by Robert Paul Wolff, *Kant's Theory of Mental Activity*, p. 222: "The transcendental ego exercises its productive imagination upon a pure a priori manifold of sensuous intuition, from which it constructs the world of nature. In this world among other things, is the empirical self, which is then affected by physical objects according to the laws of the physiology of perception. The result is a quite distinct manifold of perceptions (empirical intuition) on which reproductive imagination operates. The consequence is a set of subjective habits of association (reproduction) which mirror the objective connections already established by transcendental synthesis. In order for this rather elaborate theory to have any plausibility at all, there must be a pure manifold independent of, and not merely abstracted from, the manifold of perceptions." The view I am advancing is not identical to that of Adickes, but it develops a particular point in Kant's position that explains how the processes outlined above may actually be carried out.

18 This emendation is based on Felix Grayeff's, *Kant's Theoretical Philosophy*, p. 194, discussion of Kant's use of the term "empirical apperception" elsewhere in the CPR and on Kemp Smith's footnote to this passage. In Grayeff's discussion of the fourth paragraph of the section entitled *Explanation* in the B edition of the Transcendental Deduction, he equates "empirical apperception" with "apprehension." His reason for this is that: "'Apprehension' seems better, since it is more in keeping with the context (cf. Kant's second footnote to sec. 26). 'Apperception', which appears from the fourth edition onwards, is of course 'empirical apperception' (apprehension)." Kemp Smith, in his translation of the *Critique of Pure Reason*, p. 171, also notes that Kant changes "apprehension" in the fourth edition of the CPR to "apperception." If Grayeff is correct in maintaining that by the term "apperception" in the fourth edition onwards, Kant really does mean "empirical apperception," then I think it is appropriate to assume that in this passage as well Kant really means "empirical apperception," since to interpret it as "pure apperception" would render the passage in contradiction with his main line
apperception, is the ground of the possibility of all knowledge, especially of experience" (A 118). The distinction between productive imagination and reproductive imagination can also be described in the following manner.\footnote{19} Productive imagination is the function that brings about the relation between the \textit{faculty} of intuition and apperception; reproductive imagination is the function that brings about the relation between particular perceptions on the level of intuition alone, specifically, empirical intuition. Furthermore, the function of reproductive imagination presupposes, or, as Kant says, has as its ground, productive imagination.\footnote{20}

There is, however, one curious feature about this process that is not fully captured by either the function of reproductive imagination or productive imagination alone, but only by the combination of the two. This is that, in the course of the activity of both functions, another relation comes into play - the relation of the particular intuitions to apperception (A of argument throughout the entire Transcendental Deduction, as he would then be claiming that pure original apperception is not the ultimate principle guiding the production of knowledge but rather that this principle is subordinate to some other principle.

\footnote{19}Felix Grayeff, \textit{Kant's Theoretical Philosophy}, p. 179, maintains that: "in a sense, productive imagination is the most characteristically Kantian of the organs. For it is by its means that the peculiarly critical combination of logic and metaphysics is brought about. It converts the logical act, which unifies the manifold, into a metaphysical act which establishes phenomenal reality."

\footnote{20}Though I have limited my discussion of the imagination in this study to Kant's treatment of it in the first \textit{Critique}, the following remark by Eva Schaper, "Kant's Schematism Reconsidered," p. 284, emphasizes an important point that is relevant to the function of the imagination in both the first and third \textit{Critiques}: "Now the same productive imagination which in the first \textit{Critique} is said by Kant to underlie the a priori synthesis of apperception, reappears in the third \textit{Critique} as the ground for reflective judgment. And reflective judgment, in its aesthetic and teleological form, is \textit{not} about the knowledge, the 'merely' phenomenal, but about the world in its one aspect in which human subjectivity can discover that it is in harmony and \textit{conformity} with something other than itself: the aspect of beauty and purpose, which the subject does not impose, but to which it \textit{assents}. And this is not a world outside time; it may not be 'knowledge,' but it is given."
122). The most important feature of this relation is that it is not one that is achieved in a single act. Rather, it is achieved only through a continuous series of acts. In other words, the relation is not established all at once, but is one that evolves gradually. How the imagination carries out this series of acts that has, as its final effect, the relation of particular intuitions to apperception, is the core of the explanation to the general problem of the relationship between sensibility and understanding, and of the problem of schematism.\textsuperscript{21} It consists essentially in the production of schemata. Now since schemata proceed from the imagination, and since the imagination mediates between sensibility and understanding, the schemata are able to serve as mediators between concepts and intuitions. I will make a few preliminary remarks about this issue here, and then elaborate on the details in Chapter IV.

Kant draws our attention to a crucial point in the A version of the Transcendental Deduction, after he has outlined the three-fold synthesis, that contributes to an explanation of the possibility of the relation between apperception and perceptions:

This transcendental unity of apperception forms out of all possible appearances, which can stand alongside one another in one experience, a connection of all these representations according to laws. For this unity of consciousness would be impossible if the mind in knowledge of the manifold could not become

\begin{quote}
\textsuperscript{21}Bernard Rousset, \textit{La Doctrine Kantienne de L'Objectivite}, p. 268, explains that Kant does not speak of "schema or pure concept," but of "schema of a pure concept"; in effect, therefore, the category is an intellectual representation of the unity of synthesis, whereas the schema is the a priori synthesis of intuition"; it is for this reason that the schema does not have as its origin the understanding, but the imagination: it is the "transcendental product of the imagination." What Rousset seems to be getting at here is that, even though the schema functions as a schema of the pure concept, because it is so closely connected to intuition, it cannot be a product of the understanding, in the way that the pure concept is; it has an origin of its own - the imagination. Furthermore, as here described, the schema is not so much a third thing as a representation of the a priori synthesis of intuition. Now if, as I suggest, this synthesis consists of a series of acts, the schema itself may be viewed as a representation of a series of acts being carried out by the imagination.
\end{quote}
conscious of the identity of function whereby it synthetically combines it in one knowledge. The original and necessary consciousness of the identity of the self is thus at the same time a consciousness of an equally necessary unity of the synthesis of all appearances according to concepts, that is, according to rules, which not only makes them necessarily reproducible but also in so doing determines an object for their intuition, that is, the concept of something wherein they are necessarily interconnected (A 108).

Kant explains here that the identity of the self "is at the same time a consciousness of an equally necessary unity of the synthesis of all appearances according to concepts." Thus it is not the case that apperception is one unity and this unity is related to the unity of appearances through synthesis, but rather, the unity of apperception is awareness of the unity of appearances. Once this is recognized, it no longer makes sense to ask: How is the relation between these multiple unities possible? or what is the same thing - How is the relation between apperception and particular intuitions possible? The only question that is intelligible is: How is this one general unity possible? I propose that it is possible if we regard the activity of imagination as carried out in a continuous series of acts, as will be partly explained below.

We should recall Kant's description of the most basic function of the imagination which is: to represent something that is not actually present (B 151). This is the sense in which Kant views the imagination as "reproductive." But the imagination carries on the act

Sarah Gibbons, *Kant's Theory of Imagination*, p. 38, explains that, according to Kant, "imagination combines sensible, human intuitions by representing 'absent' ones and synthetically combining them with others 'present'."

The function of the imagination in both its productive and reproductive capacities as described by Kant is markedly different from Descartes' conception of it. We see this most explicitly in a passage in the *Meditations* in which Descartes distinguishes the imagination from the understanding: "I further consider that this power of imagination in me, taken as distinct from the power of understanding, is not essential to the nature of myself, that is, of my mind;
of reproduction on two levels: the empirical and the transcendental (A 102); the former gives rise to empirical knowledge, the latter to a priori knowledge. The point Kant stresses, however, is that the latter is also a precondition for the former (A 102). Thus it is reproduction on a transcendental level, that makes both a priori and empirical knowledge possible. Reproductive imagination on a transcendental level is referred to by Kant as 

productive imagination (A 123).

From the perspective of the view described above, an interesting result follows. The imagination’s reproductive act may actually be seen as completing the act of receptivity of sensibility, since the intuitions are not properly received until the information provided by the sense data has been re-presented in the imagination as material that can be employed by the understanding; in this sense, the imagination’s function is receptive (B 151). Upon the completion of the receptive act, the imagination informs the understanding of a) which categories are to be applied to which intuitions, and b) how the category is to be applied. The former instruction depends essentially on the specific information provided by the sense

for even if I lacked it, I should nevertheless undoubtedly still be the selfsame one that I am; it seems therefore, that this power must depend on some object other than myself. And if there is a body to which the mind is so conjoined that it can at will apply itself, so to say, to contemplating it, then I can readily understand the possibility of my imagining corporeal objects by this means. The difference between this mode of consciousness and pure understanding would then be simply this: in the act of understanding the mind turns as it were towards itself, and contemplates one of the ideas contained in itself; in the act of imagining, it turns to the body, and contemplates something in it resembling an idea understood by the mind itself or perceived by sense" (Descartes, Meditations on First Philosophy, p. 110). Whereas Descartes associates the imagination very closely with the senses and completely segregated from understanding Kant views the imagination as working very closely with both sensibility and understanding.
The latter depends on schema production. In the production of schemata, the imagination completes the act of the understanding in the sense that it *translates* the rules of the understanding, which are rules for the synthesis of intuitions in general, into rules for the synthesis of particular intuitions. (B 151-52) Thus the pure concepts are forms that further determine the forms of intuition that have received a particular form by the presence of sense data. This process eventually leads to the production of empirical objects, and of synthetic a priori judgments about those objects. In a situation where sense data have not been provided, we simply have a case in which one type of form (the category) is acting on another type of form (the form of intuition) that has not been informed by sense data; and this process eventually leads to the production of pure objects - as those known in geometry - and the corresponding synthetic a priori judgments that may be made about them. Because, in the

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24 Eva Schaper, "Kant's Schematism Reconsidered," p. 283, stresses an important point. She maintains that "imagination, as introduced in the Subjective Deduction, is made responsible for the connection which we have in the phenomena of our experience. I am now stressing 'phenomena,' not 'the given,' for it is the given appearances as categorized in which the connection is available. Seen thus, the schemata are limiting factors for the categories, restricting their objectively valid application to phenomena only (leaving indeterminate thinking theoretically capable, but in an epistemologically useless fashion, to employ unschematized categories). The given as thought constitutes 'phenomena,' and 'appearances for sense' are left in the somewhat ambiguous position of theoretical limits, not actual constituent parts of experience. When it comes to the analysis of constituent parts, we are already concerned with schematized content, and the schemata are attributable to what there is in our experience and can be handled by both sense and thought in conjunction." I think Schaper aptly describes the "appearances for sense" - what I refer to as "sense data" - in terms of "theoretical limits," as opposed to "constituent parts."

25 Rudolf Makkreel, *Imagination and Interpretation in Kant*, p. 30, makes a similar point with respect to this issue: "The task of the imagination is to mediate between the conceptual universality of the categories and the empirical particularity of sensible intuition. It does so by applying the categories to the most universal condition of sense, namely the form of time. The imagination schematizes by translating the rules implicit in the categories into a temporally ordered set of instructions for constructing an objectively determinate nature."
process of schema production, the imagination must translate the rules of the understanding (categories), which are rules for the synthesis of intuition \textit{in general}, into rules for the synthesis of sensible intuition, the imagination is, in a sense, constructing a new rule (the schema), and is ultimately bringing about a new synthesis, more specifically, \textit{combination}. under the auspices of the transcendental unity of apperception, and is, in this activity, functioning spontaneously.\textsuperscript{26} Thus, since the spontaneous activity of the understanding - that of combination - can not be brought to completion without the mediation of the imagination, we may view the imagination as completing the spontaneous act of the understanding in the process of cognition. That the imagination may, and in fact \textit{must} be viewed as carrying out a function that assimilates both the receptive faculty of sensibility and the spontaneous faculty of the understanding is evidenced by the findings of J. Michael Young. The following section will be devoted to a consideration of Young's analysis of this feature of the imagination and its implications.

\footnote{Kant's use of the term "rule" requires some explanation. The rules Kant discusses are \textit{transcendental rules}. A transcendental rule may be described as a feature of our cognitive apparatus that brings about a necessary order to our representations. This order is produced through \textit{synthesis}. Rules that produce synthesis on the level of the understanding alone are the \textit{categories}. Rules that produce synthesis on the level of both sensibility and understanding, i.e., through combination, and which thereby allow for the application of the categories to intuitions, are \textit{schemata}.}
J. Michael Young, in his consideration of the role that the imagination plays in bringing about unity in the manifold of intuition, attempts to explain why Kant seems to vacillate on the issue of whether the imagination is an active faculty, that is, a spontaneous faculty. He explores this issue with a view to the problem of the application of the categories to intuitions. Young arrives at a position which rests on the view that:

various distinctions that Kant draws upon in his characterizations of imagination and understanding - between spontaneity and receptivity, activity and passivity, unity and manifoldness, etc., - are not intended to be univocal. One and the same faculty may therefore be classified as spontaneous from one point of view but as receptive from another, with the point of the classification varying from one viewpoint to another. In this respect, the distinctions Kant draws here are like several others central to his view - the distinction between the objective and the subjective, for example, or that between the formal and

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37Michael Young, "Kant's View of Imagination."

38Robert Paul Wolff, Kant's Theory of Mental Activity, p. 173 argues the following: "The answer forced on Kant is a sort of pre-established harmony of faculties. The unseen transcendental synthesis organizes objects in a way which is paralleled by the association of perceptions. What possible justification can be given for this claim? It will not do to evoke the necessary conditions of unity of consciousness, for there is no connection, according to this theory, between transcendental synthesis and empirical unity of consciousness. All Kant can prove is that there could be no unity of empirical consciousness without association. This tells him nothing about objective affinity." In what follows, I will show how my reading of the relationship between transcendental synthesis and empirical synthesis avoids the problems that Wolff notes above.
the material. Just as a single judgment (e.g., a judgment of taste) may be classified as objective from one point of view but as subjective from another, with the point to the classification varying somewhat depending on the viewpoint in question, so too may one faculty be characterized as spontaneous when viewed from one standpoint, but as receptive when viewed from another.29

From the claim that certain of the distinctions operative in Kant's explanation of the nature and function of the imagination are equivocal, Young develops the view that the imagination exhibits a certain degree or grade of activity. This claim is an extremely significant one.

The above claim provides us with a means of handling those passages in which Kant seems to contradict himself by arguing in one instance that the understanding is the active or spontaneous faculty, in another passage that it is associated with sensibility, in another that the imagination is essentially the same function as the understanding, and in yet another that the imagination functions as mediator between sensibility and understanding. Young argues that the only way to render these apparently conflicting claims compatible is to view the activity or spontaneity that Kant refers to here as one that admits of degrees or grades, and therefore as one that a faculty may exhibit more or less of. Given this, when Kant tells us that the understanding is the active or spontaneous faculty, this does not preclude there being other faculties that are less active or spontaneous. Young maintains that it need not necessarily be the case that "the imagination is not an active or spontaneous faculty at all, but that the degree or grade of activity exhibited in imagination is lower."30 Thus when Kant states that the understanding is the active or spontaneous faculty, we are to understand by this


that the function of the understanding is pure activity or pure spontaneity; when he speaks of
the understanding as being essentially the same function as the imagination, what he means is
that the understanding and the imagination (in its productive capacity) are the same in that
they both manifest activity or spontaneity;\footnote{Kuno Fischer, \textit{A Commentary on Kant's Critique of Pure Reason}, p. 86, observes that
"imagination produces the image according to a rule which is given by pure consciousness, and
therefore an original rule, and in this point of view not reproductive, but productive; as it
proceeds according to rules, it is not only an intuiting or perceiving, but also an intellectual
faculty."} and by asserting that the imagination is mediator
between sensibility and understanding, Kant makes it clear that, nonetheless, the imagination
ought not to be regarded as \textit{identical} with the understanding, despite the fact that the \textit{function}
which the imagination is performing when it functions in a spontaneous manner is \textit{the same}
as the function which the understanding performs all the time.

Young cites a passage in Kant's \textit{Logic} in support of the above view:\footnote{Kant, \textit{Logic} - Introduction, viii, pp. 71-72 (Ak IX, 64-65).}

Kant there distinguishes several forms or grades of what he refers to generally
as \textit{Erkenntnis}. While \textit{Erkenntnis} is used as a term for the genus being
differentiated, however, it is also used to designate one of the specific forms or
grades, and in this narrower use it is distinguished from the mere \textit{Kenntnis}.
The point, clearly, is that \textit{Kenntnis} is a form of \textit{Erkenntnis}, but a lower form,
lacking the full range of features that characterize the latter. Similarly, I will
suggest, the synthesis of imagination is a lower form of the synthesis of
understanding.\footnote{J. Michael Young, "Kant's View of Imagination," p. 152, n. 20.}

Young uses the distinction between \textit{Erkenntnis} and \textit{Kenntnis} that Kant draws in the \textit{Logic} to
defend the distinction he draws between the spontaneity of the understanding and the
spontaneity of the imagination in the CPR.
Independently of Kant's comments in the *Logic*, however, one may argue, as Young does, that although the faculty of imagination does not constitute a genuine faculty, as in the case of sensibility and understanding, since it does not contribute any elements of its own to the content of knowledge, it does, nonetheless, carry out a necessary activity in the achievement of knowledge. Specifically, it carries out what Young refers to as the *construal* of sense data. He writes: "I wish to point out, however, that what seems central in the various uses mentioned is not that one engages in mental imaging but rather that one 'sees more than meets the eye,' taking or treating or construing what is sensibly present as something other, or something more, than what immediately appears." He adds that:

imagination is the capacity to bring sensible affection under a rule, to construe it as the awareness of something manifesting certain general features. The features in question, however, are features present in sensible awareness; imagination is simply the capacity to identify them and to construe particular states of sensible awareness in accordance with them.  

Thus, whereas sensibility is passive, since it only involves being affected by sensible states, imagination is shown to be active as it allows the subject to perform an activity on the sensible states with which it is affected. Specifically, it allows the subject to construe or interpret those sensible states as the awareness of things.  

\[34\] Ibid., p. 141.  
\[35\] Ibid., p. 164.  
\[36\] D.P. Dryer, *Kant's Solution for Verification in Metaphysics*, p. 267, suggests the interrelation of productive and reproductive imagination in the acts of *observation* and *recognition* of objects. Dryer writes: "Imagination is thus required not only for obtaining observations of things; Kant argues that imagination is also required for recognizing an observed object by a certain concept. Without connecting together what is successively presented by one's senses of a certain object, and being conscious of the way in which one unites what is presented, one would not be enabled to think what it is that one is observing."
Young carefully distinguishes this activity of the imagination from that of the understanding. He explains that the imagination only allows the subject to represent a certain type or kind of thing, that is, it allows the subject to perceive things as things of either one kind or another kind. The understanding, on the other hand, allows the subject to represent that type discursively and reflectively. The understanding also allows the subject to represent the content of the act of construal in such a way as to make possible critical scrutiny of that content. Young explains:

The mere construing of sensible awareness, which is the characteristic act of imagination, does involve the synthesis or unifying of various traits, therefore, and Kant stresses this point whenever his concern is to emphasize the distinction between imagination and sensibility. To judge that something is of a certain kind, on the other hand, is to represent it in accordance with the conception of a rule. In the conception of a rule, the framing of which calls for reflection and criticism, we do not merely combine identifying appearances; we represent those appearances as combined in truth, or as Kant puts it, 'in the object' (B 141-42).37

Thus the imagination can only bring sensible states under rules and combine them in accordance with those rules, it cannot subject those acts of construal or interpretation or even the rules themselves to reflective criticism; this is an activity only the understanding can perform. The consequence of this is that the imagination is unable to distinguish between correct and incorrect combination, or between correct and incorrect interpretation. Young cites Kant’s claim in A 293 / B 350 that there is truth and error only in judgment; and judgment results only from the activity of the understanding. Young adds that the basis of the distinction Kant draws between perception and empirical knowledge, which he discusses at length throughout the Analytic, must certainly be the fact that knowledge requires judgment,

not mere construal or interpretation; thus knowledge requires the activity of the understanding and not just that of the imagination. Young sums up the situation in the following manner:

The function of the imagination is the synthesis of representations, while that of the understanding is to bring this synthesis to concepts. This latter involves distinguishing between a merely subjective linking of appearances and a linking of those appearances in truth, or in the object. Putting it differently, with the exercise of understanding and the representation of combination or unity comes the distinction between a merely subjective unity and an objective unity. It is unity of this latter sort, one might say, that alone is unity in the strictest sense, and this is presumably what Kant has in mind when he says that combination, or the representation of unity, is the work exclusively of understanding, and when he characterizes judgment as the act of 'bringing given representations to the objective unity of consciousness' (B 141; cf. n. 20).38

Young's analysis of the activity of the imagination and the activity of the understanding has, it seems, some very interesting implications.

If the imagination is indeed an active faculty to some degree, while at the same time it is not pure activity in the way that the understanding is, then we are left to conclude that the process of cognition does not just involve the functions of two faculties: one passive and one active - the functions of sensibility and understanding respectively. The nature of the imagination as both receptive and spontaneous is indicative of a mid-range of functions in between sensibility and understanding that exhibit varying degrees of receptivity and spontaneity.39 What I propose is that the function of combination that the imagination carries

38 Ibid., p. 154.

39 Lorne Falkenstein, Kant's Intuitionism: A Commentary on the Transcendental Aesthetic (Toronto: University of Toronto Press, 1995), p. 60, asserts: "in the Critique and all later works, it is the distinction between receiving and processing [spontaneity] that defines the separation between the faculties." It should be noted, however, that by introducing a faculty, i.e. the imagination, which is responsible both for receiving and processing, the faculties must be redefined in terms of degrees of receptivity and processing (spontaneity).
out in the process of cognition, is precisely this mid-range of functions in between sensibility and understanding. That is to say, combination is not just one single act; it is a continuous series of acts by means of which the receptive faculty is brought into connection with the spontaneous faculty.

Combination, as I describe it in Chapter II above, is a species of synthesis. Specifically, it is a type of synthesis that can involve the work of more than one faculty, that is, it can involve the work of both sensibility and understanding. But when both the faculties of sensibility and understanding come into play, what this essentially involves is the operation of the one faculty upon the other, specifically, the operation of understanding upon sensibility. As pointed out, however, this cannot occur without the intervention of another function— that of imagination. Only through the intermediate function of the imagination can the understanding perform its function on sensibility. What Young has explained helps to account for why. The understanding, being pure activity, cannot immediately receive the synthesized manifold of sensibility, which is purely passive. Because the imagination is active to some degree, it has something in common with the purely active faculty of understanding; because the imagination is not completely active, it has something in common with sensibility. What implications does this have? This implies that while sensibility and

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40 Of course combination can also occur just on the level of understanding alone, though not on the level of sensibility alone, i.e., there may be a combination of concepts. When the term is used in this way, however, it is not used in its strict sense.

41 Bernard Freydberg, Imagination and Depth in Kant's Critique of Pure Reason, p. 76, discusses the dual nature of the imagination. He states: "after remaining largely dormant throughout the B Deduction, suddenly imagination spreads over everything, revealing itself to be the fundamental unity actuating human thought of objects. As belonging to sensibility, imagination gives 'to the concepts of understanding a corresponding intuition.' (B 151) As
understanding are distinct faculties, and while the imagination is also distinct from either of these, in the act of combination, that is, when they are acting in such a way as to give rise to knowledge, their functions are brought into connection with one another.

Thus despite the fact that Kant states that sensibility and understanding are not to be confounded, as one is pure passivity and the other pure activity (A 51 / B 76), he does describe the function of the imagination as one that involves a range of activities in between the functions of these two faculties that come into play in the act of combination.

Young recognizes that a very intimate relationship exists between understanding and imagination when we employ them. He does not specify what kind of employment brings about this relationship, that it is their transcendental employment, nonetheless, his point is certainly along the same track as the view advanced here. What is particularly interesting about his position is his account of the functions of reproductive imagination and productive imagination that emerges from his discussion of the relationship between understanding and imagination. He writes: "I pointed out in the Section III that while Kant holds that imagination and understanding are distinct faculties, he also believes they may nonetheless come to be intertwined as we employ them. I indicated in particular that we may employ understanding in a way that simply mirrors what we can now describe, with Kant, as the reproductive function of imagination." What Young intimates is that after we come to associate certain traits as characterizing a certain kind of thing, and after we become

spontaneity 'it determines the sensibility a priori.' (B 152) It is determinative and determinable at once."

conscious that we are performing this activity, we may then reflect on the rule by means of which the identification of things as things of a certain type is possible. This activity, combined with the activities of comparing and abstracting allow us to frame a concept of the type. In effect, we construe sensible affection as the awareness of a certain type of thing, that is to say, the awareness of something which is the same kind of thing as some other things we have been affected by. The awareness of this type of thing is made possible by the reproduction of the combination of traits met with on previous occasions. As this act of reproductive imagination rests entirely on association of the kind described, it is an empirical act. The subject's activity of associating traits is not evidence of these traits actually being connected in the object. In A 121-22 and B 152 Kant stresses that, for this reason, association can never serve as more than a mere subjective and empirical ground for the combination of traits. Clearly then the imagination does not function objectively when it functions reproductively. But does it ever function in a manner that may be regarded as objective?

Kant argues that it does. When the imagination functions objectively, Young points out, its activity may be likened to that of the understanding. He explains:

If we may employ understanding in such a way that it mirrors the reproductive function of imagination, Kant holds, we may also employ imagination so that it mirrors the functions of understanding. We may employ imagination, that is, to construe things sensibly present as instantiating pure concepts of the understanding. This is what Kant calls the pure or productive function of the imagination.  

Young stresses that the term "productive" ought not to be interpreted as involving "the
production of novel sensible content or of novel sensible form." For, generally speaking, the function of the imagination is to allow us to construe sensible awareness as the awareness of a certain type of thing. In some cases, the type under consideration may be characterized by reference to things met with previously in sensible awareness, and in these cases the imagination functions reproductively. There are cases, however, in which the type under consideration cannot be characterized with reference to things met with previously in sensible awareness; this occurs when we are dealing with pure concepts of the understanding. In these latter cases, Young holds, "the function of the imagination by which we identify things sensibly present as instances of that type is one through which we contribute to experience. For this reason Kant labels it a 'pure,' 'productive,' or 'a priori' function." Young does not explain this point any further, but it seems that what he means to say is that this function of the imagination is productive in the sense that it involves "the identification of things as things of a certain type," without reference to things previously met with in experience, but rather through the association of the imagination with the active faculty in us, that of understanding. The question, of course, is: What exactly is this association?

The most plausible answer to this question is, I think, that productive imagination marks that part of the process of cognition where the purely passive and the purely active

\footnote{\textit{Kant’s notion of productive imagination, therefore, is markedly different from that of Fichte, for whom productive imagination actually does produce for itself an original manifold, as opposed to one that is merely received. This manifold is, for this reason, an intellectual intuition, as opposed to Kant’s merely sensible intuition. See J.G. Fichte, \textit{The Science of Knowledge}, pp. 42-48, 191-94, 201-12, 275-76, and \textit{A Crystal Clear Report to the General Public Concerning the Actual Essence of the Newest Philosophy}, pp. 75-84.}}

\footnote{\textit{J. Michael Young, "Kant’s View of Imagination," p. 156.}}
faculties are integrated, i.e., in the act of combination, which allows schematism to occur. This is not to say that the purely passive faculty and the purely active faculty are integrated all the time. Thus the above position does not preclude there being a purely passive faculty and a purely active faculty - sensibility and understanding. It only suggests that these two faculties do not account for all of the activities involved in the phases of cognition when indeed cognition occurs; in particular, they alone do not account for the activity of combination. It suggests, furthermore, that it is the various functions of the imagination that constitute the mid-range functions in between sensibility and understanding, and that therefore, the imagination ought to be viewed as that faculty that is able to mediate between sensibility and understanding, in the act of combination.46

Let us consider now another issue that arises from Kant's discussion of the synthesis of reproduction in imagination. Kant writes:

It is a merely empirical law, that representations which have often followed or accompanied one another finally become associated, and so are set in a relation whereby, even in the absence of the object, one of these representations can, in

46This argument is not one that Kant states explicitly anywhere in the text, though it is, nonetheless warranted by the text. Kant's failure to provide an explicit argument to resolve the central problem he is tackling with in connection with the function of the imagination is noted by Henry E. Allison, Kant's Transcendental Idealism, p. 161: "The second and perhaps most problematic aspect of Kant's doctrine is the claim that the imaginative synthesis is governed by the categories. Why, after all, should the imaginative activity have anything to do with the logical functions of judgment? I take this to be the most fundamental question raised by Kant's analysis. Only by establishing such a connection can Kant demonstrate the connection between the categories and human sensibility that is needed for the explanation of the possibility of synthetic a priori judgments. The issue is thus central to the whole program of the Critique. Unfortunately, Kant seems to beg rather than to answer this question. Instead of providing an argument, he simply claims dogmatically that the imaginative synthesis is an expression of the spontaneity of thought, that it determines inner sense a priori in respect of its form, and that this determination is in accord with the unity of apperception." The views presented in this study are intended to reveal an answer that may plausibly be given.
accordance with a fixed rule, bring about a transition of the mind to the other. But this law of reproduction presupposes that appearances are themselves actually subject to such a rule, and that in the manifold of these representations a coexistence or sequence takes place in conformity with certain rules. Otherwise our empirical imagination would never find opportunity for exercise appropriate to its powers, and so would remain concealed within the mind as a dead and to us unknown faculty (A 100).

It is in this passage that the language with respect to the imagination gets very misleading. Kant speaks here of the empirical faculty of imagination and later contrasts this with a pure transcendental faculty of imagination (A 118), as though these were two distinct faculties. This is not, in fact, the case. What Kant really means to distinguish here are the two different ways that reproductive imagination may be employed - in a transcendental manner (this is what he refers to as productive imagination), and in an empirical manner. Furthermore, he means to point out that the latter presupposes the former (A 101).

What this essentially amounts to is that the reproducibility of patterns of combination of representations that we encounter in experience presupposes first of all that certain general features of these representations are reproducible in such a way that they may be compared and connected even when the representations are not present to us in an empirical way. Were this not possible, the empirical laws governing the relations between objects would only hold true as long as the objects were presented to our senses, but would cease to hold when they were not - which is to say that they would not be laws governing the relations between those objects at all. Now the only way that this is possible is for the representations to be reproducible in pure intuition. For this allows a series of representations to be captured, so to speak, and held together in order to yield the effect of the combination of those
representations. This effect is the representation of the complete object which possesses the characteristics that give rise to the law-governed relations that hold between empirical objects. For example, it would not be possible to know the empirical law that lines may be straight or curved - which requires the reproducibility of various straight and curved lines in experience - if it were not for the fact that the various representations constituting a line were able to be reproduced in pure intuition and held together in one unified representation which could then be compared to other representations (A 102). This reproduction in pure intuition is therefore independent of the reproduction in empirical intuition, as it is a precondition for empirical reproduction. Kant thus says that this "reproductive synthesis of the imagination is to be counted among the transcendental acts of the mind" (A 102). This reproduction in pure intuition must, therefore, be a product of a pure imagination, that is, of a transcendental imagination, and this, it seems, is what Kant refers to as productive imagination (A 102 / A 123). Thus what the complete cognitive process brings about is the transformation of the undetermined empirical manifold, not the fully determined empirical manifold that only results from the complete cognitive process; and it is this pure manifold that the schema determines; specifically, it is the pure manifold of time that gets determined, as Kant explicitly states: "the schema of each category contains and makes capable of representation only a determination of time" (A 145 / B 184). That is to say, the schema determines the

47"It is by means of imagination that what is presented in observations is united" (D.P. Dryer, Kant's Solution for Verification in Metaphysics, p. 302).

48This, however, is a very different view from the one underlying the objection that Jonathan Bennet, Kant's Analytic, p. 143, makes reference to: "Why does the schematism theory favour imagined over actual instances of a concept?" In the manner that I have posed the problem, this question is not even an intelligible one.
undetermined form of our sensibility - time - upon being occasioned by sense data received through the undetermined empirical manifold⁴⁹; and in determining the form of sensibility of time for a particular category, the schema makes possible the application of that category to the corresponding appearance; and this makes possible the assertion of a synthetic a priori judgment about that appearance. It is only when the subject is in a position of being able to make synthetic a priori judgments about the appearances that have been presented to it by the undetermined empirical manifold by means of the schematism process that those appearances may be viewed as constituting a determined empirical manifold,⁵⁰ regarding which further a priori knowledge and empirical knowledge may be had.⁵¹

Now despite the fact that the sense data are manifold, the forms of sensibility are

⁴⁹The undetermined empirical manifold is the term I use to denote the transcendental matter that Kant refers to in A 143 / B 182: "Since time is merely the form of intuition, and so of objects as appearances, that in the objects which corresponds to sensation is the transcendental matter of all objects as things in themselves (thinghood, reality)." (I follow, here, Erdmann's reading as opposed to that of Wille, which Kemp Smith adopts.) I also maintain that this is the manner in which we ought to interpret Kant's use of the terms "raw material of sensible impressions" at A 1-2 / B 1-2, "sensation" at A 19 / B 34, "appearance" at A 19 / B 34 and A 138 / B 177, "material" at A 232-34 / B 284-86, A 50 / B 74, A 76 / B 102, B 145, and "matter" at A 42 / B 60, A 59 / B 83, A 63 / B 88, A 86 / B 118, A 161 / B 207, A 162 / B 209, A 180 / B 223, A 223 / B 270, A 231 / B 283, A 261 / B 317, A 266-68 / B 322-24, A 277 / B 333.

⁵⁰Ernst Cassirer, Kant's Life and Thought, p. 170, remarks that what Kant shows is that: "the conditions of the possibility of experience in general are likewise conditions of the possibility of the objects of experience, and that for this reason they have objective validity in a synthetic a priori judgment."

⁵¹Graham Bird, Kant's Theory of Knowledge, p. 9, states that "Kant sometimes speaks (particularly in the Schematism) as though some mechanism were needed to connect the pure categories with ordinary empirical experience, since the categories are supposed somehow to be independent of such experience." Bird, however, confuses the issue, since experience is not something that is connected to the categories, rather, experience is a product of the connection of the categories with intuitions.
one - only one time and only one space (A 25 / B 39, A 31-32 / B 47-48). It is because of the singularity of these forms of sensibility that anything that is received by them becomes synthesized into a form that may then be unified by the understanding. The entire process begins with the action of the synthesis of apprehension (A 99). It is because the synthesised representations in apprehension can then be reproduced in the same sets in which they were received that the unity of these representations - which eventually yields perceptions - is possible;\textsuperscript{32} this is the action of the synthesis of reproduction through the imagination. Another act, however, is required in order for the reproduced perceptions to be combined and to give rise to objects of experience.\textsuperscript{33} This is the synthesis of recognition in a concept. Here again the language gets quite confusing. For what Kant means by "in a concept" is not that the concept is the faculty, but that the concept is the means by which the activity is being carried out. Now since the concept is the product of the understanding, it is, properly speaking, the understanding that carries out this act. What the understanding does by means of its concepts is allow the subject to become conscious of the fact that certain representations

\textsuperscript{32}Felix Grayeff, \textit{Kant's Theoretical Philosophy}, p. 194, comments on the second note to section 26 in a manner that is pertinent to the issues examined here: "Kant here explains the principle of the argument which the two examples are intended to illustrate. The intention is to show that the unity generated by the synthesis of apprehension is always the same as that generated by the synthesis of apperception. 'Imagination,' here contrasted with the understanding as a purely intellectual faculty (cf secs. 23 and 24), includes both the transcendental productive imagination and the empirical imagination which manifests itself in the synthesis of apprehension."

\textsuperscript{33}Edward Caird, \textit{The Critical Philosophy of Immanuel Kant}, p. 463, points out certain restrictions to this manner of expressing the idea presented here, based on a crucial point Kant makes in a note to section 19 of the \textit{Prolegomena}. In that text, "Kant denies that judgments of experience can be based on judgments of perception, the predicate of which is a secondary quality." It should be noted, however, that the "judgments of perceptions that Kant discusses in the Prolegomena are different from the notion of "perceptions" referred to here.
presented to it at different times are identical. In other words, concepts allow the subject to recognize similarity among its representations, in order to become conscious of the fact that "what we think is the same as what we thought a moment before" (A 103). Were this not possible, the reproduction of representations would be all in vain. Kant explains: "If, in counting, I forget that the units, which now hover before me, have been added to one another in succession, I should never know that a total is being produced through this successive addition of unit to unit, and so would remain ignorant of the number. For the concept of the number is nothing but the consciousness of this unity of synthesis" (A 103). Neither is it possible for the reproduction of representations alone to bring about this recognition. For all that the act of reproduction is the presentation to the mind of an appearance that is no longer present to the senses. But through this act the mind is not automatically informed that this representation is the same as that which had been presented to it earlier by means of the senses. For this act, the employment of concepts is required which the imagination itself does not possess but only the understanding. It is by means of the imagination, and the schemata it produces, however, that the understanding may apply its concepts to the synthetic manifold presented to it and thereby bring about the final phase in the process of cognition. This is the account of the function of imagination as presented in the A edition; the B edition version will be presented in Section iv of this chapter.

From all that has been said thus far, we may say that there is a sense in which the imagination can be said to work from the end of sensibility - in its reproductive capacity, as it completes the act of receiving intuitions. There is also a sense in which the imagination can be said to work from the end of understanding - in its productive capacity, as it constructs
schemata.⁵⁴ In the former, the imagination is reproducing the representations presented in the manifold of undetermined empirical intuition in pure intuition; in this capacity, the imagination is retentive.⁵⁵ In the latter the imagination is producing a new representation - the schema - which, though occasioned by the combination of the successively intuited and reproduced representations, issues a priori from productive imagination.⁵⁶ In the sense, then, that productive imagination involves recognition, and that the recognition of a set of representations depends upon the reproducibility of those representations, productive

⁵⁴Sarah Gibbons, *Kant's Theory of Imagination*, p. 52, explains this point in a different way: "Thus thought may be said to limit imagination from the perspective of the given sensory manifold, and the subject's attempt to grasp it. On the other hand, from the perspective of the thinking thing taken in abstraction from the given manifold, sensibility restricts thought by marking the distinction between thinking and knowing. In general, we might say that the A edition tends to build up the object of knowledge from the elements of sensible experience, while the B edition begins by abstracting from that experience, in order to characterize thought about objects in general, subsequently to fill in the conditions of sensible experience which such thought must meet." These two ways of presenting the matter, however, are compatible.

⁵⁵Henry E. Allison, *Kant's Transcendental Idealism*, p. 161, points out, however, that, unlike Kant's presentation of the imagination in the A edition, his presentation of it in the B edition does not limit the transcendental activity of the imagination to reproduction: "Rather, it gives equal weight to the capacity to project the future, that is, to represent the not yet given. Both are necessary for the representation of time and space as described in the Transcendental Aesthetic, and the characterization of the imagination given in the Second Deduction allows for both." This feature of the imagination is certainly relevant, especially to the issue of the ability to establish laws of nature a priori. I maintain, however, that the imagination described in the B edition (as well as productive imagination in the A edition) is fundamentally "reproductive" - even in its capacity to project the future - since it must always refer to a sensible intuition; the imagination must still reproduce the general nature of the sensible manifold of intuition when projecting the future, even if not reproducing certain particular intuitions that actually are or were present.

⁵⁶This could be viewed as a weak interpretation of the point made by Paul Guyer, *Kant and the Claims of Knowledge*, p. 168, presented in Chapter II, sec. iv this study. Upon this weak interpretation, I find Guyer's point acceptable.
imagination presupposes reproductive imagination. But if productive imagination is to combine the reproduced representations in such a way as to render them unified in one object, the combination must be a necessary one. For the unity of a set of representations could not be brought about if it were possible for the reproduced representations to be combined in any order whatsoever. Thus the essential function of productive imagination is to impart necessity to the order of the reproduced representations so as to give rise to a unified object. Now this necessity is not in any way provided by sensibility. For if sensibility is not responsible for the combination of the representation, even less can it be responsible for the necessity involved in the combination. That is, if sensibility cannot combine the representation, it also cannot combine in a necessary order. Because all combination can only come from the intellectual faculty and not the receptive faculty, the necessity also can only come from the intellectual faculty. Thus in the sense that the representations that are reproduced by reproductive imagination must be reproduced in a necessary order, reproductive imagination presupposes productive imagination. The fact that there is a sense

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57Bernard Freydberg, *Imagination and Depth in Kant’s Critique of Pure Reason*, p. 100, asserts this point as well: "Productive imagination is always at the same time reproductive imagination. What occurs on the side of productive imagination as 'possible object' always also occurs on the side of reproductive imagination as 'actual object,' including that real givenness which cannot be anticipated with any specificity. The field recedes so that the play we call experience can occur."

58This claim might appear to contradict the point Kant makes at B 152, where he states that "in so far as imagination is spontaneity, I sometimes also entitle it the productive imagination, to distinguish it from the reproductive imagination, whose synthesis is entirely subject to empirical laws, the laws, namely, of association, and which therefore contributes nothing to the explanation of the possibility of a priori knowledge. The reproductive synthesis falls within the domain, not of transcendental philosophy, but of psychology." It should be stressed, however, that Kant is here referring to reproductive imagination as it is applied to the fully determined empirical manifold, whereas I am considering it here as applied to the undetermined empirical
in which reproductive imagination may be said to ground productive imagination, and a sense in which productive imagination may be said to ground reproductive imagination, suggests that the two presuppose one another - though Kant himself either failed to recognize this, or did not state it explicitly.
Section iv

The Work of Imagination through Figurative Synthesis

In section 24 Kant distinguishes between two kinds of synthesis: figurative synthesis and intellectual synthesis. These two forms of synthesis are characterized as follows:

This synthesis of the manifold of sensible intuition, which is possible and necessary a priori, may be entitled figurative synthesis (synthesis speciosa), to distinguish it from the synthesis which is thought in the mere category in respect of the manifold of an intuition in general, and which is entitled combination through the understanding (synthesis intellectualis). Both are transcendental, not merely as taking place a priori, but also as conditioning the possibility of other a priori knowledge. (B 151)

Though Kant, in this passage, refers to the intellectual synthesis, which only occurs on the level of the understanding, as "combination," we must recall that this is not his usual employment of this term. In fact, he specifies that the combination he is referring to here is combination "through the understanding." Combination in its strict sense, that is, as involving both the faculty of sensibility and the faculty of understanding, more appropriately describes the directing of the figurative synthesis, which occurs in the manifold of intuition, to the unity of apperception, which of course involves the understanding (B 151); this also,

59Felix Grayeff, Kant's Theoretical Philosophy, p. 179, explains the distinction between the sensible and intellectual faculties: "Having expounded his doctrine that the logical categories are ideally valid beyond the sphere of human experience (Sec. 21-23), Kant now goes on to describe the human mind, or the actions of the human mind. He does so from two different names. The mind, understood as a conceptual faculty ideally valid outside human experience, is called
however, requires the work of the imagination. Kant writes:

But the figurative synthesis, if it be directed merely to the original synthetic unity of apperception, that is, to the transcendental unity which is thought in the categories, must, in order to be distinguished from the merely intellectual combination, be called the *transcendental synthesis of imagination*. (B 151)\(^6\)

The claim that the figurative synthesis may be called the transcendental synthesis of imagination when it is directed to the unity of apperception is not much elaborated on, though it is certainly important to determine exactly what the relationship is between these two forms of synthesis, and in particular, whether they, in fact, are *two* different syntheses at all.

To grasp fully the subtleties of the activity of the imagination noted above, some reflection on the development of Kant’s theory of imagination will be of assistance. Rudolf Makkreel notes three distinct phases of this development, occurring in the precritical writings, the *Critique of Pure Reason* and *The Critique of Judgment*. Makkreel argues that in the precritical writings Kant views the imagination as having various formative powers, most of which are concerned with imaging; in the CPR: "Kant focuses on the imagination as a transcendental productive power of providing a priori schemata that make possible the understanding; the action of the mind in this sense is called intellectual synthesis. The mind, understood as a faculty which is valid only for and yet also creatively determinative of human experience, is called productive imagination; the action of the mind in this sense is called figurative synthesis."

\(^6\)Felix Grayeff, *Kant’s Theoretical Philosophy*, p. 177, also distinguishes between intellectual synthesis, figurative synthesis and productive imagination in the following manner: "The unification of a manifold in general is called ‘intellectual synthesis.’ The transformation of an indeterminate succession into duration, simultaneity and determinate succession is called ‘figurative synthesis.’ The mind, understood as the faculty of figurative synthesis, is called ‘productive imagination.’ As such it mediates between sensibility and the intellect and, though wedded to sensibility, is to be regarded as a transcendental organ."

application of the categories to sense. At this stage its synthetic activities assist in the scientific understanding or 'reading' of nature. "\(^a\) In the third Critique, Kant demonstrates the imagination's interpretive powers. What is most interesting about Makkreel's presentation is his discussion of the Objective Deduction and of the revised Deduction of the B edition. Makkreel maintains that the renaming of the synthesis of imagination as "figurative synthesis" in the B edition of the CPR is reminiscent of some of the imagination's formative powers, as presented in the precritical writings, specifically, in relation to the production of monograms in the construction of mathematical figures. He also holds that, whereas some have viewed the imagination as interpretive even in the CPR, the function of the imagination in that text is not flexible or specific enough to be interpretive. Instead, Makkreel argues, the schematizing function of the imagination in the CPR is just to assign objective meanings to the categories to bring about a reading of nature that is somewhat fixed, though still quite general. \(^b\)

Makkreel stresses that any active function that the imagination performs is assigned to the imagination by the understanding. Thus to the extent that the imagination functions actively, it is always in service of the understanding. Proceeding in this fashion Makkreel remains in keeping with Kant's assertion that all activity is the work of the understanding. In trying to demonstrate the truth of Kant's claim, Makkreel finds it necessary to reconcile Kant's presentation of the imagination in the Subjective Deduction of the A edition with the Deduction of the B edition of the CPR. Whereas the Subjective Deduction places much emphasis on image formation and the reproductive function of the imagination, the Objective

\(^a\) Ibid.

\(^b\) Ibid., p. 4.
Deduction focuses on the productive function of the imagination. When Kant speaks of the imagination as the mediator between sensibility and understanding that allows for the applicability of the categories of the understanding to sensibility, he is referring to the *productive* imagination (A 118). The productive function of the imagination is, therefore, what is operative in producing the schemata that are required for the application of the categories to intuitions.64 In the B Deduction the transcendental synthesis of productive imagination is mysteriously given another name "figurative synthesis" (*synthesis speciosa*) which Kant distinguishes from intellectual synthesis (*synthesis intellectualis*), which is carried out by the understanding, independently of the imagination. (B 151-52)65 Makkreel suggests that:

the term figurative aptly suggests the graphic, more spatial qualities that the imagination contributes to synthesis. Insofar as the imagination synthesizes it serves the understanding, but in that role it also brings to bear some of its own formative power. We have seen Bildung at work before in empirical processes of image formation, but here it is displayed in the production of schemata.66

64Lewis White Beck, "Kant's Theory of Definition," p. 31, discusses the productive imagination in connection with mathematical entities: "mathematical entities are not arbitrary logical products of compatible logical predicates; the concepts have objective validity (in pure intuition) shown through the presentation of the corresponding determination. If the presentation is a product of the productive imagination, the construction is called schematic or pure, as of a figure (no matter how roughly drawn) used in a geometrical proof."

65Felix Grayeff, Kant's Critical Philosophy, pp. 179-80, remarks that "Kant scholars have maintained that the concept of the productive imagination was formed by Kant only at a late stage of this philosophical development. Indeed, Kant has even been accused of not having understood the deep significance of his own doctrine and of having carelessly abandoned it soon after he had conceived it." Grayeff firmly holds that the concept of productive imagination, regardless of whether Kant always used this term when referring to the mind, is one of the foundational concepts of Kant's critical philosophy.

66Rudolf Makkreel, Imagination and Interpretation in Kant, p. 30.
In consideration of these facts, the apparently murky relationship between the imagination and understanding becomes clearer. Though not actually identifying the imagination with understanding, Makkreel concludes that:

The imagination plays an important role in the constitution of objects of experience from the manifold of sense, and in this role the imagination becomes the handmaiden of the understanding. But in serving the needs of the understanding we have seen the imagination bring distinctive powers to bear in applying the categories to the manifold of sense.⁶⁷

In its figurative synthesis and in the production of monogrammatic schemata the imagination brings into play its formative powers (A 142 / B 181). Makkreel notes, however, that the imagination also contributes to what he calls the "reading of experience," as it construes a meaning from the manifold of sense.⁶⁸ These conclusions are very similar in spirit to those of Young, and both are supportive of the views defended in this study.

In the passage that follows, Kant explains a certain feature of the workings of the understanding, and thereby shows how its function as apperception is distinct from inner sense, which is a function of sensibility:

The understanding, that is to say, in respect of the manifold which may be
upon something that does not already possess it, then the understanding and that thing cannot possibly be identical. He explains further:

The former, as the source of all combination, applies to the manifold of intuitions in general, and in the guise of the categories, prior to all sensible intuition, to objects in general. Inner sense, on the other hand, contains the mere form of intuition, but without combination of the manifold in it, and therefore so far contains no determinate intuition, which is possible only through the consciousness of the determination of the manifold by the transcendental act of imagination (synthetic influence of the understanding upon inner sense), which I have entitled figurative synthesis (B 154).

This very last remark might at first appear odd, as it does not seem to be in keeping with what Kant just said a little earlier in the text. He had carefully distinguished figurative synthesis from intellectual synthesis and both of these from the transcendental synthesis of the imagination. In B 154, however, he seems to conflate figurative synthesis with the transcendental synthesis of imagination. For in B 151 Kant describes the figurative synthesis as simply the synthesis of intuition before it comes into relation with apperception.

Sarah Gibbons, *Kant's Theory of Imagination*, p. 52, attempts to distinguish the various functions associated with imagination and understanding. She stresses that the synthesis of imagination and the synthesis of recognition in a concept that are discussed in the A edition should be distinguished. She also warns against regarding Kant as invoking two separate syntheses - one intellectual and one figurative - in the B edition. She explains that, although she suggested that the intellectual synthesis is "an abstraction suited to the general claims about the unity of apperception that Kant is there attempting to support," this is not to equate it with the synthesis of recognition in a concept. Furthermore, she argues that: "both the synthesis of imagination and the synthesis of recognition as described in the A edition are concerned with spatio-temporal intuition. Intellectual synthesis, in contrast, describes synthesis in terms of 'intuition in general.' Kant only introduces spatio-temporal intuition in the second step of the B edition proof. Figurative synthesis, then, does not correspond precisely to the synthesis of imagination as Kant describes it in the A edition. It describes the synthesis of imagination as it relates to the objectively valid categories; we might think of it as including the synthesis of recognition in a concept." Despite the difficulty of pairing up exactly the terminology of the A and B editions, considered independently of one another, both attribute to the imagination various functions as opposed to one single function. This point will prove very significant for the purposes of this study.
and the unity of the categories. He tells us in that passage that it is when the figurative synthesis is in fact directed to the synthetic unity of apperception that it may be entitled the transcendental synthesis of imagination. In the present passage, however, Kant refers to the "consciousness of the determination of the manifold by the transcendental act of imagination (synthetic influence of the understanding upon inner sense)" as "figurative synthesis." It is difficult to see, however, how this act which is performed by the imagination and which involves the work of the understanding upon inner sense can possibly be referred to as "figurative synthesis" without contradicting the assertion made in B 151. In what sense can this process be understood as one of figurative synthesis while at the same time avoiding that contradiction?

I think there is a very legitimate, though in no way obvious, sense in which the process just described can be viewed as figurative synthesis if we take into consideration the view of the imagination that has been established. The situation is one in which Kant is employing two fundamentally different, and, in a certain sense, opposing, terms to describe

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70 Henry E. Allison, Kant’s Transcendental Idealism, p. 160, offers a very reasonable account of how the confusion may be resolved, but, in the end, he too is not certain that Kant has established everything that he wants to establish by means of these distinctions. Allison writes: "Kant begins the argument of the second part of the Deduction by introducing the distinction between an intellectual and a figurative synthesis (synthesis intellectualis and synthesis speciosa). The former notion . . . is the activity of judgment through which a given manifold of representations is brought to the objective unity of apperception. Broadly construed, the notion of a figurative synthesis encompasses any imaginative synthesis, including the formation of an image. Here, however, Kant is concerned only with the a priori or transcendental dimension of this synthesis. If the argument is to work, Kant must show, first, that this synthesis is responsible for the unification and determination of time, and second, that it, like the intellectual synthesis, is governed by the categories. Although it can hardly be said that Kant himself actually establishes either of these claims, I believe that he at least supplies the necessary materials for the construction of the relevant arguments." In what follows, I attempt to construct such an argument.
one and the same thing. It does not at all seem possible that this can be done and at the same
time avoid a contradiction, unless we view the thing being referred to in a certain way. So
long as the thing being referred to is viewed as a single act, the contradiction remains
unresolved. If, however, we view this process as a *continuous series* of acts, then the
problem is quite workable. Now if we are dealing with a series of acts, we should expect this
series as a whole to possess different characteristics depending on which particular point in
the series we happen to be considering. Moreover, it would be very possible that those acts
constituting the initial acts in the series differ from those acts constituting the terminal acts in
the series more than any intermediate acts in the series differ from one another. Given this, I
suggest that what Kant is referring to when he refers to the process in question as "figurative
synthesis," is the very beginning stages of the series of acts which, towards its end stages,
would more appropriately be referred to as the "transcendental synthesis of imagination."
Thus this apparently mysterious passage becomes quite intelligible if viewed in light of the
theory of the imagination presented above.

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The function of the imagination has been shown to be the mechanism by which the
application of the categories to intuitions is rendered possible. Through the act of combination
of sensibility and understanding, the imagination, in its productive capacity, produces
schemata which mediate between the products of these two faculties - categories and intuitions. This mediation is rendered possible because of the dual nature of the imagination as both receptive and spontaneous; that is, the imagination exhibits degrees of receptivity and spontaneity. As the activity of combination that issues from imagination manifests these two distinct features, we are left to conclude that the function of the imagination in the activity of combination constitutes a mid-range of activities between the functions of sensibility and understanding, each varying in their degree of receptivity and spontaneity. Because of the existence of this mid-range of activities, it turns out that in effect the application of categories to intuitions does not really require the categories to be directly applied to something opposed and therefore utterly heterogenous to those categories. Rather, the application is a process that occurs in stages, as the opposing functions of receptivity and spontaneity are integrated by means of the continuous series of acts of the imagination. The schemata produced from this activity are, in effect, representations of the combination of the manifold of sensibility with understanding in the act of cognition. The schema is therefore representative of something dynamic, since it is a representation of a process consisting of a continuous series of acts.

Since, in this process, there is no indication of a radical break in the functions of the faculties being combined, the heterogeneity between these faculties and, accordingly, between their products, does not preclude the application of categories to intuitions. Thus we may say that the application of the categories to intuitions is rendered possible because of the combination of their sources through the mediating acts of the imagination in the process of schematism. In the chapter that follows, a brief outline of the acts of the imagination involved in the schematism process will be presented.
CHAPTER IV

THE ACTS OF THE IMAGINATION IN SCHEMA PRODUCTION

Section i

The Schemata of the Categories of Quantity and Quality

The view that the imagination carries out a continuous series of acts, as opposed to only one act, and that these acts involve various combinations of the spontaneous function with the receptive function, is rendered quite plausible when we consider closely what is involved in the imagination's production of schemata. Firstly, the very fact that the imagination produces several different types of schemata corresponding to the categories raises at least the possibility that the imaginative acts can be quite varied in the production of each of these schemata. Secondly, upon close examination of Kant's description of these schemata, it becomes evident that each of the four triads of categories can be hierarchically arranged according to the increasingly prominent role of the understanding as we proceed
from the quantitative to the qualitative, relational and modal categories. What I maintain is that in the imaginative acts that give rise to the types of schemata corresponding to each of these sets of categories, we may note a parallel increase in the contribution of the spontaneous function of the imagination.

In my discussion of the above issues, I rely heavily on the secondary literature for a general exposition of the Principles of the Understanding. Though recognizing that there are various competing views with respect to the nature of the principles, these points of disputation are not considered here, since my main concern in this chapter is not to provide a detailed account of the nature of the principles, but to establish a view of the workings of the imagination in the production of the schemata that give rise to these principles.

Kant claims that there are eight different transcendental schemata for the twelve categories.¹ These schemata can generally be understood as the basic temporal patterns of experience.² Kant refers to a schema as a "transcendental determination of time" (A 139 / B 178). This expression is interpreted by W.H. Walsh as "a condition or state of affairs, or perhaps a feature of things, which is characterisable in temporal terms, and whose presence is readily detectable by empirical means."³ Corresponding to the quantitative categories - unity, 

¹Gordon Nagel, The Structure of Experience, p. 80, clarifies an important point: "Kant uses the same word for both the image-producing rules and the categorial rules of time-determination. This ought never to have caused confusion because he is explicit that the latter do not involve images. Also he uses the adjective transcendental only for the latter. One might wonder why he calls both sorts of rules schemata."

²Gordon Nagel, ibid., p. 76, asserts that time "is involved in every aspect of experience at every level. If, as it is not unreasonable to hope, Kant is able to explain the interconnections of all the various features of time, he will have at least a partial explanation of the connections of one faculty with another, and of one level with another."

³W.H. Walsh, Kant's Criticism of Metaphysics, p. 68.
plurality and totality, Kant offers the schema of number. Corresponding to the qualitative categories - reality, negation and limitation, there is the schema of degree. For the relational and modal categories, Kant presents a schema for each of the categories in these triads. For the category of substance the schema is permanence; for the category of cause, the schema is succession; for the category of community, the schema is co-existence. Finally, for the category of possibility, the schema is the agreement of the synthesis of different representations with the conditions of time in general; for the category of existence, the schema is existence in some determinate time; and for the category of necessity, we have the schema the existence of an object at all times.

Kant characterizes the first two sets of categories as giving rise to the constitutive principles, and the second two sets as giving rise to the regulative principles. From the first set of categories Kant derives a set of principles that he refers to as the "Axioms of Intuition"; from the second set, likewise, he derives the "Anticipations of Perception." He characterizes these two sets of principles as "constitutive" for the reason that they govern the conditions of experience, rather than merely postulating or presupposing them.
the actual construction of appearances. These principles are the "Analogy of Experience" and the "Postulates of Empirical Thought," whose function it is to govern, according to rules, the mere existence of appearances, as opposed to their construction. Because existence cannot be constructed, these principles can only be applied to the relations of existence; for this reason they are called regulative principles. This very crucial distinction that Kant draws between the constructing of appearances and the regulating of appearances suggests a considerable difference in the nature of the imaginative acts that are responsible for the production of the schemata from which these principles are derived. We may begin, then, with an analysis of the difference between schemata that are able to give rise to constitutive principles and those that are able to give rise to regulative principles.

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Kant tells us that if we consider what is fundamentally involved in the construction of an appearance, we discover that it first of all consists in the intuition of extensive magnitude (quantities). Thus the principle of the axioms of intuition is that all intuitions are extensive magnitudes. To proceed, it must first be understood what an extensive magnitude is for

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'Paul Guyer, *Kant and the Claims of Knowledge*, p. 190, draws our attention to the peculiar terminology that Kant employs here. Kant refers to the *Axioms* of intuition, yet "later explicitly asserts - in line with his view in the 1770s - that 'since philosophy is simply what reason knows by means of concepts, no principle deserving the name of an axiom is to be found in it' (A 732 / B 760)". Guyer explains that "the principle of the axioms of intuition is not so called because of its own status but rather because of its function. What it does is address the problem of applied mathematics of extensive magnitudes to empirical intuitions and the empirical objects which they represent." Kant clarifies this point retrospectively in A 733-4 / B 761-2.'
Kant. He writes: "I entitle a magnitude extensive when the representation of the parts makes possible, and therefore necessarily precedes, the representation of the whole" (A 162 / B 203). In other words, an extensive magnitude is a quantity that consists of a sum of parts, for example, the size of a book as twenty centimetres long, or the duration of a sound as ten seconds long. Thus to the three categories of quantity Kant designates number as their schema, since it is the notion of number that makes judgments of extensive magnitude possible.

Kant defines number as "a representation which comprises the successive addition of homogeneous units" (A 143 / B 182). The respect in which number may be regarded as a determination of time Kant explains thus: "Number is therefore simply the unity of the synthesis of the manifold of a homogeneous intuition in general, a unity due to my generating time itself in the apprehension of the intuition" (A 143 / B 182).

From this explanation, we may infer that the act of imagination that produces the schema of number is one that, as Kant says, generates time itself in the very act of apprehension of the intuition. In doing so, it must be asserted that the imagination is bringing into play its spontaneous function and not just its receptive function. But from the above description Kant could certainly not mean that this schema actually produces time itself as a form of intuition, but rather, that it is the notion by means of which we become aware of a quantity of parts of a homogeneous thing, since this quantity of parts is apprehended...

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3Paul Guyer, ibid., p.191, raises a problem that Kant leaves unexplained. "This is that there are three categories of quantity - unity, plurality, and totality (A 80 / B 106) - yet, again, only the single principle that all intuitions and appearances are extensive magnitudes. What does this imply about the relations between the categories and the principle which is supposed to be linked to the schematism of those categories? Is the principle derived from the categories at all, or even a condition for their application of any obvious kind?" Guyer offers a probable explanation for this, but stresses that it is not an account that Kant explicitly gives.
successively, that is, as a series in time, in our intuition of it. Furthermore, it should be noted that the time that is generated is a determinate time. Kant states that apprehension is: "that synthesis of the manifold whereby the representations of a determinate space and time are generated" (A 162 / B 202). Determinate space and time is, of course, empirical space and time, as the pure forms of space and time are indeterminate. Implicit in Kant's claim here is that "empirical intuition is not just sensing, but apprehending sensations at locations within a spatiotemporal manifold." This is possible through the imagination's production of the schema of number, which does not just involve passively receiving intuitions, but actively apprehending them as having specific locations in time and space. These spatiotemporal locations are not, therefore, just received through intuition, but are rather brought into being by the imagination's spontaneous function. It should be stressed, however, that this spatiotemporal manifold is not actually produced by the imagination's function of combination in schema production; rather, combination only allows this manifold to be

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6Lorne Falkenstein, *Kant's Intuitionism*, p. 249, makes an important point along the same lines. He explains that "the Axioms are written over the tacit supposition that the matters presented in intuition are already given adjacent to one another in space and time. Successive synthesis or 'combination' does not determine these adjacency relations; it merely identifies them and combines them in a single thought adequate to represent them in all their multiplicity, the way the single thought 'triangle' represents at once an infinity of coloured points at various locations."

7Gordon Nagel, *The Structure of Experience*, p. 91.

8George Schrader, "Kant's Theory of Concepts," p. 148, make a pertinent point with respect to this issue: "There is only one process of synthesis at any level. It is empirical in that it operates with intuited data, but a priori in that it is not blind or random. At the level of apprehension of the manifold, the imagination is more passive than spontaneous. It is predominantly receptive, but already operating in the service of the understanding."
The other basic component involved in the construction of an appearance is the intuition of intensive magnitude. Kant asserts, therefore, that the principle of the anticipations of perception is that all intuitions are intensive magnitudes. This principle is expressed in the B edition in the following manner: "In all appearances sensation, and the real which corresponds to it in the object (realitas phaenomenon), has an intensive magnitude, that is, degree" (B 207). Kant maintains that appearances, as objects of perception, differ from space and time in that space and time are merely formal intuitions, and therefore cannot be perceived, whereas appearances contain not only intuition but also the "matter of some object in general" (A 166 / B 207). It is due to this matter that things existing in space or time may be represented. Kant refers to this matter as "the real of sensation." Furthermore, Kant maintains that "there is also possible a synthesis in the process of generating the magnitude of a sensation from its beginning in pure intuition = zero, up to any required magnitude" (A 166 / B 208). What he seems to be getting at is that empirical intuitions are not simply "had" or "not had," but rather, they may be had in different degrees, which is to say that they have intensive magnitudes.

The magnitude of a sensation begins in pure intuition, at which point it equals zero, as it is free of any matter. All we have at this point is the a priori consciousness of the manifold in space and time; but through the process of synthesis, the magnitude of a sensation may be

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7As Lorne Falkenstein, *Kant's Intuitionism*, p. 249, puts it: "The function of combination is not to assemble or produce this manifold but to enable the mind to think it in all its multiplicity in a single thought. Briefly, it is to turn a spatiotemporal array of representations into a representation of a spatiotemporal array."
most of what it needs simply from sensibility and the representations it receives. In the imaginative act that produces the schema of quality, the imagination must go beyond what is merely given in sense to a greater extent than in the case just described. For the notion of *degree* is one that denotes something *in between* reality and negation, and in this sense, cannot be derived merely from the actual representations given in sensibility. Since the schema of quality is precisely that representation that tries to capture the *degree* of a content, which is to say that it must do more than merely assert or deny its reality, the imagination, in producing this representation, must make greater use of its spontaneous function. For, in making possible a representation of the *degree* of the qualities of an appearance, this schema is making possible the representation of the *content* of the appearance - since this content consists not just of qualities, but of degrees of qualities. To produce this kind of representation, the imagination must go beyond the given, and therefore beyond receptivity, to a greater extent than it had to in producing the schema of quantity, since it is not merely making possible the enumeration of appearances that are given in intuition, but the "filling out" of these appearances, in the sense of giving them content (i.e., giving us the possibility to represent to ourselves their content), and therefore determining them to a greater extent. So far then, there is considerable evidence that the act of the imagination that produces the schema of the second triad of categories involves greater spontaneity than the act that gives rise to the schema of the first triad. Let us now examine the imaginative acts involved in the production of the other two sets of categories to determine whether the trend persists.
thereby to the concept of substance" (A 204 / B 249). What this suggests is that "although substance, causality, and community are three separate concepts, they can be used only in conjunction with one another." This point will be shown to be a significant one.

In general, the analogies are viewed as rules that allow us to determine a priori the existence of each appearance with respect to the unity of all time. The "unity of all time" to which Kant refers is a reference to the objective unity of experience. Kant always speaks of this objective unity as linked with apperception. He explicitly states that

> the general principle of the three analogies rests on the necessary unity of apperception, in respect of all possible empirical consciousness, that is, of all perception, at every [instant of] time. And since this unity lies a priori at the foundation of empirical consciousness, it follows that the above principle rests on the synthetic unity of all appearances as regards their relation in time (A 177 / B 220).

In other words, the necessary connections between perceptions in the manifold have their foundation in the necessary unity of apperception, which is a unity that holds for all possible empirical consciousness, that is, for any perception at any instant of time. Kant says of this original apperception that it "stands in relation to inner sense (the sum of all representations), and indeed a priori to its form, that is, to the time-order of the manifold of empirical consciousness" (A 177 / B 220). Again, he emphasizes here the point that, in order for the relations between the perceptions in the manifold to be necessary connections, the perceptions must be related, not only to one another, but to original apperception. For inner sense, which consists of the sum of all representations in relation to one another, is viewed as standing in relation to original apperception, and thus to the necessary unity contained in it.

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15 Ibid.
Kant notes, furthermore, how everyday experience confirms that "only the continuous influences in all parts of space can lead our senses from one object to another" (A 213 / B 260). He illustrates this point with the example of how light acts as a mediating community between our eyes and the celestial bodies and thereby reveals their coexistence. Moreover, he asserts that it is due to the parts of matter that fill up space that the perception even of our own position, and of any change in our position, is possible. Kant writes:

Without community each perception of an appearance in space is broken off from every other, and the chain of empirical representations, that is, experience, would have to begin entirely anew with each new object, without the least connection with the preceding representation, and without standing to it in any relation of time (A 214 / B 261).

Kant supports this argument with a reflection on the activity that goes on in apperception. Kant describes the community of apperception in the mind as one in which all appearances, being contained in a possible experience, must stand (A 214 / B 261). If objects are to be represented as coexisting, it is necessary that they mutually determine their position in one time, and in so doing constitute a whole. But this community is merely a subjective one. To assert that this subjective community has objective grounds and that it thus holds of appearances as substances, the perception of the one substance must make possible the perception of the other by serving as its ground, and conversely. Kant describes this as reciprocal influence, and maintains that it is grounded in apperception, and for this reason, it may bring about a real community of substances, without which experience could never present to us the empirical relation of coexistence.

What Kant has explained here is how appearances, that exist outside one another, are yet able to stand in connection with one another, and thereby constitute a composite - which
may come about in various ways. There are three basic dynamical relations that may hold between appearances, though others may arise from these. These are: inherence, consequence and composition; and these grow out of each of the three analogies just discussed. Generally, the principles of the analogies govern the determination of the existence of appearances in time, according to each of the three modes of time: "the relation to time itself as magnitude (the magnitude of existence, that is, duration), the relation in time as a successive series, and finally the relation in time as the sum of all simultaneous existence" (A 214 / B 262). What ought to be noted in connection with this last point is that the unity of time-determination is a dynamic one. For the nature of time is such that it does not determine the position of every existent thing in it immediately, since absolute time cannot itself be perceived, nor can it interact with appearances. Thus the position of all appearances in time can only be determined by the rule proceeding from the understanding that brings about the synthetic unity with respect to time relations for the existence of these appearances; and this rule does this in an a priori manner, rendering it valid for every position in time.

In a footnote to A 218 / B 265, Kant makes some concluding remarks. He states there that a unity results from the tacitly assumed principle of the community of coexistent substances. This unity is of the world whole which necessitates the connection of all appearances. Were the connection of these appearances not necessary and were these appearances rather to exist as isolated parts, it would not be possible for these parts to constitute a whole. And if their coexistence did not necessitate their connection or community, which Kant specifies as "the reciprocal action of the manifold," it would not be possible to infer the real relation of connection or community from the ideal relation of
coexistence. Thus, as we have seen, the general aim of the section on the analogies is:

to portray the unity of nature in the connection of all appearances under certain exponents which express nothing save the relation of time (in so far as time comprehends all existence) to the unity of apperception - such unity being possible only in synthesis according to rules (A 216 / B 263).

When considered in conjunction with one another, the analogies assert that all appearances are connected together in one nature, according to an a priori unity. Without this a priori unity, there would be no unity of experience and no determination of objects in experience.

Thus to the category of community Kant assigns the schema of co-existence which constitutes the basis for all that is expressed by the principle of community presented above. If we now consider the specific imaginative act that produces the schema of co-existence, we discover that it too involves a greater degree of spontaneity than do the acts that produce the schemata of the first and second sets of categories. For this act involves the imagination's bringing into connection appearances with the a priori unity described above. Just as in the case of the first and second analogy, this act does not just involve bringing into relation the appearances themselves, but rather, bringing these appearances into relation with this a priori unity - this concept of nature - which itself has its foundation in the transcendental unity of apperception. As we have seen, the schema giving rise to the first analogy grounds the unity of one thing, as it makes possible the representation of the abiding nature of a single object; the schema giving rise to the second analogy grounds the necessary connection of a series of things, as it makes possible the representation of events; finally, the schema from which the third principle is generated grounds the representation of a concept of nature, as it makes possible the representation of the connection of all appearances in one nature, in accordance with an a priori unity. In all these cases, the production of the schemata involves relating the
perceptions to the transcendental unity of apperception, and therefore in an objective, and not just to one another, in a subjective manner. As the schema production of the categories of quantity and quality do not involve the transcendental unity of apperception in quite the same way as in the schema production of the relational categories, it seems that the acts of the imagination that produce the schemata of the categories corresponding to each of the three analogies do indeed involve greater use of the function of spontaneity than the acts that give rise to the schemata of the categories corresponding to the axioms and anticipations.
Section v

The Schemata of the Modal Categories

The second set of regulative principles - the postulates of empirical thought - provides further evidence for the view that the proportion of spontaneity in the acts of the imagination that produce the schemata corresponding to the concepts from which these principles are derived increases as we move up on the hierarchical scale of the four triads of categories. A brief analysis of the nature of the postulates will demonstrate this. As these notions are very closely related, my account of each will be run together in one general explanation.

Kant explains that the categories of modality are to be distinguished from the others in the sense that, unlike the others, they do not, in the determining of an object enlarge or amplify the concept in conjunction with which they are used. Their function is solely to express the relation of the concept to the faculty of knowledge (A 219 / B 266). That is to say, no matter how complete the concept may be, there remains an issue outside that concept which is the issue of whether the object about which we are having the concept is merely possible or actual, and if actual, whether it is necessary or only contingent. Kant writes:

No additional determinations are thereby thought in the object itself; the question is only how the object, together with all its determinations, is related to understanding and its empirical employment, to empirical judgment, and to
reason in its application to experience (A 219 / B 266).31

The postulate corresponding to the category of possibility establishes that an object is possible if it is "in connection only with the formal conditions of an experience, and so merely in the understanding" (A 234 / B 286). The postulate corresponding to the category of existence asserts that an object is actual if it "stands in connection with perception, that is, with sensation as material supplied by the senses, and through perceptions is determined by means of understanding" (A 234 / B 286). Finally, the postulate corresponding to the category of necessity decrees that an object exists as necessary if "in its connection with the actual, [it] is determined in accordance with universal conditions of experience" (A 234 / B 286).

To this Kant adds that, with respect to the postulate corresponding to the category of existence, the actuality referred to here need not involve the immediate perception of the object, i.e., consciousness of some sensation with respect to it, in order to make a knowledge claim about its existence. All that is required is that the object be connected with some actual perception in a manner prescribed by the analogies of experience, since the analogies determine all that may count as a "real connection" in experience in general.

With respect to the postulate corresponding to the category of necessity, Kant stresses that this necessity concerns the material necessity in existence, and not just the formal and

31Gordon Nagel, The Structure of Experience, p. 224, also points out that the postulates "are not principles in quite the same sense as the Axioms, Anticipations, and Analogies. There is not the paired-relation to a specific feature of time such as its part/whole structure, its continuity, or one of its three objective modes. The modal categories do have schemata, as we shall see; but the structure of experience is essentially complete with coexistence added to duration and succession. Thought is somewhat optional in experience because there is knowledge at the level of perception, though it is incomplete and mixed with error. It is possible to be knowledgeable without being critical, informed without being thoughtful."
logical necessity - which is the only kind required for the connection of concepts. The necessary existence of some object can never be known from concepts, but rather from the object's connection with something that can be perceived in accordance with the laws that hold universally for all experience. We cannot, however, know of the necessity of the existence of any object from some other object except in the case of the existence of an effect from some cause in accordance with the law of the second analogy.

Kant concludes from this that that which can be known to be necessary is not the existence of things (substances) but rather, the existence of the state of things. Still, we can only know the existence of the state of a thing from our perception of other states that are governed by the law of causality. Causality is thus not applicable to things as substances, since substances can never be perceived as appearances and therefore can not be viewed as empirical effects that have a place in the causal chain. Kant states: "It therefore follows that the criterion of necessity lies solely in the law of possible experience, the law that everything which happens is determined a priori through its cause in the [field of] appearance" (A 227 / B 280). Furthermore, the unperceived effect is to be inferred a priori from the perceived cause. We can see here that Kant is certainly straying from Leibniz on this issue, as he wants to keep the law of causality restricted to phenomena, leaving substances completely out of the picture. We may recall the problem Leibniz had trying to fit the existence of particular substances into his grand scheme of analytic a priori truths. The principle of perfection was to deal with this difficulty, as well as the distinction he drew between our knowledge and that of God. Kant is operating along much the same lines, in the sense that he too wants to fit every particular thing into an unbroken, causally linked chain of occurrences, only he insists on
restricting the law of causality to the realm of appearances.

Kant asserts that everything that happens is necessary - though hypothetically so. Were this not the case, there would not be anything that we could call "nature." We may, therefore, know as a law of nature a priori that "nothing happens through blind chance" (A 228 / B 280). We may also assert, says Kant, that "no necessity in nature is blind, but always conditioned and therefore intelligible necessity" (A 228 / B 280). Both these laws govern the play of alterations in the world and subject them to a system that we may call "nature," which is all to say that they are subject to the unity of understanding. Kant says of nature and of the unity of the understanding that they amount to the same thing (A 228 / B 281). This is quite significant. For it is clear by this that by the unity of the understanding Kant is not referring to the understanding of an individual subject, but rather, to any possible understanding. All possible forms of understanding are forms of understanding at all because they are united in one general form of understanding. If this were not so, then Kant would have to assert the existence of as many natures as there are understandings, since he equates the unity of understanding with nature. To say that these alterations are subjected to the unity of understanding is also to say that they belong to one experience, and therefore, to the synthetic unity of appearances.

Kant discusses briefly a problem that arises in connection with the notion of possibility. The problem concerns the question of whether the realm of possibility extends further than the realm of actuality; and also, whether the realm of actuality is larger than the realm of necessity. Kant admits that one would expect a synthetic solution for these subtle questions, though he asserts that they are questions that reason alone is more equipped to
handle. These problems, Kant says, are tantamount to the enquiry whether things as appearances one and all belong to the sum and context of a single experience, of which every given perception is a part, a part which therefore cannot be connected with any other [series of] appearances, or whether my perceptions can belong, in their general connection, to more than one possible experience (A 230 / B 283).

Kant maintains that we cannot conceive of an understanding or conditions of sensibility or apperception different from the ones we have; thus even if there were others, we could not possibly know it. In terms of all that can be given to us in experience, therefore, we must say that all is strictly necessary. Nonetheless, the real of possibility certainly does exceed that of actuality when we consider the objects of reason, i.e., when we concern ourselves with practical issues (i.e., morality).

Remaining within the jurisdiction of the understanding, Kant denies the validity of the move of extending the realm of the possible beyond that of the actual on the grounds that something would then have to be added to the possible to yield the actual. Kant argues that that with which we would have to amend the possible would be impossible. All that can possibly be added, says Kant, is a relation to my understanding, namely that in addition to agreement with the formal conditions of experience there should be connection with some perception. But whatever is connected with perception in accordance with empirical laws is actual, even although it is not immediately perceived (A 231 / B 284).

\[^32\]"Instead of regarding possibility as being coextensive with conceivability, and hence, limited only by logical constraints, Kant regards the possible as being much more restricted. With the narrowing of the possible, Kant expands the necessary. In fact, only if the possible is less than the conceivable, is there an empirical sense of necessity at all; for, if the conceivable is all possible, everything empirical is contingent, and everything necessary is nonempirical" (ibid., p. 226).
Kant is employing here a very interesting kind of talk: that which must be added to the possible to give rise to the actual, as he says, is a "relation to the understanding." What Kant seems to mean by this is that, in order to become actual, the possible must be connected with other perceptions of the understanding, and in this sense, it stands in relation to the understanding. Kant maintains, in fact, that the principles of modality are not objectively synthetic, as was previously mentioned, since the predicates possibility, actuality, and necessity do nothing to enlarge the concept of which they are affirmed. They are synthetic only in a subjective sense, in that they only "add to the concept of a thing (of something real), of which otherwise they say nothing, the cognitive faculty from which it springs and in which it has its seat" (A 234 / B 286). Again, Kant makes reference to the faculties, and is reminding us that how we determine what kinds of judgments count as knowledge will involve a consideration of the source of the concepts contained in the judgment; if the concept is connected to the understanding, but only in such a way that it is connected with the formal conditions of experience and nothing else, then the object of this concept is merely possible; if the concept is linked to other concepts of which we have perceptions based on sensation, then the source of those concepts is the understanding, and we judge the object to be actual; if the concept arises from and is determined through a connection of perceptions only according to concepts, the object is then necessary (A 234 / B 286). Kant asserts: "The principles of modality thus predicate of a concept nothing but the action of the faculty of knowledge through which it is generated" (A 234 / B 287).

33"When the Critical standpoint is accepted, possibility, actuality and necessity can only be defined in terms of the conditions which render sense-experience possible. In other words, the Critical position, that all truth, even that of a priori principles, is merely de facto, involves
It is interesting that Kant views *possibility* as a concept of the understanding, though when it is used by the understanding, it is used in a relative sense, meaning "possible with respect to the formal conditions of experience," as opposed to "absolutely possible" (A 232 / B 284). The absolutely possible is handled by the faculty of reason. Thus what is happening here is that the faculties of understanding and reason are *sharing* a concept. This seems to suggest that the notion of possibility, and therefore, the notions of actuality and necessity, are ones that can be employed by the faculty of reason, as well as the faculty of understanding. What determines when they are being employed with respect to the former and when with the latter, is whether or not the imagination has also been employed, producing the schemata of the categories corresponding to the postulates. Only with the contribution of schemata, at each of the levels of cognition, can a set of representations become fully determined as an object of experience.  

The nature of the schemata of the categories associated with the postulates is only very briefly dealt with by Kant. He describes the schema of modality in general as "time itself as

acceptance of the view that the actual reduces to the experienced, and that only by reference to the actual as thus given can possibility and necessity be defined. The Leibnizian view that possibility is capable of being defined independently of the actual, and antecedently to all knowledge of it, must be rejected" (Norman Kemp Smith, *Commentary to Kant's Critique of Pure Reason*, pp. 391-92).

"The determinacy requirement in the process of acquiring knowledge of objects is described by Gordon Nagel, *The Structure of Experience*, p. 223, in a manner that appreciates the development of determinacy: "The whole project began with the recognition of the indeterminacy of reason. The development within the system - the progression from sensing to apprehension, from apprehension to perception, and now from perception to thought - can be seen as a step-by-step reduction of the virtual randomness that confronts us in sense, but it can also be viewed the other way about - with thought free to fashion what it will, but with only certain thoughts having perceptible objects, and only certain of the possible objects of perception actually perceived. The two views are complementary because the constraints must work both ways to work at all."
the correlate of the determination whether and how an object belongs to time" (A 145 / B 184); they are rules that relate all possible objects of experience to the "scope of time." Specifically, the schema of possibility is described as: "the agreement of the synthesis of different representations with the conditions of time in general" (A 144 / B 184). It may therefore be expressed as "the determination of the representation of a thing at some time or other." The schema of existence is "existence in some determinate time"; and the schema of necessity, "existence of an object at all times" (A 145 / B 184). Thus the schemata of the modal categories are rules that determine the scope of time during which the object exists. In doing so, the schemata of the modal categories allow us to determine an important feature of the object with respect to its relation to the whole of empirical knowledge, i.e., if it is merely possible, actual or necessary.

The role of the postulates is to make possible empirical thought about objects, not just empirical knowledge about objects (in fact, they are not even required for empirical knowledge of objects). Thus the proposition "water is composed of hydrogen and oxygen" is an empirical judgment, arrived at by use of the axioms, the anticipations and the principles. The postulates did not enter into the establishing of this objective proposition, as there is no reference in it to the scope of time for which its truth holds. Nonetheless, it is certainly possible to invoke the postulates to go beyond the assertion of objective empirical judgments and merely think judgments that do include a reference to the scope of time. In this case, we would be able to think of the judgments as holding true of the object either at some time or other, at some particular time, or at all times. In so doing, the postulates allow us to reason out all sorts of judgments about empirical objects by means of inference rather than direct
observation - hence the emphasis on thought as opposed to knowledge - in order to yield a system of empirical thought about objects. What this tells us about the nature of the imaginative acts that produce the schemata of the modal categories that give rise to the postulates is that these acts just start to bring in the function of reason. That is to say, the activity of the understanding that is involved in the production of these schemata still involves sensibility, since these schemata are still based on the representations received in sensibility, and they still involve the understanding, since these schemata involve thought; but the activity of the understanding in this case is just beginning to approximate the function of inference, which is one of the activities of reason. Now since reason is still more spontaneous a faculty than understanding, we may conclude that the acts of the imagination that produce the schemata of the modal categories involve more spontaneity than those of the relational categories and, a fortiori, those of the other categories.
The above analysis has shown that the schemata corresponding to each of the four
triads of categories are produced by acts of the imagination that differ in respect of the
proportion of the spontaneous function involved in these acts. Specifically, as we proceed
from the schemata that correspond to the quantitative, qualitative, relational and modal
categories -in this order - we find that the acts of the imagination involved in their production
make increasingly greater use of the spontaneous function, as they involve a more and more
radical processing of the intuitions. What implications does this have? I maintain that, in
demonstrating that the spontaneous function of imagination can be combined with the
receptive function in varying proportions in at least four distinct ways, we have also
demonstrated the very strong possibility that it can be combined in an indefinite variety of
proportions, each of which may be located on a spectrum, with the function of pure
receptivity on one extreme, and the function of pure spontaneity on the other extreme. Upon
this view, the acts of the imagination that produce the four general types of schemata
presented above may be regarded as just pivotal points on this spectrum, as each makes
possible a discernably different temporal pattern of experience, while at the same time
suggesting that there are an indefinite number of acts in between these pivotal ones that do not give rise to a discernable temporal pattern of experience, but do, nonetheless, serve as connectives between these pivotal acts, thus rendering the whole series continuous. The reason these mediating acts are able to function as connectives is that each of these mediating acts is a synthesising act that builds on the previous synthesising act - thus giving rise to a more and more complete unity, as opposed to a series of utterly distinct and unrelated unities.

In an earlier chapter, I discuss the distinction between productive imagination and reproductive imagination. I argue that Kant does not, by these terms, designate two distinct faculties. Rather, productive imagination and reproductive imagination are one and the same faculty, employed in different ways. That is to say, the faculty of imagination can carry out two functions: that of production and that of reproduction. It was noted that reproduction usually occurs on an empirical level, as it essentially performs the function of retention with respect to empirical perceptions; production usually occurs on a transcendental level, as it involves an a priori synthesis, and concerns the connection of perceptions on a transcendental level. I pointed out in that chapter, however, that Kant describes the function of production in such a way that suggests that there are traces of the function of reproduction even in the function of production. This is not to say, however, that the reproduction operative in the imagination's function of production involves that which is empirical, since the reproduction in this case is not empirical. Rather, what all of this amounts to is that, although what Kant usually refers to when he speaks of reproductive imagination is the reproductive function of the imagination on an empirical level, there is, nonetheless, a kind of reproduction that the

33See Chapter III, sec. ii above.
imagination carries out on a transcendental level. In fact (as was also pointed out earlier), Kant actually refers to reproductive imagination as a function that must be counted among the transcendental acts of the mind (A 102). The reason, we may surmise, that the productive function of the imagination cannot be purely productive is that in that case it would be producing intuitions of its own - resembling the productive imagination of Fichte. This, however, we know not to be the case, as our cognitive apparatus is limited to sensible intuitions that must be given to us. As long, therefore, as the imagination is dealing with intuitions that are given to it, as opposed to ones that it produces for itself, it will always, in its activity, be reproducing, in the sense of producing again or presenting again that which is given in sensibility - both on an empirical level, in the act of association, and on a transcendental level, in the a priori synthesis that grounds this empirical association. The productive function of the imagination cannot, therefore, be viewed as completely distinct from its reproductive function. What is more relevant in noting the distinction between the various functions of the imagination is the level on which the functions are being carried out, specifically, whether they are being carried out on an empirical level or on a transcendental level.

Recognizing this, it is clear that the productive function of the imagination that carries out the production of schemata itself involves the reproductive function of the imagination. In

36 Andrew Brook, *Kant and the Mind*, p. 127, stresses that the activity of the imagination in its reproductive capacity ought not to be considered as mere repetition, if what is meant by "repetition" is just "the reintroduction of an old appearance into the present." Brook explains that "the unordered flow of intuition is not simply repeated, it is connected to other things in some orderly way. That requires construction as well as repetition."

37 See Chapter III, sec. iii, n. 44.
fact, the distinction we have been drawing between the receptive and spontaneous functions of the imagination can be correlated to the reproductive and productive functions, respectively. Kant makes explicit at least the second of these correlations: "In so far as imagination is spontaneity, I sometimes also entitle it the productive imagination" (B 152). From this we may conclude that the combination of the receptive and spontaneous functions of the imagination involved in the production of schemata amounts to the combination of the productive and reproductive functions of the imagination.

The above claims find much support in consideration of what is involved in the production of each individual schema. Let us consider first the act of the imagination that produces the schema of quantity - number. This schema gives rise to the serial relation that results from the occurrence of sensations one after the other. Now the act of the imagination that produces this schema is productive in that it gives rise to this schema in connection with the pure concepts of quantity: unity, plurality, totality, which derive from the understanding. What the imagination produces when it produces the schema of number is a rule for the application of the concept (which is itself a rule) to intuitions as they appear to us one after the other. The schema of number determines that the temporal representations in apprehension are to be structured by the categories according to a part/whole relation.\(^{38}\) The representation of number, however, is not itself given as a representation in intuition; it is spontaneously produced by the imagination in connection with the first set of categories - those of quantity. In the production of this representation, therefore, the productive function of the imagination is definitely in play. The representation of number, however, could not

\(^{38}\)Gordon Nagel, *The Structure of Experience*, p. 84.
come about if the imagination did not reproduce the sensations as they are given one after another in apprehension; for if each one were dropped out of consciousness as they occurred, then no notion of seriality would result. Thus the imagination's reproductive powers are clearly evidenced in this aspect of the imagination's activity. What is not evidenced, however, is any precise indication of where the reproductive function ends and where the productive function begins. There is nothing in the way the imagination synthesizes the representations in apprehension that makes it obvious where the division between the two functions can be made. The very same holds for each of the other schemata.

If we consider the act that produces the schema of the qualitative categories - *degree* - we find that here as well both the functions of production and reproduction are in play. The imagination's productive function is manifested in producing the notion of *degree* of the sensation's intensity, since *degree* is not something that is presented to us in intuition. What we are presented with is merely the sensation. The degree of the sensation's intensity is something that results from synthesizing the representations given in intuition according to the categories of quality provided by the understanding. On the other hand, because what is synthesized is that which is presented in intuition, and not something that the imagination itself invents entirely on its own, in order to synthesize the intuitions that are presented in a manner that gives rise to a quality possessing some degree of intensity, each of the intuitions must be retained by the imagination - since they are synthesized with one another. Despite

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39 Incidentally, Paul Guyer, *Kant and the Claims of Knowledge*, p. 207, views A 99 as implying that "even merely subjective sequences of representations are not directly given in passive apprehension alone." Guyer seems to suggest that even on a very basic level of representation, even, that is, at the level of mere subjective representations, some spontaneity must be involved in the production of these representations.
the fact that Kant asserts that a quality, being an intensive magnitude, is *apprehended* only as a unity, the intuitions that give rise to intensive magnitudes are themselves multiple. It is only through the activity of the imagination that this multiplicity of representations can become *apprehended* as a unity. The retentive activity that makes this possible is, of course, the reproductive function of the imagination. Again, however, there is no clear indication of the precise distinction between the productive and reproductive functions. What holds of the schemata of the first two sets of categories - quantity and quality - holds also for the schemata of the second two sets - the categories of relation and modality. Since the argument is the same in each of these cases as well, I will only make a few remarks about the production of these schemata.

The schema of the first relational category - *permanence* - resulting as it does from an act of the imagination that has the effect of determining the *relation* between perceptions in such a way as to give rise to the empirical representation of the permanence of time, is one that involves the productive function of the imagination in that this permanence is not presented to us in intuition, but is a notion that results from the synthesis that the imagination carries out on the perceptions that are presented to us. The imagination's reproductive function is, of course, also at work in retaining the perceptions in the act of synthesis. To produce the schema of the second relational category - *causality* - the imagination's productive and reproductive functions are required for precisely the same purpose, as they are as well for the schema of the third relational category - that of *coexistence*.

Since the imaginative acts that produce the schemata of the modal categories involve the greatest degree of spontaneity, we would expect that it is in these acts as well that we find
the greatest proportion of the function of productive imagination. This is evidenced by the fact that the modal status of the object is determined by the function of the understanding in its association with reason, or at least, in its approximation to the function of reason. This holds true for each of the schemata of the modal categories: possibility, actuality and necessity. For what the imagination does in the production of these schemata is construct a notion pertaining to the scope of time of the object's existence, and this certainly does not arise simply from the nature of the representations themselves as they are received by sensibility. The production of this schema is guided by concepts of the understanding in determining the temporal feature of these appearances. These concepts, however, are not, in this case, serving to provide a temporal feature of these appearances just as they are presented at the given time, but rather, with reference to the scope of time. Moreover, in doing so, these concepts are going beyond the appearances, and in such a way as to involve the inferential power of reason.

In the production of the schemata that make possible these acts, the imagination is thus incorporating the function of the understanding in a manner that differs considerably from the manner in which it incorporates it in the production of the other schemata. For, in this act, it is incorporating the function of the understanding in its most spontaneous mode, i.e., the mode in which it begins to approximate the function of reason. And in doing this, the imagination is functioning in its most productive mode. Nonetheless, because, in this act, the imagination is still essentially combining the function of understanding with that of sensibility, the imagination does not extinguish its reproductive powers and just allow the understanding to be carried away by reason. The understanding is in this case, just as in the
others, still operating with reference to the representations given in sensibility, and to do this, the reproductive function of the imagination must be operative, since these representations must be reproduced, and thereby retained, in order for the understanding to exercise its synthesis upon them. There is nothing in this imaginative act, however, that indicates the precise point at which the imagination is functioning productively or reproductively, and thus it seems that, in the production of schemata for the modal categories, as in the production of the other schemata, there is no indication of a radical break between the productive and reproductive functions of the imagination, as these functions seem to presuppose one another.

Given, therefore, that the imagination's receptive function essentially amounts to its reproductive function, and that the imagination's spontaneous function essentially amounts to its productive function, by demonstrating that both the reproductive and productive capacities of the imagination are involved in the production of each schema, we have demonstrated that the imagination's receptive and spontaneous functions are, likewise, involved in the production of each schema. But, as was shown in the earlier sections of this chapter, it does not seem possible that the imagination could carry out both its receptive and its spontaneous functions in a single act, since these two functions are quite distinct from one another. It seems therefore, that we must conclude that in the production of each individual schema there is also involved a continuous series of imaginative acts, varying in degree of receptivity and spontaneity - providing further support for the view that the imagination's function of combination that gives rise to schema production is carried out in a continuous series of arbitrarily many acts.
This chapter has shown that the acts of the imagination that produce the schemata of the categories exhibit varying proportions of spontaneity. Specifically, as we move from the less cognitively sophisticated categories to the more cognitively sophisticated ones, i.e., from the categories of quantity, to those of quality, relation and modality, respectively, the proportion of spontaneity involved in producing the schemata for each of these sets of categories increases. The employment of each of these schemata is, therefore, a pivotal phase in the process of cognition, since, in each of these employments, the object of our knowledge becomes more and more determined, and thus our knowledge of it becomes more and more accurate and complete. In fact, it was shown that even the production of each individual schema seems to involve a continuous series of imaginative acts, as opposed to a single act. All of this seems to suggest that it is possible for a category to be applied to an intuition by virtue of its being schematized, and yet still not give rise to knowledge of an object of experience. This kind of situation arises when only the quantitative and qualitative categories are schematized, and when the imaginative acts that produce the schemata of the relational categories are not carried out. At most, what this may give rise to is subjective perceptions, that would involve being able to localize the sensible qualities of appearances and to compare them to one another, but it would not give rise to experience of objects, as happens when those imaginative acts producing the schemata of the relational categories do come into play. If, in addition to these acts that produce the schemata of relational categories, the imagination
also carries out those that give rise to the production of the schemata of the modal categories, then this renders possible an even higher cognitive state than the experience of objects. These terminal acts in the series allow us to unify our empirical knowledge of objects into what may be viewed as a system or world of objects. This systematization of knowledge constitutes Kant's ideal of a "science of nature" as expounded in the Architectonic of Pure Reason.

At this point it might be objected that if Kant is proposing some "third thing" to mediate between the concept and the intuition to which the concept is applied, how is this to be rendered compatible with the view that the mediation occurs in stages, involving a continuous series of intermediates? The compatibility of these views becomes evident by recognizing that, upon the view presented here, the schema is itself the representation of a continuous series of acts - generally referred to as combination; and there is nothing amiss about asserting that there is one representation representing a series of acts. For the schema is a representation of the transcendental time determination for a given category; but, as has been shown, this time determination is achieved by the imagination through a series of acts that vary with respect to the degree of spontaneity involved in these acts. The reason for this, as was pointed out in this and the preceding chapters, is that the imagination manifests degrees of receptivity and spontaneity, and that in order to function in both these ways, it must perform more than a single act in the general act of combination.40 For the general act of combination is precisely one that brings together the functions of these completely

40Robert Pippin, Kant's Theory of Form, p. 135, says of the faculty of judgment, which, of course, includes the function of the imagination, that it "sounds like an apprehension of a manifold that is neither a passive reception of material nor a spontaneous synthesizing." What I have tried to explain is how the imagination could be both.
heterogeneous faculties. But in this "bringing together" a variety of acts seems to be taking place - as shown in the three-fold synthesis of the A edition, the figurative synthesis in the B edition of the CPR, and the Principles of Pure Understanding.

This series of acts suggests that there are a variety of different phases in what Kant generally calls the act of *combination*, and these phases do not seem to be completely divorced from one another, but, on the contrary, are very closely related. In effect, these acts give rise to a continuity of the receptive and spontaneous functions of cognition, as they bring about the integration of these two functions. As it is maintained that there are no radical breaks in the process whereby a category is applied to an appearance, since a continuity is achieved - through the workings of the imagination - between their sources, Kant's solution to the problem of the Schematism seems quite plausible.
CONCLUSION

CONTINUITY THROUGH IMAGINATION

Having established that the activity of the imagination in the process of cognition is one that combines the receptive function and the spontaneous function and thus renders continuous these otherwise disparate functions, we will now consider what consequences follow from this and what consequences do not follow. Specifically, it must be made clear exactly what kind of continuity this is and what kind it is not. The crucial point to be stressed is that the kind of continuity referred to here is only attributed to the function of the imagination in the act of combination, that is, in the act that is involved in the production of experience. But since the imagination manifests degrees of receptivity and degrees of spontaneity in the act of combination, this essentially amounts to saying that the faculties of receptivity and spontaneity themselves are rendered continuous with one another in the act of combination.¹ In what follows, I will demonstrate why this is so.

We should begin by warding off a possible misconception of the kind of continuity here propounded. The claim is not that these functions are absolutely continuous, but that they are only continuous in the process of cognition, that is, in the process of coming to know objects of experience. This, however, does not entail that the faculties are

¹See Chapter IV above.
connected in such a way that they can never operate independently of one another - when they are *not* bringing about experience. This point may appear to dismantle the entire theory here presented. For how, one might object, are the faculties to be regarded as continuous if they can operate independently of one another? Surely if they can operate independently then they must be separable, and if separable, then discontinuous. My suggestion is to consider again the following crucial passage in the Deduction:

The two extremes, namely sensibility and understanding, must stand in necessary connection with each other through the mediation of this transcendental function of the imagination, because otherwise the former, though indeed yielding appearances, would supply no objects of empirical knowledge, and consequently no experience (A 124).

The vital hint that Kant offers us here is the point about sensibility and understanding being *extremes*. Now to understand why Kant refers to these faculties as "extremes" we should recall that these faculties are not "things" in the sense of "objects" of any kind, but rather functions. For if these faculties were regarded as "things" in the sense of some kind of objects, then it would not be at all clear how we could say of them that they are continuous and yet that they can operate apart or independently. If, however, we realize that these faculties are in fact functions, and therefore, processes, then to say that they are continuous is not to say that they are "attached" so as to be inseparable from one another - as continuous *things* would be; nor is it to say that they are simultaneous, as continuous *things* would be. The first case would simply be spatial continuity and the second, temporal continuity; the continuity under discussion is equivalent to neither of these.

We can make an attempt to understand somewhat the nature of this continuity if we consider the general nature of a process of any kind. It is clear that, in any process, we may
distinguish the various parts or phases of which it is composed. As was noted in the passage cited above, Kant actually refers to sensibility and understanding as "extremes." The underlying assumption is that the process of cognition, as a whole, is one continuous process. As extremes of one process, sensibility and understanding may be regarded as the two end phases of the process, one of which may operate without the other. But to say that the one may operate independently of the other is not necessarily to say that when it does so it is actually separated or broken off from the other. Rather, what is happening is that the entire cognitive process is not brought to completion with respect to some particular act of knowledge, as not all the phases occur, but only one or some.

Consider first sensibility functioning on its own. That this in fact does occur is not difficult to prove. For we have all, at times, stared off into space and have had a slew of

\[2\] Dieter Henrich, "Identity and Objectivity: An Inquiry into Kant's Transcendental Deduction," pp. 133-34, explains the synthesis that makes the unity of cognition possible: "all identifications of regulated configurations and sequences, which pertain to the essence of cognition, are preceded by a process through which such combinations are first produced in consciousness. And since objects are complexes of simple representations, objects of intuition can be yielded only when a type of synthesis is completed which is equally the condition of the possible cognition of objects. The act which precedes the ascertainment of determinate relations between sensations is at the same time the way in which objects take form out of the diffuse manifold. Not only experiential knowledge but also the objects of experience have their origin in a single activity (B 197)."

\[3\] Mark Glouberman, The Origins and Implications of Kant’s Critical Philosophy, p. 141, makes a similar remark in connection with this point: "Compositionally, Kant segregates sense (treated in the Aesthetic) from understanding (addressed in the Analytic). The segregation, reflected in the symmetrical slogans about the organisational and the data components, solidifies the impression that we are confronting 'elements' whose individual integrity is independently secure: 'Intuitions and concepts constitute... the elements of all our knowledge' (A 50 / B 74). But it can seem that Kant's problems concerning how the elements co-operate in cognition, about 'their union' (A 51 / B 75), are created in significant measure by the artificiality of the initial division."
objects come within our visual field and yet not perceived them because we were intensely engaged in some deep thought or in a state of shock or something of that sort. In such a case, the sense data are certainly presented to our senses and the mind is thus confronted with a manifold of intuition offered to us by sensibility, but the manifold is not taken up into consciousness and perceived by means of the understanding; it is only apprehended. Thus we have here a case in which sensibility is operating, but understanding is not. What this indicates is that only this phase of the cognitive process is taking place, and the others not.

If we desire an example of a case in which understanding can function on its own without sensibility, we need only consider the situation Kant describes in the section on Phenomena and Noumena. Kant discusses in that section the distinction between "knowing" and "thinking." What he tells us there is what he tells us in many other parts of the CPR over and over again: in order to have knowledge, both intuitions and concepts are required - and this means the functions of both sensibility and understanding are required. To know an object means to apply a set of concepts to a set of intuitions. But certainly we are also able just to think of an object without having any intuitions presented to us, in which case sensibility would not be functioning. We may think, for example, of noumena. But to think of noumena is not equivalent to knowing noumena (A 250 / B 307). All we are doing when we think of things like noumena is employing the concepts of the understanding in their logical sense, and not as schematized by the imagination. Again, this in no way entails that understanding can never be continuous with sensibility. All it means is that the cognitive process with respect to this particular case is not complete, since the concepts are not being applied to intuitions. Without intuitions, they are without content and thus merely empty; as
such they are not capable of giving rise to experience of noumena as objects but only to thoughts of noumena in the mind. If the understanding could not function on its own in this way, there would be many things that we could not think of - like unicorns and utopias etc. Be we can and in fact do think of such things. This is clearly indicative of the fact that the cognitive process that gives rise to knowledge is not always *completed* in any given case. It sometimes happens that only certain phases of the process occur, but not the whole thing in its entirety - much like an aborted pregnancy. This is all fine, as long as we recognize that when the process is not carried out to completion it does not give rise to knowledge. Knowledge is only produced when the functions of sensibility and understanding are functioning in a continuous manner.

These examples demonstrate situations in which either sensibility or understanding operates on its own, independently of the other. But the fact that this is possible does not in any way upset the theory proposed - that these functions are nonetheless continuous in the imagination's activity of combination, as this activity consists of a continuous series of acts. For to say that these faculties are continuous is not to say that they may not operate on their own independently of the others. Rather, it means only that their functions must be operating in conjunction with one another when they are giving rise to experience. Thus, their being continuous does not entail their operating in conjunction with one another all of the time; they will only do so when they are giving rise to experience.

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4 Manfred Baum, *Deduktion und Beweis in Kants Transzendentalphilosophie*, p. 157, discusses the agreement between sensibility and understanding, in the operation of understanding on the pure manifold of sensibility that renders possible experience a priori. Presumably, what Baum means by making possible "experience a priori" is making possible the a priori elements of experience that give rise to a priori judgments of experience.
Yet one might still object: How can a series of discrete acts be viewed as continuous? In connection with the present case, if it is maintained that the imagination gives rise to the continuity of sensibility and understanding by virtue of the fact that it carries out a continuous series of acts in between the activity of these two faculties, how could this series of discrete acts possibly be considered continuous? In order to appreciate the kind of continuity that the imagination achieves by means of the continuous series of acts that it carries out, we should realize that this continuity essentially has its basis in the notion of *synthetic unity* - a notion central to Kant's whole project in the CPR. What this notion entails is that the unity referred to here is synthetic, that is, it is one that is achieved through a *synthesis* of elements of some kind; it is not a unity that refers to an absolutely unbroken whole. Because the unity that the imagination achieves through the synthesis it performs on the materials on which it operates (i.e., concepts and intuitions) is essentially a synthesis of discrete elements, it is not unreasonable to view the continuity that the imagination achieves between the sources of these elements - sensibility and understanding - as a continuity of a series of discrete acts.

Now it is certainly not the case that *any* series of acts may be viewed as a *continuous series*. We may certainly conceive of a situation in which a series of acts takes place that could not in any significant sense be said to be continuous. For example: the lights go on, my head begins to ache, the plant falls off the ledge and the church bells ring. For these acts are not related to one another in a manner that renders the whole series continuous in any way. But a series of acts of this sort must certainly be distinguished from a series of acts in which there is some kind of relation between, or connection of, the acts that constitute the series. We may, for example, consider the different acts of a group of musicians performing an
orchestral piece. Each musician performs a different instrument (though, of course, not necessarily an instrument of a different kind). Each musician, therefore, produces a distinct series of sounds. If guided by both a musical score and a conductor, however, the different acts of these musicians may be regulated in such a way as to produce a continuous orchestral piece, as opposed to an unrelated series of sounds.

The series of acts carried out by the imagination in its function of combination may be viewed as a case of the latter kind. In fact, if this latter example is modified slightly, we may produce a rather close analogy between these two cases. The manifold of intuition that sensibility presents us with may be likened to the group of musicians; the unity derived from the rules of the understanding may be likened to the musical score; and the activity of the imagination in its function of combination may be likened to the activity of the conductor. In the same way that the conductor, by producing a series of significant gestures, brings the musicians in concert with one another as his gestures guide them in their performance of the musical score, the imagination, by producing a series of synthesising acts, brings the manifold of intuition in conformity with the rules of the understanding. In the first case, a continuity is achieved by the conductor between the varied acts of the musicians and the unity of the musical score; in the second case, a continuity is achieved by the imagination between the manifold of sensibility and the unity of the understanding.

It has now been explained what is meant by the continuity of sensibility and understanding: sensibility and understanding are continuous when employed in the complete cognitive process that brings about knowledge of objects. With this rather stringent definition,
we have seen how many objections that one might pose against this notion can be dealt with. Given what has been said here and in the above chapters, there can, I think, be found in the CPR a very substantive account of the relation between sensibility and understanding, and of the process of schematism that mediates between them; or, at least, what Kant provides constitutes the foundations for working out such an account. If there is any mystery at all with respect to the cognitive process that Kant is attempting to explain, that is, the application of the categories to appearances, it does not consist in the relation between the faculties of sensibility and understanding, but rather in the relation between the sense data and the forms of sensibility, that is to say, the relation between the forms of intuition and that which is being intuited.

Kant confesses that his presentation contains a gap when he tells us:

But in the above proof there is one feature from which I could not abstract, the feature, namely, that the manifold to be intuited must be given prior to the synthesis of understanding, and independently of it. How this takes place, remains here undetermined (B 145).

3The theory of continuity as here described provides an alternative to the theory of double affection which avoids one of the crucial problems with that theory. Moltke S. Gram, The Transcendental Turn, pp. 19-20, describes this problem. He states that, because transcendental affection consists in an epistemic relation between a thing in itself and the ego in itself, and because even transcendental affection requires some kind of intuition, there must exist a sensibility for the ego in itself which possesses its own characteristics. "If this were not the case, then DA could not explain, as it must, how transcendental affection gives the ego a relation to a particular rather than, say, only to a concept. The doctrine of transcendent affection requires the notion of a positive noumenon. Without such a notion the theory must also recognize, not the mere absence of sensibility, but merely a different kind of sensibility characterized by its own forms." My theory avoids this requirement by asserting the existence of various intermediate acts in between sensibility and understanding.

4H. Vaihinger, Commentar zu Kants Kritik der reinen Vernunft, vol. 2, p. 53, discusses the various traditions of interpretation with respect to the notion of "affection."
The particular aspect of the situation that Kant leaves unexplained is how the manifold to be intuited could possibly be represented a priori if it is independent of the understanding. The implication here seems to be that apriority is normally associated with the understanding, and along with it, unity also. While Kant firmly maintains that unity could never be represented at the level of intuition alone, the manifold of intuition itself can be given a priori, without the aid of the understanding. When we then consider that the matter of intuition, i.e., sensation, cannot be given a priori, but that the form of intuition can, it remains mysterious indeed how it is that forms of intuition are able at all to carry out their function of receiving sense data. Once the sense data have affected sensibility, then the imagination comes into play in completing the act of receptivity and in beginning the act of spontaneity by means of which the intuitions may become determined as objects of possible experience. But how it is that the sense data trigger the faculty of receptivity at all is a problem outside the limits of Kant's account. This problem is distinct from the problem that Kant tackles in the Schematism chapter, and should be distinguished from it. Thus this problem is not one that this study attempts to resolve.  

The views presented throughout this study are intended to serve as a plausible account of those steps that seem to be missing in Kant's argument for the possibility of synthetic a priori judgments, and thus for the possibility of Kantian metaphysics altogether. It is difficult to see how metaphysics, in Kant's sense, could be defended if it were the case that the transcendental functions of sensibility and understanding were always completely disparate.

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"Gerd Buchdahl provides a very thorough treatment of the general problem of affection in Kant and the Dynamics of Reason, pp. 153-65."
The reason for this is that in that case sensibility would somehow have to make possible empirical intuitions, and thus synthesize its own manifold, without the aid of the understanding through its rules of unity - the categories. But it has been shown that sensibility has, in fact, no means of its own by which to unify its manifold. If, however, this could be possible, then the objects produced would not have been structured by the categories, inherent in the understanding; but under these conditions, we would never be in a position of knowing these objects a priori, and would therefore never be in a position of possessing objective knowledge about these objects. For Kant maintains that we can only know a priori what the understanding itself has structured, but in so structuring the manifold, a manifold that is itself part of our own constitution, all that results is appearances, and thus if we have objective knowledge of anything at all, this knowledge can only be of appearances - one of the main consequences of transcendental idealism. It follows from this, that if the understanding does not contribute to the structuring of our objects of knowledge, then it would not be possible to formulate synthetic a priori judgments about them. Since, however, it has been shown that sensibility on its own can not produce the unity required for the representation of objects about which synthetic a priori judgments may be known, and since

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⁸"We can know a priori of things only what we ourselves put into them," B xviii.

⁹Gerd Buchdahl, *Kant and the Dynamics of Reason*, p. 198, provides us with the following account of Kant's notion of "appearance": "As an 'appearance,' the object is characterized from two sides. (1) It is something that is set in an essential relation to the possibility of being experienced, of being able to become an 'object' in a cognitive judgment. (2) On the other side, this 'experience,' like the object qua 'appearance,' is exhibited (under transcendental analysis) as possessing a certain 'structure,' constituted of three elements: (a) its a posteriori constituent (what Kant also calls its "matter," corresponding to sensation); (b) the spatio-temporal framework; (c) the conceptual (categorial) apparatus, both of which are held to be a priori."
this unity is only brought about by the continuity of the functions of sensibility and understanding, and since this continuity can only be achieved by the various intermediate transcendental functions of the imagination, it follows that the view of the imagination presented here is presupposed by Kantian metaphysics.  

Moreover, there is, I think, good reason for being skeptical of the position that the functions of sensibility and understanding are completely distinct in the sense of always being discontinuous. Let us suppose as true the position opposite to the one advanced here: that the transcendental functions of the faculties can never function continuously, could it still be possible for this set of utterly distinct functions to give rise both to pure knowledge and empirical knowledge? An affirmative answer to this question would presuppose that somehow one of these faculties on its own could give rise to one form of knowledge and another one of these faculties on its own could give rise to the other form of knowledge. But this is clearly not the case. For one of the main tenets of Kant's theory of experience is that knowledge - any kind of knowledge - consists of both intuitions and concepts, and since intuitions are produced by one faculty and concepts by another, then the involvement of both faculties is required to yield any kind of knowledge whatsoever. The reason, of course, is that the

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10 C. Thomas Powell, *Kant's Theory of Self-Consciousness*, p. 64, points out that "for experience to be experience it must be systematic, and that for experience to be systematic it must be represented to be the experience of a unitary continuant subject." What I have tried to demonstrate throughout this study is part of what constitutes "the experience of a unitary continuant subject."

11 Lewis White Beck, "Can Kant's Synthetic Judgments Be Made Analytic?", p. 17, maintains that "no philosopher has emphasized more than Kant the fundamental difference between sense and understanding while at the same time asserting their complementary function." It is my intent in this thesis to describe more fully this complementary function.
production of any kind of knowledge requires the transcendental functions of sensibility and understanding, and these transcendental functions, could not possibly operate together in such a way as to give rise to knowledge unless their functions were mediated by the activity of the imagination;¹² and, as we have seen, the specific manner in which the imagination operates has, as a result, the continuity of the receptive and spontaneous functions of our knowledge in the act of combination.

Now it might still be argued that two faculties could both be involved in the production of one and the same form of knowledge and still be utterly distinct from one another. Again, I do not wish to dispute the view that the faculties of sensibility and understanding are distinct from one another; I only intend to establish that their functions, in the act of combination, are not discontinuous. What I maintain is that the functions of sensibility and understanding are involved with one another in a way that renders their acts continuous when giving rise to knowledge of objects of experience. This view does not in any way imply that the two operate in this way when each is giving rise to its own products - intuitions and concepts. In its capacity to produce intuitions, sensibility is completely self-subsistent; in its capacity to produce concepts, understanding is completely self-subsistent; but in the act of combination that gives rise to knowledge of objects, the functions of these two faculties are rendered continuous.

¹²Eva Schaper reports the constructionalist view that the synthesis of imagination as described by Kant actually molds the sense-manifold in such a manner that its submission to the categorial apprehension of the understanding is thereby ensured. I agree with Schaper's criticism of this view that there is nothing in Kant that necessitates this interpretation, despite the fact that there appears to be much in the text that is compatible with it. Eva Schaper, "Kant's Schematism Reconsidered," p. 276.
As shown in Chapters III and IV above, the various transcendental functions of the imagination manifest varying degrees of receptivity and spontaneity, which renders the faculty of imagination as a whole at one and the same time both receptive and spontaneous. This view of the imagination leads Kant to establish the following:

Now since all our intuition is sensible, the imagination, owing to the subjective condition under which alone it can give to the concepts of understanding a corresponding intuition, belongs to sensibility. But inasmuch as its synthesis is an expression of spontaneity, which is determinative and not, like sense, determinable merely, and which is therefore able to determine sense a priori in respect of its form in accordance with the unity of apperception, imagination is to that extent a faculty which determines the sensibility a priori; and its synthesis of intuitions, conforming as it does to the categories, must be the transcendental synthesis of imagination (B 151-52).

The above passage is very awkwardly stated, mainly due to the order in which Kant presents his ideas. The general assertion that he makes, however, is one that is vital to the coherency of his overall argument in the Deduction and in the Schematism chapter. Never do we get a more fully fledged picture of the imagination as we do in this section of the text, and what Kant says later in the Schematism chapter presupposes this understanding of the nature of the imagination, as he does not repeat these points again in that chapter in the detail that he

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13Susan Neiman, ibid., makes reference to Kant's comparison of his own procedure to that of a chemist "who isolates particular elements in an attempt to exhibit each in a pure state (B xxi; A 842 / B 870; V 291). This metaphor will prove particulary important when it is remembered that much of the chemical analysis of Kant's day was 'rational' rather than 'real': the chemist expected analysis to reveal the composition of mixed bodies but not to isolate elements as concrete substances that he could handle. This procedure served Kant as a model for separating the faculties that contributed to making up experience. Without ever supposing that one might be found operating independently of the others, he could proceed to examine the distinctive contributions made by each in a separation clearly intended to be artificial. " Neiman's point is certainly a relevant one, though this very last notion should be qualified. It is true that we should not suppose that the faculties could operate independently of one another when giving rise to experience, but certainly, they may operate independently of one another when not doing so, i.e., when giving rise merely to concepts or to intuitions.
provides here. What Kant tries to do here is demonstrate the dual nature, as it were, of the imagination by showing how only by its having this dual nature can it perform the fundamental function required for the application of the categories to objects of experience. Specifically, the imagination must in some sense belong to sensibility, or receptivity, but must in another sense belong to understanding, or spontaneity. In so far as it belongs to sensibility, it is determinable; in so far as it belongs to understanding, it is determinative. The question that arises is: in what sense does the imagination "belong" to both the faculty of sensibility and the faculty of understanding? Clearly the language of "belonging" is merely metaphorical, and it is not very clear what Kant intends by this metaphor.

Kant maintains that the imagination "belongs" to sensibility in that sensibility is the subjective condition under which the imagination can provide for the concepts of the understanding an intuition that corresponds to them. Thus imagination may be said to belong to sensibility in so far as it operates in accordance with the subjective conditions of our knowledge. He adds that it may also be said that the imagination "belongs" to understanding for the reason that "its synthesis is an expression of spontaneity," and being so, the imagination may determine sensibility in an a priori manner, according to the categories; in this latter sense, then, the imagination may be said to "belong" to understanding in so far as it operates in accordance with the objective conditions of our knowledge.\footnote{Dieter Henrich, "On the Unity of Subjectivity," p. 29, stresses an important point regarding the notion of "spontaneity." He writes: "The spontaneity of thinking must not be confused with intelligible freedom. For even if consciousness is aware of itself in all its thoughts as the ground of their being thought, it is still possible to imagine that the conditions that bind consciousness to the laws for the production of its own thoughts are not at all different from the conditions that underlie the material appearances in their transcendent substrate (A 358)."}
imagination's dual nature is demonstrated as it has been shown to operate in accordance with both the subjective and the objective conditions of our knowledge, making it, at once, both determinable and determinative. Given this explanation, is it possible to establish a more accurate way of describing the imagination as "belonging" both to sensibility and understanding? I propose that a more informative way to describe the relation in which the imagination stands to sensibility and understanding is continuity. Specifically, this relation ought to be regarded as transcendental continuity. It is transcendental in precisely the sense that Kant uses the term: "not merely as taking place a priori, but also as conditioning the possibility of other a priori knowledge" (B 151). The imagination may be said to render the functions of sensibility and understanding transcendently continuous in the sense that it actually constitutes the middle ground for the operation of the one faculty upon the other, i.e., of understanding on sensibility, to bring about other a priori knowledge. Thus my position views the imagination as "belonging" both to sensibility and understanding in the sense of being continuous with them. I maintain, furthermore, that it is due to this continuous mid-range of activities of the imagination that cognition achieves unity in the fullest sense.

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The relation between sensibility and understanding as presented in Kant’s *Critique of Pure Reason* is expounded on many fronts and in many contexts. In no single part of the text do we get a complete picture of this relation, not even with respect to its most basic features. Thus even a very cursory grasp of this relation can only be had by establishing certain assumptions and testing those assumptions against the various lines of argument that get developed throughout the text. This is precisely the method that I have adopted in this study. The central tenet of Kant’s theory of cognition that I have employed in guiding the assumptions that I bring to the problem under investigation is the set of conditions that Kant holds to be the grounds for the possibility of synthetic a priori knowledge. My aim, therefore, has been to establish what the relation between sensibility and understanding must be in order to render possible synthetic a priori judgments about objects of experience.

The investigation began with an examination of the relation between sensibility and understanding in connection with the problem of schematism - the problem of the heterogeneity between the categories and appearances in the application of the former to the latter. What Kant offers in the way of a solution to the problem that he thinks is operative here is a mediating representation - that of the schema - which renders the application of the categories to intuitions possible by functioning as a mediator between them. When it is asked, however, how it is that the schema can function as mediator between these two elements, the answer that Kant provides is that the schema is a representation of transcendental time determination. It would seem then, that a proper understanding of how the schema can function as mediator in the process of category application rests on an understanding of what transcendental time determination consists in. As has been demonstrated, this is a process that
is carried out by the imagination, the function of the mind that produces schemata. The process that the imagination carries out consists in the a priori synthesis of the manifold of intuition in accordance with the rules of the understanding, which Kant refers to as *combination*. Combination is a type of synthesis that involves *both* the faculty of sensibility and the faculty of understanding, as opposed to just one or the other. For combination is a type of synthesis that brings *unity* to the manifold of intuition, and the unity it brings is that prescribed by the rules of the understanding, i.e., the categories. It is necessary that this unity be provided by the understanding since, as has been shown, sensibility can provide no such unity on its own. The synthesis of the imagination may, therefore, be said to bring about a priori synthetic unity in our representations - which constitutes the ultimate foundation for the possibility of synthetic a priori judgments. It became necessary, therefore, to examine the nature of the imagination in its production of schemata, that is, in its capacity to bring about transcendental time determination, by means of the a priori synthetic unity that it carries out.

In the course of exploring just how the imagination operates, it was discovered that the function of the imagination differs in a significant way from the functions of sensibility and understanding. Firstly, the imagination is not, strictly speaking, a faculty, as are sensibility and understanding. Rather, the imagination functions as a *mediator* between the faculties of sensibility and understanding. As a mediator between faculties the imagination can hardly be a faculty in the same sense as are sensibility and understanding. Thus the question becomes, how are we to understand the mediating function of the imagination? That is, what must the imagination be like in order to mediate between two distinct faculties? The answer
to this question that emerges from the very little that Kant says about the imagination is that
the imagination is able to function as a mediator between sensibility and understanding due to
the fact that the imagination manifests certain features that it shares with sensibility and
certain features that it shares with understanding.

Now given that sensibility is purely receptive and understanding is purely
spontaneous, to say that imagination shares some features with sensibility and some features
with understanding is to say that the imagination manifests some capacity for receptivity and
some capacity for spontaneity. In other words, the imagination manifests some degree of
receptivity and some degree of spontaneity. The imagination is receptive in so far as it
completes the act of receptivity by synthesizing the manifold of intuition and thus preparing
the given representations for concept application; it is spontaneous in so far as it brings this
synthesis to concepts and thereby brings unity to these merely synthesized representations.
These two acts represent the end stages of sensibility and the beginning stages of
understanding; the stages in between are those of schema production - in the transcendental
determination of time. The transcendental determination of time has been shown to consist of
a mid-range of intermediate activities in between the faculties of sensibility and understanding
that integrate the functions of these two faculties. That such mediation is required is
evidenced by the fact that the pure concepts of the understanding, deriving as they do from a
faculty that is purely spontaneous, can not be directly applied to appearances, as empirical
intuitions, since intuitions are derived from a faculty that is purely receptive. The categories
and the appearances to which they are to be applied are, therefore, heterogeneous for this
reason.
It was argued, however, that the heterogeneity is really one concerning the sources of these elements of our knowledge rather than one that concerns the elements themselves. That is to say, the heterogeneity consists in the disparity between these completely distinct faculties - sensibility and understanding - rather than the products of these faculties - intuitions and concepts. The problem only presents itself on the level of the products in an indirect manner. Thus if the heterogeneity problem is to be resolved, it must be resolved on the level of the faculties themselves, and not merely on the level of their products. For the heterogeneity that is posing the obstacle for the application of the categories to appearances is precisely that between pure receptivity and pure spontaneity. In order for the products of these faculties to be related in the manner required for the production of experience, the faculties themselves must be related in a manner that makes the relation between their products possible. For when Kant says that the application of the categories to appearances is rendered possible through the mediating representation of the schema, it must be remembered that the schema itself is a mere product of the imagination. Now if the schema, itself a product of the imagination, mediates between the products of the faculties of sensibility and understanding, then the imagination, itself the source of the schema, must therefore mediate between the sources of those products, i.e., the faculties of sensibility and understanding themselves. Thus the resolution of the heterogeneity problem lies fundamentally in the mediation of the faculties of sensibility and understanding by the imagination.

It was stated that the imagination is able to carry out this mediation by virtue of the fact that it manifests degrees of receptivity and spontaneity, and that this is indicated by its activity of the production of transcendental schemata. For in the production of schemata the
imagination carries out a continuous series of acts that pertain neither to receptivity alone, nor to understanding alone. The reason for this is that the production of transcendental schemata involves the transcendental determination of time, and this has something to do with sensibility, since time is the form of all appearances, and is therefore contained in every particular appearance, and something to do with understanding, since it involves rules that rest on the forms of unity of the understanding. In the process of transcendental time determination, the form of inner sense is determined in accordance with a rule of unity of the understanding. This rule of unity is, of course, the category. Thus in the transcendental determination of time the understanding is being made to operate on sensibility; that which is spontaneous is made to operate on that which is receptive. What this essentially amounts to is the combination of understanding with sensibility. That is to say, as the manifold of intuition becomes unified by the understanding, the function of sensibility, i.e., the receptivity of intuitions, is being combined with the function of understanding, i.e., the synthetic unity of intuitions, which is a spontaneous act. Now since schematism is transcendental time determination, and since transcendental time determination is essentially the combination of sensibility and understanding, if the imagination is the means by which schematism occurs, then the imagination is also that by means of which the combination of sensibility and understanding occurs. In bringing about the combination of sensibility and understanding, the imagination is mediating between these two faculties, in the sense of rendering their functions continuous with one another.

Furthermore, it does not appear that the activity of the imagination occurs all at once. For if it is performing an activity that is both receptive and spontaneous, it is difficult to
understand how it could perform this activity all at once. It seems reasonable to infer, then, that this activity is, rather, carried out in a continuous series of acts - the initial acts of the series manifesting more the receptive activity of sensibility, and the final acts manifesting more the spontaneous activity of understanding. In fact, Kant's discussion of the three-fold synthesis in the A edition, his discussion of the figurative synthesis in the B edition and his account of the axioms, anticipations, analogies and postulates all seem to indicate that this is the case. As the imagination carries out more and more of these acts, it produces schemata that give rise to higher and higher cognitive states. This is possible because each synthesising act that the imagination carries out builds on the previous synthesising act, giving rise not to completely segregated unities, but rather to a fuller and fuller unity - as the object of our knowledge becomes more and more determined. It is not, of course necessary that all the acts in the series are actually carried out, as the process of cognition may be halted at any one of its stages. This explains how it can be that there are two completely distinct faculties of knowledge - sensibility and understanding - whose functions may, nonetheless, be rendered continuous with one another.

The crucial point here is that the functions of sensibility and understanding are not asserted to be continuous all the time, but only in this process of combination, that brings about the production of experience, and only up to the point where the imagination is carrying out its various acts. For only in the act of combination are the functions of receptivity and spontaneity required to become related. At other times, sensibility and understanding are perfectly self-subsistent, for example, in the production of intuitions and concepts alone. Thus the mediating function of the imagination brings about the combination
of sensibility and understanding only in the production of experience, and in our knowledge of a world of objects. Given, then, that the imagination mediates between sensibility and understanding by carrying out a continuous series of acts that results in the combination of the faculties of sensibility and understanding themselves, the schema, which is the product of imagination, may be viewed as mediating between the products of sensibility and understanding - the categories and appearances - by serving as the representation of this continuous series of mediating acts.

We have seen, then, that there is not an irresolvable heterogeneity problem in the application of the categories to appearances. This is not to say, however, that the problem presented in the Schematism chapter is an artificial one. The problem that confronts us at the beginning of the Schematism is genuine in the sense that if an explanation as to how, despite their heterogeneity, the application of the categories to intuitions is possible, could not be provided, then the transcendental philosophy could not be justified. If, on the other hand, an explanation can be provided, then this genuine problem will have been shown to have a genuine solution.

This study has attempted to demonstrate what the relation between sensibility and understanding must be in order to give rise to the synthetic a priori judgments that make experience possible. The issue was examined in connection with the heterogeneity problem presented in the Schematism chapter of the Critique of Pure Reason. While showing how the heterogeneity problem can be resolved, certain features of the relation between sensibility and understanding emerge, one of the most crucial being the continuity of the functions of sensibility and understanding that results from the imagination's act of combination. This
combination of sensibility and understanding is ultimately the means by which unity is achieved in the various processes of cognition that give rise to experience, i.e., that give rise to the possibility of objectively valid synthetic a priori judgements of objects. Thus the unity of experience that is necessary for the possibility of experience consists in the combination of the sources of experience.


---. "How are Concepts of Objects Possible?" *Kant-Studien* 74 (1983): 22-44.


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