RICE UNIVERSITY

THE ANTINOMIES OF RATIONAL COSMOLOGY IN KANT

by

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ABSTRACT

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The transcendental illusions of rational cosmology are a set of four formally valid arguments concerning the origin of the universe, which result in contradictory conclusions. Their existence is of great embarrassment to reason since in the face of such a dilemma it is tempting to abandon reason in favor of scepticism or dogmaticism. Kant attempts to save reason from this fate by giving an account of how the illusions arise in the first place. His account shows that they are founded upon a mistaken assumption, namely that our experience is of the world in itself rather than a transcendently subjective experienced world.

The thesis is an attempt to set out and defend an interpretation of the structure of these illusions. This interpretation is founded upon Kant's account of their origin. The interpretation is firstly that the thesis and antithesis of each illusion represents, respectively, the
finite and infinite alternative of the unconditioned condition of the series of conditioned things. It is by virtue of this that the illusions are antithetical since these two alternatives are mutually exclusive, and thus the arguments contradictory. Secondly, that each antinomy is concerned with a different series of conditioned things and consequently, that the unconditioned condition of each is distinctly different from the other three.

In the exposition of Kant's account of how the illusions of rational cosmology arise, set out in the first two chapters, it becomes apparent that the interpretation of the antinomies argued for is the only one which is consistent with his account of their origin. It is further argued in the final chapter that any other interpretation leads to many problems in the form of internal inconsistencies in the antinomies themselves.
DEDICATION:

FOR MY MOTHER AND FATHER
# TABLE OF CONTENTS

INTRODUCTION .......................................................... 1

CHAPTER

**ONE**  THE NATURE OF REASON AND ITS ILLUSIONS ............... 9

  Div. 1: The Nature of Reason .. 9

  Div. 2: Illusion in the Works .. 19

**TWO**  COSMOLOGICAL ILLUSIONS .................................. 32

  Div. 1: Derivation of the Cosmological Illusions from the Categories of Understanding .... 32

  Div. 2: The Corresponding Illusions as Found in Speculative Metaphysics ............. 44

**THREE**  SOME PROBLEMS WITH THE DYNAMICAL ANTINOMIES ......... 64

  Div. 1: Not Genuine Antinomies? .. 73

  Div. 2: Indistinguishable Antinomies ................. 86

**FOUR**  CONCLUSION .................................................. 103

BIBLIOGRAPHY ......................................................... 111
INTRODUCTION

The transcendental illusions of rational cosmology are a set of four formally valid arguments concerning the origin of the universe, which result in contradictory conclusions. Their existence is something of an embarrassment to reason since it is tempting in the face of such a dilemma either to cling dogmatically to the conclusions of one's preference or to abandon oneself to complete scepticism.

The illusions are manifest in four sets of antinomies to the effect that the world has a beginning in time and a limit to its extension in space; that it has no beginning in time and has infinite extension in space. That the matter of the world is not infinitely divisible but is composed ultimately of simple parts which are themselves indivisible; and that there are no such simples, the matter of the world being infinitely divisible. That the series of causes in the world is finite and has its origin in a first cause which is itself a free causality or an uncaused cause; and that there is no free causality, the series of causes being infinite. That there is a necessary being in which the series of alterations of the states of the world terminate; and that there is no such necessary being, the series of alterations of the states of the world being infinite.
It was these antinomies of rational cosmology which led Immanuel Kant to begin work upon his Critique of Pure Reason. In a letter to Christian Grave, dated September 21, 1789, he says:

It was not from the investigation of the existence of God, of immortality and so on, that I started, but from the antinomy of pure reason; 'the world has a beginning'; it has no beginning'; and so on up to the fourth antinomy: 'man has freedom'—against this 'there is no freedom, everything belongs to natural necessity'. These were what first awoke me from the dogmatic slumbers and drove me to the critique of reason itself in order to end the scandal of reason's ostensible contradiction with itself.

It was Kant's intention to give a full exposition and account of the mechanism whereby human knowledge is acquired, in order that he might later show how the illusions of rational cosmology came about, and in order to save reason from the grip of the sceptics.

The way was open for him to achieve his aim when he realized that a possible solution to those conflicts could be offered by the recognition of the transcendental subjectivity of space and time, and of the categories of understanding. It was this recognition which has been called Kant's Copernican revolution. Recognition of this transcendental subjectivity means that a distinction has to be made between our judgments or experience of the world, and the world in
itself independent of our experience. We apprehend the world in the a priori forms of pure intuition, namely, space and time, and through the categories of understanding; consequently, we cannot know whether our judgments and knowledge of the world are valid for the world in itself, independent of our experience of it.

Kant maintained that the judgments of the understanding form the sole content upon which inferential reasoning operates. It follows, then, that since we cannot guarantee the objective validity of our judgments about the world in itself, neither can we guarantee the objective validity of the conclusions of our inferences among these judgments. This is not to say that the inferences of reason would not be valid if applied to things in themselves; they most certainly would; but rather, that since we are limited to applying them only to our experience of the world, they are for us only valid when applied within the realm of that experience. Our inferences of reason, then, are made according to rules which do not objectively determine real relations between things in themselves. For example, we can correctly conclude from the existence of something conditioned to the existence of a condition of it, if that condition is or can be given in experience; however, we cannot conclude from the existence of something conditioned in experience to the existence of an unconditioned condition of it. For something unconditioned cannot in principle be given in experience. It must be
independent of our experience, and consequently, it cannot be inferred from something in our experience. This would in fact be an illegitimate inference from the realm of our experience to the realm of things in themselves which we cannot in principle have experience of. In the same way, we cannot conclude from the existence of the world in space and time to an unconditioned condition of its existence, for example, to its finite or infinite existence in time, or its finite or infinite extension in space. Kant thinks that the conflict of reason as to whether the world has a beginning or is infinite can be shown to be an illusion arising from the attempt to apply the rules of inference to the judgments about experience in order to derive judgments about things which are independent of our experience.

At first, Kant considered publishing a popular work entitled "Antinomy of Pure Reason" in which he would first give "the reader a desire to get at the source of this controversy" (Letter to Herz, dated May 11, 1781) in reason, and would then proceed to explain how the contradictions came about. However, since "the school's right must first be served" (Letter to Herz, dated May 11, 1781), he chose instead to lay down the foundations of knowledge in the Critique. Here he showed the transcendentally subjective nature of the a priori forms of pure intuition, and in the same manner, the transcendentally subjective nature of the categories of understanding according to which all our
intuitions are ordered as judgments of experience. This having been done, it was then only a relatively simple task to show that mistaking space and time (and the categories of the understanding which present things to us as quantities or qualities in space and time) for objective forms in the world, independent of our experience, would lead to conflicts as to whether the series of things given in space and time were finite or infinite. These are the conflicts which we find in the mathematical antinomies. In the same way, mistaking the categories of understanding for an objective order and unity in the world itself would lead to the conflict of whether given conditioned series in the world were infinite, or whether they had beginnings in first members. These are the conflicts we find in the dynamical antinomies.

But, of course, mistaking the transcendental subjectivity of space and time and the categories for objectivity in the world itself does not explain why we should be interested in whether the series of conditions of something conditioned has a beginning or is infinite. To explain this, Kant must, at the beginning of the Dialectic, examine pure reason itself. This he does, and shows that we are led to seek for the unconditioned condition of any given series of conditions by the very nature of our reason. Hence, the impetus for constructing the illusions of rational cosmology lie in the very nature of reason itself, while the source of the illusions themselves lies in our applying the rules of
reason to judgments of the understanding as if they were judgments about things in themselves.

In this thesis, I am concerned with giving a clear account of the subject matter of the antinomies of rational cosmology, specifically the dynamical antinomies, and with defending the coherence of the system of these antinomies as set forth by Kant against two main attacks made upon them by Professor Strawson in his book, *The Bounds of Sense*. To this end, I devote the first two chapters to an account of the origin of transcendental illusion in general and to the particular source of the transcendental illusions of rational cosmology. In Chapter One, I give an exposition of Kant's analysis of the normal functioning of our reason, showing how, in an attempt to secure unity among the judgments of understanding, it unites them under principles via syllogistic inferences. This process involves seeking for the totality of conditions of the truth of the judgment to be inferred, and so ultimately sends us on a search for its unconditioned condition. There is no reason why we should believe there to be anything in reality corresponding to the idea of the unconditioned condition in reason save that, as I have pointed out above, we mistake our judgments about our experience of the world for objective facts about the world in itself independent of our experience of it. We believe, then, that inferences of reason are made from objective judgments about the state of the world in itself, and so
conclude that if the conditioned is given, the whole series of conditions up to the unconditioned must also be given.

In Chapter Two, I look at Kant's treatment of the problem of how, given that we believe that there is an unconditioned condition for every series of conditions, we proceed to construct in the understanding a suitable concept of the unconditioned to correspond to this Idea of Reason. This is problematic since the understanding, which is the sole source of all concepts, can, by its very nature, only produce concepts of the conditioned. It is then seen that since we cannot produce a suitable concept from experience, we extend the pure category of understanding itself to the unconditioned and thereby construct the required concept, either as an unconditioned first member of the series, or as the totality of the series which is itself unconditioned. I will refer to these alternatives respectively as the finite and infinite alternatives of the unconditioned.

In the remainder of Chapter Two, I isolate the type of categories which are suitable for such an extension and then set forth the four sets of antinomies in which they result.

In Chapter Three, I consider Strawson's objections that, indeed, the third and fourth antinomies are not true antinomies at all, since both the infinite and finite alternatives are contained in the thesis, which is, therefore, false, and the antithesis is a reiteration of the second
analogy and therefore true. I am also concerned with his objections that the third and fourth antinomies do not, in fact, represent distinct antinomies, but are the same, save that in the third, we are looking for an unconditioned which is the sufficient condition of the series of causes, and in the fourth we are looking for its necessary condition. My intention in this chapter is to show, by reference to the origin of the dynamical antinomies as outlined in the first two chapters and by independent argument, that both of these objections are unfounded.
CHAPTER ONE
THE NATURE OF REASON AND ITS ILLUSIONS

Division 1: The Nature of Reason

In the second half of the Critique of Pure Reason, the "Transcendental Dialectic," Kant hopes to expose the logic of illusion. That is, he hopes to show that the very nature of human reason leads to certain illusions with regard to human knowledge. Since these illusions emerge as part and parcel of the nature of reason itself, it follows that like reason, they will exhibit a logical structure which may be unfolded by an analysis of reason. The uncovering of the illusions will not prevent us from being further deceived by them, any more than the realization that the moon's size is constant both at its rising and at noon can prevent us from seeing it as larger at its rising. The illusions are embedded in the very nature of the workings of our reasoning—to avoid them would require us to dispense with human reason altogether. Kant begins his attempt at exposing the nature of transcendental illusion by analyzing the nature of its source, that is, the nature of human reason. He attempts to do this following generally the procedure of the analysis of the understanding in the Analytic. He hopes to show us exactly how we are led into the illusions of speculative
metaphysics.

In the "Transcendental Analytic," Kant exhibited the type of order or unity which must be found to exist in the manifold of experience, if that experience—and hence our knowledge of the world—is to be possible. That is to say, one of his main aims in the Analytic was to show that the manifold of all experience displays a synthetic unity which alone makes possible our empirical knowledge of the world. On analysis, Kant found that the synthetic unity necessary to experience exhibited twelve modes of synthesis. These twelve modes are captured in the categories or pure concepts of understanding. The synthesizing of our impressions according to the categories results in judgments or empirical knowledge. Hence, the understanding is the source of our judgments and of our knowledge of the world. However, so far, the given logical mechanism will only produce individual and unconnected judgments or pieces of empirical knowledge about the world. Yet there is an order and connectedness found among our judgments, as is exhibited by the way we infer judgments from other, not immediately connected, judgements. An explanation yet remains to be given, therefore, for the unity and coherence exhibited by the body of our knowledge which it does not receive from the understanding wherein those judgments originate.

In the same way that the manifold of experience would lack coherence were it not unified by the categories of
understanding, the knowledge and judgments of the understand-
ing would lack unity were they not unified according to the
(principles) concepts of reasons. As Kant says:

Understanding may be regarded as a faculty
which secures the unity of appearances by
means of rules, and reason as being the
faculty which secures the unity of the
rules of understanding under principles.
Accordingly, reason never applies itself
directly to experience or to any object,
but to understanding, in order to give the
manifold knowledge of the latter an a
priori unity by means of concepts, a unity
which may be called the unity of reason
and which is quite different in kind from
any unity that can be accomplished by
the understanding (B359).

Thus, the function of reason is to secure unity among the
judgments of the understanding and this is done by uniting
them "under principles." The term "principle," Kant observes
(B357), can be used to refer to any piece of knowledge which
is used as a major premise in a syllogism regardless of the
origin of that piece of knowledge. However, any piece of
knowledge which is so employed, but which has not been derived
from concepts, but rather from experience through induction
or intuition, is not in itself a genuine principle, but is
only so relative to other judgments which can be subsumed
under it. It is not a genuine principle or a principle in
itself, since it is not knowledge derived from concepts. A
genuine principle, on the other hand, is not only able to
serve as a major premise in a syllogism, but is also a
judgment which is derived from a universal through concepts alone. It is inferred from a given concept or the concepts contained in a prior judgment and thus is established other than by empirical intuition--that is to say, it is established by inference. The distinction, then, rests on the origin of the given judgment; if it has been inferred from another judgment through concepts, it qualifies as a genuine principle; if, on the other hand, it has been induced from empirical intuitions, it is only a principle in employment and relative to the judgments subsumed under it.

Now reason strives to unite judgments of the understanding under principles in the former sense of the word. This task is performed by reason when it takes a given judgment of the understanding, for example. "All men are mortal," and then seeks out from the understanding a further judgment which contains a concept such that everything which is subsumed under that concept as under a condition, is known from the concept. In other words, it seeks for a further judgment in the understanding which contains a concept from which the truth of the initial judgment under consideration, namely, "men are mortal," may be inferred. The concept under which the initial judgment is subsumed will, of course, itself be a universal induced from experience on behalf of the understanding--that is to say, it will not at this stage be a genuine principle. The inferred
judgment "men are mortal" will now be a principle, since it has been inferred through concepts from the further judgment "animals are mortal"; but the aim of reason is to unite the judgments of the understanding under principles, thus reason must now seek out a further judgment from which it can infer the judgment "animals are mortal" before the judgment "men are mortal" can be said to be subsumed under a principle.

One can see from this that the procedure according to which reason will secure unity among the judgments of the understanding will be by subsuming a given judgment under a concept, as under a condition, such that the judgment in question can be inferred from the judgment containing the required concept. The concept will be a universal, since particulars can be inferred from it. Thus, once the judgment which contains the universal concept has itself been established as a principle, all the particular judgments which can be inferred from it will in fact be unified under it; that is, be unified under a principle. We can see then that for reason to unite any set of judgments of the understanding under principles it must first discover in the understanding a judgment from which the set of judgments can be inferred. It must then proceed to infer this judgment from yet another in order to establish it as a principle, and subsequently, the set of judgments which it has inferred from the judgment recently established as a principle, are in fact united under a principle. Since reason strives to unite all the judgments
of the understanding under principles, the judgment from which our judgment which was thereby established as a principle was inferred, will itself become a candidate for being inferred from yet another judgment. Thus, the process whereby reason attempts to unify judgments of the understanding under principles is repeated in such a way that the judgment from which the initial judgment was established by inference, must now itself be established by inference from concepts contained in yet another judgment of the understanding.

From this we see that in inference reason endeavors to reduce the varied and manifold knowledge obtained through the understanding to the smallest number of principles (universal conditions) and thereby to achieve in it the highest possible unity (A305).

Now, with regard to the inference of reason, a distinction must be made between something which is immediately known and something which is inferred by reason. If a judgment is derived from another judgment without the mediation of a third judgment, then there has been an immediate inference of it from the first judgment. Kant names this type of inference an inference of the understanding. However, if in the inferring of the first judgment from the second, a third mediating judgment is required, we are dealing with a case of an inference of reason.

In the former case, the judgment is derived from the
preceeding judgment by analyzing the content of that first judgment. The judgment which is inferred is already contained within the content of the first judgment and hence can be immediately inferred from it. When I infer that "some men are mortal" from the judgment "All men are mortal," I have made an immediate inference since it is clearly the case that the judgment "some men are mortal" is contained within the judgment "All men are mortal." No act of reason is necessary to produce the inferred judgment in this case, since it is merely the result of an analysis of the first judgment. Consequently, this kind of inference can be made by the understanding itself without the aid of reason, thus making it an inference of the understanding. However, when from the same first judgment "All men are mortal" I infer that "learned beings are mortal," I have not made an immediate inference since the second judgment is not contained in the first, nor can it be derived from it by analysis. Hence, the understanding alone could not produce the inferred judgment in this case. Here a third and mediating judgment was required, namely "learned beings are men" before the inference "learned beings are mortal" could be made. This judgment, then, is a product of the inference of reason, namely an inference according to a syllogistic form.

Now,

In every syllogism I first think a rule
(the major premise) through the understanding. Secondly, I subsume something known under the condition of the rule by means of a judgment (the minor premise). Finally, what is thereby known I determine through the predicate of the rule and so a priori through reason (the conclusion). The relation, therefore, which the major premise as the rule, represents between what is known and its conclusion, is the ground of the different kinds of syllogism. Consequently, syllogisms like judgments are of three kinds, they express the relations of what is known; they are either categorical, hypothetical, or disjunctive (B361).

In other words, the relation which exists between the minor premise and the conclusion is expressed in the major premise, since the relation of its terms to one another determines what the conclusion from the minor premise will be. But the major premise is a judgment of the understanding and as such must employ one category from each of the four modes of categories. Thus, one of the four modes so employed will be that of the relational—which Kant previously metaphysically deduced from one of the logical forms of judgment, namely the relational form of judgment. Hence, the relation expressed in the judgment of the major premise can only be one of three kinds, namely the categorical, the hypothetical, or the disjunctive. And, since the relation expressed in the major premise determines the relation between the minor premise and the conclusion, there can only be three possible kinds of syllogism or inferences of reason, namely the categorical, the hypothetical, and the disjunctive. Thus, it
follows that the attempt to unify the judgments of the understanding under principles by means of the inference of reason can take place only according to these three modes of inferences or syllogisms. Furthermore, as has already been indicated, the rule or major premise from which the principle or conclusion is inferred will itself become a candidate for being inferred from another rule or major premise in order that unity among the judgments of understanding may be increased and in order to ensure that the judgments initially united under it are united under a principle, since it is only unity under principles that reason is concerned with,

The principle of reason to unify knowledge is not an objective law for objects or things in themselves, but is a law for the ordering or unifying of the judgments of the understanding and which is therefore valid only for appearances. Accordingly, reason does not itself operate with intuitions or concern itself with imposing unity on possible experience (which is the job of the understanding through its concepts), rather, it concerns itself solely with the judgments which are the product of the understandings dealings with the manifold of experience via the categories. And reason, as has been pointed out, seeks to unite these judgments under principles by inferring them from the concepts contained in other judgments (a rule) under which they
are subsumed as under a condition. However, the rule itself is subject to the same requirements (i.e., to be subsumed under yet another rule which is its condition) if the judgments inferred from it are to be united under a principle. Hence, the condition of the condition must be sought by means of a prosyllogism, that is, an ascending series of syllogisms in which the major premise of one must become the conclusion of another prior to it. And since there are three kinds of syllogism, it will follow that there will be three series of prosyllogisms corresponding to the categorical, hypothetical and disjunctive syllogism. Thus, it follows that reason's attempt to unify the conditioned knowledge given by the understanding, under principles, is in fact an attempt to infer as many of the judgments of the understanding as is possible from one judgment which is itself a principle. Reason itself is neither the source nor producer of concepts or judgments, therefore, in its attempt to unify our knowledge, it will be constantly seeking from the understanding a judgment which will act as a principle from which yet larger numbers of subsumed judgments may be inferred, and it will seek such a principle for each of the three modes of syllogistic inference. The outcome of reason's efforts will be a constant growth in the order and unity found among the judgments of the understanding.
Division 2: Illusion in the Works

In the previous division, we saw that the judgments of the understanding were unified by reason under principles. Now in the same way that the concepts or categories of understanding were found to be the source of the synthetic unity of the manifold of intuition which is a necessary condition of our having empirical knowledge of objects, we may presume, Kant suggests, that there are concepts of reason according to which the judgments of the understanding are unified. We may call these concepts "pure concepts of reason," or "transcendental ideas." But,

No objective deduction such as we have been able to give of the categories is strictly speaking possible in the case of these transcendental ideas. Just because they are only ideas, they have in fact no relation to any object that could be given as coinciding with them (B393-A336).

The nature of our reason, as we have seen in the last division, is to unite the knowledge or judgments of the understanding under principles, that is, to unite them through a series of syllogistic inferences whereby, through one of the three modes of inference, we infer some judgments from others. Now in any syllogistic inference, we restrict, in the conclusion, a given predicate to a particular object; while in the major premise we consider the same predicate in the whole extension of a given concept, i.e., a concept which
is the condition of the object in the conclusion. Thus, whereas in the conclusion the predicate "X" is ascribed to A, in the major premise it is ascribed to all B's, where B is a concept which contains the condition under which X is ascribed to A in the conclusion. The major premise is therefore a universal judgment and as such contains the totality of conditions for the truth of the conclusion, since in it the predicate has been ascribed to a concept which is the condition of the subject in the conclusion, and furthermore, it has been ascribed to the totality or "Allness" of that concept. Thus, the concept of reason according to which the judgments of the understanding are unified under principles is the concept of the totality of conditions for anything which is given as conditioned. But the totality of conditions for anything conditioned is in fact ultimately the unconditioned, since the judgment of the major premise in the syllogism will itself be conditioned (being a judgment of the understanding) and its condition will also be a condition of the conclusion in the syllogism. We may conclude then that the concept of reason, or the concept according to which the judgments of the understanding are unified under principles through syllogistic inference, is the unconditioned condition of any given conditioned. What this amounts to saying is that reason unifies the judgments of the understanding under principles by syllogistic inferences; and that the major
premise of any syllogism must contain the totality of conditions for the truth of the conclusion, since if this were not the case the conclusion could not be derived, via inference, solely from it. Hence, we say that reason attempts to unify the conditioned judgments of the understanding under their unconditioned condition. This is the principle under which the unity of reason takes place and thus we can say in general that the concept of pure reason is the concept of the unconditioned.

Since the totality of conditions, or the unconditioned condition, is always sought in the major premise, and since the major premise is always a judgment of the understanding, it follows that the unity of reason will take place under three types of unconditioned conditions; one corresponding to each type of judgment which can be found in the major premise of a syllogism which number is in fact determined, as has been demonstrated in the first division of this chapter, by the number of relational categories in the understanding. In reason, therefore, we seek to unite the conditioned judgments of the understanding under an unconditioned condition in the categorical synthesis of a subject; an unconditioned condition in the hypothetical synthesis of the members of a series, and an unconditioned condition in the disjunctive synthesis of the parts in a system. And, since the number of kinds of syllogism is also determined by
the number of relational categories in the understanding, it follows that there will be the same number of kinds of syllogisms as there are concepts of pure reason, each of which will advance

. . .through prosyllogisms to the unconditioned, first to the subject which is never itself a predicate; secondly, to the presupposition which itself presupposes nothing further; thirdly, to such an aggregate of the members of the division of a concept as requires nothing further to complete the division (8380).

A clearer picture of the whole function of reason now begins to emerge. We noted that there was a certain unity to the body of knowledge provided by the understanding, which could not have emerged from the understanding itself, given its constitution. This unity consisted in the way certain judgments or groups of judgments of the understanding were seen as contained within or unified under another judgment despite the fact that the immediate inference or inference of understanding was possible as an explanation of this unity. Instead, the unity in question was achieved by a mediated inference; that is, by an inference of reason, or a syllogistic inference of which it has been shown that there are three modes corresponding to and determined by the three types of relational categories employed in the judgments of the major premise of the syllogism.

Now, since the major premise is itself a judgment of
the understanding, we can also seek to unify it under yet another judgment of the understanding; that is, we can seek to make it the conclusion of yet another syllogistic inference, and so on, for every major premise of each of the three types of syllogisms. This will lead to three series of prosyllogisms, one for each type of syllogism in which the major premise of each will become a conclusion of another. Since in each of these series many judgments will be inferred from the same major premise, and many different major premises will, as conclusions, be likewise inferred from a common major premise, the overall unity in the body of our knowledge will be increased. The common major premise of the various conclusions which themselves are the major premises from which groups of judgments are inferred will also be the common major premise in the prosyllogism from which all the subsequent or subsumed judgments will be derived via syllogistic inference, thus there is an increase in the number of judgments which have been established by inference from one principle; this reduces the number of principles from which, or under which, the judgments of the understanding are unified by inferences of reason, and hence increases the unity found in the body of knowledge in general.

Now in each individual syllogism in the three series of prosyllogisms, the condition which makes possible the inference of the judgment of the conclusion from the judgment of the major premise, is the fact that the latter contains
the totality of conditions for the truth of the former, and if this were not the case the inference could not take place. Thus, the concept or rule under which reason unites the conditioned judgments of the understanding is that of the unconditioned. And, since there are three kinds of syllogism, there will be a concept of the unconditioned corresponding to each. The three concepts of reason are, therefore, the concepts of the unconditioned in the categorical, the hypothetical, and the disjunctive synthesis. These concepts are rules according to which the judgments of the understanding are unified under principles when we employ the inference of reason.

We now know that the three concepts of reason are the concepts of the unconditioned in the categorical synthesis, the unconditioned in the hypothetical synthesis, and the unconditioned in the disjunctive synthesis. The next step is to inquire into the status of these concepts--are they just ideas or can we discover unconditioned conditions corresponding to these concepts? To begin with, it must be remembered that reason concerns itself exclusively with the judgments of the understanding and does not itself ever relate directly to reality or the manifold of intuitions. Reason itself can generate no concepts but is dependent upon the understanding in this respect. Therefore, reason's whole contact with reality, or the empirical world is mediated
through the understanding. Hence, it will be among the judgments of the understanding that we will find the unconditioned conditions of the conditioned, if it is to be found at all. But all knowledge gained in the understanding is conditioned, since it is given through the a priori forms of all experience, namely space and time. Thus, we are destined from the start not to be able to produce judgments or have empirical knowledge of a reality corresponding to the concepts of reason. In other words, the reality of the concepts of reason cannot be discovered in experience, and consequently, the three concepts of reason are in fact transcendental ideas, the reality of which we can in principle never discover in experience. In this sense, the concepts of reason are only ideas, having no ground in reality for us, but at the same time they are not merely speculative constructions on our part; rather, they are ideas which originate in the very nature of our reason and which are essential to us for the unity of our knowledge as gained in the understanding. The unifying of the judgments of the understanding under principles takes place through syllogistic inferences, or the inferences of reason. But a syllogistic inference is an inference of a conclusion from the totality of its conditions through concepts, and the totality of the conditions of anything is its unconditioned condition. Thus, the transcendental ideas of reason, despite the fact that they are only
ideas, are yet indispensable, since it is through them that the unifying of our knowledge under principles is possible. It is clear that the concepts of reason do not extend the knowledge of the understanding, since in fact no concepts of knowledge ever originate in reason, but they do guide the understanding as to the direction it should take in producing its judgments; that is to say, the concepts of reason guide us as to the type of judgments which we require from our understanding, in order to ensure its more consistent and coherent employment, i.e., in order to ensure greater unity and coherence in our knowledge.

However, what we are here left with is a constant tension between the function of reason and the function of our understanding. Our reason, by its very nature, operates according to concepts of the unconditioned, while the understanding, by its very nature, is unequipped to produce such a judgment or concept, since it can only operate within the realm of experience, which is given through the \textit{a priori} forms of space and time, and which is, therefore, always given as conditioned. Thus, the rules for the employment of reason and, therefore, for the unity of knowledge, are constantly diverging from the rules of the understanding for the production of judgments and concepts. But the rules or concepts of reason are subjective laws for the ordering or unifying of the judgments of the understanding; that is to say, they
are rules for the type of connection that should take place between actual or possible judgments of the understanding; they are not objective laws for objects or things in the world. The reason for this, of course, is not that the rules of logical inference or reason are somehow sloppy and could not validly be applied to things in themselves, rather, it follows from the fact that the judgments of the understanding are themselves given in the transcendentally subjective ordering of the categories of understanding. Thus, one cannot claim that what is true of something in experience is likewise true of it in itself, independent of our experience of it. But from this it follows that neither can we claim that the inferences which we make between things given in experience, i.e., judgments of the understanding, also hold between those things in themselves independent of our experience of them. Thus, the rules of reason are not laws to the effect that a certain order, unity, or connectedness must be found, or is to be found among objects in themselves. However, for us the distinction between what is true of objects in themselves and what is true of our judgments about the world is not always clear; and consequently, we, and especially speculative metaphysicians, mistake these laws about appearances or judgments of the understanding for laws about things in themselves. Thus, mistaking the subjective necessity of connectedness or unity among the judgments of
the understanding, for an objective necessity in the determination of things in themselves, we are led into transcendental illusion, where the understanding breaks its legitimate bonds of experience and produces judgments which contain concepts which have no objective ground in reality since they have not been formed from the manifold of intuition—in other words, the understanding produces concepts which have not, and in principle could not, originate in experience. These concepts and the judgments which contain them are therefore illegitimate and any inferences made from them are either false, or at best highly speculative and in principle unverifiable.

Now, since there are three transcendental ideas or ideas of an unconditioned condition, it follows that there can only be three types of transcendental illusions, or cases where we illegitimately manufacture concepts in the understanding corresponding to the ideas of reason. Since the concepts of reason or the transcendental ideas were in fact concepts of the unconditioned in the categorical, hypothetical and disjunctive synthesis, it follows that we will seek for the unconditioned condition of categorical judgments, hypothetical judgments and disjunctive judgments. In the first case we will be looking for the unconditioned condition of the subject of the judgment, since the form of any categorical judgment is 'S is P'. In the second case
we will look for the unconditioned condition of the series of conditions of something in appearances, since the form of a hypothetical judgment is 'if A then B.' In the last case we will look for the unconditioned condition of all objects in appearances, since the form of a disjunctive judgment is A or B. The three types of transcendental illusions will then take the form of an unconditioned (absolute) unity of a subject which leads to the illusions of rational psychology, an unconditioned unity of the series of conditions of appearances in the world, which leads to the illusions of rational cosmology; and an unconditioned unity of the connection of all objects of thought in general, which leads to the transcendental illusions of theology. Now, of course, this does not mean that there are only three transcendental illusions to be found in speculative metaphysics; what has been shown here is that since all rational thought (i.e., inferences of reason) is in only one of the three names forms, it follows that all rational illusions which spring from the very nature of rational thought, must likewise occur in one of these three forms. That is to say, the form that all transcendental illusions of speculative metaphysics must take has been given, but not the content of those illusions. It yet remains to be explained in the second chapter how the particular illusions of speculative metaphysics come about.

In the present chapter we have seen that if we
mistakenly assume that the subjective laws of the necessity of connection between judgments of the understanding are objective laws in the determination of things in themselves, then we must conclude that for any given conditioned judgment there must be an unconditioned condition. In truth, of course, there would only be an unconditioned condition of the conditioned judgment if we already had, or could in principle produce through the understanding, another judgment satisfying that condition. For, as long as we do not actually possess such a judgment, as a judgment of the understanding, we have no right to assume that there must be one; that is, we have no right to infer from the existence of a conditioned judgment its unconditioned condition.

We further saw that having made this mistake, we proceed to seek for a major premise, through a series of prosyllogisms which is the unconditioned condition of the given judgment and from which we can, therefore, unconditionally infer it. It was shown that there are only three forms of syllogistic inference which we can employ in this task, and since the type of judgment (i.e., categorical, hypothetical or disjunctive) in the major premise determines the form of the syllogism in which it occurs, it follows that, depending upon which form we use to make our inference, we will be seeking for an unconditioned judgment in the categorical, hypothetical, or disjunctive synthesis. Accordingly, the transcendental illusions of speculative metaphysics
will be made up of three types of judgments, those which contain concepts of an unconditioned unity of the series of conditions of appearances, and those which contain concepts of an unconditioned unity of the condition of all objects of thought in general. These illusions will be respectively: the transcendental illusions of rational psychology, cosmology and theology.

In the remainder of this thesis I will be concerned only with the transcendental illusions of rational cosmology which, as will be seen, turn out to be four sets of contradictory judgments about the world.

It was shown in this chapter that the understanding, under the influence of reason, produces concepts which do not and could not originate in experience. It has yet to be shown how the understanding can produce such concepts since its whole function is none other than the ordering and unifying of our experience under categories. This will be the topic of the next chapter, but since I am only concerned with the transcendental illusions of rational cosmology, the next chapter will concern the origin in the understanding of these transcendental concepts alone.
CHAPTER TWO

COSMOLOGICAL ILLUSIONS

Division 1: The Derivation of the Cosmological Illusions
From the Categories of Understanding

It has been observed in the last chapter that no concepts are generated through reason itself; through reason we merely make inferences from the concepts and judgments which have already been provided by the understanding, and that includes transcendental concepts. However, the understanding by itself could not produce these transcendental concepts, since, left to itself, it would continue to operate within the bounds of experience and thus to restrict its judgments to conditioned judgments. However, having mistaken the laws of reason concerning the necessity of connectedness between judgments of the understanding for laws concerning the determination of things in themselves, we believe that for every conditioned judgment there must be (through the appropriate series of prosyllogisms) an unconditioned condition. And, since all judgments or concepts originate in the understanding, it is here that we will search for a concept, and the judgment which contains it, of the unconditioned condition of a given judgment. But, of course, the understanding in its normal functioning cannot produce such a judgment; consequently, it is only by freeing the understanding from its
legitimate bounds of experience that we can ever produce the concept and judgment in question. That is to say, we form the concept and judgment only by by-passing experience or the manifold of intuition, and concentrating solely upon the idea or the category of the understanding itself. Thus, for example, we take the category of causality, isolate it from the manifold of intuition, and extend the mere idea of causality with which we are left, to the unconditioned. We thus produce the concept of an unconditioned cause or an un-caused cause, which is of course an illegitimate concept, since it is devoid of all experience or manifold of intuition. It now becomes clear that the transcendental illusions of reason, or more correctly, the concepts contained in the judgments which make up those illusions, are no more than categories of the understanding extended to the unconditioned. Thus, the source of each transcendental idea or concept is to be found among the categories themselves. But of course not all categories may be suitable for this type of extension, and furthermore, since we are here dealing only with the transcendental illusions of rational cosmology, not all categories which are suitable for extension to the unconditioned will also be suitable candidates for becoming transcendental ideas of rational cosmology. In the first place, only those categories which present reality to us as conditioned will qualify as candidates for being extended to the unconditioned.
For we would have no impetus to extend a category to the unconditioned which did not present reality to us as a conditioned. The only reason we extend the category to the unconditioned in the first place is to produce the ultimate condition of a given conditioned judgment, that is, to produce its unconditioned condition.

But of those categories which will qualify as suitable candidates to be extended to the unconditioned, only a further subgroup will also qualify as suitable candidates for becoming transcendental concepts or ideas of rational cosmology. It was shown in the second division of Chapter One that the illusions of rational cosmology are those which are presented in the form of hypothetical judgments, and in a series of hypothetical syllogisms, each conditioned is given as having arisen out of a series of conditions (i.e., if A--B, and if B--C, then A--C. If A--C, and if C--X, then A--X, etc.). Hence, the concepts which form the judgments which make up the transcendental illusions of rational cosmology will be concepts of the unconditioned of the series of conditions of any given conditioned in appearance. Consequently, only those categories of understanding which present empirical reality to us as unconditioned, and which present it to us as constituting a series of conditions from which at each stage, the given conditioned has been generated, will qualify for being transformed into transcendental ideas of
rational cosmology. Thus, Kant says that only those categories will qualify

\[ \text{. . .in which the synthesis constitutes a series of conditions subordinate to, not co-ordinate with one another, and generative of a given conditioned (A 410=B 437).} \]

It now emerges that our next task is to isolate out of the table of categories presented in the Analytic, all those categories of understanding which present empirical reality to us as conditioned and as generated by a series of conditions.

In the Table of Categories (A 80 = B 106), we have, under the first heading, "Quantity," the categories of unity, plurality and totality. Now, each of these is in fact, number or quantities of things; unity is the representation of something as a single unit; plurality, several of those units (i.e., more than one), and totality, the complete whole of all those given. And each of the representations given in these categories of unity, plurality and totality, as representations of quantity, will be given in the original quanta of all our intuition, namely space and time. Now, time itself is a series, and in it each moment is conditioned by the moment before it, namely by past time, since it is through the passing of preceding time that each moment comes into existence. Thus, for every given moment, we can seek through the series of its conditions for the unconditioned. Likewise,
every quantity given in time is conditioned by that quantity's existence in a preceding moment, since it is through the temporal passing away of that quantity's existence in the previous moment that makes its existence in the present moment possible. Thus, for every quantity given in time, we can seek through the series of its conditions for its unconditioned condition. Unlike time, space is not itself a successive series, but is co-ordinate or contemporaneous with every other part of space--thus, one part of space is not the condition of the possibility of another. As Kant says at A412/B439,

But as the parts of space are co-ordinated with, not subordinated to, one another, one part is not the condition of the possibility of another; and unlike time, space does not in itself constitute a series.

However, the synthesis of the manifold parts of space is, for us, successive, and thus temporal and containing a series. In this series, the spaces which are thought of in extension of any given space are the limits of that space and, thus, its conditions. Thus, each space, insofar as it is limited (and all spaces are given as limited by the spaces in Space), is also conditioned in that it presupposes another space as the condition of its limits. Hence, space also exhibits for us a regressive series, in that each space is conditioned by its limits, namely other spaces in extension of it, which, in
turn, are also conditioned, and so on. Thus, in space, as in time, I can seek through the series of conditions for its unconditioned condition. In the same way, every quantity given in space is conditioned by the limits of its spacial existence, and we can in the same manner seek through the series of its conditions for its unconditioned condition.

Clearly, then, the categories of unity, plurality and totality, as categories of quantity, will lead to a transcendental illusion of rational cosmology since we can, with regard to all quantity, seek for the totality of its conditions (its unconditioned condition) in time and space. Now, of course, the totality of the conditions of all quantity in time and space will be the totality of the conditions of all appearances in time and space, since all quantity in time and space is given as appearance. And the totality of all appearances just is the world (the universe). Thus, the first transcendental illusion of rational cosmology will concern the unconditioned existence of the world in space and time.

The second heading in the Table of Categories given in the Analytic is that of "Quality," under which are found the categories of reality, negation, and limitation. Now, clearly negation or not-being does not either in space or time present reality to us as conditioned, or as containing a series generative of a given conditioned. In the same way,
limitation does not itself present anything to us as conditioned, since it is only the relation in time between negation and reality. This leaves us with reality itself; but reality in time alone does not present objects to us as conditioned and as generated by a series of conditions, for in any series of sounds, for example, a given sound will not be conditioned by the series of sounds preceding it, but will be indifferent to it. However, reality in space (and time), namely matter, is given as a conditioned generated by the series of its conditions.

Its internal conditions are its parts, and the parts of these parts its remote conditions. Thus there occurs a regressive synthesis, the absolute totality of which is demanded by reason. This can be obtained only by a complete division in virtue of which the reality of matter vanishes either into nothing or into what is no longer matter—namely, the simple (A 414=B 441).

Hence, Quality, through the category of reality (in space), is given to us as conditioned. That is to say, reality in space, or matter, is given to us as conditioned by its parts, and these parts as conditioned by their parts, and so on, from which series the given conditioned is generated. Thus, the second transcendental illusion of rational cosmology will concern the unconditioned condition of the division of matter into its constituent parts.

The third heading in the Table of Categories is that
of "Relation," under which we have the categories of substance, causality and community. Now, substance does not exist in, but subsists through, the series of appearances and, consequently, it can give reason no cause to seek for its conditions (it is only the unconditioned of a given conditioned, given in the series of appearances that reason is concerned with). Neither do the accidents of any substance give reason cause to seek for an unconditioned, since they do not exist as a series, but are co-ordinate with one another in the same substance. As for the relation of accident to substance, this is not one of conditioned to its condition, since the accidents are no more than the mode of existence of the substance. Kant says of accidents

\[
\text{Even in their relation to substance} \\
\text{they are not really subordinated to it,} \\
\text{but are the mode of existence of the} \\
\text{substance itself. (A414=B441)}
\]

Thus, no series of conditions to the unconditioned will arise here either. Through the category of community, an aggregate of substances is given. The same arguments applied to substance will apply to each member of the aggregate, thus showing that no conditioned series is given, and the aggregate itself does not lead to such a series, since no one member of it is the condition of the possibility of the other. This leaves us with only the category of causality, under the heading of Relation. This category does, indeed, present reality
to us as a series of causes of any given effect, such that "we can proceed to ascend from the latter as the conditioned to the former as conditions, and so to answer the question of reason (B 442)."

Thus, the third transcendental illusion of rational cosmology will concern whether or not there is an uncaused cause as the unconditioned condition of the series of causes in the world.

The fourth and last heading in the Table of Categories is that of "Modality," under which we have the categories of possibility, existence and necessity. Now anything given through the category of possibility is just the representation that the object could exist at some time or other, and this will not lead to an unconditioned, since the object is not given as a member of a conditioned series—in other words, possible existence is not conditioned. As for necessity, through this category, we have the representation of the existence of an object at all times, and clearly there can be no question of seeking for an unconditioned here, since there is no question of a condition. This leaves us with existence. Now, existence is the representation of the existence of an object in some determinate time, and thus it is the representation of it as accidental existence, since there is a time before its existence when it was not. But since objects do not pop into being from nothing, it follows that the accidental in existence will lead from a series of conditions
to the unconditioned. The conditions in this case will be the objects whose existence preceded the existence of the given object in time, and the cessation of whose existence led to, or was the condition of, the existence of the current object; that is, of the coming into existence of the current object at the time it did. Thus, the fourth and last transcendental illusion of rational cosmology will concern the unconditioned condition of the accidental mode of existence of anything.

In anticipation of Part Two of this thesis, it is important to bring out more fully here the distinction between the type of conditioned series which reason will seek through to the unconditioned in the case of the category of relation, namely causality, and the category of modality, namely (accidental) existence. In the first case, we are concerned with a relation, viz. that of causality, between two distinct things. The cause is that which precedes the effect in time, and the effect is the change in the state of the second object which precedes the occurrence of the first, i.e., the cause, in time. For example, in the case of two billiard balls, the first of which hits the second, the first is the cause, and the second is the object which suffered the effect of the cause and the motion of the second is the effect of the cause. Thus, we have here an effect, the billiard ball in motion, which is conditioned or has been caused by another
billiard ball. Now for every such effect, we can seek its cause, and in the same way we can seek the cause of the motion in the first billiard ball, and so on through the totality of the series of conditions to the unconditioned.

In the second case, that of modality, we are concerned with the mode of existence of an object, not with its relation, while it continues to exist, to another object, as is expressed by the relation of a cause to its effect. The mode of existence that we are concerned with is that of the accidental in existence; that is, with the existence of something which had a beginning to its being in time. The condition of the existence of any object which exists in this mode is the object whose existence precedes it in time, and the cessation of which was the condition for the coming into being of the object in question. For example, the existence of a tree precedes the existence in time of the wooden table made from it, and the cessation of the existence of a seed, as a seed, is the necessary condition for the beginning of the existence of a flower or plant. It is for this reason that Kant tells us that the fourth transcendental illusion of rational cosmology will concern "Absolute completeness as regards the Dependence of Existence of the alterable in the [field of] appearance" (B 443).

We now know that there can be but four types of transcendental illusions of rational cosmology, since there
are but four types of categories in which the synthesis of the manifold leads to a series of conditions such that any given conditioned in the series is generated from its conditions. And for each of these series we will, through reason, seek through the conditions of the series for the unconditioned. But, Kant tells us:

The unconditioned may be conceived in either of two ways. It may be viewed as consisting of the entire series in which all the members without exception are conditioned and only the totality of them is absolutely unconditioned. This regress is to be entitled infinite; or alternatively, the absolutely un-conditioned is only a part of the series--a part to which the other members are subordinate, and which does not itself stand under any other condition (A 418).

Thus it follows that for every series through which reason may seek for an unconditioned there are two possible candidates for the title, one, the entire series itself, the totality of which is unconditioned and therefore infinite, or the other, the first member of the series which is the condition of all the members in the series, but which is itself unconditioned. This, as we shall see, will lead to the transcendental illusions of rational cosmology being presented as sets of antinomies.
Division II: The Corresponding Illusions as Found in Speculative Metaphysics

The transcendental illusions of rational cosmology are a set of apparently rational or logical arguments to the effect that for every given conditioned in appearance, there must be an unconditioned. We saw in the last division that there are only four types of judgments given as conditioned through the understanding which could possibly lead to the required unconditioned conditions of rational cosmology. We also saw that the unconditioned of any conditioned series could be conceived of in two, not only different, but opposing ways; on one hand, we could conceive of it as the totality of the infinite series itself, and on the other, as a first member of a finite series. This means that it is possible to establish by means of rational argument, both that any given conditioned series is infinite and in itself unconditioned (i.e., not conditioned by anything beyond it), or finite and ultimately conditioned by its first member which is itself unconditioned. Thus we will discover that the transcendental illusions of rational cosmology are antinomies; that is, comprising four sets of completely contradictory arguments.

Before briefly outlining the four sets of conflicting arguments, it is necessary to make three further points. The first is that the Antinomies of Rational Cosmology are not meant to be taken as arguments established by and constructed
from the analysis of their origin which has been given in
the preceding pages. As was seen in the Introduction, the
purpose of the analysis was to explain the possibility of
this type of conflict arising in reason. Thus, the
arguments are seen as pre-existing the analysis. The eight
arguments which Kant produces as thesis and antithesis of
the four antinomies, are intended as paradigm examples of
all the cosmological arguments found within speculative
metaphysics. The fact that they correspond exactly with what
analysis showed that the transcendental illusions of
rational cosmology must be, would only, in Kant's view, be
further proof of the validity of the analyses.

The second point is that the thesis of each of the
antinomies represents the mode of thought of the dogmatic
rationalist, while the antithesis of each represents the
mode of thought of the pure empiricist. The former is pre-
pared to create transcendental ideas in order to satisfy
reason's demand for the unconditioned, while the latter
attacks the former for straying beyond the bounds of the em-
pirical, and consequently regards the series itself as in-
finte and not conditioned by anything external to it. Thus,
the series itself in its infinite totality is made the
unconditioned which satisfies reason's demand.

The third point is that Kant makes a distinction
at A 419=B 447, between the first and second pair of
antinomies. The former (the first and second) are called mathematical antinomies and are distinguished from the latter (the third and fourth) on the grounds that in the former we are concerned only with the unconditioned condition of the world as a mathematical sum-total of all appearances. That is to say, in the first antinomy we are looking for the unconditioned condition of the mathematical sum-total of the world's persistence or existence through moments of time, and of the extension of its parts through space. In the second antinomy, we are looking for the unconditioned condition of the mathematical sum-total of the division into parts of the world in space. In brief, we might say that the mathematical antinomies are concerned with the composition and division of the magnitude of the world in space and time. In the latter, dynamical antinomies, on the other hand, we are concerned with the world viewed as a dynamical whole. And thus the search is for an unconditioned condition of the series of causes of the states of the world in the third antinomy, and for the unconditioned condition of the series of alterations of the states of the world in the fourth antinomy. We are not here concerned with the unconditioned condition of the composition of parts of the world into whole or of the division of wholes of the world into parts, but rather with the unconditioned conditions of the cause of the world as a whole.
Now in discussing the mathematical antinomies, Kant observes (A 531=B 559; A 560=B 588), that the unconditioned condition of the mathematical sum-total of the composition or division of the magnitude of the world must itself be given as a magnitude, whether that be an infinite or finite magnitude. The unconditioned condition must be given as homogeneous with the conditioned since we must explain a quantitative conditioned by a quantitative unconditioned. The unconditioned of the mathematical antinomies must then be given as an unconditioned in space and time and consequently it must be given in experience or the phenomenal world. This drives us into a hopeless contradiction, since we are attempting to put into the realm of experience that which cannot exist in such a sphere, namely, the unconditioned.

In the case of the dynamical antinomies, since we are not concerned with the world as a conditioned in space and time; but rather with its existence as a dynamical whole, our search is for an unconditioned which need not be homogeneous with its conditioned and, consequently, our search for it need not be restricted to the phenomenal world, but may also include the noumenal world.

The condition (or the cause) of the existence of an effect or of an alteration need not be homogeneous with the effect, and consequently, the unconditioned condition of the existence of the world, as a series of causes or as a series of alterations, need not be homogeneous with the series
itself. That is to say, it (the unconditioned) may itself be a member of the series, and so exist in the phenomenal world, or on the other hand, it may exist outside the series and thus outside the phenomenal world in the realm of the noumenal.

However, as we shall see it is in the realm of the phenomenal world that the unconditioned is sought for in all four antinomies—a fact which later helps in the resolution of the conflict between the thesis and antithesis of the third and fourth. Thus, the relevance of the distinction between the mathematical and the dynamical antinomies will become clear later when in the third chapter we are discussing the dynamical antinomies.

The First Antinomy, concerns the existence of the world in space and time. The thesis is that "The world has a beginning in time and is also limited as regards space" (A 426). The proof considers time first: If the world had no beginning in time, then at any given moment an infinite series of the successive states of things has passed away. But the infinity of the series means that the series has no beginning, and therefore, that the regressive series is in fact never completed. Thus it follows that it would be impossible that at any given moment an infinite series of successive states of things had passed away—which must be the case if the world has no beginning in time, therefore a
beginning of the world is a necessary condition of its existence. Regarding the world as limited in space, let us consider it rather as an infinite given whole of co-existing things. Now the size of an area which is not wholly given in intuition can only be thought through an act of unifying its parts (which are given in intuition). And the totality of the area will only be arrived at when all the parts have been successively unified thus. Therefore, in order to think of the world as an infinitely given whole or totality, one must unify its infinite parts. But since these unifying acts would be successive, they would occur in time, and an infinite time would have to be thought of as having elapsed, during which the unifying of the infinite parts of space took place. But it has already been shown that there cannot be an infinite time, and since this is a necessary condition of there being a spacially infinite world, it follows that the world must be limited in space.

The antithesis is, of course, the contradictory of the thesis, and considers the world infinite, without a beginning in time or limits in space. "The world has no beginning, and no limits in space; it is infinite as regards both time and space" (A42F). In the proof of this, we assume that the world has a beginning in time. Then it follows that before its existence there was a time when it was not--an empty time. However, the coming into being of
anything is not possible in an empty time, since an empty time does not contain the condition of the existence of anything, whether that thing be due to internal or external causation. Thus there cannot be a time before which the world existed and therefore the world must be infinite with regard to time. Let us assume, also, that the world is finite and limited in space. It then follows that that which the world is limited by is empty space (which is itself unlimited). Thus the world is both related to its own constituent parts in space, and as a whole, to space itself. But the world is the totality of all intuition, and therefore there is no object of intuition beyond it. Thus it follows that there is no object beyond the world with which it could, as a whole, be related to. "The relation of the world to empty space would be a relation of it to no object" (A429). But such a relation is not a relation at all, and thus no relation can be said to hold between the world as a whole and empty space. But the relation of the world as a whole to empty space would be a necessary condition of the world being limited in space. "The world cannot, therefore, be limited in space, that is, it is infinite in respect of extension" (A429).

The Second Antinomy concerns the substance (matter) of the world and whether or not it is composed of simple parts. The thesis maintains that all composite substance is made up of simple parts, and that there exists, therefore,
only the simple or that which is composed of the simple. Once again we may note that the thesis offers the finite series version of the unconditioned. The proof for the thesis points out that if there are no simples, then when we remove composition from thought (i.e., when we divide all that is divisible), we are then left with nothing, since there are no simples. Hence, if we deny simples, there is nothing left from which the composite can be composed, and at the same time, we cannot deny that all composite can be removed from thought (i.e., that all composition is not totally divisible) for then the composite would not be composed of substances, but would be indivisible, that is, a simple—which has been disallowed. In other words, if there are no simple parts in the world, then neither is there composition since all composition must ultimately be composed of simples or else it is divisible into nothing, and so vanishes. And if there is neither composition nor simples, then there is nothing. Hence, for there to be anything, there must be simples "and nothing anywhere exists save the simple or what is composed of the simple" (A434).

The antithesis, of course, offers the infinite series version of the unconditioned, namely that nothing in the world is composed of simples; the division of anything is, therefore, infinite, and there are no simples. The proof considers the consequences of there being simple parts.
If this were the case, all composite things would be made up of simple parts, each part having an external relation to the other. But "since all external relation, and therefore all composition of substances, is only possible in space" (A455 - B463), so there must, therefore, be a series of simple parts of spaces, corresponding to the simple parts of the composite substances, and which together form the total space in which exists the composite substance. But space is not a composite of simple parts, rather of spaces, so the simples of the composites will exist in or occupy a space (not a simple part of space). But the primary parts of the composite substances are simples and not composite, therefore, the simple occupies a space. Anything real, however, which occupies a space "contains in itself a manifold of constituents external to one another and is therefore composite" (A437). By this Kant means to say that, like that which it occupies, namely space, the real must have extension, and therefore contains parts or elements external to one another, such as might be described by referring to the top half, bottom half, right or left side, etc. But if this is the case, it follows that everything real which occupies space is composite, since, of course, it is possible in principle to divide it into its composite parts. Thus, once it is admitted that the simple occupies space (which it must do if it is a constituent part of a
Substance which occupies space), it follows that the simple is composite, for everything which exists in space has the same extension as the space it exists in and is, therefore, divisible. Hence, all that exists in space is divisible, and therefore, composite. If simples exist in space, which they must do, then they are composite, which is a contradiction. Thus, postulating the existence of a simple as a real object requires postulating the existence of an object in space which does not have extension; this is impossible, and so the simple cannot be real, but could only exist as an idea, the existence of which could not in principle be established. Now since what we are concerned with is showing that the world is made up of simple parts, and since by "the world" we mean the sum of all our experience, and since, further, all our experience is of real objects in space, it follows that the world cannot be composed of simple parts, and that with respect to our experience, there cannot exist anywhere in the world, anything that is simple.

In the Third Antinomy we deal with causality, and the question of whether or not causality in accordance with the laws of nature is the only causality, and the one from which the appearances of the world can be derived. The thesis, again on the side of the finite series, claims that causality in accordance with the laws of nature is not the only kind of causality and that the appearances of the world
can only be explained ultimately by postulating another causality, namely a free causality or an uncaused cause. The proof begins by assuming the contrary, viz., that there is no causality save in accordance with the laws of nature. Thus, everything which occurs presupposes another state of affairs preceding it in time, such that the subsequent state of affairs follows from the previous according to a rule. Now this will be true of all states of affairs, and so will be true of the previous state of affairs also, and this process will continue ad infinitum, since each cause will have to be something which occurred at a given time prior to which it was not, since if this were not the case, it would always have been and so, too, would its consequences—which is not the case. Thus, each cause has a beginning in time and is, therefore, a state of affairs which itself came into being via natural causality, since, of course, no other causality has been allowed. Hence, all causes must themselves have causes of their occurrence. And, hence, there can never be a first beginning, but only at any one time a relative beginning which itself will have a cause, and consequently, the series of causes will lack completeness. However, the law of nature demands that all states of affairs be preceded by other states of affairs which are sufficient to determine the existence of the subsequent state of affairs; but, if that previous state of
affairs is itself only the effect of a yet more previous state of affairs, then it is not in itself sufficient to determine the subsequent state of affairs in question, which, it now becomes clear, is dependent for its existence not only upon its previous apparent cause, but also upon the cause of that cause and so on ad infinitum. Now, since no uncaused cause can be allowed, it follows that the state of affairs in question has not been preceded by another state of affairs sufficient to determine its existence, thus, as Kant says:

The proposition that no causality is possible save in accordance with the laws of nature when in unlimited universality, is therefore self-contradictory; and this cannot therefore be regarded as the sole kind of causality (A 446).

Hence, there must be a cause which is not itself caused but which begins of itself. That is to say, there must therefore be a free causality, in order that the laws of nature themselves be satisfied.

The antithesis claims that there is no freedom, and that everything takes place according to the laws of nature. The proof again considers what must follow if the opposite is the case; that is, if there is free causality or an uncaused cause. It will then follow not only that the series which originates from this cause will have an absolute and
spontaneous beginning, but the cause itself will have an absolute and spontaneous beginning—that is to say, there will be no previous state of the world from which this cause will proceed as an effect. It is an uncaused cause. But now, every state of the world which results in yet another subsequent state of the world, exists as a state of the world itself first, before it exists as a cause of the subsequent state; and a first or uncaused cause exists first as a state of the world which has absolutely no causal connection with any other state of the world preceding it, and which is in no way a result of any other state of the world.

Transcendental freedom thus stands opposed to the law of causality; and the kind of connection which it assumes as holding between the successive states of the active causes renders all unity of experience impossible (A 447).

That is to say, if we allow free causality, we must allow a state of the uncaused cause such that it stands in no causal relation to any preceding state of the world; but if this were so, unity of experience would be impossible since new states of the world and their consequences would constantly be spontaneously generated without any reference or relation to previous states of the world, and thus our experience of the world would be of a series of effects related only by their temporal succession, which is contrary to the causal
law of nature. Thus, free causality, or an uncaused cause, is impossible and it is necessary for the unity of experience that all causality be in accordance with the laws of nature.

**The Fourth Antinomy** concerns the existence or non-existence of a necessary thing. The thesis proposes the view that there is in the world, either as its cause or as its part, an absolutely necessary being. The proof observes that we find in the sensible world series of alterations. But each alteration is preceded in time by conditions which render it necessary; that is to say, in a series of alteration, each alteration is preceded in time by that of which it is the alteration and which is the necessary condition of its possibility. However, its condition is itself an alteration and will also be conditioned by the previous member of the series and so on, so that "every conditioned that is given presupposes in respect of its existence a complete series of conditions up to the unconditioned which alone is absolutely necessary" (A 453). Hence, we must posit the existence of the absolutely necessary, since it is a necessary condition of the possibility of alteration itself. Furthermore, this necessary being must belong to the sensible world, for otherwise the series of alternatives in the world would derive its existence from a necessary condition which was outside the world--which is
impossible since the beginning of a series which exists in
time can only be caused by that which precedes it in time,
for the relation between condition and conditioned is a
temporal relation. Thus, the highest condition (the uncon-
ditioned) of that series must also belong in time, and
therefore to the realm of appearance. "Something absolutely
necessary is therefore contained in the world itself,
whether this something be the whole series of alterations
in the world, or part of the series" (A 454).

The antithesis denies the conclusion of the thesis,
asserting that no absolutely necessary being exists either
in the world, or outside it, as its cause. The proof argues
that if such a necessary being existed in the world, then
it would have to exist either as a beginning of the series
of alterations, or as the series itself which would be con-
ditioned in all its parts, but which would, as a whole, be
absolutely necessary and unconditioned. However, the former
alternative conflicts with the dynamical law of the deter-
mination of all appearances in time, as set out in the
Second Analogy; that is, the law that all alteration takes
place in conformity with the rule of the connection of
cause and effect; and the latter contradicts itself, since
if the existence of no one member of the series is necessary,
then the series as a whole cannot be necessary. But not
only can a necessary being not exist in the world as belonging
to it, but it cannot exist outside it as its cause, for if this were the case, then this cause, as the instigator of the series of alterations in the world, would itself at one state have to begin to act, and its causality would therefore be in time; hence, it would belong to the sum of appearances, that is, to the world, which, it was shown above, is impossible. There cannot, therefore, exist a necessary being, either as a part of the world, or as an external cause of it.

These, then, are the eight arguments to the unconditioned which emerge from the extension to the unconditioned of those categories which present to us (through the understanding) the manifold of intuition as conditioned, and as generated by a series of conditions. They seem at first sight to launch pure reason into an impossible dilemma, for as Kant says, it

subjects it to the temptation either of abandoning itself to a sceptical despair, or of assuming an obstinate attitude, dogmatically committing itself to certain assertions and refusing to grant a fair hearing to the arguments for the counter-position. Either attitude is the death of sound philosophy, although the former might perhaps be entitled the euthanasia of pure reason (B 434).

However, being as we are readily equipped with an analysis of the origin and derivation of the antinomies, a solution and salvation for reason is not far from sight.
I do not intend to examine this solution, as it does not bear direct relevance to the point of my thesis; however, in order not to leave the dilemma hanging in mid-air, I will take the liberty of quoting at length from Professor Caird's book, *The Critical Philosophy of Kant*, which I think captures the essence of the solution:

As the objects of experience exist only in our experience of them, it is easy to see that both the rival systems of rational cosmology rest upon an illusion. For they both proceed upon the principle that, the conditioned being given, the whole series of conditions, up to the unconditioned is given; therefore they seek by means of the conditioned to determine the unconditioned. Now this would be a correct procedure, if the things of experience had a nature, which was independent of our experience of them; for, in that case, we, who apprehend the conditioned as such, must necessarily apprehend that by which it is conditioned. But a phenomenon is nothing apart from the perception of it. When we apprehend it as conditioned, this only means that, as an empirical object, it is connected, according to necessary laws of the understanding, with other perceptions. Nor can we know with what other perceptions it is connected, except insofar as these perceptions are actually given in sense. When, therefore, we have determined an empirical object as conditioned (and of necessity we must thus determine it) all that we know by this means is a phenomenon, and the law of its connection with other phenomena. But while we are thus enabled to seek out these other phenomena, and have, moreover, in the Analogies of Experience a criterion, by which we may recognize them when we find them, we cannot determine a priori what they are.
On the other hand, we do know a priori that in this process of connecting phenomenon with phenomenon, we never can come to an ultimate object, an object which has no further relation or condition. Consequently, so long as we speak of phenomena, we cannot say that the conditioned being given, the unconditioned is given with it; but only that the conditioned being given, the unconditioned is set as a problem to be solved. The illusion of rational cosmology is that it takes the problem for its own solution.¹

Consequently, since in experience we only meet with the conditioned, it follows that we shall never meet with an unconditioned, and thus there will be no requirement upon us to discover an unconditioned for any conditioned series, either as its absolute beginning (as in the case of the thesis) or the absolute totality of the series itself (as in the case of the antithesis).

In the first two chapters of this thesis, I have attempted to give a coherent account of Kant's analysis of the role of reason in the creation of the transcendental illusions of pure reason, and thus the transcendental illusions of rational cosmology. I also attempted to show that despite the tendency of reason to create these

illusions, their actual origin had to be in the understanding, since this is the sole source of our concepts—reason cannot itself generate concepts, not even transcendental concepts. In this respect, it was demonstrated that the transcendental illusions of rational cosmology were actually specific categories of understanding extended to the unconditioned; that only those categories which presented the manifold of intuition to us as a conditioned, generated from the series of its conditions, would qualify for such a transformation, since it was only in the case of the conditioned that reason had any cause to seek for the unconditioned, and that consequently, the transcendental illusions of rational cosmology would only be of such a number, and no more; that number was four, and there were indeed found to be only four types of transcendental arguments in rational cosmology.

In the third and last chapter, I intend to concentrate only upon the last two of these arguments, namely, the third and fourth antinomies. Professor Strawson, in his book, *The Bounds of Sense*, has indicated that a number of problems arise in connection with the third and fourth antinomies. In Chapter Three, I intend to outline those problems as set forth by Professor Strawson, suggest a second possible interpretation of these antinomies in the light of which interpretation these problems disappear,
and attempt to show that, given the origins of the transcendental illusions of rational cosmology, and specifically the origin of the third and fourth antinomies, the second interpretation is more plausible than Professor Strawson's.
CHAPTER THREE

SOME PROBLEMS WITH THE DYNAMICAL ANTINOMIES

In the light of the analysis of the function, origin, and structure of the transcendental illusions of rational cosmology given in the first two chapters, it is reasonable to expect a certain coherence and consistency among the systems of the four conflicting sets of antinomies. For example, since the illusions of rational cosmology, unlike the illusions of rational psychology or speculative theology, are expressed as antinomies of reason, it must follow that in the case of rational cosmology there are two possible candidates for the job of the unconditioned condition of something conditioned. Kant has explained this by telling us at A 418 that the unconditioned condition of a series of conditioned things may be given in one of two ways. Either as a first member of the series to which the other members are subordinate, and which itself is unconditioned, or as the series as a whole which, despite the fact that each member is conditioned, is in its totality unconditioned. The former, or finite alternative, is represented in the thesis of each antinomy, while the latter, or infinite alternative, is represented in the antithesis. In each antinomy, then, we should expect to find that the argument in the thesis
is an argument for the existence of some first member of the series of conditions and thus is an argument to the effect that the series is finite. In the antithesis, on the other hand, we should expect the argument to be a denial of the existence of any such first member of the series and thus to be an argument to the effect that the series of conditions is infinite and itself is as a whole unconditioned.

In the same manner, given that the unconditioned in each antinomy is constructed by isolating a suitable category or concept of the understanding from among each of the four classes of categories, and extending it to the unconditioned, we should expect to find that the subject matter of each of these antinomies is different, or in other words, that we are dealing with four distinct antinomies.

With regard to the first and second antinomies, our expectations in both these respects are adequately met. The thesis of the first antinomy argues for a beginning of the world in time and a limit to its extension in space. There is, then, a first member to the series of the world's existence through time, and also to the series of its extension in space, from which it follows that both series are finite. The antithesis argues that there is no such first member to either series and thus that the existence of the world through time is infinite as is its extension in space. The thesis of the second antinomy argues that the ultimate
parts of matter are indivisible simples and, consequently, that the series of parts into which matter may be divided is finite. The antithesis argues that there are no simple parts and, consequently, that the series of parts into which matter may be divided is infinite. Clearly then, the thesis and antithesis of the first and second antinomies are authentic representations of the finite and infinite alternatives of the unconditioned.

With respect to the subject matter of these two antinomies, it is clear that in the case of the first we are concerned with the beginning of the world in time and its extension in space, whereas, in the second, we are concerned with the divisibility of matter into its constituent parts. Thus, the distinction between them is that, in the former, we are looking for "absolute completeness of the composition of the given whole of all appearances" (B 443), while in the latter, we are looking for "absolute completeness in the division of a given whole [in the field] of appearances" (B 443).

In the case of the third and fourth antinomies, however, these distinctions are not clear, nor is it obvious that these antinomies follow the same structural patterns as the first and second antinomies with respect to the finite/infinite alternatives of the unconditioned. Professor Strawson in his book, The Bounds of Sense, has made specific
allegations that the third and fourth antinomies are almost indistinguishable, and that in each of these antinomies, both the infinite and finite alternatives of the unconditioned condition are represented by the thesis of the antinomy. It is these two points that I wish to consider in this chapter.

Strawson observes that whereas the thesis and antithesis of the first and second antinomies both embody false assumptions, and are therefore genuine antinomies in that they are both false, the thesis and antithesis of the third and fourth antinomies embody no such corresponding false assumptions. That is to say, both the thesis and antithesis of the first and second antinomies base their arguments on the false assumptions that the cosmological series in question exist as wholes, whether finite as in the case of the thesis, or infinite, as in the case of the antithesis. However, when we come to the third and fourth antinomies, we find that though the thesis of each is indeed based upon such a false assumption, namely the existence of the series of causes as a whole in the case of the third, and the existence of the series of alterations as a whole in the case of the fourth, the antithesis embodies no such false assumption, but rather, reaffirms the conclusion of the second analogy, viz., that all things given in appearance conform to the laws of cause and effect. If this is the case, however, the
very nature of the antinomy is destroyed since, of course, the contradiction is resolved by showing that the thesis is false, and the antithesis, true. Strawson explains this discrepancy by pointing out that it arises from the fact that, whereas the thesis and antithesis of the first and second antinomies represented the finite and infinite alternatives respectively, the thesis of the third and fourth antinomies represent both alternatives (the antithesis representing the claim of the second analogy). In the case of the thesis of the fourth antinomy, we are concerned with the existence of an absolutely necessary being, either as a part or first beginning of the series, or as the whole series of alterations itself. As Strawson says

This may be something which is necessary and sufficient to start the whole series off, but which is not itself dependent upon anything antecedent to it, or, alternatively, it may be nothing else than the whole series itself which we are to regard as independent of any extraneous necessary condition. Roughly speaking, the series either owes its existence as a whole to nothing at all or to something in particular which owes its existence to nothing at all. In the former case (the infinite alternative) the thing which is unconditioned is the series as a whole, in the latter (the finite alternative) it is the starting cause.1

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1P. F. Strawson, *The Bounds of Sense* (Methuen) pp. 209-210. All future references will be to this edition and will be cited in the text.
In the case of the thesis of the third antinomy, we are concerned with the existence of an uncaused cause, and though Kant does not explicitly state that the uncaused series of causes taken as a whole would also qualify as the unconditioned condition which we are in search of, Strawson implies that it is so intended, since, he claims, on the one hand, the antithesis denies the existence of any unconditioned condition of the series and both the finite and infinite alternatives qualify as such unconditioned conditions, even though only ideas. And on the other hand, this would make the thesis of the third antinomy parallel to the thesis of the fourth. Thus, the first point Strawson levels against Kant regarding the third and fourth antinomies is that they are not genuine antinomies at all, since the thesis (unlike the first and second antinomies) embodies both the finite and infinite alternatives of unconditioned conditions of a given series, and can be shown to be false, while the antithesis reaffirms the conclusion of the second analogy, and can therefore be shown to be true.

Strawson's second point concerns the difference between the third and fourth antinomies. It has already been pointed out that he considers the antithesis of each as a reaffirmation of the second analogy. And with regard to the thesis of the fourth, he says:
The thesis of the fourth antinomy reads curiously like a confused variation on that of the third, modified by a change in wording and the admission of the infinite alternative. A simple and prima facie plausible way of making sense of the distinction between them is to suppose that while the third antinomy is primarily concerned with antecedent sufficient conditions, the fourth is primarily concerned with antecedent necessary conditions (p. 209).

It might appear from Strawson's statement that he himself does not hold this "simple and prima facie plausible" interpretation. However, he does not offer another interpretation, and later states that

The 'demand of reason for the unconditioned' in the thesis of each of the dynamical antinomies explicitly takes the form of a demand for a freely acting cause or an unconditioned existence which belongs to the sensible world, the world of things in space and time (p. 211). (underlining mine)

Therefore, one can only conclude that this is indeed a correct statement of his view.

For Strawson, then, the third antinomy is concerned with a cause which is itself uncaused and which is the sufficient condition of the series of causes in the world. The fourth antinomy, on the other hand, is concerned with a cause which is itself uncaused, but which is the necessary and not a sufficient condition of the series of causes in the world. He interprets the thesis of the fourth antinomy
as an argument to the effect that in the world we find a series of alterations of its states, each of which is conditioned by its antecedent causal condition which renders it necessary. Now, since each new state in the series comes into existence through its antecedent necessary condition, the existence of each state in the series is contingent, that is, is dependent for its existence upon a previous state which is its necessary condition and without which it could never have come into existence. However, all and every state of the world cannot be like this, since if this were so, there would be nothing which would be sufficient to start the whole series off. We must admit, therefore, something in the world which is not contingent. This may be either a first member of the series of alterations which is not itself dependent for its existence upon anything antecedent to it and which is thus a necessary being, or alternatively, it may be none other than the series itself which, as a whole, exists necessarily, that is, independently of any extraneous necessary conditions.

Kant says that the unconditioned thing is an 'absolutely necessary' being. In the context of the argument this expression appears both curious and confusing. The essential point about the unconditioned thing is the negative one that it does not owe its existence to any antecedent or extraneous necessary condition of itself (p. 210).
By a "necessary being," therefore, Strawson concludes, Kant means a being not contingent upon anything.

Thus, we see that, given Strawson's interpretation, the fourth antinomy, like the third, is concerned with an unconditioned condition of the series of causes in the world; however, whereas the third is seeking for the sufficient condition of the series as a whole, the fourth is seeking for a necessary condition. Nor is this the only problem this interpretation leads to, as Strawson himself points out. When we come to deal with the antithesis, we find that:

Against the alternative hypothesis that the series of alterations as a whole is necessary (unconditioned) he argues that the existence of a series cannot be necessary if no single member of it is necessary. What a poor argument this is, and how it defeats the general purpose of argument for the antithesis, we see when we translate out the reference to necessary existence, and obtain the equivalent argument that if every member of a series owes its existence (is contingent upon) an antecedent causal condition, then the same must be true of the series as a whole (p. 210).

Thus, not only do we find a problem with regard to an interpretation of the fourth antinomy which distinguishes it from the third, but we further find that, given Strawson's interpretation, there appears to be an internal contradiction within the antithesis of the former.
I wish to examine these two problems in order, and consequently, I will now concentrate upon Strawson's first point, namely the fact that the thesis and antithesis of the third and fourth antinomies do not represent, respectively, the finite and infinite alternatives of the unconditioned condition, as do the thesis and antithesis of the first and second antinomies.

Division 1: Not Genuine Antinomies?

Before considering the problem of whether the third and fourth antinomies represent genuine antinomies, it is necessary to be clear as to Kant's intention with respect to this question; neither the illusions of rational psychology nor speculative theology express themselves as antinomies and Kant accounts for this phenomenon in the section entitled, "System of Cosmological Ideas," in the Critique. In the exposition of this section in Chapter Two, it was shown that the unconditioned condition of any given object in appearance can be conceived of either as a first member of the series, or as the totality of the infinite series as a whole, the former of which represents the thesis of each antinomy and the latter, the antithesis. At A 418= B 446, Kant says:

The unconditioned may be conceived in either of two ways. It may be viewed as consisting of the entire series in
which all the members without exception are conditioned and only the totality of them is absolutely unconditioned. This regress is to be entitled infinite. Or, alternatively, the absolutely unconditioned is only a part of the series—a part to which the other members are subordinated, and which does not itself stand under any other condition.

Lest we should interpret this to mean that these alternative unconditioned conditions are to be found in the thesis alone, Kant, in the second part of the paragraph, goes on to explain further that the first view (the infinite alternative) represents those cases where the series of conditions "is without limits or a beginning," such as the infinite existence of the world in space and time, the infinite divisibility of matter, the infinite extension of the series of causes and the infinite extension of the series of appearances in the world—all of which clearly represent the four antitheses. Of the second view (the finite alternative), he says that it represents those cases where:

there is a first member of the series which in respect of past time is entitled, the beginning of the world, in respect of the parts of a given limited whole, the simple; in respect of causes, absolute self activity (freedom); in respect of the existence of alterable things, absolute natural necessity (A 418=B 446).
These latter four are clearly the contentions of the thesis of each of the antinomies. It becomes clear then that insofar as Kant's intentions are to be taken into account, the thesis of each antinomy represents the finite alternative of the unconditioned, and the antithesis represents the infinite alternative. In the Prolegomena, he gives a very clear statement of the need for this, if we are to explain how we end up with eight arguments from only four transcendental ideas:

There are no more than four such transcendental ideas, as many as there are classes of the categories; but in each of them, they only bear on the absolute completeness of the series of conditions for something that is given as conditioned. In conformity with these cosmological ideas there are also only four kinds of dialectical assertions of pure reason, which themselves prove by their being dialectical that to each of them a contradictory one is opposed, according to equally specious principles of pure reason (p. 103).

Of course, this exposition of intention is not a refutation of Strawson's theory; it is merely intended to point out that if Strawson is correct, there is error and inconsistency embodied in Kant's doctrine, since the inclusion of the finite and infinite alternatives in the thesis was not intended as part of his theory. It yet remains to be shown whether or not there is another interpretation or explanation which can be given to these passages in Kant,
such that the conflict between Kant's intention and practice can be resolved.

Let us look first at the antithesis of the third antinomy which Strawson claims represents the thesis of the second analogy. The antithesis claims that there is no free causality; the only causality from which the appearances of the world can be derived takes place solely in accordance with the laws of nature, for every effect there is a cause and there exists nowhere in the world an uncaused cause. In other words, the series of causes does not terminate in a first member, an uncaused cause, and thus, having no beginning, it must continue to infinity. Furthermore, if an uncaused cause exists nowhere in the world, then it also follows that the series itself does not owe its existence to an uncaused cause, and is itself not only infinite, but also unconditioned. This, of course, is precisely the infinite alternative as found in the first and second antinomies--the series itself is infinite and is, as a whole, unconditioned. Strawson has claimed that this antithesis represents the claim of the second analogy, but if we examine it carefully, we see that this is not the case. The claim of the second analogy is that "all [given] alterations take place in conformity with the law of the connection of cause and effect" (B 233), and the conclusion to be drawn from this is at most that the series of causes
is infinitely extendable. But the antithesis of the third antinomy claims that the series of causes is infinitely extended:

Nature does indeed impose upon the understanding the exacting task of always seeking the origin of events ever higher in the series of causes, their causality being always conditioned (B 475=A 447).

As we remember from Chapter One, the illusions of pure reason arise when we mistake the, for us, transcendentally subjective laws of reason for the ordering and unifying of judgments of the understanding, for objective laws concerning the order and unity of things themselves. This was so because we could not equate our judgments of the world with the world in itself, independent of our experience of it, since our judgments were products of transcendentally subjective principles of understanding. Were these principles to be thought of as transcendentally objective, then so too, our judgments would be considered as an objective and accurate reflection of the world in itself, as opposed to just our experience of it; the inferences of reason would thus also be valid for the world itself and, hence, we would be entitled to conclude that if a conditioned was given in a judgment, then so, too, the whole series of conditions up to the unconditioned, was likewise given. However, the principles of the understanding are not objectively valid.
for things in themselves, and it follows that the rules of reason cannot be applied by us to the world in itself, thus making it illegitimate to conclude from something conditioned to an unconditioned condition of it. In the antithesis of the third antinomy, the rule of the second analogy of experience to the effect that there is a necessary connection of cause and effect between all alteration given in experience, has been mistaken for a law to the effect that such a necessary connection holds between all alteration in itself. Thus, it is concluded by reason that the series of causes must be infinitely extended, since for every effect there actually is (independent of our experience) a cause and, at the same time, it has been shown that there cannot be an unconditioned member in the series. The series of causes, then, is extended to infinity and is itself an unconditioned series, thus representing faithfully the infinite alternative of the unconditioned.

With respect to the thesis of the third antinomy, the claim is that there must be a free causality or an uncaused cause from which the series of appearances of the world "can one and all be derived." This uncaused cause must be a first cause at the beginning of the series of causes, from which the series is ultimately derived. There is no suggestion in the thesis that the series of causes taken as a whole would itself qualify as the unconditioned, and in the antithesis,
Kant refers to the claim of the thesis as offering

a point of rest to the inquiring understanding in the chain of causes, conducting it to an unconditioned causality which begins to act of itself (A 44f).

Again, this seems to be a clear representation of the finite alternative of the unconditioned. Strawson himself admits that the thesis may be given this ostensive interpretation, but implies that Kant in fact intended it to be interpreted as representing both finite and infinite alternatives. However, since Strawson's implication is vague and is, in any case, not given any justification other than the supposed parallel which would then emerge between the thesis of the third and fourth antinomies (his argument that the infinite alternative is required of the antithesis already having been shown to be false), I do not intend to concern myself with it further, but will straight away consider his interpretation of the fourth antinomy.

Strawson gives the same interpretation to the antithesis of the fourth antinomy as he does to the antithesis of the third: it represents the claim of the second analogy and is, therefore, true. However, upon examination, we find the antithesis to be that a necessary being exists nowhere in the world or outside of the world. Neither a necessary being at the beginning of the series of alteration (which all alteration would be an alteration of), nor is there a
necessary being outside the world as the ground of the existence of all alteration. Thus, the series of alterations, like the series of causes, terminates in no beginning and so proceeds to infinity. At the same time, the series itself is unconditioned since it does not, as a whole, depend upon a necessary being outside of itself. Hence, it would seem that we may again conclude that the antithesis represents the infinite alternative of the unconditioned, and that it, too, like the antithesis of the third antinomy, rests upon the illusion that the rules of inference for the connection of the judgments of the understanding are in fact rules in the determination of the connectives between things in themselves, thereby concluding that the series of alterations is infinitely extended rather than infinitely extendable. However, we are momentarily kept from this conclusion by noting that in the first paragraph of the proof of the antithesis, the existence of necessary being in the world—which is to be refuted—is offered in one of two possible forms:

Either there is a beginning in the series of alterations which is absolutely necessary and therefore without a cause, or the series itself is without any beginning and although contingent and conditioned in all its parts, nonetheless, as a whole, is absolutely necessary and unconditioned.¹

¹A 453=B 481. Underlining is my own.
This, indeed, looks as though the antithesis is refuting not only the finite alternative of the unconditioned, but also the infinite alternative. If this is so, we are left to wonder just what the assertion of the antithesis is. On the one hand, it denies the existence of a necessary being either in the world or outside the world, and thus asserts that the series of alterations does not terminate in a first member and has, therefore, no beginning. On the other hand, it also denies that the series itself is infinite and, as a whole, unconditioned, and thus asserts that the series does terminate at some point in a first member, and that it is, as a whole, conditioned. So we have in the antithesis both an assertion and a denial that the series is infinite and, likewise, an assertion and denial that the series, as a whole, is conditioned.

The source of our problem, as we can see, is the alternate form in which the existence of the necessary being in the world may be given, namely, as the series itself which, as a whole, is absolutely necessary. It is in no way clear in the passage quoted above (A 453=B 481) just what Kant means by this alternative (though it is tempting to assume that he means the infinite alternative of the unconditioned); nor do we get any help from the thesis itself, which is concerned only with proving the existence of a necessary being, leaving it undecided whether this "be the
whole series of alterations in the world or a part of the series" (A 452=B 480). However, in the observation on the thesis, we learn that, while the thesis demonstrates the existence of a necessary being, it must leave unsettled "whether this being is the world itself or a thing distinct from it." This seems to indicate that in the thesis, the necessary being is to be understood as an entity whether in the world or outside of it. It may be a first beginning of the world or series of alterations, which is distinct from the world (in that it is necessary while the members of the series are contingent), but which at the same time exists in the realm of the phenomenal world, inasmuch as it is temporarily related as a first cause to the series of alterations. Or, on the other hand, it may be the world itself (i.e., the whole series of alterations) which is a necessary being.

In the thesis, then, the necessary being which is to serve as the explanation of unconditioned condition of alteration is offered as either a theistic or pantheistic alternative; that is, as either a being that is a first cause of the series of alterations in the world, or as the world itself. In the antithesis, on the other hand, the existence of a necessary being in any form is completely denied. The series of alterations simply continues to infinity and the series, as a whole, is not conditioned by
anything; in other words, it is unconditioned.

The important point is that the unconditioned in the thesis, like the unconditioned in the thesis of the third antinomy, is offered as an unconditioned something existing in the world, viz., an uncaused cause or a necessary being. But in the fourth antinomy, unlike the third, this unconditioned entity may exist in one of two alternate forms which it is not in the power of the argument itself to decide between. It may exist either as a cause of the series of alterations in the world, which is itself distinct from the series and necessary to its existence, or it may exist as the world itself, the existence of which is, in its totality, necessary. Thus, when Kant, at A 453=B 481 says that the series of alterations itself is without any beginning and as a whole is absolutely necessary, he does not mean to suggest that the series is infinitely extended and thus as a whole unconditioned, but rather that it "is without any beginning" in the sense that it does not have a first cause, either outside or as a first member of the series. This does not imply that the series is infinite, but that the finite series itself taken as a whole is a necessary being which comes into existence of its own accord.

Given this interpretation, we avoid the absurdity of a complete contradiction within the antithesis and give an account of both thesis and antithesis which is consistent
with the preceding antinomies and which accords with Kant's stated intentions. The thesis represents the finite alternative of the unconditioned; it argues for the existence of a necessary being, either as a first cause of the world, or as the world itself, to explain the possibility of the contingent existence of the world (that is, to explain the possibility of the existence of the world merely as a series of alterations of its own states). The antithesis denies the existence of a necessary being. A necessary being exists neither in the forms offered by the thesis, nor outside the world in the realm of the noumena. The series of alterations is infinite and unconditioned and thus a faithful representation of the infinite alternative of the unconditioned. Like the antithesis of the third antinomy, it is an illusion, and one which arises from mistaking the rules of inference for the connection between judgments of the understanding for rules in the determination of the connection between things in themselves.

The dynamical antinomies are indeed, then, genuine antinomies, the thesis of which represents the finite alternative of the unconditioned and the antithesis of which represents the infinite alternative, both of which are correspondingly false. However, whereas, in the case of the mathematical antinomies, the theses and antitheses
of each were false outright, in the dynamical antinomies, there is a sense in which they may both be true, though we can never have certain knowledge about this. It is in this respect that the significance of Kant's earlier distinction between the mathematical and dynamical antinomies (cf. p. 57 above) comes into play. It will be remembered that the unconditioned condition of the mathematical series could only be given in space and time (and, therefore, in the phenomenal world) if it was to serve as an explanation of that series, while the unconditioned of the dynamical series could be given in either the phenomenal or noumenal realm and still qualify as an explanation of its series. Now in both the thesis and the antithesis of the dynamical antinomies, the unconditioned was sought for only within the realms of the phenomenal world; that is, the world of appearances. It is, however, possible to admit the truth of the thesis of each of these antinomies by redirecting the search for the unconditioned to the realm of the noumenal world in the case of the thesis of each. Here, it is perfectly possible that there exists an uncaused cause or a necessary being though, of course, we could never know about it since this realm is beyond our epistemological reach. Kant is not here suggesting that such a cause or being does exist, but merely that it would be possible, or at any rate not in contradiction with the principles of understanding,
in the realm of the noumenal world. At the same time, the antithesis of each may be taken as true if we first recognize that its claim is restricted to the phenomenal world. But, of course, implicit in such a recognition is the further recognition that an uncaused cause or a necessary being may exist in the noumenal world, and therefore, that the series of causes or alterations is not necessarily infinitely extended, but merely infinitely extendable in the realm of our experience of the world. We may conclude, then, with Kant that:

The dialectical arguments which in one or other way sought unconditioned totality in mere appearances, fall to the ground, and the propositions of reason when thus given this more correct interpretation may both alike be true (A 532=B 560).

Division 2: Indistinguishable Antinomies?

Strawson's second complaint about the dynamical antinomies was that they did not represent two distinct antinomies, but were in fact a set of variations on a common theme. As we have seen, he considers the antithesis of each antinomy to be a reiteration of the thesis of the second analogy; and he considers the thesis of the third an argument to the effect that there must be an unconditioned sufficient condition of the series of causes in the world, and the thesis of the fourth an argument for an unconditioned
necessary condition of the same series. In each case he considers that the unconditioned condition argued for is a "freely acting cause." The necessary being, the existence of which the thesis of the fourth antinomy attempts to prove, is defined by Strawson as a being which "does not owe its existence to any antecedent or extraneous necessary condition of itself" (p. 210). I wish to begin with the notion that the fourth antinomy is concerned with a series of causes. If we read the proof of the thesis, we see that the series of conditions which the unconditioned (the necessary being) is meant to explain is the series of alterations: "The sensible world, as the sum-total of all appearances, contains a series of alterations" (A 452=B 480). But every alteration, the argument continues, is conditioned by that of which it is the alteration and which precedes it in time, rendering it, the alteration, necessary. And since something conditioned in existence presupposes a complete series of its conditions up to the unconditioned, there must exist something which is absolutely necessary as the unconditioned condition of the series of alterations. "Alteration thus existing as a consequence of the absolutely necessary" (A 452).

In this argument we are clearly dealing with the series of alterations in the world from which it is being attempted to prove the existence of a necessary being. One
might then wonder where Strawson comes up with the idea that the series in question is one of causes. If we read a little further down in the proof of the thesis, we find that the existence of the necessary being must be within the realm of the phenomenal world "for if it existed outside that world, the series of alterations in the world would derive its beginning from a necessary cause which would not itself belong to the sensible world" (A 454=B 482).¹ This seems to indicate that the necessary being must stand in some sort of causal relation to the series of which it is to be the unconditioned condition. This is indeed true, but is in itself not sufficient to identify the argument here with the argument in the thesis of the third antinomy. In the latter we were concerned with a first cause of the series of objects in the world related to each other as cause and effect, while in the former we are looking for a first member of the series which is a necessary condition of the existence of the series itself. The distinction being made is between the cause of a series of effects between the members of a series, and the cause of the existence of the members of the series themselves. The unconditioned which satisfies the former series is an uncaused cause, while in the latter series it is a necessary being in the

¹Underlining is my own.
sense of an unalterable being. Despite the fact, then, that the necessary being also stands in a causal relation to the series of alterations, it is not performing the same function as that of the uncaused cause in its series, since the necessary being is the cause of the existence of its series, while the uncaused cause is the cause of the chain reaction found between the members of its series.

It is, of course, by no means accidental that it is this precise distinction which emerges as the distinction between the third and fourth antinomies. If we recall the origins of the four transcendental illusions of rational cosmology as set forth in the first two chapters of this thesis, we will remember that the illusion of the third antinomy had its source in the relational category of causality, while the illusion of the fourth antinomy had its source in the modal category of existence. We should, thus, expect to find that in the third antinomy we are seeking for the unconditioned condition of a series of causes, and that in the thesis which represents the finite alternative of the unconditioned, we construct that unconditioned by extending the pure category of causality itself to the unconditioned, thus creating the concept of an uncaused cause which seems to explain the possibility of that series. We should, in the same manner, expect to find that, in the case of the fourth antinomy, we are seeking
for the unconditioned condition of a series of alterations, or the accidental in existence, of the world; and we should expect that in the thesis, which again represents the finite alternative of the unconditioned, we construct that unconditioned by extending the pure category of the accidental in existence to the unconditioned, thus creating the concept of the permanent in existence, i.e., a necessary being, to serve as an explanation of the possibility of the accidental in existence or the series of alterations of the states of the world.

However, it is not only the fact that the necessary being stands in a causal relation to its series that leads Strawson to believe that we are here concerned with the unconditioned necessary condition of a series of causes; the argument put forward in the proof of the thesis is an argument, he claims, from contingent existence (that which owes its existence to something other than itself and which precedes it in time) to necessary existence (that which does not owe its existence to any antecedent causal condition). If this is so, then clearly, we are involved in a causal series, since the existence of each member in the series is caused by some preceding state, and the unconditioned condition of the series is a necessary being in the sense of a being which does not owe its existence to some preceding state. In other words, an uncaused being which
is itself the first cause of the series. As we can see from the last argument, if this interpretation is correct, not only is there a problem as to the distinction between the third and fourth antinomies, but also there is a problem with the discrepancy between Kant's proclaimed origin and source of this antinomy, viz., the modal category of existence, and its real origin which would then remain a mystery to us. Although this consideration is not enough in itself to convince us of the error of Strawson's interpretation, it does serve as a strong indication that we should look for an interpretation which would be more compatible with the origin and source of the antinomy as proclaimed by Kant. I believe that such an interpretation is to be found, and furthermore, I do not think that it is as clear and obvious as Strawson would have us believe that the argument given in the proof is to be interpreted as one from contingent existence to an existence which is uncaused or is its own cause. In the remainder of this chapter, I wish to set out an alternate interpretation and argue for its superiority on the grounds that it not only avoids the discrepancies and contradictions of Strawson's view, but also that it gives a more coherent reading of the argument in the antinomy itself.

The argument which I would like to suggest is represented by the thesis of the fourth antinomy as this:
In the sensible world, we find a series of alterations. Each alteration is the coming to be of something which at one time was not. But something which begins to exist must come from the cessation of the existence of something else. If this were not the case, then alteration would not be presented to us as forming a series, but as the coming into being of a different thing from nothing. However, this cannot be the case, "For without such a series even the representation of serial time, as the condition of the possibility of the sensible world would not be given us" (A 452=B 480). Thus, the existence of an alteration is conditioned by that which precedes it in time and the cessation of which was a necessary condition of its existence. For example, a tree must exist as a tree before it can be made into a (wooden) table, and the table, having been set fire to, must exist as a table before it can become a pile of ashes. The existence of the tree is thus a necessary condition of the possibility of the existence of the table, just as the existence of the table is a necessary condition of the possibility of the existence of the ashes, etc. But if each member of the series is merely an alteration of the preceding member, the series could never begin to exist, and consequently, there must be an unconditioned condition of the series which is absolutely necessary. "Alteration, thus existing as a
consequence of the absolutely necessary, the existence of something absolutely necessary must be guaranteed" (A 453). In this case, the important thing about the necessary being is not that it does not owe its existence to an antecedent causal condition and is thus an uncaused cause, but that for as long as it exists, it does not alter the mode of its existence. Given this interpretation, it can indeed qualify as the unconditioned condition of a series of alterations, since it is the permanent or the unalterable which must persist through all alteration. An uncaused cause could not qualify as the unconditioned condition in this instance. It could only qualify as the unconditioned condition of a series of causes; however, a causal relation is one which exists between two objects, while in the case of a series of alterations it is clear that we are dealing with some one entity of which the alterations are alterations.

It will be noted at this point then that the argument of the thesis is similar to the argument of the first analogy. They are both arguments to the effect that the existence through time of a series of alterations is only logically possible if we postulate something permanent which persists through the alterations and is the condition of its possibility. As Kant says in the argument for the first analogy:
For this permanent is alone what makes possible the representation of the transition from one state to another, and from not-being to being (A188).

And again at A 187:

The correct understanding of the concept of alteration is also grounded upon [recognition of] this permanence. Coming to be and ceasing to be are not alterations of that which comes to be or ceases to be. Alteration is a way of existing of the same object. All that alters persists and only its state changes.

There are differences, though, between the two arguments. In the case of the first analogy, we recognize that the series of alterations is one given in the experienced world, and thus in a world given through the transcendentally subjective categories of understanding. In the thesis of the fourth antinomy, however, we mistake the series of alterations in the experienced world for a series of alterations in the world in itself. The result of this is that in the first analogy we recognize that reason can only infer from something conditioned given in experience (in this case, an alteration) to the logical condition of it, which must likewise be given in experience. We thus conclude that the permanent, which is the logical condition of alteration, is the object itself (or what Kant calls "substance in the field of appearance" given in experience, which the alterations are alterations of.
As Kant says:

All appearances contain the permanent (substance) as the object itself, and the transitory as its mere determinations, that is, as a way in which the object exists (A 182).

Or again at B 225:

Consequently the permanent, in relation to which alone all time-relations of appearances can be determined, is substance in the [field of] appearance, that is, the real in appearance, and as substrate of all change remains ever the same.

However, in the case of the thesis of the fourth antinomy, we believe that the series of alterations is contained in the world in itself, independent of our experience of it; consequently, we believe that it is legitimate to infer via reason that since something conditioned is given in the series (namely, an alteration), so too must its unconditioned condition be given. "Now every conditioned that is given presupposes in respect of its existence, a complete series of conditions up to the unconditioned" (A 452). We thus conclude that the permanent is a necessary being which is the logical unconditioned condition of the series of alterations. Thus while the general form of the argument of the first analogy and the first part of the thesis of the fourth antinomy are the same; the latter leads
to the illusion that there exists a necessary being which is the unconditioned condition of all alteration, since it (like the other antinomies) reasons from the mistaken belief that our experience of the world is an experience of the world in itself. This mistake is compounded by reason when we infer from the existence something conditioned to the existence of an unconditioned condition of it, which cannot in principle be given in experience. Apart from this discrepancy, however, both arguments are arguments to the effect that permanence is the logical condition of alteration.

However, the thesis of the fourth antinomy now makes a second point, viz., that the necessary being which is the logical or necessary (unconditioned) condition of the series of alterations, must exist in space and time since, if it did not do so, it could not be considered as standing in any sort of relation to the series of alterations, and thus could not be considered as standing in a causal relation to it. But this move then leads straight into the absurdity of concluding that the necessary being, as the unconditioned cause of the series, exists in the phenomenal world, despite the fact that the unconditioned cannot in principle be given in experience. This leaves the way open for the antithesis to point out that a necessary being as a first or uncaused cause of the series of alterations
cannot be found in the phenomenal world. This would contra-
dict the rule of the second analogy to the effect that in
time all alteration must take place in conformity with the
law of the connection of cause and effect, and that thus,
a necessary being cannot exist in the phenomenal world. Did
the antithesis assert no more than this its claim as a
reiteration of the claim of the second analogy, would be
ture. But, as we have already pointed out, the argument
of the antithesis--also mistaking the rules of inference
for the connection between judgments of the understanding,
for rules in the determination of the connection between
things in themselves--also leads to illusions. The argument
for the antithesis concludes from the rule of the second
analogy that the series of alterations is infinitely
extended rather than infinitely extendable, and consequently
that a necessary being exists neither in the world nor
outside of it.

My interpretation of the fourth antinomy is then,
in brief, that the thesis argues from the existence of
alteration in the sensible world to the existence of a
necessary being, also in the sensible world, which is both
permanent or unalterable in its mode of existence, and a
necessary first cause of the series. The argument has not
the power to decide whether this necessary being is the
world itself or a being distinct from it. The antithesis,
on the other hand, denies the existence of a necessary being in either form, and asserts that the series of alterations contained in the world is infinite and itself unconditioned.

I will now attempt to set out the advantages which this interpretation has over Strawson's. As we remember, Strawson's interpretation led to three major problems. The first of them was that we could not make any significant distinction between the third and fourth antinomies—which, incidentally, means that the latter did not represent any real argument in the history of speculative metaphysics, but was merely created by Kant in order to preserve the structure of his account of the origin of the antinomies.

However, if we recognize that the fourth antinomy is concerned with whether or not there exists in the world a necessary being as a first cause of the series of alterations and which is unalterable in its mode of existence, the distinction becomes clear. The third antinomy is concerned with the unconditioned condition of a series of causes, while the fourth antinomy is concerned with the unconditioned condition of a series of alterations; consequently, in the former case the unconditioned condition is an uncaused cause, while in the latter, it is a being which does not change the mode of its existence. It is true, however, that both the uncaused cause and the necessary being stand in a causal relation to
the series of which they are the unconditioned conditions, and that they are themselves uncaused. But in the case of the third antinomy, the unconditioned is solely an uncaused cause, while in the case of the fourth antinomy, the unconditioned is primarily a necessary or unalterable being, and only secondarily an uncaused cause. Thus, the two antinomies are indeed distinguishable. Furthermore, we can, in the history of speculative metaphysics, find distinct arguments which correspond to each of the antinomies. One has only to compare, for example, the 'Second' and 'Third Ways' of Thomas Aquinas, as set forth in his *Summa Theologica*, Part 1, Question 2, Article 3. The Second Way argues from the existence of a series of causes in the world to a first uncaused cause as the condition of the series, while the Third Way argues from the existence of a series of alterations in the world to the existence of something necessary or unalterable, which is also the condition of its series.

It is, then, precisely these two distinct arguments that are represented by Kant's third and fourth antinomies and in the case of each, he has shown that the illusion of believing there to be an unconditioned condition of everything conditioned, has its source in our mistaken belief that our experience of the world is transcendentally objective.
The second problem encountered by Strawson was that the refutation in the antithesis of the alternative forms of the necessary being offered by the thesis was in conflict with the claim of the antithesis itself. The argument given by Kant here is that "the existence of a series cannot be necessary if no single member of it is necessary" (A 453). If we assume with Strawson that by "necessary" Kant means "having no antecedent causal condition," then the argument, when translated out, reads: "the existence of the series must have an antecedent causal condition if every single member of it has an antecedent causal condition"—which is precisely what the antithesis is attempting to deny! If, on the other hand, we assume that by "necessary" Kant means "unalterable in the mode of its existence," when we translate out the argument, it coherently states that the existence of the series cannot be unalterable in the mode of its existence if no single member of it is unalterable in the mode of its existence.

The last of Strawson's problems is the fact that if his interpretation is the correct one, we are left in the dark as to the real origin of the fourth antinomy. If we insist with Kant that all the illusions of rational cosmology are in fact pure categories of understanding extended to the unconditioned, we could conclude that the true source of this antinomy is the relational category of
causality since this is the source of the illusion of the third antinomy. But this would not only be in contradiction with Kant's teaching on the subject; it would also leave unexplained why reason does not seek for an unconditioned condition of the accidental in existence, for that is clearly given as something conditioned and so qualifies as a candidate for extension to the unconditioned. If, however, we accept the interpretation that the series in question is a series of alterations, and that the necessary being is a being which does not alter the mode of its existence, the problem disappears. In the first place, if the conditioned series is a series of alterations, rather than causes, then it arises, as Kant said it would, from the modal category of existence, or more precisely, the accidental in existence. For the accidental in existence is that which comes to be and ceases to be, and this is none other than an alteration. And in the second place, the unconditioned condition of a series of alterations would be a necessary being—where this is a being whose mode of existence cannot change, i.e., a permanent being (as opposed to a being whose existence is not dependent upon an antecedent causal condition, as Strawson claims).

For these reasons I will conclude that the interpretation of the thesis of the fourth antinomy as an argument from the series of alterations in the world to a
necessary being which is unalterable in the mode of its existence and which stands in a causal relation (in the sense of a necessary condition) to the series of which it is the unconditioned condition, is a more consistent interpretation than that of Strawson's, since it not only avoids the problems of his interpretation, but also leads to a more coherent reading of both the thesis and antithesis of that antinomy.
CHAPTER FOUR

CONCLUSION

In this thesis I have attempted to do two things: first, to show that the thesis and antithesis of the four antinomies, specifically the dynamical antinomies, respectively represent the finite and infinite alternatives of the unconditioned condition of a series; and second, that the third and fourth antinomies are distinct in that they deal with different kinds of series of conditions, and consequently, that the unconditioned condition of each of the series is also different.

In arguing for these two points, it was necessary first to explain the source of the transcendental illusions of rational cosmology (the antinomies). The illusion in all four cases is that there exists an unconditioned condition of any series of conditions of any given conditioned thing. To explain the source of these illusions, Kant first showed that the natural functioning of reason is to unite the judgments of understanding under principles, and this is done by inferring one judgment (the conclusion) from another (the major premise) via syllogistic inferences (through a minor premise). However, the possibility of inferring the conclusion from the major premise requires
that the major premise contain the totality of conditions of the truth of the conclusion. Were this not the case, we would have no grounds for deriving the conclusion solely from the major premise. That is, if the major premise did not contain the totality of conditions of the truth of the conclusion, more information than is given in the major and minor premises (perhaps a third premise) would have to be added to the syllogism; before the conclusion could be inferred.

But now, the totality of the conditions of anything is ultimately its unconditioned condition. Consequently, reasoning in its normal function of uniting the judgments of understanding under principles, is in a certain sense seeking for the unconditioned condition of any judgment for which a major premise can be sought, i.e., any conditioned judgment.

In the normal functioning of reason illusion need not arise, since we have only a regulative idea of the unconditioned whereby reason unites the judgments of understanding under principles. Illusion arises when we mistake our experiences of the world for experiences of the world in itself, and thus conclude that if something conditioned is given, its unconditioned condition must also be given. Here we have moved from the mere idea of the unconditioned to an assumption about the actual existence of an
unconditioned in the world.

The concept of this existing unconditioned condition cannot arise in reason, since no concepts are generated by reason. All concepts arise in the understanding; thus, it is here that we look for the source of an unconditioned existing in the world. However, the unconditioned cannot be given in experience; hence, the understanding can legitimately form no concept of it, since it forms concepts only of things given in experience (or of things necessary for experience, such as concepts of space and time and the categories). The only explanation left for the construction of the concept of an existing unconditioned condition is that we illegitimately extend the pure concepts of understanding, i.e., the categories themselves, to the unconditioned, leaving aside the essential element necessary for the construction of any concept, viz., experience.

Kant shows that not all pure concepts of understanding, or categories, are suitable for being extended to the unconditioned in this manner. We found that the temptation to extend categories to the unconditioned only arises in those cases in which there is a need to satisfy reason's demand for the unconditioned. Reason only demands an unconditioned condition of something which is given in experience as conditioned. Thus, only those categories which present experience to us as conditioned give rise to
a need for an unconditioned condition. Having examined the categories of understanding, we found those which are capable of being extended to the unconditioned. According to Kant, there are four transcendental illusions of rational cosmology, one corresponding to each of the four headings of the categories. Consequently, since each transcendental illusion of rational cosmology, or antinomy, has its origin in a different class of category, it follows that the four antinomies will be dealing with different types of illusion.

The unconditioned condition of any series of conditions may be conceived of in one of two ways. It may be the first member of a series, which is unconditioned, or it may itself be the entire series of conditions which has no first member, and which, as a whole, is unconditioned. These two possibilities are incompatible; that is to say, they cannot both be the unconditioned condition of the same series. They are incompatible because a series with a first member is finite, while a series with no first member is infinite. Consequently, an antinomy of pure reason will be expressed as a set of formally valid arguments which reach contradictory conclusions. One conclusion will represent the finite alternative and the other, the infinite alternative of the unconditioned condition of the series. We will, therefore, expect to find in each antinomy that
one argument represents the finite alternative, while the other represents the infinite alternative. Kant tells us at A 418=B 446 that the finite alternative is argued for in the thesis of each antinomy, while the infinite alternative is argued for in each antithesis.

Professor Strawson in The Bounds of Sense has another interpretation of the structure of the antinomies, or at any rate of the dynamical antinomies. He maintains that the third and fourth antinomies are in fact almost indistinguishable, claiming that they are both arguments from a series of causes in the world to an uncaused cause. In the case of the third antinomy, the uncaused cause is, according to Strawson, the sufficient condition of its series, and in the case of the fourth antinomy, an uncaused cause which is the necessary condition of its series. He also maintains that whereas the thesis and antithesis of the first and second antinomies do indeed represent, respectively, the finite and infinite alternatives, in the case of the third and fourth, both alternatives are represented by the thesis, while the antithesis of each represents the claim of the second analogy. Strawson's interpretation destroys the antinomical nature of the third and fourth antinomies, since it would follow from his view that the thesis of each was false, while the antithesis was true.
There are two arguments against Professor Strawson's claim that the dynamical antinomies are indistinguishable. First, we found that the third antinomy is concerned with the causal relations found between a series of different objects, and the fourth antinomy with the series of alterations of some one object. Secondly, therefore, the unconditioned condition of the third antinomy is an uncaused cause which is the efficient cause of the series, and the unconditioned condition of the fourth antinomy is a necessary condition of its series. Of course, the efficient cause argued for in the third antinomy is also a necessary condition, since without it there could be no causal relations between the members of the series. However, the third and fourth antinomies are still distinct, because the necessary condition argued for in the fourth antinomy is not also an efficient cause.

With regard to Professor Strawson's second point, that the theses of the dynamical antinomies represent both the finite and infinite alternatives of the unconditioned, and that the antithesis of each represents the claim of the second analogy, one has only to examine the text to discover that Professor Strawson is mistaken. Close observation of the second analogy and of the antithesis of the third and fourth antinomies reveals that their claims are not identical. The claim of the second analogy is that
"all alterations take place in conformity with the law of the connection of cause and effect" (B233). The conclusion from this is that a series of causes and a series of alterations are infinitely extendable. However, the conclusion of the theses of the third and fourth antinomies is that each of these series are infinitely extended.

Although Professor Strawson acknowledges that Kant never says that the unconditioned argued for in the thesis of the third antinomy can be either the finite or infinite alternative, he still implies that this is so. Strawson's main reason for maintaining this is that the antithesis denies both alternatives. However, since it was shown that his interpretation of the antithesis is mistaken and that the antithesis in fact represents the infinite alternative, we may dismiss his claim as unfounded.

We might offer a similar analysis of the thesis of the fourth antinomy, except that Kant does mention two distinct types of necessary being in that thesis. The necessary being may be either the world itself, i.e., the total series of alterations in the world, or the first member of that series. However, it is a mistake to interpret these (with Strawson) as the infinite and finite alternatives of the unconditioned condition. Clearly, the "first member of the series" is a representation of the finite alternative (because it marks a beginning in time).
But "the world itself" (the total series of alterations) is not meant to represent the infinite alternative, since it is to be understood as a finite series which as a whole is a necessary or unalterable being and which is itself without any cause.

I have found, then, that my interpretation of the dynamical antinomies makes Kant more coherent than Strawson for three reasons. First, because it coheres with his claim at A 418=B 466 that the thesis of each antinomy represents the finite alternative and the antithesis, the infinite alternative of the unconditioned condition. Second, it coheres with his account of the origin of the antinomies, viz., that each antinomy has its origin in a different class of category, and so is distinct from the others. Finally, my interpretation gives a more intelligible reading to the refutation of the-world-itself alternative of the unconditioned, found in the antithesis of the fourth antinomy. This refutation, on Strawson's reading, is, as we have seen, self-contradictory.
BIBLIOGRAPHY

TEXTS CITED:


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Kemp-Smith, Norman. A Commentary to Kant's 'Critique of Pure Reason.' London, 1918.
