USE OF THESES

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Becoming Gods

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This thesis is my own original work.

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Abstract of *Becoming Gods*

The central question of this work is whether humans are capable of realizing the unity of thought and being, i.e., the complete truth of the universe and our place in it, i.e., absolute knowing. This question is pursued from the point of view of several different conceptions of the nature of philosophy. Part I considers this question from the point of view of the Platonistic conception of philosophy. The conclusion of part I is that absolute idealism offers the best prospect for the Platonist who believes that humans are capable of realizing the unity of thought and being. Part II is a skeptical critique of the conclusion of part I. It is argued that there is little reason to suppose that humans are capable of realizing the unity of thought and being, given the Platonistic conception of philosophy. In part III this question is pursued from the point of view of philosophical naturalism. This view is also subjected to a skeptical critique. It is argued that there are good scientific reasons for supposing that humans are incapable of realizing the unity of thought and being, given that they pursue this goal along naturalistic lines. Part IV suggests the outlines of an experiment which would put to the test the question of whether humans are capable of realizing the unity of thought and being. By genetically manipulating the human genome it may be possible to create beings which are as far removed from humans in intelligence and comprehension as humans are from chimpanzees. If this experiment succeeds then these newly created beings will have a much better chance than humans of realizing the unity of thought and being. It is argued that these beings might merit the name 'gods'. Part IV also considers the pragmatists' rejection of the central question of this work. It is argued that the experiment described provides a rejoinder to the pragmatist.
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The thesis of this work is that in order to complete philosophy, philosophers must attempt to become as godlike as possible, and that to achieve this end, humans ought to attempt to create a new species of philosophers. In all probability, this new species of philosophers will greatly transcend human abilities to philosophize, for this new species may indeed merit the appellation 'gods'.

Put schematically, and somewhat more formally, the argument is as follows:

P1: If we humans are to complete philosophy, then philosophers must become as godlike as possible.

P2: If we humans do not attempt to create a new species of philosophers, then it is not the case that philosophers will become as godlike as possible.

C: If we humans are to complete philosophy, then we humans must attempt to create a new species of philosophers.

The conclusion is conditional. The conclusion of this work is not that we ought to create a new species of
philosophers; for this would require the ethical premise
that we ought to complete philosophy as far as humanly
possible, however this ethical question is beyond the
domain of this work.

-29. The argument of this work is completely
derivative and unoriginal. The premises are drawn, for the
most part, from Hegel and Darwin.

-28. The first (Hegalian) premise intimates a link
between the godlike and philosophers. Hegel, of course, is
certainly not original in intimating a link between the
divine and philosophers. There is a long tradition of
speculation on this matter, predating and postdating
Hegel's own discussion. It will perhaps be best to say
something first about the tradition to which Hegel is
responding before discussing his original contribution.

-27. The question of how godlike or divine human
philosophers might become is usually made by comparing the
nature of human wisdom with that of the divine form of
wisdom. The divine is thought of as the perfect form of
wisdom, the standard by which other forms of wisdom might
be compared. Philosophers, as lovers of wisdom, might hope
to attain such a standard. Whether human philosophers are
in fact capable of attaining such a standard of wisdom is
a much contested question in the history of philosophy.

-26. Xenophanes was pessimistic about achieving such a
standard:
(Fragment 18) Truly the gods have not revealed to mortals all things from the beginning; but mortals by long seeking discover what is better.

(Fragment 34) And as for certain truth, no man has seen it, nor will there ever be a man who knows about the gods and all the things I mention. For if he succeeds to the full in saying what is completely true, he himself is nevertheless unaware of it, and Opinion (seemingly) is fixed by fate upon all things.

Commenting on these fragments, Wilbur and Allen note the following:

Certainly Frgs. 18 and 34 can be understood as a direct result of his view of the extreme difference between man and the divine... Although Xenophanes does not believe that it is possible for the finite to encompass the infinite, man may yet acquire
some understanding through experience and "long seeking." [2]

-25. Heraclitus expresses similar sentiments in the following passages:

(Fragment 78) Human nature has no power of understanding; but the divine nature has it.
(Fragment 32) That which alone is wise is one; it is willing and unwilling to be called by the name of Zeus. [3]

Two further fragments from Heraclitus encapsulate central themes of the present work:

(Fragment 83) (The wisest man will appear an ape in relation to God, both in wisdom and beauty and everything else).
(Fragment 79) Man is called childish compared with divinity, just as a boy compared with man. [4]
Fragment 83 expresses humanity's wisdom in terms of a phylogenetic analogy. The difference between the wisdom of homo sapiens and apes is analogous to the difference between the wisdom of a god and humanity's wisdom.

Fragment 79 expresses humanity's wisdom in terms of an ontogenetic analogy. The difference between the wisdom of adult homo sapiens and young homo sapiens is analogous to the difference between the wisdom of a god and an adult homo sapiens. Taking these fragments to heart has enormous consequences for the view that humans might bring philosophy to its completion, for if at least one desideratum of a completed philosophy is the complete truth about the universe and our place in it, then, it seems that, given that Heraclitus is correct, a completed philosophy is forever beyond human ability and indeed our ken. Such a conclusion seems to follow given that we accept Heraclitus' analogies, for it seems hard to deny that by the very nature of their minds apes and children are never going to be able to grasp the complete truth of the universe. For instance, it seems plausible that no ape or child of five say will ever understand Einstein's theory of relativity, Godel's proof, or Dostoevsky's Notes from Underground. It might be conjectured that there are certain concepts and thoughts which could never be entertained by an ape or a five year old. This inability
might explain in part the idea that the complete truth about the universe might elude an ape or a child. Of course, if one maintains with Heraclitus that we stand in exactly the same relation as compared with a god, then it follows that there are certain thoughts and concepts which we might not be capable of entertaining, i.e., it seems that we must conclude that the complete truth eludes adult humans as well. Given that a completed philosophy has as one of its desiderata the complete truth, it follows, a fortiori, that philosophy cannot be completed by humans. In any event, this is simply a quick sketch of one of the main arguments of this work, an argument which of course takes its cue from Heraclitus. However, some of the greatest philosophical minds take issue with Heraclitus on precisely this point.

-24. Heraclitus' phylogenetic and ontogenetic analogies suggest or at least seem to allow the possibility of a continuum of wisdom and intelligence between a child or ape on the one hand, and a god on the other. There are differing views on where humans lie on this continuum. Plato, Aristotle and Hegel seem to believe that (at least some) humans lie close to the god end.

-23. Plato never identified humans with the divine but he seems to have believed that at least some humans could come very close to the divine, at least in terms of their wisdom. To see this, consider Plato's descriptions of the
So the mind of a god, sustained as it is by pure intelligence and knowledge, like that of every soul which is destined to assimilate its proper food, is satisfied at last with the vision of reality, and nourished and made happy by the contemplation of truth, until the circular revolution brings it back to its starting-point. And in the course of its journey it beholds absolute justice and discipline and knowledge, not the knowledge which is attached to things which come into being, nor the knowledge which varies with objects which we now call real, but the absolute knowledge which corresponds to what is absolutely real in the fullest sense. [5]

In the last part of the quote Plato is apparently referring to knowledge of the Forms. God’s knowledge is apparently knowledge of the Forms. Plato goes on to suggest that, of all the different types of humans, philosophers come closest to a godlike vision. [6] Of the life of the philosopher Plato says that,
Because he stands apart from the common objects of human ambition and applies himself to the divine, he is reproached by most men for being out of his wits; they do not realize that he is in fact possessed by a god. [7]

Plato's view then, in a nutshell, seems to be as follows: the knowledge of a god is true knowledge for it is knowledge of the Forms. Most humans do not possess true knowledge for they mistakenly believe knowledge to consist of acquaintance with sensous particulars, not the Forms; thus most humans possess only opinion, not knowledge. However, philosophers distinguish themselves among humans in that they understand that true knowledge is knowledge of the Forms. Hence, in terms of their understanding, philosophers are most godlike among humans. The perfection of a human life consists in becoming as godlike as possible. [8]

-22. Aristotle is perhaps even more to the point. In the _Nicomachean Ethics_ he argues that philosophical activity, that is, the activity of our intelligence, is the most virtuous form of human activity:
...it follows that the activity of our intelligence constitutes the complete happiness of man, provided that it encompasses a complete span of life; for nothing connected with happiness must be incomplete.

However, such a life would be more than human. A man who would live it would do so not insofar as he is human, but because there is a divine element within him. This divine element is far above our composite nature as its activity is above the active exercise of the other (practical) kind of virtue. So if it is true that intelligence is divine in comparison with man, then a life guided by intelligence is divine in comparison with human life. We must not follow those who advise us to have human thoughts, since we are (only) men, and mortal thoughts, as mortals should have; on the contrary, we should try to become immortal as far as that is possible and do our utmost to live in accordance with what is highest in us. [9]
Aristotle believes that, qua philosopher, one ought to become as immortal or godlike as possible, a conclusion which is consistent with the present argument.

-21. As a preliminary conclusion it is perhaps fair to say that the question of to what extent humans are godlike has a long history, one which can be traced to the Pre-Socratics. Here we have seen Xenophanes and Heraclitus suggesting that there is a large and ineliminable gulf between a divine intelligence and wisdom and the human form thereof. Plato and Aristotle, on the other hand, suggest that at least some humans might become close to gods in intelligence and wisdom. This debate is continued by Kant and Hegel, and more recently, by Nagel and Davidson. Some of this debate will be considered in more detail in later chapters. For the present only Hegel's contribution to the debate will be briefly considered.

-20. We have confirmed that Hegel's originality does not lie in asserting that, if we humans are to complete philosophy, then philosophers will become as godlike as possible, for Plato and Aristotle seemed to have agreed with this statement. According to them, the most perfect example of wisdom and intelligence is characterized by a god, and philosophers are most godlike among humans.

-19. Hegel's original contribution to this debate is in effect to say that Heraclitus and Xenophanes correctly
characterize humanity at the beginning of history, whereas Plato and Aristotle are correct about humanity at the end of history, i.e., Hegel sees humanity in developmental terms. Humanity passes from a finite being to an infinite being via the process of history. Hegel describes this developmental process in a number of ways from various points of view, e.g., from the perspective of art, religion, and philosophy. Kojeve summarizes one such developmental sequence whereby Christianity is assimilated to the Hegelian philosophy:

Now, according to Hegel, one can realize the Christian anthropological ideal (which he accepts in full) only by "overcoming" the Christian theology: Christian Man can really become what he would like to be only by becoming a man without a God—or, if you will, a God-Man. He must realize in himself what at first he thought was realized in his God. To be really Christian, he himself must become Christ. [10]

For humanity to become Christ is for humanity to become God. Hegel's appropriation of Christianity, of course, is
actually an inversion since "...it is a Man who has become "God," not "a God who has become a Man..." [11] The first God-Man was Hegel himself, at least according to Hegel. For Hegel was the first to solve the "riddle of history". History is revealed to be a progressive sequence of events which culminates in humanity passing from being merely finite beings to being infinite beings; hence even the ancient Greeks, who Hegel much admired, were merely finite beings. It is only with Hegel himself that humanity fulfills its potentiality and becomes infinite.

Furthermore, it is only with Hegel that philosophy (and history) can be completed; for merely finite beings are never capable of a perfected wisdom, of absolute knowing. Philosophy can only be completed by a God-Man. In opposition then to Xenophanes and Heraclitus, Hegel maintains that there is no unbridgeable chasm between divine wisdom and human wisdom. There is a chasm, but it is bridged by history: history being the process whereby humanity progresses from finite to infinite being. To Heraclitus' remark that "Man is called childish compared with divinity, just as a boy compared with man", Hegel might agree as long as it is interpreted in a certain way. Hegel might say that "Man is called childish compared with the Man-God, just as a boy compared with man," for as Hegel notes the wisdom of mature people of a former age is taught to children of the present age as prepartory
exercises. [12] (Euclidean geometry, for example, was a great achievement made by the ancient Greeks but is now taught in grade schools). To Plato and Aristotle's suggestion that the wisdom of at least some humans is similar to that of the divine, Hegel would agree—but only given that human wisdom has matured through the mediating process of history. On Hegel's view, neither Plato nor Aristotle could have had a divine form of wisdom because of the historical epoch in which they lived. Absolute knowledge was not possible for Plato or Aristotle—only with Hegel does absolute knowledge arrive on the scene.

-18. Whatever plausibility it had in its own day, Hegel's thesis that humans have developed to the point where they are now Men-Gods is untenable. It is untenable for perhaps any number of reasons. [13] For the present purposes, it will be most useful to concentrate on Hegel's thesis in light of Darwin's theory of natural selection. Certainly there are at least superficial similarities between the views of these two thinkers. Both Hegel and Darwin view humanity as the result of an evolutionary process—neither believed that humanity had arrived on this earth as the completed product of some extramundane process. Beyond these points of agreement, there is not much in common between the writings of Hegel and Darwin.

-17. One obvious way to distinguish the work of Hegel and Darwin is that, while both agree that humanity is the
result of evolutionary processes, Hegel tends to explain humanity as the product of cultural evolution, Darwin concentrates more on humanity as the result of biological evolution. This in itself does not put the work of these two thinkers in conflict. Indeed, it might be pleasant to think of humanity as the sum of its "nature and nurture", and that Darwin describes the evolution of our nature and Hegel describes the evolution of our nurture. While there is perhaps a possibility of complementary analysis here, there is also the potential for conflict.

-16. Perhaps the greatest potential for conflict stems from the differing teleological notions employed by these two thinkers. As often noted, what bothered Darwin's contemporaries so much was not the idea that species might evolve--this idea had been around for some time--but that the whole process was not goal directed. Species did not evolve according to some preordained plan. It was the sheer contingency of Darwin's notion of evolution which many found disturbing. In contrast Hegel's conception of evolutionary development employs, in some sense, the idea of necessity, for Hegel there is a goal or a plan for humanity, namely: to arrive at absolute knowledge. [15] The various stages in humanity's evolution to this goal are laid out in a pattern which is in some sense necessary.

-15. Naturally, these two differing conceptions of the
teleological processes need not necessarily conflict. Perhaps one could maintain the picturesque view that Darwin describes the origins of the biological species homo sapiens in terms of a contingent process: the natural selection of random mutations; while Hegel describes the necessary progression of the culture of homo sapiens to its final goal: absolute knowing. This picturesque view is thrown into question when one starts to wonder whether natural selection did in fact produce a species which has the potential for absolute knowing, i.e., how do we know that homo sapiens are not congenitally incapable of realizing absolute knowledge? After all, there is nothing about the nature of natural selection which guarantees that a creature capable of absolute knowledge will evolve.

Most intellectuals today agree in broad outlines with Darwin's account of the descent of homo sapiens. As to the question of whether this account of our genesis has potential ramifications for our quest for the complete truth, absolute knowledge, there are three distinct attitudes. Some are optimistic about our chances of achieving absolute knowledge, despite accepting a completely secular account of our origins. Such optimism is expressed by some physicists who believe that we might find a "final theory", a "theory of everything" or "discover the ultimate laws of nature". Similar optimism is expressed in Davidson's "transcendental anthropology".
The second attitude is one of pessimism: it may be that we are congenitally incapable of absolute knowing, knowing the complete truth. Such pessimism has been expressed by various philosophers and speculative psychologists. The third attitude is one of indifference. The generality of the question of whether homo sapiens are capable of absolute knowledge is such that it extends beyond the specialized interest of most intellects. It is probably safe to say most intellects do not ponder or have a view on the question of epistemological ramifications of Darwinianism. This work is mainly concerned with undermining the first attitude in favor of the second. This work does not speak to the third attitude because there is no ethical argument here to the effect that we ought to ask questions about the possibility of absolute knowledge.

-13. In a sense then, the main thrust of this work is to suggest a certain skepticism with respect to the idea that human philosophers might ever be able to realize one of the central ambitions of philosophy: namely, to arrive at the complete truth, i.e., the unity of thought and being, i.e., absolute knowledge. This succinct formulation glosses over a number of complications, not the least which is the fact that both "skepticism" and "philosophy" come in a number of varieties.

-12. To say that one of the central ambitions of "philosophy" is to arrive at the unity of thought and
being is already to presuppose particular conceptions of philosophy, e.g., I argue that there are good reasons for understanding at least one strand of pragmatism as rejecting this ambition. Furthermore, even if one's preferred conception of philosophy accepts the ambition to realize the unity of thought and being, there is still the question of the method by which this goal is to be reached. Platonists might demand a presuppositionless demonstration of the unity of thought and being, while naturalists might suggest that the proper method of realizing this goal is exemplified by the empirical sciences. The moral is that any grand claims made about "philosophy" require sensitivity to various competing conceptions of "philosophy".

-11. The problem of differing conceptions of philosophy is further exacerbated by the strategy I have chosen for handling this problem. Some writers are content to describe (or more often than not, simply assume unannounced) their preferred conception of philosophy. The strategy I have employed--one which is certainly not indigenous to this work--is to examine several competing conceptions of philosophy according to their own standards, e.g., as noted above, Platonists demand that epistemological claims be demonstrated in a presuppositionless manner, while naturalists might demand that epistemological claims be shown to be "scientifically
respectable".

-10. Prior to criticizing a view, I attempt to construct the best case for that view, e.g., about half this work is devoted to constructing what is intended as the best possible case which accords with the Platonic conception of philosophy. This position is constructed only to be criticized in the latter part of the work.

-9. While I employ this same strategy for each conception of the nature of philosophy (i.e., for each of the various proposed metaphilosophies), the attention each receives varies greatly. As the previous paragraph indicates, most of this work is devoted to criticizing the Platonic conception of philosophy. Some readers of an earlier draft of this work have expressed surprise that I should devote so much space to criticizing a conception of philosophy which most contemporary philosophers do not accept, for I understand the Platonic conception of philosophy as an attempt to provide a presuppositionless demonstration of the unity of thought and being. As a sociological observation, it is probably true that most contemporary philosophers reject this conception of philosophy. As a somewhat trite observation, I should say that because most of the philosophers living near the end of the twentieth century reject this conception of philosophy, it does not seem to follow, necessarily, that this conception of philosophy is incorrect. It is true, as
many have observed, that there is more philosophical output at this point in history than ever before—but this observation of course speaks only to quantity not quality.

-8. There are two reasons why I concentrate so much attention on Platonism. The first reason for this focus is simply that this conception of philosophy is in fact central to any understanding of philosophy hitherto. Clearly, the Platonic conception of philosophy has dominated the history of philosophy—at least from Plato to Hegel. Many of the ancient and modern philosophers held to the ideal of a presuppositionless demonstration of the unity of thought and being. But even various alternative conceptions of philosophy, such as pragmatism and naturalism, are only fully comprehensible as a reaction against Platonism. While I believe this is in fact correct, I do not argue this claim in the text. My strategy is not to demonstrate any claim of "guilt by association", rather, as previously noted, I attempt to criticize these various metaphilosophical models according to their own standards.

-7. This strategy is perhaps no more apparent than in the discussion of Platonism itself. This discussion centers around the epistemology of a certain logical law. My thinking is that if there is any area of discourse which is amiable to the Platonic conception of philosophy, it is logic. This thought is hardly original, especially
when one considers that the discussion of the epistemology and metaphysics of logical laws are inevitably intertwined with notions such as a priori versus empirical knowledge, analytic versus synthetic propositions, and necessary versus contingent propositions. These contrasts, of course, were of great interest to the Enlightenment Platonists. The positive case made for the Platonist in the first part of this work, in fact, continues a tradition which has Kant as a central figure. Kant, as is well known, thought that there were enormous metaphysical consequences which followed from the existence of synthetic a priori truths. Kant thought that such truths were in some sense necessary and indeed termed his investigation "transcendental logic". [16] Hegel in effect criticized Kant for not taking this insight far enough, for Kant studied only a few concepts—e.g., cause and effect—from the point of view of a transcendental logic. Hegel, in contrast, attempted to provide a "transcendental logic" for all our concepts. This work, in effect, makes a similar criticism of Hegel in that he too did not push this insight far enough, for it is argued that Kant's insight concerning "transcendental logic" also applies to "formal logic", to the most abstract of all logical laws. In any event, the point here simply is that I concentrate the discussion of Platonism around the epistemology and metaphysics of a certain logical law because I think that
this is the best case a Platonist could make. In the second part of this work, however, I attempt to criticize this "best possible case".

-6. The second reason for discussing Platonism in such detail is closely related to the first. If alternatives to the Platonic model of philosophy are at least implicitly defined in terms of the failure of the Platonic project, then, the vindication of Platonism might have repercussions for these alternate models. One may wonder why I should be concerned with the possible vindication of Platonism given that I criticize what is intended as the best possible case for Platonism. The reason lies in the fact that the "best possible case" is ambiguous between the "best possible case a human might construct" and "the best possible case a God might construct". Naturally, even the most optimistic understanding of this work would suggest that it refutes the best possible case which a human Platonist might make. Accordingly, this means that at best it may be said that the Platonic conception of philosophy is an ideal which humans cannot attain, but, for all we know, the Gods might be Platonists. At least this is what I shall argue.

-5. It might seem strange that I should raise the question of whether divine beings might be Platonists given that I claim to be a Darwinian. After all, the Darwinian world is a godless world. I agree that there are
no Gods at this point in history, but the future may see Gods. Indeed, it maybe that some of those alive in the last decade of the twentieth century might still be alive for the arrival of the gods.

-4. Darwinianism suggests our secular origins, but it does not prohibit the idea that our destiny might lie in the divine—at least this is what I argue. On the Darwinian view, there is no reason to believe that homo sapiens stand as some sort of crowning phylogenetic achievement. It is perfectly consistent with Darwinianism to suppose that there might be another species which exceeds homo sapiens in wisdom and intelligence by the same margin that homo sapiens exceed apes, i.e., it may be that such a "higher species" evolves from homo sapiens. Unlike the evolution of homo sapiens, I suggest that this species might evolve as the result of genetic engineering. To paraphrase Heraclitus, it may be that the wisest homo sapiens will appear an ape in relation to such a "higher species", both in wisdom and beauty and everything else. Indeed, if I am correct in my contention that there may be reason to call such "higher beings" 'gods', then it may be that we can say with good reason that "the wisest man will appear an ape in relation to God, both in wisdom and beauty and everything else".

-3. To these gods we ought to bequeath the task of philosophy. By this I mean not only that the gods might
complete philosophy according to a certain conception, but
that they must also adjudicate between the competing
conceptions of philosophy (e.g., Platonism, pragmatism,
naturalism, historicism, etc.).

2. It is perhaps already apparent that I believe that
there is a crisis in European philosophy. Certainly this
seems so if we think of philosophy in the tradition from
Plato to Hegel. Consider that a recent collection of
papers has been published under the title After Philosophy
with the subtitle, End or Transformation?. This subtitle
presupposes obviously that there is no prospect for
continuing philosophy unchanged. The collection is
interesting if for no other reason than it contains papers
by some of the best known contemporary philosophers
including, on the one hand, Dummett, MacIntyre, Rorty,
Putnam, and Davidson; and on the other, Blumenberg,
Derrida, Foucault, Habermas, and Lyotard. Although they
differ on just about everything else, these thinkers are
at least agreed that there is a crises in philosophy:
philosophy must either be brought to an end or at least
transformed. I agree with this "consensus sapientium" that
philosophy ought to be brought to an end or
transformed—if they are speaking about human philosophy.
I think the "end or transformation" conclusion, however,
is too hasty if it is applied to what the gods might be
capable of performing, for it does not seem plausible to
me to assume that humans can delineate what is possible and impossible for the divine. It would seem, rather, that the wisest human philosopher will appear an ape in relation to God, in philosophical ability, beauty and everything else. It follows that it may be that the gods are capable of rejecting the "end or transformation" question, since, for all we know, it may be that they are capable of completing philosophy. To answer the question of this volume with a question: how do we know that it is philosophy which ought to be ended or transformed rather than the (human) philosophers themselves?

-1. Even thinkers who believe that philosophy ought to continue along its traditional vector are often pessimistic about the possibility of making much progress. Thomas Nagel is one such thinker. Nagel will have no truck with "...deflationary metaphilosophical theories like positivism and pragmatism, which offer to raise us above the old battles," rather Nagel suggests:

There is a persistent temptation to turn philosophy into something less difficult and more shallow than it is. It is an extremely difficult subject, and no exception to the general rule that creative efforts are rarely successful. I do not feel equal to the
problems treated in this book. They seem to me to require an order of intelligence wholly different from mine. [17]

The view suggested in this work has deep sympathy with that expressed by Nagel in this passage. Where Nagel says that philosophical problems seem to require an order of intelligence wholly different, I could not agree more. I say in addition that we might put this suggestion to the test by creating an intelligence which is wholly different. It might be that an intelligence which is wholly different, in that it is godlike, might be capable of making progress in philosophy where we humans have failed. In other words, the lack of any sustained progress in philosophy might not be due to the nature of philosophical problems, but due to our own human nature. The experimental hypothesis then is this: there will be no good philosophy until philosophers become gods or the gods become philosophers.
End Notes: Preface

2. Ibid.
3. Ibid. p. 64.
4. Ibid. p. 72.
5. Phaedrus, 247.
6. Ibid. 248.
7. Ibid. 249.
8. Ibid.
9. Nicomachean Ethics, 1177b my emphasis.
10. Alexander Kojeve, Introduction to the Reading of Hegel, trans. J. H. Nichols, Jr., Ithaca: Cornell University Press, 1969, p. 67. Of course Kojeve's reading of Hegel is just one reading among many others. Some would interpret Hegel as a more traditional atheist--there is no God not even a God-man--while others would see him as a more traditional type Christian.
11. Ibid.


16. *Critique of Pure Reason*, trans. N. K. Smith, Toronto: Macmillan, 1965, A55/B80, A57/B82. This work hereafter is cited as 'CPR'. References of course follow the standard 'A' and 'B' format which refers to the two editions of the work which Kant published.

Chapter One: Introduction

1. The guiding question of this work is whether it is possible for humans to realize the unity of thought and being. This ancient question is not quite captured by the modern paraphrase which asks whether it is possible for humans to know reality. For if one knew but one truth about reality, this would certainly count as an instance of knowing reality, but this would not necessarily show that the unity of thought and being had been realized. Consider that one truth about the world which one might claim to know is that reality is far too complex for humans ever to know very much about it. Naturally, such a claim would suggest that there was a radical disunity between human thought and reality. A better paraphrase of the original question is whether it is possible for humans to know the complete truth about reality. The 'complete truth about reality' does not mean that every truth about reality be known, but only that the important truths be known. Just as when physicists consider a final theory about all physical phenomena, they do not mean that every truth about physical phenomena will be part of such a theory, but only that most general features of physical reality will be described. The unity of thought and being then might be thought of as "the true and complete theory of reality". Thus, if one is in a position to realize the
unity of thought and being, then one will have avoided both error and ignorance. Error is avoided because by definition one would be endorsing the truth. Ignorance would be avoided because the theory is complete.

2. One way to understand the structure of the present argument is as a "dialectical" interplay between dogmatists and skeptics. The term 'dogmatist' here is employed in the sense of one who believes that it is possible to know the complete truth about reality, i.e., for humans to realize the unity of thought and being. The term 'dogmatist' is not employed here in the pejorative sense of one who maintains one's views uncritically, on the basis of mere assumptions or dogma. Indeed, the first dogmatist to be met is one who attempts to provide a presuppositionless demonstration of the unity of thought and being. In contrast, skeptics are doubtful that it is possible for humans to know the complete truth about reality.

3. The work is divided into four parts. Part I, chapters 2 to 6, considers a line of argumentation which seems to promise victory to the dogmatist. Operating within the strictures of what will be described as the Platonic conception of philosophy, part I terminates in the conclusion that the question of the unity of thought and being can be satisfactorily answered by idealism. Part II, chapters 7 and 8, is in effect the skeptic's rebuttal
to the conclusions of part I. The skeptic argues that idealism cannot consistently be maintained by the dogmatist who accepts the standards of Platonistic philosophy. Part III, chapter 9, begins with a consideration of the position of a different dogmatist. This dogmatist rejects the Platonist conception of philosophy in favor of a "naturalistic" conception of philosophy—the basic idea being that "philosophy is itself a sort of empirical science." [1] The new dogmatism is itself subject to skeptical attack. The skeptic argues that dogmatism cannot consistently be maintained in conjunction with the naturalistic conception of philosophy. Part IV, chapters 10 and 11, ends with the suggestion that only creatures with a godlike perspective can overcome skepticism and achieve the unity of thought and being. Given that it seems to be in our power to create such godlike creatures, and that we want to overcome skepticism, it follows that the task of philosophy is to create such godlike beings. The remainder of this introduction will be devoted to provide a few details about the subject matter of the various chapters.

4. The aim of chapter 2 is to elucidate the Platonistic conception of philosophy. As noted, part I is the dogmatist attempt to show that humans might be capable of realizing the unity of thought and being in a manner consistent with this conception. For the present purposes,
the most important feature of this conception is the demand for a presuppositionless demonstration of the unity of thought and being. The leading idea of a presuppositionless methodology is that a philosophical theory, conceived of as a body of propositions, must be structured such that each proposition is justified. Traditionally, this ideal has been pursued in one of two ways: either the theory is "foundational" in the sense that it employs axioms which do not require further justification, but which are justifiers for the remainder of the theory, or, the theory is justified via its "coherence", there are no axioms in the theory, rather, the propositions are justified via a system of symmetrical justificatory relations. In either case, one criterion for evaluating whether a philosophical theory meets the demands of an assumptionless methodology is to see whether the theory is immune from skeptical doubt. The rationale for this is that skepticism is often understood as questioning our justification for believing or knowing something, but if the ideal of an assumptionless methodology is met, every step of a philosophical theory is justified.

5. Having described the standard of evaluation, the argument turns to the question of whether the dogmatist can demonstrate the claim to know that reality or being is not contradictory. Certainly, the dogmatist would be
hard-pressed to show that knowing that reality (or being) is not contradictory is sufficient to say that humans might know the complete truth about reality, since the mere claim that reality is not contradictory allows much latitude for theories about the nature of reality. Knowing that reality is not contradictory is quite compatible, for example, with the skeptical hypothesis that an evil demon is attempting to deceive about the nature of reality. On the other hand, if one knows that reality is not contradictory then one knows at least that it is not the case that one is both deceived by an evil demon about the nature of reality and not deceived--at the same time in the same respect. To be able to claim to know even this would be an advance for the dogmatist. In other words, even if knowing that reality is not contradictory is not sufficient for claiming to know the complete truth about reality, the dogmatist, it will be argued, is in a good position to say that knowledge of this claim is at least necessary for claiming knowledge of the complete truth about reality. To put this point yet another way, if the dogmatist cannot demonstrate that reality is not contradictory, then there seems to be little prospect that less general claims about reality are likely to be immune from skeptical attack. Hopefully, the rationale for concentrating on the law of noncontradiction will become clearer as the discussion proceeds.
6. In the following quote Ayer delineates the theoretical options for explaining the laws of logic:

Where the empiricist does encounter difficulty is in connection with the truths of formal logic and mathematics. For whereas a scientific generalization is readily admitted to be fallible, the truths of mathematics and logic appear to everyone to be necessary and certain. But if empiricism is correct no proposition which has a factual content can be necessary or certain. Accordingly the empiricist must deal with the truths of logic and mathematics in one of the two following ways: he must say either that they are not necessary truths, in which case he must account for the universal conviction that they are; or he must say that they have no factual content, and then he must explain how a proposition which is empty of all factual content can be true and useful and surprising.

If neither of these courses proves satisfactory, we shall be obliged to give way to rationalism. We shall be obliged to
admit that there are some truths about the world which we can know independently of experience; that there are some properties which we can ascribe to all objects, even though we cannot conceivably observe that all objects have them. And we shall have to accept as a mysterious inexplicable fact that our thought has this power to reveal to us authoritatively the nature of objects which we have never observed. Or else we must accept the Kantian explanation which, apart from the epistemological difficulties which we have already touched upon, only pushes the mystery a stage further back. [2]

Ayer thus sees four options for accounting for mathematical and logical truth: either one of the two variants of empiricism, or rationalism, or idealism must provide an explanation. In *Language Truth and Logic*, Ayer adopted one of the empiricist explanations, namely, that logical statements have no factual content. His argument for this position is basically one of elimination. Ayer attempts to show the implausibility of the other three theoretical options in order to support the version of empiricism which he adopts. A similar strategy will be
employed in this work. However, the argument of the
dogmatist will be that the Kantian strategy is the most
successful.

7. It may prove useful at this point to schematize the
argument of the first part:

Part I

P1: If it is possible to justify a philosophical
type theory in accordance with the ideal of an
assumptionless methodology, then the law of
noncontradiction must be so justifiable—i.e.,
the law of noncontradiction must be
justifiable in accordance with the ideal of an
assumptionless methodology.
P2: It is possible to justify a philosophical
type theory in accordance with the ideal of an
assumptionless methodology.
P3: If the law of noncontradiction is so
justifiable, then either empiricism,
rationalism, or idealism is so justifiable.
P4: Empiricism is not so justifiable.
P5: Rationalism is not so justifiable.
C: Therefore, idealism is so justifiable.
8. The arguments for these premises defy easy summary, hence it will have to suffice here to indicate where in the text the arguments can be located. The first premise encapsulates the discussion of the Platonic conception of philosophy which, as noted, is contained in the next chapter. The dogmatist naturally proceeds on the assumption that something like 'P2' is correct. Following Ayer, 'P3' states the major theoretical positions which are open to the dogmatist for justifying the law of noncontradiction. As the quote from Ayer suggests, the argument for the fourth premise requires considering two quite distinct options. The first of these is the position which is sometimes known as 'radical empiricism'. Radical empiricism suggests that all truths, including those of logic, are empirical. The burden of chapter 3 is to show that there is at least one logical law which is knowable a priori, and hence, radical empiricism is false. Radical empiricism is a completely general theory, it maintains that all truths are empirical; thus one need only a single counter-example to prove it false.

9. The other empiricist option is to admit that there are some a priori knowable truths, but that such truths have no factual content. The best known, and most developed version of this idea, is that logical laws are true in virtue of the meanings of their terms. This view has sometimes been known as the 'linguistic theory of the
a priori'. The argument offered in chapter 4 against this position runs as follows: if the linguistic theory of the a priori is to successfully explain logical truth, then the notion of a prelogical language must be viable, but such a notion is not viable, hence the linguistic theory of the a priori is an unsuccessful explanation.

10. In contrast to the two empiricist theories just canvassed, both rationalism and idealism, as they are defined here, assert that we have a priori knowledge which has factual content, i.e., that we have a priori knowledge about the world. What distinguishes these two theses is of course the issue of the mind independence of the world. Idealists believe that the world is not mind independent whereas rationalists hold that the world is mind independent, i.e., rationalists, as the position is understood here, maintain realism. Thus, in chapter 5, where rationalism is discussed, a discussion of what is meant by 'realism' is necessary. The conclusion of this chapter, that rationalism is not justifiable in a manner consistent with the demands of an assumptionless methodology, is supported by a very traditional argument. The argument is that rationalism falls prey to skepticism: rationalism is supposed to demonstrate that we have knowledge of the world, but such a claim is ultimately based on an assumption, and mere assumptions are incompatible with the ideal of an assumptionless
11. Initially, idealism seems to show promise precisely where the other theoretical options failed, for in chapter 6 two transcendental arguments are made which purport to demonstrate knowledge of the world or being. Naturally, the idealist does not mean that we have knowledge about a mind independent reality, but rather, that we have knowledge of a reality which is mind interdependent. Thus, the argument of part I concludes with the suggestion that idealism is the only viable theoretical option.

12. Part II is the skeptic's reply to the dogmatist's argument. In chapter 7 the question of whether the law of noncontradiction can be justified is considered in abstraction from any particular metaphysical and epistemological theory. The conclusion drawn is that the law of noncontradiction cannot be justified in a manner consistent with the ideal of a presuppositionless methodology. This result is used to undermine the idealist conclusion of part I.

13. Chapter 8 is a further refinement of this skepticism. This chapter also defends skepticism against the Davidsonian charge of an illicit appeal to the idea of a conceptual scheme.

14. Part III begins with a metaphilosophical move on the part of the dogmatist. The dogmatist concedes that the
Platonistic conception of philosophy inevitably leads to skepticism. What this demonstrates, according to this version of dogmatism, is that the Platonic conception of philosophy sets the standards for knowledge or rational belief too high. This new form of dogmatism suggests that philosophy itself is continuous with the other empirical sciences, i.e., philosophy itself is an empirical science, albeit, perhaps one which proceeds at a greater level of abstraction. The dogmatic naturalist then sees the problem of skepticism as intimately entangled with the Platonistic conception of philosophy. Once the latter is abandoned the former no longer looms as a seemingly insurmountable obstacle. The skeptic responds to the dogmatist here by suggesting that naturalism itself implies a naturalistic skepticism. In other words, skepticism itself seems to be a perfectly respectable scientific hypothesis.

15. The argument of the first nine chapters may be summarized as follows: if one pursues philosophy in a priori fashion in the manner suggested by the Platonic conception, then skepticism is inevitable. In particular, the sort of skepticism which results is the type which only a godlike being would have any chance of overcoming. On the other hand, if one pursues philosophy in an empirical fashion in the manner suggested by the naturalistic conception, then skepticism is inevitable. In particular, the sort of skepticism which results is the
type which only a godlike being would have any chance of overcoming. It might seem then that skepticism is inevitable.

16. In part IV, chapter 10, a course of action is briefly outlined which would allow humans a chance to create gods, or at least beings which are more godlike than humans. The main idea is that it will be technologically possible in the next century to alter the human zygote to fashion a being which is as far removed from humans in intelligence and understanding, as humans are from chimpanzees. The best prospect for overcoming skepticism— to realize the complete truth about the universe— lies with the creation of such beings. If philosophy is to be pursued as far as humanly possible, then the task of human philosophers is to create such beings.

17. Chapter 11 concludes by outlining some of the outstanding problems of this line of thought. Perhaps the most important of these objections is that we would not be ethically justified in genetically engineering such beings. Problems are 'outstanding' in the sense that they are not discussed in any detail in this work, but must be considered if the project outlined here were to be brought to fruition.

18. The reader may receive from this introduction the impression that a disparate array of topics will be
discussed—from prelogical languages to genetic engineering. While there is certainly an array of topics, hopefully they are not nearly as unconnected as they might first appear. The aim, in fact, is to show that there is one long argument which connects these various elements. Of course, this remains to be seen.
End Notes: Chapter One

19. The aim of this chapter is to explicate the notion of a presuppositionless methodology. Plato's description of the methological ideal of philosophy is contrasted with a more modern conception represented here by David Lewis' view. Next, several conditions are delineated which any philosophical theory must meet in order to count as an instance of a 'presuppositionless theory' as it is defined here. Finally, by way of illustration, the conception of a presuppositionless methodology described is applied to several historical figures.

20. Plato, in the Republic writes:

...you want to distinguish that part of the real and intelligible which is studied by the science of dialectic as having greater clarity than that studied by what are called the 'sciences'. These sciences treat their assumptions as first principles and, though compelled to use reason and not sense-perception in surveying their subject matter, because they proceed in their investigation from assumptions and
not to a first principle, they do not, you think, exercise intelligence on it, even though with the aid of a first principle it is intelligible. [1]

David Lewis, reflecting on the nature of philosophy, has written:

Philosophical theories are never refuted conclusively. (Or hardly ever, Godel and Gettier may have done it.) The theory survives its refutation--at a price... But, whatever may be said for foundationalism in other subjects, this foundationalist theory of philosophical knowledge seems ill-founded in the extreme. Our "intuitions" are simply opinions; our philosophical theories are the same... a reasonable task for the philosopher is to bring them into equilibrium. Our common task is to find out what equilibria there are that can withstand examination, but it remains for each of us to come to rest in one or another of them... Once the menu of well-worked out theories is before us,
philosophy is a matter of opinion...[2]

21. Turning to Plato first then, his idea of an assumptionless philosophy, what he terms 'the science of dialectic', is explicated mainly in the manner in which it is said to contrast with the method of geometry. Regarding geometry, Plato suggests:

I think you know that students of geometry and calculation and the like begin by assuming there are odd and even numbers, geometrical figures and the three forms of angle, and other kindred items in their respective subjects; these they regard as known, having put them forward as basic assumptions which it is quite unnecessary to explain to themselves or anyone else on the grounds that they are obvious to everyone. Starting from them, they proceed through a series of consistent steps to the conclusion which they set out to find. [3]

The science of dialectic employs a superior method for,
it treats assumptions not as principles, but as assumptions in the true sense, that is, as starting points and steps in the ascent to something which involves no assumption and is the first principle of everything; when it has grasped that principle it can again descend, by keeping to the consequences that follow from it, to a conclusion. [4]

Plato has in mind a view of philosophy or 'the science of dialectic' as a deductive system which terminates in a first principle. This first principle is not itself an assumption; thus the view of philosophy here is that of an assumptionless science. According to Plato, geometry shares a deductive strategy with philosophy, where it differs of course is in the nature or status of its original principles. The science of dialectic demands an assumptionless methodology which means the original or first principles cannot be mere assumptions. Geometry, so Plato tells us, proceeds on the basis of mere assumptions to the consequences which follow from these assumptions. Philosophy can be said to be superior to geometry in that it is more critical about the nature of its first
principles. Unfortunately, Plato does not provide us with much more detail about the nature of this assumptionless science. In particular, one might want to ask of Plato what is meant by the metaphor of ascending to the first principle, and how will we know when we have arrived at this first principle? Plato, however, does provide us with enough indication of the idea of an assumptionless science to contrast it with some views to which it is opposed.

22. David Lewis' theory about the nature and goal of philosophy contrasts sharply with that of Plato's. The issue between them is the nature of the basic principles of one's philosophical theory. Plato, as noted, believes that philosophy is ultimately rooted in principles (or a principle) which themselves require no further assumptions. Lewis, on the other hand, suggests in the passage quoted that philosophical theories are ultimately rooted in opinion—we must choose our "first principles". There is no further "court of appeal" to decide between conflicting "intuitions", for intuitions are mere opinions. Plato would be critical of Lewis' account of philosophy, since the procedure endorsed by Lewis is much the same as that which Plato attributes to geometers. Geometers, it was said, merely assume their first principles and so too, if Lewis is correct, must philosophers merely assume their first principles. Plato might chide Lewis for allowing mere assumptions into
philosophy. Lewis, on the other hand, would suggest that Plato's vision of philosophy is just wishful thinking: for there is no further context, no further court of appeal, from which to decide between our "intuitions", our opinions.

23. Alasdair MacIntyre commenting on Lewis' views has written:

Analytic philosophy, that is to say, can very occasionally produce practically conclusive results of a negative kind. It can show in a few cases that just too much incoherence and inconsistency is involved in some position for any reasonable person to continue to hold it. But it can never establish the rational acceptability of any particular position in cases where each of the alternative rival positions available has sufficient range and scope and the adherents of each are willing to pay the price necessary to secure coherence and consistency. [5]

Interestingly, MacIntyre speaks as if Lewis' theory
applied only to analytical philosophy, whereas Lewis speaks only in terms of the genus, philosophy, and not the species, analytical philosophy. MacIntyre continues:

Hence the peculiar flavor of so much contemporary analytic writing—by writers less philosophically self-aware than Rorty of Lewis—in which passages of argument in which the most sophisticated logical and semantic techniques available are deployed in order to secure maximal rigor alternate with passages which seem to do no more than cobble together a set of loosely related arbitrary preferences; contemporary analytic philosophy exhibits a strange partnership between an idiom deeply indebted to Frege and Carnap and one deriving from the more simple-minded forms of existentialism. [6]

Lewis might respond to this by saying that "yes, indeed much of contemporary analytic philosophy does indeed have that peculiar flavor of cobbling together 'arbitrary preferences' with logical and semantic techniques". But there is no further context or court of appeal to
arbitrate between these "arbitrary preferences"—what Lewis terms "intuitions" or opinions. This applies not only to analytical philosophy, but to all philosophy. While there is a long tradition of philosophy which thought that it could root philosophical theory in principles which are binding on all rational beings, this was just wishful thinking. Lewis might conclude that if MacIntyre is correct that much of contemporary analytical philosophy does exhibit this character, it ought to be applauded, for at least analytical philosophy is self-conscious of the fact that it, like all of philosophy, is rooted in opinion, not in some assumptionless first principle which ought to be binding on all rational beings. [7] If MacIntyre's description is correct, then much of contemporary analytical philosophy is committed to rejecting Plato's idea of an assumptionless science. For Plato, the idea of an assumptionless science is incompatible with the idea that the fundamental principles of a philosophical theory are based merely on personal preference.

24. Initially, the idea of an assumptionless science might be approached in the more familiar context of the project of providing knowledge claims with a foundation. Much of the work in foundationalism takes its cue from Descartes. One way of conceiving the project of foundationalism is as the search for certain basic
propositions which are justifiers, but which themselves do not require justification. Such a description captures the intention of Descartes' project of pure enquiry. [8] Such a conception also meets Plato's strictures for an assumptionless science since Descartes' version of foundationalism sought basic principles which were justified. While the association of the idea of an assumptionless science with the foundationalist enterprise may have served to provide some preliminary elucidation, the systematic ambiguity of the notion of 'foundations' precludes further fruitful exploration along these lines.

25. One vector along which this systematic ambiguity manifests itself is in the foundational/coherentism contrast. In this sense, 'foundationalism' is generally understood as suggested above, namely, the idea that there are basic propositions and nonbasic propositions; the nonbasic propositions must stand in some sort of justificatory relation to the basic propositions. In other words, the justificatory relation in foundationalism is asymmetric: basic propositions justify nonbasic propositions but not vice-versa. Coherentism, on the other hand, allows symmetrical justifications; hence there are no basic propositions on the coherentist alternative. This very broad characterization of 'foundationalism' and 'coherentism' obviously allows for development in a number of different ways. In fact Triplett, in a recent survey
article, classifies foundationalist literature, mostly in the 1975-1987 period, into sixteen subdivisions, not all of which are mutually exclusive. [9] Furthermore, as Triplett notes, his survey article does not capture all the distinctions among types of foundationalism which appear in the literature. [10] One may receive some idea of the breadth which the term 'foundationalism' has taken on by noting that Triplett includes not only such obvious foundationalists as Descartes and Chisholm under this rubric, but also thinkers such as Kuhn and Rorty! [11] This in itself ought to be enough to make one reluctant to elucidate the notion of an assumptionless methodology with that of 'foundationalism'.

26. The ambiguity attached to the notion of 'foundationalism' is further exacerbated by the fact that it sometimes takes on a meaning which encompasses both 'foundationalism' and 'coherentism' as defined above. Rorty, for instance, writes:

It is the notion that human activity (and inquiry, the search for knowledge, in particular) takes place within a framework which can be isolated prior to the conclusion of inquiry--a set of presuppositions discoverable a priori--which links
contemporary philosophy to the Descartes-Locke-Kant tradition. For the notion that there is such a framework only makes sense if we think of this framework as imposed by the nature of the knowing subject, by the nature of his faculties or by the nature of the medium within which he works. The very idea of "philosophy" as distinct from "science" would make little sense without the Cartesian claim that by turning inward we could find ineluctable truth, and the Kantian claim that this truth imposes limits on the possible results of empirical inquiry. The notion that there could be such a thing as "foundations of knowledge" .... depends on the assumption that there is some such a priori constraint. [12]

The point to be made here is that Rorty's use of 'foundationalism' does not exclude that of 'coherentism' as it was defined above. Indeed, I think Rorty would argue that the coherentist alternative, on some construals, is but one variant on the quest to find "such an a priori constraint".

27. The discussion of the preceding two paragraphs is
meant to serve as some justification for introducing certain neologisms. To begin with, a 'presuppositionless methodology' may be defined as the requirement that a philosophical theory does not make or require assumptions in order to support its conclusions. Plato of course speaks of an 'assumptionless science', however, the term 'science' means something quite different today. Furthermore, Plato's conception of an assumptionless science involves both a method, the requirement that no assumptions ultimately are permissible, and a conception of the goal or object of such an inquiry, namely: the Forms. The idea of a presuppositionless methodology does away with the Platonic requirement that the object or goal of an assumptionless science is the Forms. In other words, the notion of a presuppositionless methodology borrows from Plato his methodology for philosophy but not his ontology.

28. A philosophical theory may be conceived of as a set of propositions. The requirement that such a theory is presuppositionless amounts to the claim that each proposition is appropriately justified, i.e., none of the propositions are mere assumptions. What the 'appropriately justified' conditions amount to will be examined below; first, however, the form that such philosophical theories must take will be considered.

29. As the discussion above indicates, traditionally
the requirements imposed by a presuppositionless methodology have been pursued along foundationalist or coherentists lines. These terms will have to be abandoned in favor of two quite specific doctrines: the 'terminal view' and the 'circular view'. While the terminal and circular views, to be described, share many features in common with foundationalism and coherentism, neither of these terms of art is meant as an explication of 'foundationalism' or 'coherentism'.

30. An 'assumptionless methodology' in the sense being defined, must take the form of either the circular or terminal view. What distinguishes these two forms of an assumptionless methodology is whether axioms are permitted into the theory. Axioms are to be understood here as propositions which are "appropriately justified" but do not derive their justification from other propositions. Axioms are propositions which are justified in and of themselves. The terminal variant of an assumptionless methodology allows, indeed requires, axioms; whereas, the circular view does not allow axioms into the philosophical theory. A philosophical theory consistent with the terminal view might have something like the following form:

Example 1
A philosophical theory, then, is conceived of as an argument. In the present example, R, as a conclusion of a philosophical argument, is consistent with a presuppositionless methodology only if the premises are appropriately justified. In the present case, this would mean that the conditionals, P2 and P3, are appropriately justified. Furthermore, P must be an axiom since it is not a consequence of some further proposition which is justified. In other words, if P were just an assumption, an unjustified proposition, the argument would then be inconsistent with the demand for a presuppositionless methodology. In reference to Lewis' view discussed above, P in this case might be what he terms an "intuition" or an "opinion". A well-worked out philosophical theory then might show the consequences, in this case R, of maintaining some opinion P, but, according to Lewis, P itself is not capable of further justification. This sort of philosophical theory of course would fall short of the ideal of a presuppositionless methodology.

31. The circular variant of a presuppositionless methodology, since it does not allow axioms, must meet the
demand for justification by allowing propositions to be mutually supportive. Thus, the circular variant might use something like the following form:

Example 2

P1: P
P2: If P then Q.
P3: If Q then R.
P4: Thus R.
P5: If R then P.
C: P

The circular variant of the presuppositionless methodology meets the demand for assumptionlessness by allowing propositions to be mutually supportive.

32. Obviously, there is a possibility for mixed models which combine elements of both the terminal and circular view. One might propose a model in which there are partial feedback loops between propositions which are terminal and those which are derived from these more secure beliefs. For instance, while Haack uses the 'Foundationalism' and 'Coherentism' labels, what she means by these terms is close enough to the meanings of 'terminal' and 'circular' to make the point. For as she notes there is a continuum between "Pure Foundationalism" to "Pure Coherentism". She
opts for a compromise position which she terms 'Foundherentism'. Her position has affinities with foundationalism in that it allows that there are some beliefs which are intrinsically more epistemically secure than others. The analogy with the terminal view is that the axioms are intrinsically more secure epistemically than the propositions which are derived as consequences. They are intrinsically more secure in the sense that their justification does not depend on other propositions. On the other hand, Haack's Foundherentism allows that the more secure beliefs "may depend upon the support of less secure beliefs." [13] While the possibility of a mixed model, one which combines the terminal and circular view, does not seem impossible, it will not play a major role in the present argument. The terminal and circular views will both be criticized in chapter 7, and it will be maintained further that any view which combines both elements will be subject to the criticisms of both the terminal and circular view.

33. It has been assumed thus far that the relation between the propositions of both the terminal and circular views is deductive. Now it might be thought that this sets a particularly difficult standard to achieve, i.e., it might be suggested that the terminal and circular view are much more likely to succeed if one allows relations between the propositions to be something less than
One might think, for instance, that an inductive relation between the propositions ought to be a sufficiently high ideal for a philosophical theory to aim at, but to require that the relations are deductive is an ideal one might only dream of. Furthermore, so the objection goes, the idea of a deductive relation between the propositions is an idea which goes back at least to Descartes and Spinoza, but it has been largely abandoned by recent theorists. Moser and Goldman, for example, both argue that the basic propositions justify the nonbasics in an abductive fashion, i.e., they are justified on the basis of an inference to the best explanation. [14] While this criticism is not without merit generally, in the present case it does not apply. The current subject of investigation is whether a certain logical law--one, which it will be argued, is central to the very notion of deductive arguments--is justifiable. Insisting that the justification relation between the propositions is deductive is then a simplifying assumption since it will be argued that this logical law is not justifiable--to the standard of a presuppositionless methodology--hence no argumentative structure is justifiable. In other words, it will be argued that this logical law, which specifies deductive relations, is so basic to the idea of an argumentative structure that if it is not justified, then no argument structure is so justified. Unfortunately, it
is not possible to make these cryptic remarks any clearer without anticipating too much of the discussion of chapter 3 and chapter 7; hence, full clarification will have to be postponed until then.

34. In terms of what is required for the 'appropriate justification' for the propositions of a presuppositionless methodology, it will be insisted that the propositions are justified in a manner which makes them immune to skeptical doubt. Skepticism of course comes in a number of varieties. The nature of the skepticism which is employed here as a standard by which to evaluate the justificatory claims of a philosophical theory is a large issue that will only become clear as the discussion proceeds. By way of anticipation, the standard of skepticism which has traditionally been employed has suggested that there is a gap between what is verifiable and what is true. A Cartesian skeptic, for example, might suggest that for all we know it might be the case that there is an evil demon deceiving us, i.e., such a hypothesis might be true even though we are unable to verify (or falsify) such a hypothesis. While such a form of skepticism will play a role earlier in the discussion, eventually the Cartesian version of skepticism must yield to an even more radical form of skepticism, viz., that there might be a gap between what we humans find intelligible and what is true. This skeptic might suggest
for all we know some unintelligible claim, e.g., that we are both completely deceived by an evil demon and it is not the case that we are completely deceived by an evil demon, is nevertheless true. Providing some substance to this latter claim will be one of the main ambitions of this work; hence, again, full clarification must be postponed.

35. To summarize the preceding discussion: a philosophical theory meets the standards of a presuppositionless methodology, as it is defined here, if and only if

(i) the theory conforms to the terminal or circular view;
(ii) the relation between the propositions of the theory is deductive; and
(iii) the propositions of the theory are immune to skeptical doubt.

As noted, some of these conditions (especially (iii)) will require further explication as the argument proceeds. It may prove instructive to cite three additional thinkers which adopt this methodological ideal.

36. Taking his cue from Plato, Aristotle seems to have adopted the ideal of a presuppositionless methodology. Aristotle endorses the terminal view of justification in
the *Posterior Analytics*. [15] Aristotle here also endorses the deductive relation between the elements of the system. [16] Aristotle considers and rejects at least one form of skepticism relevant to his terminal view. [17]

37. In the modern period, Descartes is perhaps the best known example of a thinker who attempted to meet the ideals of a presuppositionless methodology. Conditions (i) to (iii) in fact seem to capture the most common interpretation of Descartes' work. Descartes held to what is described here as the terminal view of justification, i.e., that knowledge could be "grounded" in some first principle(s). Condition (ii) is met in Descartes' insistence that claims to knowledge could be vindicated by holding to the deductive consequences of the first principles. [18] Descartes' attempt to meet condition (iii) is perhaps the most famous aspect of his work: the possibility of vanquishing skepticism is, for many, one of the most alluring aspects of Descartes' work.

38. Arguably, however, Hegel is one of the most important thinkers from the modern period with respect to the idea of a presuppositionless methodology. The reason is that Hegel is the only first rate thinker in the modern period to explore, in any detail, the idea of the circular variant of a presuppositionless methodology. [19]. Hegel suggests the circular nature of the philosophical enterprise throughout his mature work, one of the clearest
It may seem as if philosophy, in order to start on its course, had, like the rest of the sciences, to begin with a subjective presupposition. The sciences postulate their respective objects, such as space, number, or whatever it be; and it might be supposed that philosophy had also to postulate the existence of thought. But the two cases are not exactly parallel. It is by the free act of thought that it occupies a point of view, in which it is for its own self, and thus gives itself an object of its own production. Nor is this all. The very point of view, which originally is taken on its own evidence only, must in the course of the science be converted to a result--the ultimate result in which philosophy returns into itself and reaches the point with which it began. In this manner philosophy exhibits the appearance of a circle which closes with itself, and has no beginning in the same way as the other sciences have. [20]
Hegel attempts to meet (i) above via the circular view of justification. Whether Hegel in fact incorporates (ii) as part of his methodology is a point of much scholarly controversy. Certainly, there are at least some passages in Hegel's works which lend support to this interpretation. [21] Finally, Hegel attempts to meet condition (iii) by constructing an elaborate response to skepticism. [22]

39. The preceding extremely compressed discussion of Aristotle, Descartes, and Hegel, is intended merely to indicate the long and venerable career of the idea of a presuppositionless methodology. A more thorough treatment of this subject might trace in more detail the ontogenesis of this idea in such a way as to demonstrate its importance to philosophy—or at least the history thereof. [23] In any event, the importance of this idea for (the history of) philosophy will have to be granted as a posit or assumption of this argument.

40. Before proceeding to discuss the various models of the relationship between thought and being, between the knowing subject and reality, a word about the strategy of the argument is in order. Part I, as noted, has a dogmatic conclusion: humans do in fact know reality because idealism is true. This conclusion, however, is reached in a skeptical manner. This might be a potential source of
puzzlement for it seems to suggest that it is possible to be both a skeptic and a dogmatist. Such puzzlement is easily dispelled when one considers that the dogmatist/skeptic contrast in chapter 1 is defined in terms of results, not method. Descartes may serve as an illustration of this point. Descartes is a dogmatist in the sense defined above in that he believed that humans did in fact have knowledge of reality. Nevertheless, Descartes used a skeptical strategy to reach this result. Similarly, the strategy here will be to examine the various models of the relationship between thought and reality, viz., empiricism and rationalism, with a skeptical eye. In particular, the most common complaint is that these models are forced to appeal to assumptions which are not immune from skeptical doubt, i.e., that they do not meet condition (iii). But while the discussion of chapters 3 to 6 employs a skeptical strategy, the result is a form of dogmatism.

41. A final word is necessary about the argumentative strategy of part I. In order to facilitate exposition, it will be useful to assume that the circular strategy is not viable. This assumption will eventually be discharged in chapter 7 where the circular version of a presuppositionless methodology is criticized. Obviously, if the argument against the circular form of a presuppositionless methodology is not successful, then
this would mean that the arguments of the first part will have to be re-evaluated in light of the rejection of this assumption.
End Notes: Chapter Two

1. Plato, The Republic, 511c-d.


3. The Republic, 510c-d

4. Ibid. 511b


6. Ibid.


10. Ibid. p. 97.


12. R. Rorty, Philosophy and the Mirror of Nature,


15. 72b.

16. 71b.

17. 72b.

18. This is not to say that Descartes thought that all knowledge must proceed from first principles, only that the possibility of knowledge had to be vindicated by first principles and their consequences. It is not clear, for instance, that Descartes was committed to saying that all physics must proceed from first principles, as opposed to being empirically confirmed. Cf. Williams, op. cit. chapter 9.


20. Hegel's Logic, translated by William Wallace,
21. For example, Hegel speaks of the three parts of the *Encyclopedia* as forming a series of syllogistic deductions, where each part is a consequent of the other two.

22. Of course, one prevalent view of Hegel is that he was not concerned with epistemological issues in general, and skepticism in particular. The view presupposed here is that Hegel was very much concerned with epistemological issues. For Hegel's reaction and concern with skepticism see Forster, *op. cit.* and R. Pippin, *Hegel's Idealism*, Cambridge: Cambridge University Press, 1989.

23. Rockmore, *op. cit.* has already filled in some of the details, although the main focus of his research is Hegel and his immediate predecessors.
Chapter Three: Radical Empiricism

42. The aim of this chapter is to explicate and criticize the view which is sometimes called 'radical empiricism'. Radical empiricism is the thesis that all truths are empirical, including, in particular, logical laws. To this end, two definitions of the a priori/empirical contrast will be considered. It will be argued then that there is at least one truth which is a priori knowable. Since radical empiricism is a completely general theory about the epistemic status of all truths, one counterexample is sufficient to undermine it.

43. Most philosophers today seem to follow Kant's distinction between the terms 'a priori' and 'empirical'. [1] Kant suggests the following contrast:

In what follows, therefore, we shall understand by a priori knowledge, not knowledge independent of this or that experience, but knowledge absolutely independent of all experience. Opposed to it is empirical knowledge, which is knowledge possible only a posteriori, that is, through experience. [2]
These definitions will be adopted in the present work. One feature about Kant's empirical/a priori contrast is that it is intended to provide a mutually exclusive and jointly exhaustive characterization of all knowledge claims. The definitions are mutually exclusive, since no knowledge claim can be both empirical and a priori. If some experience is needed to justify a knowledge claim, then it is by definition empirical. If no experience is necessary to justify a knowledge claim, then it is a priori. Kant does allow that some claims to knowledge might be known either a priori or on the basis of experience, but such claims are not empirical. It is perhaps plausible, for example, to believe that one could come to know that 'all bachelors are males' without any appeal to experience, and, as such, the knowledge claim is a priori. It is conceivable, however, that someone might learn this truth by conducting a survey of the marital status of bachelors, i.e., one might learn that 'all bachelors are unmarried' on the basis of experiential evidence. This knowledge claim would be what Kant terms an 'a posteriori' claim, but not an empirical claim. Empirical claims are those which can be known only a posteriori, i.e., the empirical/a priori contrast is mutually exclusive, whereas the a posteriori/a priori contrast is not. [3] The distinctions are jointly exhaustive in that 'a priori' knowledge is defined as that which cannot be known only on
the basis of experience: if knowledge is not empirical, then it must be a priori. Empirical knowledge for Kant is defined in terms of a justificatory source, namely, experience, whereas a priori knowledge is not so defined. Kant's definitions; therefore, allow that the justificatory source for a priori knowledge lies in "innate ideas" or in a nonsensous intuition, etc.

44. Kripke's discussion of the issue of a priori knowledge in Naming and Necessity adds some further refinements to Kant's discussion:

First the notion of a prioricity is a concept of epistemology. I guess the traditional characterization from Kant goes something like: a priori truths are those which can be known independently of any experience. This introduces another problem before we get off the ground, because there's another modality in the characterization of 'a priori', namely, it is supposed to be something which can be known independently of any experience. That means that in some sense it's possible (whether we do or do not in fact know it independently of any experience) to know this independently of any experience. And possible

Kripke's questions suggest that whether a particular item of knowledge is a priori or not depends on the epistemological capacities of the inquirer. It might be, for example, that while the claim that 'all bachelors are unmarried' is a priori knowable for humans; it might be knowable only on the basis of experience, and hence, an empirical claim, for unreflective Martians. Likewise, for humans the question of whether the universe will continue to expand is plausibly considered an empirical item of knowledge, but might be a priori knowable to God with his divine form of intuition. As Kripke notes:

To make this all clear might [involve] a host of problems all of its own about what sort of possibility is in question here. It might be best therefore, instead of using the phrase 'a priori truth', to the extent that one uses it at all, to stick to the question of whether a particular person or knower knows something a priori or believes it true on the basis of a priori evidence. [5]
In what follows, Kripke's suggestion to "stick to the question of whether a particular person or knower knows something a priori" will be heeded. This leaves open the possibility that other creatures, such as Martians and God, have different epistemic capacities.

45. Following Kant and Kripke's lead, then, the following definitions are proposed:

"A sentence P is knowable empirically by some creature X" = (def) It is possible for X to know P only a posteriori, (i.e., only on the basis of experiential evidence).

"A sentence P is knowable a priori by some creature X" = (def) It is possible for X to know P other than a posteriori (i.e., other than on the basis of experiential evidence).

With the definitional preliminaries complete, the discussion can turn to an evaluation of radical empiricism.

46. Historically, John Stuart Mill was perhaps the first to scout this position in any detail. In his *System of Logic*, for example, Mill claims that even the law of noncontradiction is not knowable a priori, but
"like other axioms, one of our first and most familiar generalizations from experience."[7] In the twentieth century, radical empiricism has flourished taking substance from several sources. One such source was the mid-century attack on the analytic/synthetic distinction. In retrospect, it might seem a little confusing how such an attack could so adversely affect claims to a priori knowledge, after all, Kant for one understood analytic claims to be only a species of a priori knowledge. By mid-century, however, a certain amount of consensus had been reached that, if there are any a priori knowable truths, these truths are analytic, i.e., the category of synthetic a priori truths had been rejected. This, in effect, was a two-stage rejection of the notion of apriority. An argument which was perhaps more convincing, or at least convinced more, was one based on an inductive inference from historical data. Roughly, the argument suggests that many a priori knowledge claims turned out to be in fact contingent empirical claims; hence, all a priori claims to knowledge are in fact empirical claims. One version of this "argument", as famous as it is terse, is as follows: "Revision even of the logical law of the excluded middle has been proposed as a means of simplifying quantum mechanics; and what difference is there in principle between such a shift and a shift whereby Kepler superceded Ptolemy, or Einstein Newton, or
Darwin Aristotle?" [8] In terms of concrete examples perhaps the best known is the rejection of euclidean geometry as the geometry of space. It was once thought that it was an a priori claim that space is three dimensional and euclidean. Relativity theory, so it is said, has shown that this claim is not a priori but empirical, and indeed, false. According to some versions of this argument, we are to imagine all a priori claims to knowledge taking this same route, i.e., it will be discovered that they are in fact high level empirical generalizations which might be false.

42. This historical argument is not without problems. It may be, for instance, that the original dividing line between claims which are a priori knowable, and those which are empirical, was drawn in the wrong place to begin with. The empirical status of geometry was accepted relatively quickly, at least in historical terms, in comparison with the suggestion, noted in the quote above, that physics demands a revision of our logic. The historical evidence, in other words, does not seem to strongly support the claim that logic is empirical, since scientists (at least thus far) have overwhelmingly rejected attempts to discard classical logic, and instead, attempted other means to simplify physical theories. Surely the historical argument ought to make one more cautious before promulgating a priori claims, however, the
argument on its own is hardly sufficient to make a priorists abandon their position. It is always open to the apriorist to reply to this argument that the line between a priori claims and empirical claims was drawn incorrectly to begin with.

48. Consider then a line of argument which purports to refute radical empiricism. Radical empiricism, recall, is refuted if it can be demonstrated that there is at least one a priori knowable truth. One statement which has this special status is the minimal principle of noncontradiction:

Not every statement is true and false.

(This statement was named recently by Putnam but discussed long ago by Aristotle). [9] The contradictory of the minimal principle of noncontradiction is the maximal principle of contradiction:

Every statement is true and false.

49. It might be thought that it is a relatively simple matter to demonstrate the empirical nature of the statement of the minimal principle of noncontradiction. Consider this argument: 'of course the minimal principle of noncontradiction is empirical for it is continually
confirmed by the testimony of our senses, e.g., I can see at this moment that the judgment 'that my beer mug is full' is not both true and false. I see that the judgment that my beer mug is full is false and not true. However, if the minimal principle of noncontradiction were true, it would have to be the case that the judgment that my beer mug is full is both true and false. My senses confirm that the maximal principle of contradiction is false, and that the minimal principle of noncontradiction is true. The fact that my senses confirm the truth of the minimal principle of noncontradiction shows that the statement is empirical'.

50. The argument in the above paragraph is a little too swift. At best what this argument establishes is that the minimal principle of noncontradiction is a posteriori, it does not show that it is an empirical judgment. The reason is obvious when the definitions of 'a posteriori' and 'empirical' (provided above in paragraph 43) are recalled. A posteriori judgments are ones which can be made on the basis of testimony of the senses, whereas, empirical judgments are ones which can be made only on the basis of testimony from the senses. What the argument above does not establish is that the judgment that the minimal principle of noncontradiction is true can be made only on the basis of testimony from the senses. Consider again the example suggested above in connection with this
distinction. Suppose someone argued that the judgment that 'all bachelors are unmarried' is empirical because it is possible to undertake a survey to see that this is in fact the case. Such an argument, however, is incomplete, since it does not demonstrate that evidence from the senses is the only manner by which to confirm such a judgment. One might argue, for instance, that the judgment is in fact a priori, since it is possible to confirm the judgment by reflection on the concept of bachelor. Such reflection is traditionally thought not to involve knowledge gleaned from the senses; hence, such knowledge might properly be called a priori knowledge.

51. The terms of the debate ought to be clear at this point. The proponent of radical empiricism must show that all truths are knowable only on the basis of testimony of the senses. The opponent of radical empiricism must show that, at least in one case, testimony of the senses is in fact gratuitous in ascertaining the truth of some judgment.

52. In order to demonstrate the apriority of the minimal principle of noncontradiction, it will be useful to reflect on what it would be like to reject the minimal principle of noncontradiction. Consider then the following argument:

Pl: It is not the case that C and not-C is true.
If C then not-C.

C: Therefore, not-C.

This is the form of the argument to be given in a moment. The locution 'not-C' represents the minimal principle of noncontradiction while 'C' represents the maximal principle of contradiction. The argument then is as follows. It is not the case that every statement is true and false, and not every statement is true and false, i.e., that the maximal principle of contradiction is true, and the minimal principle of noncontradiction is true. However, if the maximal principle of contradiction is true, then it is false. The reason is that the maximal principle of contradiction is itself a statement, and every statement is true and false. Furthermore, the negation of the maximal principle of contradiction (the minimal principle of noncontradiction) is true, if the maximal principle of contradiction is true. Therefore, either way the truth of the maximal principle of contradiction implies its own falsity. Traditionally, this would have constituted a reductio ad absurdum of the claim that the maximal principle of contradiction is true. Alternatively, the maximal principle of contradiction might be said to be "self-refuting".

53. Supposing for the moment that the argument in paragraph 52 demonstrates that the minimal principle of
noncontradiction is true, it may be asked whether the argument demonstrates its apriority as well. An affirmative answer seems in order, since the argument preceded purely on the basis of reflection on the consequences of holding false the minimal principle of noncontradiction. If the conclusion of the argument were not a priori knowable, then at least one of the premises would appeal to evidence which is experiential. Thus, it appears that the strategy of the argument given in paragraph 52 is at least correct. Reasons which trace their origins to non-experiential sources were given for believing the minimal principle of noncontradiction, i.e., the argument purports to demonstrate that the minimal principle of noncontradiction is true in an a priori manner.

54. Mill might object to the claim that the argument in paragraph 52 has a conclusion which is a priori knowable. He might point out that the argument relies on the premise that contradictions cannot be true, i.e., that it is not the case that the judgment 'C and not-C' is true. For Mill, this premise ultimately traces its sources to testimony of the senses i.e., as was noted earlier, Mill believes even the law of noncontradiction is not knowable a priori but "like other axioms, one of our first and most familiar generalizations from experience". Perhaps Mill might have said that we confuse the
familiarity of the "axiom" of noncontradiction with its apriority. It is important to note that Mill does not need to deny the argument of paragraph 52, that is, Mill probably would accept this argument as demonstrating that the maximal principle of contradiction ought to be rejected and the minimal principle of noncontradiction accepted. What Mill would take exception to is the claim that the argument of paragraph 53 demonstrates that the reflections of paragraph 52 are a priori in nature. In sum, Mill's complaint is that the argument of paragraph 53 is question begging. In particular, Mill might claim that Pl, according to his radical empiricism, is an empirical claim.

55. Suppose the argument of 54, attributed to Mill, is accepted, i.e., suppose some empirical evidence bore on the claim that the minimal principle of noncontradiction is true. Would this show that we cannot know a priori that the minimal principle of noncontradiction is true? Again, the argument does not seem capable of making any yardage. Suppose the empirical evidence supports the claim that the maximal principle of contradiction is true, then we know that every statement is true, including the minimal principle of noncontradiction. On the other hand, if the empirical evidence supports the claim that the maximal principle of contradiction is false, then, the minimal principle of noncontradiction is true. Thus, no matter
what the status of the empirical evidence, we may know a priori that the minimal principle of noncontradiction is true.

56. Unfortunately, it seems that Mill is in a position to turn this argument for the apriority of the minimal principle of noncontradiction on its head. He might argue as follows: if the empirical evidence shows that the maximal principle of contradiction is true, then the statement "the minimal principle of noncontradiction is empirical" is true. On the other hand, if the empirical evidence supports the claim that the minimal principle of noncontradiction is true, then the statement is true. Either way, then, the apriorist cannot deny that the statement is empirical without begging the question.

57. One will hopefully feel that the dialectic carried on between the radical empiricists and the a priorist in paragraphs 52-56 is ultimately futile. There is a reason for this. This reason will also underwrite the a priorists position. It will be argued that the minimal principle of noncontradiction is a presupposition of human thought or language. More concretely, the law or presupposition of language is understood as follows:

The Minimal Principle of noncontradiction conceived as a law of thought:
For all creatures, if \( X \) is a creature with beliefs, then \( X \)'s belief system is interpretable according to the minimal principle of noncontradiction.

The reason that the dialectic of paragraphs 52-56 is futile, then, is that it assumes that the inconceivable is conceivable, namely, that the maximal principle of contradiction might be true. Once the conclusion that the minimal principle of noncontradiction is a presupposition of human thought is secured, it will be argued that this supports the a priorists claim.

58. Before preceding to the argument itself, it is important to examine the nature of this principle. The sense in which this principle is a presupposition of thought is similar to Kant's understanding of the categories as being presuppositions of experience. Kant's understanding of the presuppositions of experience is, in turn, best understood via the notion of transcendental arguments. Transcendental arguments, at least as they were originally conceived by Kant, take as their general premise that we have experience, or experience of a certain kind, e.g., sensible experience. The second premise states that experience implies that certain conditions obtain. The argument concludes that certain conditions must obtain. A crude schema for such an
argument might be as follows:

\[ \text{P1: } E \]
\[ \text{P2: } E \rightarrow C \]
\[ \text{C: } C \]

where 'E' stands for experience and 'C' the conditions which must obtain. Kant, for example, argues that it is a necessary condition for experience that 'All alterations take place in conformity with the law of the connection of cause and effect'. If the argument which Kant provides for this principle (in the second analogy of the first Critique) is sound, then, contrary to Hume, experience implies that there is more to the notion of causation than constant conjunction. The argument offered below supports a conclusion similar to that of Kant's, viz., that the minimal principle of noncontradiction obtains because it is implied by a more general notion. Unlike Kant, however, the argument does not purport to demonstrate directly that the minimal principle of noncontradiction is implied by experience, rather, the principle is said to be implied by the fact that the creature is a believer. The argument that the minimal principle of noncontradiction is a presupposition for the appellation 'believer' has the form:
where 'B' represents being a believer and 'C' represents the minimal principle of noncontradiction. [10] (The notion of transcendental arguments will be discussed in more detail in chapter 6).

59. An additional point about LT is that conformity to this principle does not prohibit ascribing thought to creatures who have what seem contradictory beliefs. Furthermore, this principle does not even exclude the possibility that some contradictions might be true, i.e., that some statement and its negation are both true at the same time in the same respect. What it does prohibit is that every statement might have this characteristic, or that some creature might properly be described as having nothing but contradictory beliefs.

60. It should also be noted that LT is not a constraint on interpreting thought or belief, but on the nature of thought or belief itself. If it were a constraint on interpreting thought then "LT" ought to be formulated along the following lines:

\[
\text{LT}' \quad \text{For all creatures, if } X \text{ is a creature with \textbf{interpretable} beliefs, then } X's
\]
belief system is interpretable according to the minimal principle of noncontradiction.

But LT is not formulated as a constraint on interpreting beliefs, but as a constraint on the nature of what it is to be a believer or thinker. If a creature cannot be interpreted as conforming to the minimal principle of noncontradiction, then the creature is not a believer.

61. One final point about the nature of LT is that it is intended to describe the nature of a believer's belief system, not its beliefs about its belief system. It is quite consistent with this principle that a believer is not self-conscious about the nature of its beliefs, or that a believer mistakenly believes that it has nothing but contradictory beliefs. There might even be good reason to believe that all one's beliefs are contradictory (suppose you are tortured everytime you begin to doubt that your beliefs are all contradictory). The principle denies merely that a belief system could be properly described as being completely contradictory, i.e., that for every belief P the creature also holds true not-\neg P.

62. Traditionally two strategies have been employed in attempts to elucidate the nature of thought or language. One is the first person strategy: by exploring the limits or presuppositions of my thought I thereby illuminate the structure of all thought. Kant, in his attempt to delimit
laws of experience typifies this strategy. Kant's strategy was (put crudely) that his empirical judgments must be Newtonian in character; hence, all (human) empirical judgments must have this form. Kant might be seen as saying that he can form no conception of empirical judgments where cause does not necessarily precede effect; hence, all empirical judgments must conform to the law of experience stated in the second analogy. The other strategy is of course third person in nature. By considering the limits of how other thinkers or language users may differ from us, we discover what must be common or presupposed (if anything) between all thinkers or language users. Naturally, these strategies do not differ, at least in their results, if one has some reason to believe that we are all more or less the same--as Kant seems to have believed (perhaps because of his religious ontology), or, as others have suggested, because of our common phylogenetic history. In any event, both strategies will be employed here yielding the same transcendental result.

63. Turning to the third person strategy, first, consider what it would be like to attempt to interpret the "thought" of a creature whose "thought" was governed by the law which is the denial of the minimal principle of noncontradiction, i.e., this creature's "beliefs" are in accordance with the law that every statement is true and
false. [11] This creature is prepared to deny and affirm any statement. His friends call him Mr. Contradiction.

64. To interpret this language requires some commonality of meaning between the two languages. To interpret their language requires that the interpreter is able to say in her language what the foreigners say in their language. Without commonality in meaning, between home and target language, this would be impossible. [12] Perhaps in the land of the blind, for example, they have no color terms, and thus, are unable to translate the visually oriented English language.

65. A theory which states what is required for sameness of meaning is difficult to come by. It is much easier in some cases to say when meanings differ: if two statements differ in their truth conditions then they differ in their meaning (relativized, of course, for time and speaker).

66. Consider the attempt to find some commonality of meaning between our language and Mr. Contradiction's. An obvious place to begin interpretation is with salient objects in the immediate environment. Suppose then a rabbit scampers by—to use a tired example. [13] Mr. Contradiction utters the sound 'Gavagai', and an attempt is made to interpret this sound as meaning what is meant in English by 'rabbit'. Mr. Contradiction, however, is also disposed to uttering 'Gavagai' when there are no
rabbits around. Assuming that Mr. Contradiction's utterances are true, we can conclude that 'rabbit' and 'Gavagai' mean something quite different. While it is the presence of rabbits which makes the utterance of the sentence 'Rabbits' true, 'Gavagai' is true no matter what the environing conditions are; hence, they must mean something quite different. This point generalizes: none of our expressions have the same truth conditions as Mr. Contradiction's since his statements are satisfied, i.e., made true, by any arrangement of objects in the environment. The problem is only aggravated when one considers that each statement is also false no matter what the environing conditions are. The utterance of 'Gavagai' is also false when uttered in the presence of rabbits.

67. In a nutshell the argument of 63-66 then is as follows: Suppose Mr. Contradiction conforms to the maximal principle of contradiction, i.e., that he holds that every statement is true and false. The attempt to translate his utterances fails as there is no commonality in meaning between his language with that of a speaker of English. Expression equivalent in meaning have equivalent truth (and falsity) conditions, but none of Mr. Contradiction's expressions have equivalent truth (and falsity) conditions with that of a speaker of English. Since none of Mr. Contradiction's "utterances" can be translated, the original supposition, that Mr. Contradiction is a language
user, must be rejected.

68. The argument of 63-66 is flawed. The argument turns on the assumption that none of our expressions are appropriately characterized by contradictory truth conditions. Only on the assumption that the principle of noncontradiction, 'not (P and not-P)', does the argument hold. For instance, suppose in some, but not all cases, we believe that the P and not-P is true, in which case, it is possible that there will be points of agreement between our language and Mr. Contradiction's "language". Take a concrete case. Some have argued that when one is in a doorway it is true that one is in the room (P), and not in the room (not-P). Mr. Contradiction would agree that in such a case it is true that one is both in the room and not in the room. This suggests that there may be points of agreement between English and Mr. Contradiction's language. And if this is so, then it might be possible to use these points of agreement as a foothold for further interpretation of Mr. Contradiction's language. [14]

69. In any event, the important point here is not whether the argument of 63-66 is sound, or whether the objection of 68 is correct. What is of greater importance is how the dialectic of 63-66 reveals the connection between first and third person strategies for transcendental investigations. The argument assumes, as such translation arguments are apt to, that in order to
merit the appellation of 'language user' a creature's purported language behaviour must be interpretable or translatable by some known natural language. Given this assumption, the third person strategy for transcendental investigation becomes gratuitous. The first person strategy is all that is necessary, for the limits of known natural languages--English, French, German, etc.--are also the limits of all possible languages. Any purported language behaviour which extends beyond the scope or bounds of a natural language could not be translated (by hypothesis), and hence, it could not be properly described as language behaviour after all. If one is able to explore the limits of one's own language, then one has thereby explored the limits of all possible languages. The third person strategy, in other words, does not promise to advance the issue any further than the first person strategy; therefore, attention might as well be focused on the first person strategy.[15]

70. The first person strategy involves considering the limits of "my language". In particular, this investigation turns on the question of whether sense can be made of a language which has as its logic the maximal principle of contradiction.

71. Languages have a number of uses. Languages are used to refer, describe, promise, lie, etc. "Languages" which are unable to perform any of these functions are not
languages after all. Behavior which is conjectured to be language behavior, but which is not able to perform any of the functions associated with our language behavior, is not language behavior after all.

72. A challenge in Mr. Contradiction's language would be to answer questions about the location of objects in space, i.e., how to answer "where" questions. If every statement is true, then for each object in the universe every space-time coordinate correctly describes the location of every object. In Mr. Contradiction's language, for example, it is true to say that at this very instance you are in your office, you are in your car, you are at MacDonald's, on Mars, Alpha Centuri and so on for every location in the universe. Of course, if the maximal principle of contradiction is true, then it is also false to say that you are at every space-time coordinate at this very instance. If it is true to say that you are at every space-time coordinate at this instance, and it is false to say that you are at any space-time coordinate, then, we might sum up by saying that you are everywhere and nowhere at once. There is little point, it seems, in asking where or when questions in Mr. Contradiction's language, since every answer is true (and false) for every question. There is nothing analogous to the activities of describing space-time coordinates in known natural languages, such as English, in Mr. Contradiction's language, for such
questions are normally intended to impart information between communicants, but in Mr. Contradiction's language no such information is communicated. There is no need to ask in Mr. Contradiction's language where some object is, or when something happened. The inquistor could already know that every object is everywhere and nowhere; and that every event is always taking place and never taking place.

73. Questions of identity are easily answered in Mr. Contradiction's language. It is true in his language that the morning star is the evening star. It is also true that the morning star is identical with any fading star, e.g., Elizabeth Taylor. Since it is true in Mr. Contradiction's language that all objects are identical with one another, it could be said, with some justice, that all is one in Mr. Contradiction's language. It is also true in Mr. Contradiction's language that every identity statement is false, every object is identical with nothing else. Even statements of self-identity turn out to be false in Mr. Contradiction's language, e.g., that the morning star is the evening star is false. It could also be said, with some justice, that all is none in Mr. Contradiction's language. As in the case of describing space-time coordinates, there is nothing analogous to what is considered as describing identity in this language, as an inquistor in Mr. Contradiction's language could already know that every object is identical with all and none.[16]
74. The point of the last two paragraphs applies to any speech act. There is nothing analogous to promising, warning, threatening, etc., etc., in Mr. Contradiction's language. This "language" does not share any of the same uses as our own, thus, it is not a language after all. In other words, the conjecture that Mr. Contradiction's behavior is language behavior ought to be rejected.[17]

75. One more example might help solidify this point. Consider how one might argue or reason in Mr. Contradiction's language. The exact nature of arguments is obviously open to some dispute, but clearly arguments at least consist of premises and conclusions. Whatever else is involved in relating premises and conclusion, accepting the premises must at least provide some reason for accepting the conclusion. In Mr. Contradiction's language, any set of sentences (including the null set) are acceptable premises for any conclusion. [18] In other words, every argument in Mr. Contradiction's language is valid and sound. But obviously, if this is so, then, there seems to be little point in arguing in Mr. Contradiction's language. There seems to be nothing left of the notion of arguments, and arguing, if there is no distinction between successful and unsuccessful attempts.

76. The conclusion of these reflections is that there is no language which is truly describable as embodying the
maximal principle of contradiction. This "language" would have nothing in common with the meanings or uses of our languages. The minimal principle of noncontradiction then is necessarily true for it applies to all natural languages, and since the beliefs of believers are couched in terms of some language (be this private or public), it follows that no believer's belief system is truly describable as embodying the maximal principle of contradiction. The beliefs of all believers are in conformity with the minimal principle of noncontradiction as interpreted as a law of thought, (i.e., in conformity with LT above).

77. If the argument thus far is successful, then the minimal principle of noncontradiction is a necessary truth which is also a law of thought. This leaves open the question of the epistemic status of the minimal principle of noncontradiction, i.e., whether it is an empirical or a priori knowable truth. For Kant, the epistemic status of the principle would follow immediately, since he believed that necessity was the hallmark of a priori knowledge: "Necessity and strict universality are thus sure criteria of a priori knowledge, and are inseparable from one another." [19] Since Kant's time, however, the idea that there might be necessary truths which are empirical in nature has been revived; hence, the epistemic status of this principle is not as straightforward as Kant might
have us believe. [20] Proponents of the idea of necessary truths which are empirical might concede that the minimal principle of noncontradiction is necessary, but not that it is thereby a priori knowable.

78. The apriority of the minimal principle of noncontradiction can be demonstrated by the fact that experiential evidence is irrelevant to the argument for the necessity of this truth, i.e., no matter what empirical facts are discovered the argument developed earlier still stands. To see this consider the impossible for a moment. Suppose that the world really was as the maximal principle of contradiction describes, i.e., that the world in itself is best described by every statement and its contradictory. No language can actually describe such a world, since no evidence gleaned from the senses, expressible in a language, could support the claim that the world is as the maximal principle of contradiction describes. Any evidence gleaned from the senses, which has a bearing on the truth of the minimal principle of noncontradiction, will confirm its truth; and none will infirm the judgment, that the minimal principle of noncontradiction is true. Evidence gleaned from the senses; therefore, is irrelevant to the judgment that the minimal principle of noncontradiction is true.

79. In effect, the argument of the last paragraph is that it is possible to know a priori the nature of the
evidence gleaned from the senses. It is known a priori that all possible evidence from the senses confirms the judgment, hence, it is known a priori that the principle of noncontradiction is true.

80. It is perhaps worth stepping back for a moment to consider the overall direction of the argument. The attempt has been made in this chapter to show that the minimal principle of noncontradiction is knowable a priori, is necessary, and is a law of thought or conceptual limit. The existence of such a law of thought raises the question of whether the world in itself also conforms to this law. The spectre of skepticism is at hand: does the world in itself conform to the manner in which subjects must view the world? does the structure of thought conform to the structure of being? must the world in itself conform to the minimal principle of noncontradiction? Some empiricists have thought that such questions do not arise because the apriority of logical laws can be explained by an appeal to analyticity--the subject of the next chapter. (The subsequent discussion will proceed occassionally as if this chapter had proven that the traditional law of noncontradiction, not (P and not P), is a law of thought, is necessary, and is a priori knowable. Of course, if any such conclusions have been secured in this chapter it is only for the minimal principle of noncontradiction. The reasons for this
substitution are purely exegetical: the minimal principle of noncontradiction does not lend itself to the construction of examples, since it does not prohibit contradictions being true in any particular instance. While perhaps ultimately expendable, examples help facilitate philosophical understanding. Other than the illustrative examples, nothing in the subsequent discussion turns on adopting the traditional law of noncontradiction as opposed to the minimal principle of noncontradiction).
End Notes: Chapter Three


2. CPR, B2-3.

3. Possible Worlds, op. cit. p. 150.


5. Ibid. It is perhaps worth mentioning that the analysis provided here of a priori knowledge accords well with that given by Philip Kitcher in The Nature of Mathematical Knowledge, Oxford: Oxford University Press, 1984, p. 24.

6. Putnam in "'Two dogmas' revisited," suggests that Quine "...was the first philosopher of the top rank both to reject the notion of apriority and at least sketch an intelligible conception of methodology without apriority." Putnam does not say why Quine, as opposed to Mill, merits this description. The quote can be found on pp. 8-9, in the reprint in Realism and Reason, Philosophical Papers, Volume 3, Cambridge: Cambridge University Press, 1983.


9. Putnam, "There is at least one A Priori Truth", reprinted in *Realism and Reason*, op. cit., p. 101. Aristotle attributes to Heraclitus the view that "all things are true and all are false," *Metaphysics* 1012a. Aristotle rejects this view at 1012b.

10. An examiner of this thesis suggests that a forerunner of this line of argument can be found in Aristotle's *Metaphysics*, 1008b 3-10.

11. The third person strategy of course recalls the Quinean idea of "radical translation". Quine also discusses the radical translator's problem of interpreting purported cases of "alternative logics". Quine's work is not discussed in the text for three reasons. First and foremost, it is difficult to find a single cohesive view in Quine. For instance, A. Berger argues in "Quine on 'Alternative Logics' and Verdict Tables" that Quine changed his view on the possibility of "alternative logics", *The Journal of Philosophy*. LXXVII, 5, 1980, pp. 259-77. But see P. A. Roth's "Logic and Translation: A Reply to Alan Berger", *ibid.*, LXXIX, 3, 1982, pp. 154-63 and Berger's rejoinder, *ibid.*, LXXX, 3, 127-9. Second, as far as I know, Quine does not specifically discuss the minimal principle of noncontradiction. Third, Quine is typically more concerned with the question of whether logical laws are analytic or synthetic, not a priori or empirical. For example, in *Roots of Reference*, La Salle.
Open Court, 1974, p. 80, suggests that "Perhaps then the law of excluded middle, though true by our lights, should be seen as synthetic."

12. An examiner has suggested that this paragraph involves "a confusion concerning the order of priority of the notions of synonymy and interpretation. In the Quine-Davidson tradition the point is not that synonymy is a precondition of interpretation, but that talk of synonymy rides on the back of the possibility of interpretation." In response I say, first, that it is not clear to me that by following Quine in the radical interpretation thought experiment one is thereby committed to Quine's views on synonymy. (I can think of no other reason why the examiner thinks the Quine-Davidson tradition on synonymy ought to be heeded or even deemed relevant). Second, the examiner is surely correct that in the Quine-Davidson tradition it is not a precondition of interpretation that one first have a list of synonymous expressions and then construct a translation on the basis of this. But I do not suggest anything like this, rather, what I suggest in the text is the familiar Quinean point that we must assume that the speakers of the target language talk about similar things in their language as we do in ours and share similar sorts of beliefs. Cf. "Meaning in Linguistics" sec. 5, in From a Logical Point of View, op. cit.

14. In case there is any confusion, I am not saying here that there are in fact true contradictions. The point simply is that there might be—at least the minimal principle of noncontradiction does not prohibit this possibility (see paragraph 59). The example involving the doorway is meant only to illustrate this point. I do not intend this to be justification for the idea that there are true contradictions.

15. Manley Thompson has written an interesting, but, at least to me, somewhat perplexing article entitled "On a Priori Truth" *The Journal of Philosophy*, LXXVIII, 1981, pp. 458-82. Much of Thompson's article is consonant with the argument of this chapter. Thompson, following Putnam's lead, argues for the a priori status of the minimal principle of noncontradiction. Thompson states the strategy of his argument thus: "I am going to propose a train of philosophical reflections that seem to lead to recognition of a priori truth. But my concern is more to expose a point of view than to urge acceptance of what it seems to show (p. 458)." The point of view which is exposed is the first-person orientation. According to Thompson, the notion of apriority is intimately intertwined with that of the first-person stance:

"Statements proclaiming presupposition of the principle of
contradiction or of certain forms of intuition appear as a priori truths only when we regard the presuppositions as those we ourselves cannot avoid making. Without the first-person stance there is no need to speak of "unavoidable presupposition" rather than "conformity to linguistic convention" or "behavior that arises from innate disposition." We speak of others making presuppositions and recognizing a priori truths only to the extent that we identify with them and do not regard them as objects whose behavior we are to explain solely in terms of empirical science." (p. 481). What is so perplexing is that Thompson strenuously argues for the claim that the minimal principle of noncontradiction is a presupposition of thought, but then merely asserts that this "presupposition" is simply an artifact of the first person orientation. This is apparent where Thompson says that without the first-person orientation we can speak of "conformity to a linguistic convention" or "behavior that arises from innate disposition". For what we are to imagine, if I understand Thompson correctly, is that we can explain a thinking creatures conformity to the minimal principle of noncontradiction by invoking the ideas of linguistic conventions or innate dispositions. However, these sorts of explanations seem to imply--and Thompson does not suggest otherwise--that from a nonfirst-person perspective we might find that thinking creatures might
not conform to the minimal principle of contradiction. Thompson does not discuss this idea but surely something like this must be correct if the idea of a presupposition of thought is merely an artifact of the first-person stance. In other words, I believe that Thompson shows that the minimal principle of noncontradiction is a presupposition from the first-person stance but he does not demonstrate that this presupposition can be jettisoned from a non-first-person stance.

16. An examiner has suggested that a similiar line of argument can be found in Aristotle's Metaphysics, 1007b 19ff.

17. This extended note deals with questions an examiner raised concerning Mr. Contradiction. One may skip over this note without any loss. The original question was as follows: "With reference to #74--*Why* (sic) couldn't there be performative speech acts in Mr. Contradiction's language?" An abbreviated version of my original response follows.

The question as stated by the examiner is somewhat loaded in the sense that it already presupposes that Mr. Contradiction does in fact speak a language. This part of the thesis explores the conjecture that Mr. Contradiction speaks a language. A fairer version of the question might ask why couldn't there be performative speech acts in Mr. Contradiction's conjectured language? A small point to be
sure but it does help clarify a little the structure of
the argument at this point in the thesis.

Consider then a somewhat gruesome example along these
lines. Suppose one is trapped in an overturned car which
has skidded off the road. To make matters worse gasoline
is leaking onto the still hot exhaust system. Mr.
Contradiction stumbles onto the accident scene and
promises to return with help in five minutes. Given what
we know about Mr. Contradiction's "language", I do not
think one ought to rest a lot of hope on Mr.
Contradiction's "promise". For instance, if we think back
to Mr. Contradiction's "understanding" of space/time
coordinates there ought to be some cause for concern. For
if Mr. Contradiction returned to the accident scene in
five years as opposed to five minutes he would still be in
a position to "say" that he had fulfilled his promise. In
Mr. Contradiction's language, it is true that five minutes
is equal to five years, or if Mr. Contradiction, five
minutes hence, walks into a local bar 200 meters away and
orders a beer he could "say" that he had successfully
fulfilled his promise. For in his "language", it is true
that the location of the bar is identical to the location
of the accident; hence, Mr. Contradiction did return in
five minutes. Furthermore, since it is true to say in his
"language" that the activity of ordering a beer for
himself is identical with the act of getting help, he
could quite correctly say that he got help. Furthermore, if Mr. Contradiction walks into a bar five years later and orders a beer it could quite correctly be said that he returned in five minutes with help. Similar sorts of considerations will show that any piece of behavior on Mr. Contradiction's part will count as the successful fulfillment of his promise. It is difficult to see then what the point of promising could be in Mr. Contradiction's "language" since every promise can be said to be fulfilled no matter what the ensuing behavior. Our notion of promising seems to suggest that at least sometimes systematic relations ought to obtain between the sincere utterance of a promise and specific behaviors, in order for it to be the case that the promising was successful. In the above example, the utterance of a promise to get help in five minutes is successful if help arrives in five minutes. However, nothing in Mr. Contradiction's "language" suggests any systematic relation between the utterance of a "promise" and specific behaviors. If every ensuing behavior by Mr. Contradiction might be cited as evidence that he had successfully fulfilled his "promise", then, I believe we would be correct in rejecting the conjecture that Mr. Contradiction might make promises. Certainly, I do not think anyone in the car wreck ought to take solace in the fact that Mr. Contradiction "promised" to get help.
What has been said about promises also seems to apply to other sorts of performatives as well. If Mr. Contradiction says "I'll bet you five bucks this coin will land heads-up" this might seem to count as an instance of a performative. However, as one begins to reflect on the nature of Mr. Contradiction's "language" one may wonder what would have to happen for Mr. Contradiction to win or lose the bet. If the coin lands tails, Mr. Contradiction might attempt to collect his bet anyways. For in his "language" it is true that heads and tails are identical. On the other hand, if the coin lands heads Mr. Contradiction might have lost since it is true in his "language" that "heads are not heads". As with promising, there just does not seem to be anything analogous in Mr. Contradiction's "language" to the sorts of connections between the utterance of a bet and specific events--such as a coin landing heads--which occur between our language and the world.

Hopefully, what has been said about the performatives of promising and betting might be applied in a rather straightforward manner to any other performative one might conjecture is a part of Mr. Contradiction's "language".

The examiner responded by saying that my answer "...seems to make Mr[.] Contradiction's inability to promise a matter of his unreliability, stemming from his cognitive inconsistency, rather than an intrinsically
linguistic matter. After all, Mr.[.] Contradiction would presumably be able to [do] such things as alerting, warning, startling, etc., in standard linguistic ways—even if, in virtue of his cognitive failings, he would soon come to be treated like the boy who cried "Wolf!"

Fortunately, it seems, I have the last word. Contrary to what the examiner suggests, I do not think that we can presume that Mr. Contradiction can do such things as alerting, warning, startling if these are construed as speech acts. For the question of whether Mr. Contradiction has a language is the very issue at hand; hence to presume that he is able to perform speech acts is to beg the question. (If these are not construed as speech acts, then I do not see how the point is relevant, after all, my smoke alarm can alert, warn and startle me). The little boy who cried wolf is also an unfair analogy. The point of the story turns on the assumption that the boy has a language, and knows how to properly warn the villagers. Indeed, the point is that the boy takes advantage of this fact. Consider that if it was a parrot that randomly "cried" "Wolf!" the villagers would have probably been less inclined to act. The view of this chapter is that Mr. Contradiction's "utterances" are more like that of a parrot's than a naughty little boy's.

On a conciliatory note I should add that I perhaps
agree in the end with the examiner. In paragraph 309, I suggest that sense might be given to the idea that Mr. Contradiction can speak a language. The argument of this chapter assumes that if we cannot translate or interpret the conjectured language behavior of a creature, then the conjecture must be rejected. (In other words, translatability into our language is a condition sine qua non of all languages.) I reject this sort of Davidsonian assumption in Chapter 8. I am not sure whether the examiner is questioning this Davidsonian assumption, or whether he thinks that we can in fact translate Mr. Contradiction's "language". Of course, if it is the former then we are ultimately in agreement. If the latter, then it would certainly help advance the dialectic if some reasons could be provided which support the idea that we can in fact translate Mr. Contradiction's (conjectured) language.


19. CPR, B4.
20. As Kripke argues, op. cit.
Chapter Four: Empiricism and Analyticity

81. The aim of this chapter is to complete the critique of empiricism. Radical empiricism was defined in the last chapter as the thesis that all truths are empirical, i.e., that all truths can be known only on the basis of experiential evidence. The general thesis of empiricism, as it is understood in this work, is that all truths about the world are empirical.[1] It follows that while the more specific doctrine of radical empiricism is incompatible with the idea of a priori knowledge, empiricism per se is not, i.e., empiricist, on the present definition, may allow that humans have a priori knowledge, but this knowledge cannot be about items of the world. Conversely, if it can be shown that there is a priori knowledge of the world, then empiricism is false; and either rationalism or idealism is true. Given the result of the previous chapter, that there is at least one a priori knowable truth, it is incumbent upon the empiricist to demonstrate that this knowledge is not about the world. In order to meet this challenge, empiricists have adopted the thesis that a priori truths are one and all analytic, i.e., the explanation offered for the a priority of these truths is that they are true in virtue of the meanings of
their terms. This view is sometimes referred to as the
'linguistic theory of the a priori' (or, for convenience
sake, simply the 'linguistic theory'). It is important to
note that it is not sufficient for the empiricist to argue
merely that a priori truths are one and all analytic. [2]
The empiricist must also show that analytic truths are not
about the world. The overall aim of this chapter is not to
demonstrate that logical truths are not analytic, but
rather, that the empiricist is not in a position to deny
that logical laws are, in some sense, about the world.

82. According to the present definitions, empiricists
are forced to reject the claim that we have a priori
knowledge of the world. Accordingly, the linguistic theory
of the a priori requires a bifurcation of language in
order to make plausible the idea that we lack a priori
knowledge of the world. Statements which are true in
virtue of their meanings are to be contrasted with factual
statements which, typically, are about the world, i.e., a
meaning/fact distinction is endorsed by the linguistic
theorists. This semantic bifurcation is mirrored by an
epistemological distinction: On the one hand, truths which
are true in virtue of their meanings are a priori. These
truths refer to general features of some language. Since
language is on the mind side of the great mind/world
divide, and the contents of the mind can be known a
priori, the apriority of these truths naturally follows.
On the other hand, truths which make claims about the world, and which are true in virtue of some relation between them and the world—typically this relation is said to be one of correspondence—are one and all empirical.

83. With respect to logical laws, in particular the law of noncontradiction, the model applies in a straightforward manner. The law of noncontradiction is knowable a priori, since its truth follows from the meanings of the constituent terms. The truth of 'not (P and not P)', where 'P' represents some statement or judgment, follows from what is meant by 'not' and 'and'. The meanings of these terms can be established by reflecting on the nature of the English language, and hence, the truth of the law of noncontradiction is a priori knowable. No empirical investigation is required to establish that the law of noncontradiction is true.

84. The first formulation of the argument which will be brought to bear on the linguistic theory of the a priori is rather long and convoluted. It may prove useful to indicate first the general drift of the argument. The argument does not question the claim that the law of noncontradiction, in particular, is true in virtue of the meanings of its constituent terms, instead, the argument questions whether this fact is sufficient to show that the law of noncontradiction is not about the world. Roughly,
the idea is this: if one thinks of the law of noncontradiction as part of the conceptual scheme of the subject, and the conceptual scheme of the subject dictates how the world might appear to the subject, then the law of noncontradiction dictates how the world might appear to the subject. Sometimes we are invited to think of the conceptual scheme of a subject as a "filter"--a crude metaphor to be sure, but one entirely apt for cruder versions of the scheme/content distinction. If the law of noncontradiction performs the function of a filter, then, the subjects must see the world as noncontradictory, whether or not the world is really noncontradictory. The idea is that the law of noncontradiction filters and "shapes" the world which the subject experiences; just as Kant suggests the categories might filter and shape the world which the subject experiences. In effect, then, the argument against the linguistic theory will be that it does not successfully explain how it is that the law of noncontradiction is not about the world, since it relies on an illicit form of the scheme/content distinction.

85. To begin then: the law of noncontradiction is just that, a law. It is categorical in that it applies not only to other linguistic truths, e.g., 'no bachelor is married', but also to factual truths. This should already be of some concern for the linguistic theorist since it appears there is an intimate connection between linguistic
truths and factual truths. Take an example: the page enters the room and announces that 'Holderlin is dead'. Given that the announcement is true, it seems that the law of noncontradiction (construed classically) allows us to infer other factual statements, e.g., it is not the case that the statement 'it is not the case that Holderlin is dead' is true. It seems that the law of noncontradiction yields a priori knowledge about the nature of the world.

86. The natural response for the linguistic theorist is to point out that no additional information about the world was in fact gained in this example. It simply follows from what we mean by 'Holderlin is dead', and the law of noncontradiction, that it is not true that, it is not the case that Holderlin is dead. The realization that it is not the case that, it is not the case that Holderlin is dead, is not a discovery about the nature of the world, but merely one about language.

87. The problem is not so easily dismissed. Suppose two pages enter the room and simultaneously shout, the one 'Holderlin is dead'; the other, 'Holderlin is alive'. The king wisely muses to himself that both cannot be right. But how does the king know this? Again the linguistic theorist will reply that it follows from what is meant by these statements, and the law of noncontradiction, that both cannot be true. But how does the king know that the law of noncontradiction does not in fact operate as a form
of censorship cutting him off from important facts about his kingdom? Perhaps if the law were abolished, the king might have better insight into the state of his kingdom. The law of noncontradiction is a law which constrains statements that might be reported as true in a language; which raises the skeptical question of whether this law might cut subjects off from important truths about the world.

88. To put the point in a slightly different way, it seems that the linguistic theorist has made a retreat from the initial position. It will be recalled that the theory was that factual truths are true in virtue of their relation with the world—for the sake of the argument it may be granted that this relation is one of correspondence. Linguistic truths, on the other hand, are true in virtue of some features of a language. It seems, however, that the truth of factual statements is not only determined by the relation of correspondence, but also by its logical relations with other factual statements, for it is possible to make inferences about the truth of one factual statement on the basis of another, without any further appeal to facts about the world. The king can infer that one of the pages is mistaken.

89. This line of criticism can be sharpened by presenting the linguistic theorist with a dilemma:
either the factual statements themselves are logically structured, or, it is not the case that factual statements themselves are logically structured.

If the former horn is grasped, the question arises as to whether the structure of these statements—including the law of noncontradiction—distorts the (alleged) mind independent reality. This is because statements of fact will have this noncontradictory structure. This view of logic employs the "by-product" metaphor of logic, i.e., logical truths are merely a by-product of the structure inherent in our factual statements. If logic is a by-product, then the question arises whether the structure which produces this by-product, namely, the logical structure of the factual statements, itself distorts the world in itself—but this is precisely the question which the fact/meaning distinction was suppose to avoid. This follows even if it is granted that certain statements, such as logical laws, are true in virtue of their meanings. If the latter horn is grasped, then, the linguistic theorist must confront the impossible task of saying what the factual component of a statement is, independent of its logical structure. Embracing this lemma presupposes that there is some notion of the factual content of a statement which can be factored out from the
logical structure of our conceptualizing. This view employs some version of the "grid" metaphor. Factual statements are "logic free", or "logically neutral". Logic is the grid which is placed over these sentences to organize them. If logic is thought to be like a grid, then the problem immediately arises whether this grid distorts the nature of the things in themselves. If factual statements such as 'Holderlin is dead' are logically neutral, then, it will not imply that the statement, 'Holderlin is alive' is false. It is only when the grid of logic is placed over these statements that the one implies the other, but then might not this grid cut us off from what is perhaps the truth of the matter: Holderlin is dead and alive?

90. Both metaphors suggested by this dilemma utilize the scheme/content distinction. Either, the scheme, logical laws, are said to be a by-product of the factual part of our language, the content, or, the logical scheme is something which we place over the content, the factual statements. If the scheme/content distinction can be made in an appropriate manner, however, then the problems raised against these metaphors might be avoided.

91. The basic idea behind this epistemological use of the scheme/content distinction is that the content specifies something which is real in the world, whereas, the scheme is something employed by the subject to
organize the content. Whatever scheme the subject chooses to employ is of little consequence, since it forms merely a heuristic for organizing the content. Skeptics of the scheme/content distinction suggest that it is not possible to specify the content without invoking the scheme, and if this is so, then the choice of scheme is epistemologically important. If one chooses a different scheme, one thereby alters the nature of the content. The content, however, is supposed to specify something real in the world.

92. A useful illustration of a scheme/content debate is the discussion which occurred earlier this century in the philosophy of science. Some philosophers, with an empiricist bent, suggested that there is an epistemological distinction between the given of experience, and theories of nature; thus they maintained a scheme/content distinction. In this case, experience is the content, and theories of nature are the scheme. Some empiricists with an instrumentalist bent suggest that theories are not the sort of things which are true or false of nature, rather, they are heuristics or "instruments" which we use to organize the given of experience. Thus, they saw physical theories as being both semantically and epistemologically distinct from experience. Semantically they differ in that experience is about the world, while theories are not. Epistemologically they are distinct in that our theories do not determine
what is experienced. This latter claim has come under attack from various quarters, the upshot being that no sense can be made of the notion of a theory neutral level of observation or experience. The theories which one holds true determine, to some extent at least, what one sees. In other words, the argument is that no sense can be made of the scheme/content distinction as it applies to theories and experience. Typically the arguments against this distinction either criticize the distinction as being either too vague to be of any value, or, if the distinction is clarified, it is vacuous since nothing of value remains on the observation or content side.

93. Such a view provides an apt analogy for the linguistic theory of the a priori. Logic, according to this view, can be likened to the instrumentalist's views on physical theories. Logic is both epistemologically and semantically distinct. Logic does not affect the way we view the world, i.e., factual statements are not epistemically linked to logical statements. Semantically, factual and logical statements differ in that only the former are about the world. The line of criticism directed against the linguistic theory is also similar to that which was directed against the theory/observation distinction. It will be insisted that the meaning/fact distinction is vague, and that when clarified, the distinction is in fact vacuous. In other words, the
linguistic theorist will be challenged to show, (1) that a fact/meaning distinction can be formulated, and (2), that this distinction is not vacuous.

94. The subsequent argument is intended to apply to all formulations of the fact/meaning distinction applied to logical laws although, for expository purposes, it will be useful to occasionally refer to Wittgenstein's Tractatus and Ian Hacking's "What is Logic". The former because it is perhaps the most famous formulation of the linguistic theory of the a priori. The latter is important, not only as a "hi-tech" update, but because it discusses some of the most important questions about the position--questions upon which Wittgenstein is silent.

95. The Tractatus suggests a dual picture of sentences. There are elementary sentences, those that lack logical constants, and complex sentences, those formulated by the combining of elementary sentences with sentential connectives. Truth tables provide the structure of these connectives. The truth conditions of these compound sentences are revealed by the character of the truth tables and the elementary sentences. In terms of the scheme/content distinction, the elementary sentences are of course the content, and the sentential connectives provide the scheme for organizing the content. As previously noted, to satisfy the skeptic of the scheme/content distinction it must be shown that sense can
be made of one without appeal to the other.

96. This is what Ian Hacking at certain points in his "What is Logic?" claims to have done:

It is a virtue of my demarcation [of logic] that it enables one to characterize the logical constants without being forced to say what is on the other side of the dichotomy. One does not have to say what pure descriptive constants are. A logical constant is constant that can be added to any language of a certain sort. [4]

In fairness to Hacking, however, it should be noted that he explicitly denies completely separating the elementary sentences from logic. He says that the idea of a prelogical language is a myth:

Beneath any "elementary" sentence...there is a swarming underworld of logically germane sentences that bear on the sentence in more than a merely empirical or inductive way. The best metaphor may be that of an hourglass, of
endless constructions which converge on a collection of what are at one level simple sentences, but which, when they pass through the narrow point in the hourglass, open again in endless complexity. [5]

It is difficult to tell from what is explicitly said in this article exactly how far Hacking thinks he has succeeded in separating the prelogical language from logic. The metaphor of the hourglass is not particularly instructive either. What does the narrow point of the hourglass represent? and on what level are these sentences simple? etc. In any event, these exegetical questions are of little moment since it will be argued that there is no epistemologically relevant prelogical language.

97. Continuing with the characterization of Hacking's Wittgensteinian theory, it may be asked how this theory is supposed to explain the a priori status of logical laws. The answer seems to be along the following lines: the logical constants are introduced by definition or introduction rules into the prelogical language. The formal details of Hacking's approach, derived from the work of Gentzen, are not important here. The upshot of Hacking's formal apparatus is that it allows him to define logical constants and provide them with a semantics. His
formal apparatus, for example, allows him to introduce a logical constant such as '*'. The semantics of '*' are such that A * B is true in a model if and only if at least one of A or B is false. Hacking claims that "the meaning of the logical constants are conveyed by their introduction rules, and these rules have as a by-product the class of logical truths". [6] Which is to say that the logical laws turn out to be on the mind side of the great mind/world divide--analytic truths are true in virtue of their meanings, and meanings are on the mind side--there is no question of their correspondence to a mind independent reality.

98. Suppose for the moment that Wittgenstein and Hacking are correct in their belief that sense can be made of a prelogical language. The question then of whether the "grid" of logic distorts the factual or prelogical language could be answered. They might reply that logic only serves as a convenient classification scheme. If sense can be made of the content, the prelogical language, independent of the scheme, then there is no question of whether logic distorts the true nature of reality. Similarly, if logic is in fact an incidental by-product of a prelogical language, then Wittgenstein and Hacking are correct not to address the question of whether logic distorts the true nature of reality. The earlier critique of the by-product metaphor turned on the assumption that
factual statements have a logical structure. If Wittgenstein and Hacking are correct, then this assumption is false, i.e., if they are correct then it is entirely appropriate to think of logic as a grid or scheme organizing the prelogical language or content.

99. At last the terms of the dialectic are clear. The linguistic theory of the a priori is successful only if either the content--the prelogical language--can be characterized independently of the scheme--the logical terms, or, alternatively, the scheme can be characterized independently of the content. Both possibilities will be considered and rejected.

100. Can we say what the content is without invoking the scheme? It may be instructive to begin by examining where Hacking fails to meet the criteria for a successful application of the scheme/content distinction. Concerning the prelogical language he suggests that:

...I shall make two assumptions only, one about truth, and the other about logical consequence. The strongest version of the assumption about truth is that every sentence of the language fragment [the prelogical language] should be assigned the value true or false but not both. The second assumption
is that a set of sentences $O$ is a logical consequence of the set of sentences $T$ if no matter what values are assigned to the members $T, O$, some member of $O$ is true when every member of $T$ is true. [7]

These conditions simply amount to saying that the prelogical language must consist of sentences with a single determinate truth value, and that we cannot derive sentences with multiple truth values. Hacking's two conditions are necessary (although not sufficient [8]) for his program, since otherwise he could not introduce his logical connectives in the manner which he does. The connectives are defined in terms of relations between the prelogical sentences, where the sentences themselves are understood as taking only one truth value. But then it can easily be seen that Hacking has characterized the prelogical language in terms of logic, indeed, Hacking has invoked the scheme twice. Clearly the latter assumption is one about logic, since it puts constraints on deducibility, but so also is the former assumption, the one which Hacking describes as being about truth. Hacking has already built in a certain amount of logic into the "prelogical" language in his insistence that statements must be either true or false, but not both. This is simply
a surreptitious way of using logic to define the "prelogical" language. This can be readily seen by the fact that building these assumptions into the prelogical language precludes certain logics applying to these statements, e.g., three-valued logics are precluded by the insistence on assigning true or false to a statement and para-consistent logics are precluded by the dismissal of true contradictions from the language. How could a prelogical language be incompatible with some logics and not others? The answer, of course, is that it cannot. Not only has Hacking used logic to describe the prelogical language, he has used a certain logic (or family of logics) to describe this language. There is no need to gasp in amazement when Hacking is able to derive classical logic from his characterization of the prelogical language, since he has built so much of classical logic into the "prelogical" language from the beginning. Which is to say that the scheme has been used to characterize the content. Hacking is not able to describe the prelogical language independently of the scheme. [9]

101. Wittgenstein makes similar assumptions about the nature of the prelogical language. The semantics of the logical connectives, for example, are given by truth tables in the *Tractatus*. But the manner in which these tables are supposed to be constructed prohibits adopting certain logics. As is often observed, Wittgenstein's
tables require both noncontradiction and bivalence, which again prohibits para-consistent logics and three-value logics. How can the constituents of these tables, the sentences of the "prelogical" language, be logically incompatible with certain logics? The answer, again, is that they cannot. Wittgenstein's prelogical language is not "prelogical" but embodies a logic, namely, classic logic.

102. Two examples of the failure to keep the alleged prelogical language prelogical have been examined. The question still remains whether such a prelogical language is in principle possible. In order to answer the skeptical challenge, it must be demonstrated that the purported prelogical language is "logic free", or "logically neutral", i.e., that logic resides solely in the scheme. The difficulty, however, is to say what content is left in a language without logic. Hacking suggests, by way of example, that "this is black", said pointing at this letter 'r', is an instance of an elementary sentence. [10] But if the prelogical language is "logically neutral", then it cannot be said that the truth of the sentence "this is white", said while pointing at the same letter 'r', is ruled out by the former sentence. It is hard then to say what the content of sentences like "this is black" is, if it does not rule out certain other descriptions. If descriptions really are logically neutral, then no
description can logically preclude any other description.

103. A similar point can be made about reference. If reference really is logically neutral, then the prelogical language cannot in principle preclude statements such as "'morning star' refers to a star which is more than four light years away" and "'morning star' refers to a star less than four light years away", from referring to one and the same object. The question then becomes how one can refer to such contradictory objects.

104. The point of the last two paragraphs can be bolstered by considering that, if the prelogical language is logically neutral, then it cannot be incompatible with any logical law—including the maximal principle of contradiction, i.e., the prelogical language, by its very nature, cannot rule out the possibility that every factual statement is true and false. The argument of the last chapter, however, was that no sense can be made of a language which embodies the maximal principle of contradiction. Thus, by its very nature, qua language, the conjectured prelogical language is incompatible with the maximal principle of contradiction. The assumption that there is a prelogical language, in other words, reduces to absurdity.

105. The moral of course is that, if logic is factored out of the factual statements, then our grasp on what these sentences mean seems to have evaporated. The very
notion of description seems to melt away, if we cannot say that by the very meaning of some description it is logically incompatible with some other descriptions—something we would have to deny if descriptions really were "logically neutral". The same holds for reference. A prelogical language cannot dismiss the possibility of reference to contradictory objects, but then it is not clear what we are referring to in such an instance.

106. This leaves the linguistic theory of the a priori in a bind. For if the meaning of factual statements can only be restored by factoring back in logic, then, we have not been told what the meaning of the content is independent of the scheme. If logic is factored back in, then the question arises whether the grid of logic, when "placed over" the factual component, distorts the true nature of the world in itself. Once the grid is placed over the factual statements then reference to "possibly" contradictory objects is prohibited. But again, this raises the question of whether logic might not act as some sort of censor—cutting us off from the truth.

107. If logical form is not invoked as a constraint on the prelogical language, then we cannot mean what we say when we use sentences of the prelogical language, and if logical form is not invoked as a constraint, then we cannot mean what we say by a "prelogical language".
108. It was suggested that the linguistic theorist has two choices: either a characterization of the content or the scheme must be provided, i.e., a characterization of either the prelogical language, or the logical language. Having rejected the first alternative the other now demands scrutiny. This latter strategy actually seems more conducive to Hacking's explicit strategy, since he says, it will be recalled, that "it is a virtue of my demarcation that it enables one to characterize the logical constants without being forced to say what is on the other side of the dichotomy". In other words, it is a virtue of his work that the logical language can be explicated independently of a characterization of the prelogical language. This is of course all to the good since no suitable characterization of the prelogical language is possible.

109. However, Hacking is now faced with the mirror image of the problem noted above. It was argued that Hacking's explication of the logical constants is actually dependent on his characterizing the prelogical language in logical terms, i.e., he is only able to introduce the classical connectives into the scheme because of his prior characterization of the prelogical language in logical terms. His introduction rules are like definitions, and if the prelogical language really is logically neutral, then he will have been robbed of his definiens. That is, the
constraints which Hacking placed on his "prelogical language" are necessary for his characterization of the logical constants, but these constraints are not compatible with the claim that the prelogical language is really prelogical. Hacking's own definition of logical constants, quoted above, demonstrates the point nicely: "A logical constant is a constant that can be added to any language of a certain sort". As we have seen, however, the "certain sort" of language which Hacking has in mind is a language which embodies a certain amount of logic, namely, much of what is called 'classical logic'.

110. Hacking's project is but one illustration of the failure of the linguistic theory to provide an adequate characterization of either the scheme or content. The question still remains as to what the general problem is with this strategy. As we have seen, the linguistic theorist will want to avoid saying that logic is part of the factual component because then the question of the relation of logic to the world immediately arises. But if the logical structure of language is built into the scheme, then there is little problem as to saying why statements such as "this letter 'r' is black" precludes other statements such as "it is not the case that his letter 'r' is white." Asserting the truth of both of these sentences, so the argument goes, is incompatible with the law of noncontradiction. An answer along these lines seems
to suggest that the linguistic theory has merit after all.

111. However, it was argued that the proponent of the scheme/content distinction has to meet two conditions: one was to provide a characterization of at least one half of the distinction which is describable independently of the other, and, secondly, to assure the skeptic that there is some proper subset of the language on the other side of the distinction, at least in principle. But it seems now that the linguistic theorist has no way of assuring us that there is something on the other side of the distinction, since we have not been able to find any subset of the language which is prelogical. It was suggested above that we have no notion of descriptive or, referential sentences, or even meaning in general divorced from logical structure. In other words, it seems that all of language is assimilated to the scheme side of the distinction: the scheme embodies that part of language which has logical form, but no sense can be made of the idea of a part of language which does not have logical form. On this formulation the meaning/fact distinction is epistemologically vacuous, since it cannot be intelligibly asserted that there are prelogical statements (because the idea of such things are incoherent).

112. Therefore, no sense can be made of a meaning/fact distinction, and the attendant metaphors of "grid" and "by-product", which is epistemologically relevant.
113. The argument of paragraphs 85-112 can be restated from a slightly more semantic perspective. This argument begins by noting that the choice of logic for one's language can affect the sort of descriptions of the world it is possible to make. Take an example alluded to above. Suppose a classical, dialethic, and verificationist logician are asked what possible truth values are assignable to the following:

S: There was a dinosaur in this cave.

The classical logician's answer would be straightforward. S is either true or false, but not both. The dialethic logician might say that S is either true or false, but could be both true and false. The dialethic logician reasons that a dinosaur standing half way through the entrance of the cave would be best described by saying that S is both true and false (i.e., S is alleged to be a dialethia). The verificationist would agree with the classical logician that S is not both true and false, but might suggest that S is neither true nor false. (Or more precisely, that we have no effective procedure for determining whether S is true or false). The verificationist reasons that there is no effective proof procedure for establishing whether S is true or false; hence, S's truth value is indeterminate.
114. Sometimes the type of debate which falls out of examples like the one above is said to be merely over the use of logical vocabulary like 'not', 'and', and 'or'. However, it is easy to see that the debate runs much deeper than this, for the three logical theories just canvassed will have different views on the meaning of S. This follows trivially from the assumption that two sentences differ in their meaning if they are true under different conditions or false under different conditions. That is, it is at least a necessary condition for sameness and difference of meaning that, if two sentences differ in their possible truth values, then, they differ in their meanings. To put the point yet another way, effective translations require at least the preservation of truth value between target language and home language. (See chapter three). In more concrete terms, the argument to the conclusion that these logicians disagree on the meaning of S has two steps. The first of which is that the logicians disagree about the possible truth values which might be ascribed to S. The following statements describe what the different positions might say about the possible truth values of S:

Sc: It is either true or false, but not both, that there was a dinosaur in this cave.

Sv: True or false does not apply to the
description that there was a dinosaur in this cave. (Or, again, there is no effective procedure for determining whether it is true or false).

Sd: It is both true and false, that there was a dinosaur in this cave.

The second stage of the argument is simply the point that if there is a disagreement over possible truth values of a statement then the disputants do not agree on the meaning of some statement. For, again, it is a necessary condition for sameness of meaning that two statements have the same possible truth values. Thus, the various interpretations which these logicians might propose for S would disagree about possible truth values of S, and hence, about the meaning of S. What this shows is that the debate between these logicians runs deeper than merely over sentences which contain logical operators. The debate in fact also involves so-called atomic sentences such as S. And it is not too difficult to see how the debate proceeds from here. The dialethic logician may chide the classical logician for having too narrow of a view of how the world might be described: the classical view of describing the world might cut us off from important truths such as: it might be both true and false that there was a dinosaur in the cave. The classical logician would insist that only
one or the other is true and to suggest otherwise is to entertain the absurd. The verificationist might argue against both the classical and dialethic logician that their views make our knowledge of meanings very mysterious, and so on. Which of these various positions is correct is not of importance at present, rather, the question is how such a debate might be settled.

115. One obvious answer would be to suggest that the debate be decided on empirical grounds. For instance, it may be asked: are the empirical facts best described by allowing some contradictions in our descriptions or not? Does quantum physics suggest that some physical statements are neither true nor false, but indeterminate? With respect to certain logical laws the present argument need not deny that empirical phenomenon enter into consideration. However, the conclusion of the last chapter dictates that the appeal to empirical considerations cannot be a general answer to the question of how to decide debates about which logic is correct, for it was argued in the last chapter that it is a priori knowable that the minimal principle of noncontradiction is true.

116. This is precisely the point where the linguistic theory of the a priori enters the debate. The suggestion then is that the debate is somewhat confused since the argument is over various stipulative definitions. The dialethic logician chooses to define the logical
vocabulary in a manner which conflicts with the verificationist and classical logician, but this debate does not need resolving once it is noted that these logicians are free to define the logical vocabulary in any manner they choose. What makes logic true is simply the original stipulative definitions.

117. This reply, however, misses the point since it is not simply the logical vocabulary which is subject to stipulative definitions but also truth itself; and a fortiori, descriptions which are said to be true of the world are subject to stipulative definitions. For as we have seen, these logicians must disagree on the nature of truth itself. For the classical logician, every (well formed) assertoric utterance must be either true or false but not both, whereas, the other two logicians of course disagree with this characterization. The linguistic theorist is forced to say that not only do these logicians stipulate the logical vocabulary but also the nature of truth, and thus, what might be considered a true description. This in turns raises the question of which is the true true?

118. This line of inquiry requires a reentry into the territory of metaphysics and epistemology. For one response to this is to say that the question of which is the true true makes no sense. When we define true we also define the world. The dialethic logician, for instance,
defines truth and falsity in nonexclusive terms and thereby defines her world in the same manner. She lives in a world then where truth and falsity are not mutually exclusive. The classical logician, on the other hand, lives in a world where truth and falsity are not mutually exclusive. This line of response takes the sting out of the question of the true true by removing the standard by which these different conceptions of truth might be compared, namely: the world in itself. The question of the true true, in other words, has a realist ring to it. The present line of response suggest that the question is misplaced because of what it presupposes, namely, realism. This line of response is of course forbidden to the linguistic theorist who wants to maintain realism--and yet the linguistic theory of the a priori could only be maintained by adopting a form of idealism. This idealism suggests that the mind constructs both its definition of truth and the world to which truth applies. On other hand, if realism is maintained then the definition of truth constructed by the mind is true only if it corresponds to the nature of the world in itself, i.e., the world in itself determines, for instance, whether it is the case or not that some statement is both true and false of the world in itself. If some statement is both true and false of the world in itself, i.e., if some statement corresponds and fails to correspond to the world in
itself, then the dialethic logician has constructed the correct definition of truth. If not then perhaps the classical logician has formulated the correct definition of truth. However, the linguistic theory of the a priori does not explain, given realist assumptions, how we know—if indeed we do at all—which is the true true. On the other hand, if realism is maintained, then, the definition of truth constructed by the mind is true only if it corresponds to the nature of the world in itself, i.e., if the descriptions permitted by the theory of truth correspond to the nature of the world in itself. In which case, the linguistic theory of the a priori does not explain how we know which is the true true. In short either the linguistic theory or realism must be abandoned. (This line of argument will be pursued in more detail in the next two chapters in connection with explication of the realism versus idealism issue).

119. The argument against the linguistic theory would not be complete without a discussion of the analytic/synthetic distinction. The argument above suggests that, the idea that logical laws are true in virtue of the meanings of their terms is not incompatible with the suggestion that logical laws are also about the world, but on some accounts this amounts to saying that logical laws might be both analytic and synthetic. Whether this is so depends on which of the various definitions of
the analytic and synthetic are adopted.

120. Kant was the first to make the analytic/synthetic distinction explicit. In the Critique Kant writes:

In all judgments in which the relation of a subject to the predicate is thought...this relation is possible in two different ways. Either the predicate B belongs to the subject A, as something which is (covertly) contained in this concept A; or B lies outside the concept A, although it does indeed stand in connection with it. In the one case I entitle the judgment analytic, in the other synthetic.[11]

121. Frege reworked Kant's distinction suggesting that analytic truths are those truths which may be proved (or disproved) using only definitions and logical inferences therefrom. Synthetic truths, on the other hand, are those which must be proved (or disproved) by other means.

122. It is also sometimes suggested that the distinction ought to be made thus: analytical truths are those which are true in virtue of the meanings of the terms involved, whereas, synthetic truths are true in
virtue of the way the world is. (The phylogeny of this last definition is more difficult to trace).[12]

123. The most general form of the problem which motivated Kant's transcendental idealism is how it is possible to know a priori the nature of the world. Kant hoped to sharpen or clarify this problem with the introduction of the analytic/synthetic distinction, i.e., the question of 'how is synthetic a priori knowledge possible?' was intended to replace (in part at least) the question of 'how is a priori knowledge of the world possible?'

124. Interestingly, the three sets of definitions provided in paragraphs 120-122, considered in themselves, do not explain why the question of 'how is synthetic a priori knowledge possible?' clarifies the question of 'how is a priori knowledge of the world possible? any more than does the question 'how is analytic a priori knowledge possible? This is easier to see at least in the case of the first two definitions (paragraphs 120 and 121), since no mention of the world is made in the definiens. In the third paragraph, synthetic truths are said to be true because some relation holds between them and the world, and thus, a clear link between the questions of synthetic a priori knowledge and knowledge of the world seems to be made. However, unlike the first two definitions, the third definition does not define analytic and synthetic truths
as contradictories. That is, it is not clear from the definitions provided in paragraph 118 that analytic and synthetic truths are mutually exclusive, i.e., some truth might be synthetic (about the world) and analytic (true in virtue of the meanings of the terms involved). If this is so, then even the third definition does not demonstrate why the question, 'how is synthetic a priori knowledge possible?', clarifies the question, 'how is a priori knowledge of the world possible?'

125. The point of the last paragraph is very difficult to see if one is held in the grip of a certain (more or less) empiricist's model of knowing. According to this model, meanings are on the mind side of the great mind/world divide. Humans have a priori knowledge of the contents of their minds, which include knowledge of the meaning of terms, i.e., humans have a priori knowledge about analytic truths. Since meanings are confined to the mind side of the great mind/world divide, analytic truths are similarly confined. Synthetic truths make claims which range beyond the meanings of the terms involved. At least some synthetic truths, then, make claims about the nature of the world. Some synthetic truths make the giant leap across the great mind/world divide.

126. The tenacious grip of this model is no doubt due in part to its simplicity and elegance. In order to loosen this grip it will be useful to consider two arguments
which imply the inadequacy of this model.

127. The first of these arguments is a linguistic version of St. Anselm's famous ontological argument: 'What we mean by 'God' is something than which nothing greater can be conceived, i.e., this is an analytic truth. Something which exists in reality is greater than something which exists in the mind only; hence, God must exist in reality as well as in the mind.'

128. The accuracy of this argument as a presentation of Anselm's argument is not in question here, nor is the validity or soundness of the argument, rather, the question is: if something like the linguistic version of Anselm's ontological argument were sound how would this affect the empiricist's view of the analytic/synthetic distinction? The answer of course is that it would tear the empiricist's model asunder. [13] It will be recalled that analytic truths are supposed to be confined to the mind side of the great divide, but the linguistic version of Anselm's argument purports to demonstrate something about the nature of the world, namely, that God exists, on the basis of a priori reflection on the nature of the term 'God'. If something like this argument were sound, then the question of 'how is it possible to know a priori something about the nature of the world?' could not be replaced by the question 'how is synthetic a priori knowledge possible?' If the argument is sound, then
analytic a priori knowledge may also raise the question of how is it possible to know a priori something about the world.

129. The previous argument, contrary to the empiricist's model, suggests that analytic truths might make the leap across the mind/world divide. This next argument suggests that analytic truths might actually be on the world side of this divide.

130. A terse statement of this argument is as follows: imagine two people physically identical. One is an inhabitant of earth and learns to use the word 'water' in the normal fashion. Twin earth is home to the other who has learnt to use 'water' by the same process as that of the earthling. On twin earth, however, there is no H2O but a water lookalike substance, twin-water, which is a composite of XYZ—twin-water differs from water only on the microlevel. In terms of their taste, color, smell, etc., water and twin-water are indistinguishable. According to this argument, the word 'water' has a different meaning on twin earth than it does on earth. Speakers on Twin earth, when they say 'water', do not mean water but twin-water. Earthlings, of course, mean water when they say 'water'. A consequence of this view of meaning is that two physically identical individuals may nonetheless mean quite different things by their utterances. The difference is attributable to the
different environments in which the individuals inhabit. The world, then, plays a role in determining meaning, or the histrionic version of the moral: meanings ain't in the head.[14]

132. One consequence of this argument is that if 'meanings ain't in the head', then analytic truths are not confined to the mind side of the great mind/world divide. If analytical truths are about the meanings of terms (i.e., analytical truths are true in virtue of the meanings of terms as the definition in paragraph 122 suggests) and 'meanings ain't in the head', then, it seems that analytical truths are not exclusively about what is in the head. For as the last example suggests, the word 'water' means something different on earth and twin-earth. On earth water means H2O, i.e., that it is true in virtue of what is meant by 'water' and 'H2O' that water means H2O on earth. It is analytically true on earth that water means H2O. Similarly, on twin-earth it is an analytic truth that water means XYZ. Contrary to what Kant maintained, these analytical truths are known only a posteriori, i.e., they are empirical truths. It took some empirical investigation to discover that water is a composite of H2O.

132. Again, the point of mentioning this example is to underscore the fact that there is no direct replacement of the question of a priori knowledge of the world with the
question of whether there is synthetic a priori knowledge of the world. It is only on the assumption that analytical truths are confined to the mind side of the great divide that the question of synthetic a priori knowledge becomes important. (This example is only meant to illustrate how empiricists, among others, have generally assumed that meaning is confined to the mind side of the mind/world divide. Whether one accepts the ontological argument or Putnam's "externalism" is irrelevant for the present purposes. These examples are only meant to indicate how this assumption might be challenged).

133. In terms of the argument against the linguistic theory of the a priori, it can now be seen that none of the three definitions of the analytic/synthetic distinction undermine the dual claims that logical laws might be true in virtue of the meanings of their terms, and the anti-empiricist thesis that logical laws are about the world. Consider Kant's distinction first. If in the statement of a logical law the subject contains the predicate, i.e., if the statement of the logical law is analytic, this is not incompatible with the law being about the world.

134. If logical laws are analytic in the Fregean sense, i.e., they are provable on the basis of definitions and logical inferences, then nothing prohibits them from being about the nature of the world, i.e., logical laws
could both be analytic in the Fregean sense and about the world.

135. Finally, if logical laws are true in virtue of the meanings of their terms, as the definition in 118 suggests, and logical laws are about the world, then it follows that logical laws are both analytic and synthetic.

136. Bearing in mind that the goal of the first part of this work is to prove idealism, the reader might be surprised that it is conceded here that logical laws might be true in virtue of the meanings of their terms. After all, Kant understood his idealism to turn on the question of whether there are synthetic a priori truths. But as stated in the opening paragraphs, the aim of this chapter is not to demonstrate that the linguistic theory is false, rather, that the linguistic theory is incompatible with empiricism. Empiricism, it will be recalled, is the doctrine that all truths about the world are empirical. The argument of this chapter has been that the linguistic theory cannot separate the logical from the prelogical in a manner consistent with empiricism. What this means is that empiricism has to be abandoned. While it is not consistent with the empiricism, it might be that the linguistic theory of the a priori is compatible with either rationalism or idealism—the topics of the next two chapters.
End Notes: Chapter Four

1. Historically of course 'empiricism' was a much more encompassing doctrine. For example, with Locke and Hume empiricism also included a psychology of the knowing subject, viz., the "tabula rasa". However, defining empiricism as the denial of a priori knowledge of the world seems to me to delineate at least a necessary condition for any view worthy of being called 'empiricist'.

2. Whether it is necessary for the empiricist who believes there are a priori truths--i.e., the nonradical empiricist--depends on whether there is an alternative model available which explains the apriority of the truths in a manner which does not make them about the world. As far as I know, empiricists have either adopted radical empiricism, e.g., as Mill and Quine seem to, or some version of the linguistic theory of the a priori as in the writings of Ayer and Carnap. The doctrine of "relations of ideas" found in Hume and others is plausibly considered a forerunner to the linguistic theory of the a priori.

5. Ibid. p. 315.
6. Ibid. p. 289.
7. Ibid. p. 311.
9. It has been suggested to me that Hacking is only concerned with showing that there is a "prelogical" language in the sense of a language containing no logical operators, and not with the idea of a "prelogical" language in the sense of one which does not obey any logical laws. Of course if this is so then I have seriously misconstrued Hacking's theory. As noted in the text, Hacking seems to me to be ambivalent as to whether there is a prelogical language in the first sense. If Hacking is only concerned with the idea of a prelogical language in the second sense then I do not see how this is epistemologically relevant. And yet Hacking clearly thinks that his argument is epistemologically relevant--see for example his discussion of Kant. The argument here does not concern how logical operators might be introduced into a language, but rather, can we make sense of the idea of any subset of a language which does not itself presuppose some logic. It might be relevant to note here that I chose to concentrate on Hacking's formulation of this theory, as opposed to say Ayer's, precisely because it seems to me to
be the best attempt thus far to make sense of this idea.

11. CPR, A7/B11.

12. It has been objected that "if anyone gave this definition of the analytic/synthetic distinction, they were speaking loosely." I agree. It is a terrible way to make the distinction. I include it here because it is in fact sometimes made in this manner. The following is taken from A Dictionary of Philosophy, London: Pan books Ltd., 1979: "A statement is an analytical truth if it is true in virtue of the meanings of the words it contains; a statement is a synthetic truth if it is true in virtue of the way the world is." (p. 12) In this dictionary's defence it should be said that this is only one of three definitions it offers. (The other two are the more common Kantian and Fregean versions).

13. An examiner has suggested that this Anselm point is irrelevant since nothing like the ontological argument is sound. If the reader is a certain as the examiner seems to be regarding this issue then he may quite easily forget this point. I merely wanted to suggest here the contingency of our way of looking at the relation between concepts and reality. That is, the great Anselm had another way of looking at this relation.

Chapter Five: Realism and Rationalism

137. If the results of the previous chapter are correct, then it is clear that the quest for the complete truth of the universe requires an account of logical laws. The reason, of course, is that our language is "permeated" with logic. The ubiquitous nature of logic means that it must be part of the complete truth of the universe. The previous chapter, in other words, justifies the link between the discussion of the metaphysics and epistemology of logical laws, and the quest for the unity of thought and being. Contrary to views such as the linguistic theory of the a priori, logic involves not only thought and language, but also the world or being. Given the failure of empiricism to provide an adequate account of logic, two anti-empiricist theories of the relation between thought and being, between mind and the world, will be examined in this chapter and the next. The theories are anti-empiricist in that they both allow that humans have a priori knowledge about the world. Where the theories differ is on the question of the mind independence of being or the world. Rationalists hold the realist thesis that the world is mind independent, whereas idealists of course deny this. Rationalism, as it is understood here, is the conjunction of the anti-empiricist thesis that
there is a priori knowledge about the world, and, that the
world is mind independent. Idealism is understood as the
conjunction of the anti-empiricist thesis that there is a
priori knowledge of the world, and, that the world is not
mind independent. The aim of this chapter is to show that
the rationalist's position is untenable. It will be useful
to begin with a more detailed characterization of realism
and idealism.

138. Elliot Sober once quipped that "realism is a
declaration of independence." [1] Idealists hold that the
world is not mind independent. This much is
uncontroversial, but of course, it is not very informative
either. The major task in understanding this controversy
is to understand the nature of the independence/dependence
relations.

139. Perhaps the first thing which should be said
about the debate is by way of a negative remark: the
relation between mind and the world which the realist and
idealist disagree is conceptual not causal. This is at
least true of the classical idealists who each had an
explanation for the seemingly undeniable phenomenological
fact that the world is not completely pliable to human
volition. Berkeley's famous dictum, esse est aut percipere
aut percipi seems to suggest that one could, say, put out
a fire simply by making sure that no one was perceiving
it. Without perception there can be no existence and thus,
of course, no fire. Berkeley, as is well known, avoided this sort of consequence of his theory by suggesting that God is always perceiving everything, and hence, insures that everything continues to exist. The fire, then, will continue to burn even if no human is perceiving it, since God is still watching the blaze. [2] Kant, at least in his more realist moods, suggests that the antics of the things in themselves determine or are the source of empirical judgements. [3] Hegel held that the causal independence of the material world was necessary for the self-realization of Geist, e.g., the recalcitrance of the world to the will plays an integral role in Geist's movement beyond the master/slave relationship.[4]

140. The conceptual relation which animates discussions between realists and idealists concerns the connection between the world, and how the world appears to the mind. Idealists believe that there is a necessary relation between reality and appearance, whereas, realists see the relation as merely contingent.

141. Kant himself presents the debate in almost these terms. Consider, for instance, his transcendental exposition of the concept of space where he writes:

Geometry is a science which determines the properties of space synthetically and
yet a priori. What, then, must be our representation of space, in order that such knowledge of it may be possible? [5]

As is well known, Kant solved this puzzle by claiming that space is something contributed by the human mind. Space is part of the conceptual structure the mind uses to organize incoming information. Since we may know the structure of the mind a priori, we may also know the structure of space a priori. This is Kant's solution to the problem which he termed 'transcendental idealism': "Our solution is thus the only explanation that makes intelligible the possibility of geometry, as a body of a priori synthetic knowledge." [6] Transcendental idealism, according to Kant, is the only theory which can explain the fact that we cannot be mislead about the structure of space.

142. How does Kant's transcendental idealism square with the point made in paragraph 139 that the world is not completely pliable to human volition? It seems that if we choose to conceive of the world in a different manner--synthesize sensous intuitions with different categories--then the world will in fact change. Kant is not committed to this consequence for at least two reasons. First, for Kant our conceptual framework is not something that we can change at will. The structure of our
understanding is fixed for all time; and this structure, says Kant, is such that we must see the world as a Newtonian three dimensional system where there is a necessary relation between cause and effect, etc. Second, what is completely mind dependent is the structure of appearance, and this structure is related to synthetic a priori truths, e.g., it is a synthetic a priori truth that there is a necessary connection between cause and effect. What is not completely mind dependent is the particulars upon which the conceptual structure operates, e.g., the truths given by empirical laws. These are dependent, in part, upon something else. Kant, as previously noted, sometimes suggests that it is the antics of the things themselves which determine the contingent and empirical. Kant, then, maintains that it is necessarily the case that there is a certain amount of isomorphism between rational minds and the world of appearances, (after all, it is our minds which give the world of appearances the structure it has).

143. Hegel went a step further than Kant in maintaining that there is necessarily a certain amount of isomorphism between the way the world appears to the rational mind and the things in themselves. Does this mean that Hegel was committed to saying that the world would change if we chose to view it differently? The answer is again no and for reasons similar to that of Kant's. First, Hegel
understood the contingent to be a matter of empirical discovery. [7] From pure thought alone we cannot deduce the contingent features of the world. Second, rational thought for Hegel—as with Kant—must have a certain conceptual structure. Hegel articulates the structure of thought in the two versions of his Logic (a structure which, incidently, is much more intricate than that suggested by Kant). Since Hegel believes that the necessary structure of rational thought is identical to the necessary structure of the world, the Logic also articulates Hegel's ontology. More specifically, Hegel argues that the concepts which we must necessarily employ in thinking are also necessarily applicable to the world. Thus, according to Hegel, by making manifest the large features of thought we make manifest the large features of the world.

144. Further elucidation is perhaps possible if one thinks of the dependency and independency relations in quasi-mathematical terms. If appearance and things in themselves are the variables, then, the realist asserts that the variables are independent. Manipulation or change of one variable does not necessitate a change in the other. The absolute idealist, on the other hand, maintains that the variable necessarily co-vary. When there is an "isomorphism" between appearance and reality is when we have the correct view of the world. The realist will allow
the possibility of this isomorphism but also allows the possibility that it does not obtain. An idealist such as Hegel maintains that the world and the mind necessarily co-vary. This co-variance will be in the form of a isomorphism between the way rational thought views the world and the way the world is in itself. There is also at least the logical possibility of a "pessimistic" absolute idealist who believes that there is necessarily a co-variance between thought and reality but that it is precisely not an isomorphism, i.e., that we necessarily have the incorrect view about reality. Bradley's version of idealism is perhaps an instance of "pessimistic idealism". Bradley maintained that discursive thought is riddled through with contradictions but that the Absolute, ultimate reality, is free from contradictions; hence, we are necessarily cut-off from the absolute.

145. Placing Kant's transcendental idealism in this framework is a little more involved. Kant is not an "optimistic" absolute idealist like Hegel since Kant does not believe there is an isomorphism between thought and things in themselves. Neither is he a "pessimistic" absolute idealist since, at least officially, Kant maintains that we have no knowledge of things in themselves; hence, we ought to remain agnostic about their character. The pessimistic idealist, on the other hand, says that we know at least something about the character
of the world in itself, namely, that it is not like we think it is. On this view then Kant is not an idealist about things in themselves--there is no reason to postulate any covariance between things in themselves and our thought--yet he is an idealist about the world of appearance--there is a necessary isomorphism between the mind and the world of appearance. For reasons which will not be examined here, Kant understands the world of appearance to be the so-called "external" world (thus, the external world for Kant is not equivalent to the notion of things in themselves). Unlike transcendental realism, Kant's idealism implies that it is incoherent to suggest that all our beliefs about the external world might be false. It must be the case, says Kant, that "outer perception" is often "an immediate consciousness of the existence of things outside of me".[8] It is not that we can never make mistakes about the character of the external world. Kant suggests by way of example that dreams or delusions are instances where perception "is the product merely of the imagination". [9] Whether any given judgment is veridical is a matter of its coherency with the rest of our judgments about the world. To the extent that Kant does allow that it is a contingent matter whether there is a complete isomorphism between appearances and the external world, he is a realist. Kant terms this form of realism 'empirical' realism.
146. Realism and idealism are points on a continuum which mark the degree one believes that appearance and reality might vary with respect to one another. The greater the possible variance the more one is a realist, and conversely the smaller the possible variance the more one is an idealist. The strongest form of realism, metaphysical realism, will allow that all our beliefs might be true, or that they are all false, and the various degrees of correctness in between. The metaphysical idealist, on the other hand, will postulate a necessary mapping between each and every one of our beliefs and reality, e.g., it might be that each of our beliefs is necessarily true, each necessarily false, or necessarily some combination thereof—a position so absurd that it has not been endorsed by any philosopher of note. Idealists such as Kant and Hegel endorse a less extreme form of idealism in that they hold that it is an open question whether our beliefs about (at least some) contingencies are correct. They understand this to be an empirical matter, and thus they endorse a weak form of realism, 'empirical realism'. On this point Kant and Hegel differ only on the question of whether this realism applies merely to the phenomenal world, as Kant maintains, or to things in themselves, as Hegel suggests.

147. It might be objected that this analysis of realism and idealism cannot be correct, since Descartes would have
to be classified as an idealist, yet he is in fact a paradigm of the realist. The reason that it would seem that Descartes would count as an idealist is that in the "Fifth Meditation" Descartes believes that he has a proof that it is necessarily the case that we are not radically deceived. The proof has at least two parts: an argument for the existence of God and the claim that God, in his benevolence, would not allow us to be radically deceived. It would seem that Descartes is an idealist, at least according to the definition above, since he holds that there is necessarily an isomorphism between thought and reality.

148. To avoid this sort of consequence what has been implicit in the discussion so far should be made explicit: the idealist holds that the necessary relation between thought and reality is due to intrinsic features of thought and reality. In Descartes case, the isomorphism between thought and reality does not hold because of their very nature, but in virtue of God's benevolence. Because Descartes invokes something other than the nature of thought and reality in order to guarantee the isomorphism, he should be considered a realist.

149. To complete the characterization of realism and idealism which will be endorsed here, it may prove useful to contrast it with some contemporary discussions. Perhaps the most famous discussion of 'realism' is Putnam's
contrast between 'metaphysical realism' and 'internal realism'. Putnam summarises his own work thus:

Traditionally realists have claimed that truth outruns even idealized justifiability (because we might 'really' all be deceived by an evil demon, we might really be brains in a vat, etc.). I replied (1976, 1981) to these arguments by pointing out that an epistemically ideal theory would necessarily have models...and, in fact, models that satisfied all operational and theoretical constraints (and were thus 'intended' models). I concluded that metaphysical realism--the view that truth outruns even idealized justification--is incoherent...Thus I have revived Kant's distinction between metaphysical realism and empirical realism, and reject the former while affirming the latter ('internal' realism). [10]

In a similar vein, Rorty writes that the realist wants:
...the notion of a world so 'independent of our knowledge' that it might for all we know, prove to contain none of the things we have always thought we were talking about. He wants to go from, say, 'we might be wrong about what the stars are' to 'none of the things we talk about might be anything like what we think they are. [11]

In opposition to thinkers such as Rorty and Putnam, realists like Sellars, Rosenberg, and Devitt are happy to suggest that truth might outrun idealized justification precisely because the world is independent of our knowledge of it. [12] This line of thought is summed up nicely by Papineau. He says that the issue:

...is a debate about the extent to which human belief in general is susceptible to error, and about what if anything should be done about this. Realists, believing in an independent reality, regard such errors as an ever-present danger; while anti-realists, in denying any 'independent' reality, think that at some point this danger dissolves. [13]
Papineau in this quote speaks about 'anti-realism', whereas the discussion here uses the term 'idealism'. However, this is no more than a disagreement about which term to apply to this position, Papineau, prefers 'anti-realism' whereas the 'idealism' is used in the present context. This is further confirmed when one considers that Papineau sees Putnam as one of the main proponents of 'anti-realism' yet Putnam is happy to admit the historical origins of his work lie with Kant and Hegel. [14] Thus, at least one strand of the current realism debate is in agreement with Kant that realism allows the possibility that we are radically in error. [15]

149. Having said a little about what is meant by 'realism', a discussion of the idea of rationalism is appropriate. Rationalism is sometimes defined as the philosophical doctrine which asserts that reason is capable of knowing reality in a manner which is independent of sensory knowledge of that reality. It is a matter of some delicacy, however, to find versions of rationalism which are compatible with realism. For instance, this most general characterization of rationalism does not exclude Kant's transcendental idealism as a form of rationalism. Kant thought that we
have synthetic a priori knowledge of reality— but a reality that is, in some sense, one of our own making. We have non-sensory knowledge of this reality because we make this reality. Clearly, then, if realism is to be defended along rationalist lines it must be done in a manner which differs from Kant's. This is because the realist wants to preserve the mind independence of the world. Hence, the position in question then is in fact the combination of a realist ontology and a rationalist epistemology.

150. With this combination the problem of access immediately becomes apparent: how can reason yield non-empirical knowledge about the structure of reality? A couple of contemporary authors have described this problem thus:

We might describe the problem as a problem of access: here are we, evolving social organisms in space-time. Our sense organs are admirably suited to bringing us information about tables and chairs, trees, fruits and vegetables, other organisms, the sky, the weather, and so on. We have managed to devise electronic and optical extensions of these sense organs that enable us to observe objects as small as viruses (and even
smaller) and as distant as remote galaxies. But none of the sense organs, natural or artificial, extended or unextended, ever causally interacts with, observes or perceives a set. There are the sets; beautiful (at least to some), imperishable, multitudinous, intricately connected. They toil not, neither do they spin. Nor, and this is the rub, do they interact with us in any way. So how are we supposed to have epistemological access to them? To answer, "by intuition." is hardly satisfactory. We need some account of how we can have knowledge of these beasties, some account of our cognitive relation to them. [16]

The points made here apply equally well to logical laws. What is our epistemological access to logical laws? Only two possibilities for solving this problem of access, given the commitment to rationalism, suggest themselves. Either the rationalist appeals a notion of intuition or innate knowledge. It will be argued that for either case the rationalist must invoke some mechanism or process in reality to guarantee that our beliefs concerning logical
laws are correct. These maneuvers will be examined respectively.

151. Just as only certain forms of rationalism are capable of solving the puzzle confronting the realist, so too must the notion of intuition be tailored to meet the realist's needs. For example, L. E. J. Brouwer appeals to intuition to ground our mathematical knowledge. But the intuition Brouwer appeals to is similar to that of Kant's version of the intuition thesis, namely, intuitions are part of the conceptualizing structure of the human mind. While Kant postulated both space and time intuitions, Brouwer believes only the latter notion is viable, and yet it alone is sufficient to ground mathematics. The appeal to intuition, then, is not incompatible with Kantianism. Indeed, if Arend Heyting, an intuitionist working along lines similar to that of Brouwer, is correct, intuitions need not be about the world at all: "the characteristic of mathematical thought is, that it does not convey truth about the external world, but is only concerned with mental constructions." [17] The upshot of these reflections is simply that the realist must be careful in appealing to intuition, since not all forms of this doctrine will solve the puzzle concerning our a priori knowledge of logical laws.

152. What is required then is a notion of intuition that allows a priori access to the logical structure of
the world in itself in a manner analogous to the empirical knowledge which the senses yield—analogous at least in the sense that knowledge is not innate, but the mind somehow accesses information which is not part of its "hardwired" structure. Kurt Godel adopts exactly this sort of position:

That something besides the sensation actually is immediately given follows (independently of mathematics) from the fact that even our ideas referring to physical objects contain constituents qualitatively different from sensation or mere combinations of sensation, e.g., the idea of an object itself, whereas, on the other hand, by our thinking we cannot create qualitatively new elements, but only reproduce and combine these that are given. Evidently the "given" underlying mathematics is closely related to the abstract elements contained in our empirical ideas. It by no means follows, however, that the data of this second kind, because they cannot be associated with actions of certain things upon our sense organs, are something purely subjective, as
Kant asserted. Rather they, too, may represent an aspect of reality, but, as opposed to the sensation, their presence in us may be due to another kind of relationship between ourselves and reality. [18]

Godel seems to exemplify the position under consideration for he maintains both that we have some nonempirical access to reality and that this reality is not subjective as in Kant's transcendental idealism. Godel seems to be a rationalist (and thus a realist). However, Godel's appeal to "another kind of relationship between ourselves and reality" seems to simply name the problem of access, not to solve it. Similarly, the appeal to intuition, without further specification of what this intuition amounts to, seems merely to name the problem of access, not to solve it. The rationalist owes some account of how this nonsensory access to reality works.

153. Whatever account the rationalist provides of intuition, it must be compatible with the mind independence of the world postulated by realism. The beliefs which arise from intuition cannot necessarily reveal reality if realism is to be maintained, i.e., if realism is correct, then there is the real possibility of a difference between how the world appears to the subject,
via intuition, and how the world is in itself. Thus, realism, according to its own standards, must face the question of whether there is harmony or correspondence between our intuition of the world, and the world in itself. To allay the skeptical doubt the realist must have some guarantee that such a harmony or correspondence does obtain. Nothing about the way the world appears to the subject can provide the desired guarantee, for it is precisely the question of the adequacy of appearance that is at issue, and must be at issue, by the realist's own standards. The guarantee must come on the world side of the mind/world dichotomy, or what might be considered equivalent, for the present purposes, the subject/object dichotomy. For example, an appeal to God's benevolence or to evolutionary forces is the sort of guarantee that the rationalist ought to look for since this seems to allow the independence required between subject and object (mind and world). It would be incorrect, on the other hand, for a realist to appeal to a self-sufficient incorrigible intuition into the logical structure of the world in itself. The reason is that this would destroy the independence mind and world are supposed to enjoy. For such an incorrigible intuition would mean that mind and world are dependent variables, i.e., appearance and reality would necessarily covary due to their intrinsic natures, contrary to the realist's own doctrine. In other words, in
order to avoid the spectre of idealism, realists must appeal to some external cause to underwrite any hypothesized incorrigible intuition. (Recall the discussion of Descartes in paragraphs 147-148).

154. A similar sort of guarantee is required also in an appeal to the doctrine of innate ideas. Innate ideas may engender certain beliefs about the world independent of our sensory experience of that world. The rationalist, however, must again face the question of whether there is a harmony or correspondence between the way these innate ideas structure the appearance of the world for subjects, and the world in itself. The skeptical doubt about the veridicality of these innate ideas cannot be allayed by appeal to features of how the world appears to the subject. The reason is the same as in the appeal to the notion of intuition: nothing about the way the world appears to the subject can provide the guarantee, for it is precisely the question of the adequacy of appearance that is at issue, and must be at issue, by the realist's own standards. The guarantee must come from the object or world side of the great divide. The argument, thus far, if sound, leads to the conclusion that some feature of the world must guarantee that the cognitive capacities of subjects have the right design for understanding the world. Nothing on the subject side could guarantee that we in fact have such a "right design", since it is the very
adequacy of the subject's cognitive capacity which is at issue.

155. There is a long tradition of rationalists who have perceived the need to explain or justify the claims of veridicality made on behalf of innate ideas or intuitions. Plato speculated that the soul, in its disembodied form, was able to "see" the Forms, which Plato understood as an explanation of the nature and veridicality of innate ideas. [19] Descartes, as will be seen in more detail anon, invoked God's benevolence as a guarantee. Modern evolutionary epistemologists, of the rationalist persuasion, sometimes suggest that evolutionary forces guarantee the veridicality of innate ideas.

156. Rationalists, then, must appeal to some form of the "right design" argument. The general form of the argument from "right design" is as follows. Some argument A is given to establish that something, or process X, has designed humans such that our reasoning capacities are not systematically deceived. While it seems quite possible that this argument could be used to defend any belief, the concern here will be only with the effectiveness of this argument in defending the veridicality of the principle of noncontradiction from a realist's point of view.

157. The general argument to be deployed against the "right design" thesis has two premises and concludes that
all such attempts to establish the principle of noncontradiction from a realist's point of view must be circular. The first premise is that X's existence will have to be established on the basis of argumentation. The second is that argumentation about the realist's mind independent realm presupposes that subjective necessities correspond to objective necessities. But if this is so, then, in the very act of arguing the realist begs the question. A discussion of the general nature of this argument will precede its actual application to concrete examples.

158. The first premise is rather uncontroversial. Some form of an argument must be given, be it a deductive, inductive, or inference to the best explanation argument. That there is something or some process which guarantees the veridicality of our conceptual scheme is not something which may just be assumed within Platonic philosophy. It cannot be a mere article of faith. Reasons must be given. In any event, such a condition follows from the characterization of the Platonic conception of philosophy provided in chapter 2. (See also paragraph 176 below).

159. The second premise is perhaps best supported in two stages. The first of which is to see that the subject's activity of arguing itself presupposes the principle of noncontradiction. (Recall that for expository purposes the classical law of noncontradiction has been
substituted for the minimal principle of noncontradiction). As was argued in chapter 3, if the principle of noncontradiction is false then every statement follows from every statement. Under such conditions the very notion of argumentation disappears.

160. The second stage turns on the idea that this principle must be objectively necessary as well. It is a presupposition of any argument, indeed of any claim to asserting an intelligible truth, about the objective realm that the principle of noncontradiction conforms to the nature of this realm, i.e., this principle must be assumed to hold in the objective (as opposed to the merely subjective) realm. That is, if the principle of noncontradiction is understood as merely subjective, as say merely a law of thought, then the question immediately arises whether the objective realm is a possible object of thought. Similarly, if arguments are understood as simply having subjective force, say, as merely stipulating what subjects ought to believe, then the question immediately arises whether the objective realm is distorted by the principles of argumentation. In other words, to think about or argue about the objective realm, the world in itself, is already to assume that the law of noncontradiction does not distort its nature.

161. If the principle of noncontradiction must be assumed to be true then an appeal to something, or
process, X, to underwrite the veridicality of the claim is completely gratuitous. If the realist argues against the skeptic who wonders whether the principle of contradiction accurately describes objective reality or not, then any argument used to support something, or process, X will be question begging. Such an argument will have to assume the veridicality of the very principle in question. On the other hand, if the principle is assumed, and the skeptic's worries are dismissed as nonsense, then the appeal to something else—other than the claim that it is a presupposition of thought—is not needed, and indeed, adds nothing.

162. This is the general form of the argument. The next task is to see how it applies specifically to the realist's appeal to God or evolutionary forces.

163. The theological appeal by the realist might be put thus: 'God is benevolent. Hence, God would not have allowed us to be radically deceived. If the principle of noncontradiction did not hold of the world in itself, then we would be radically deceived. Therefore, we know that the world conforms to the principle of noncontradiction.' This line of argument is purposely reminiscent of Descartes' argument in the Meditation (and elsewhere). Commenting on this line of argument in general Kant says:
...in determining the origin and validity of our knowledge, however, the deus ex machina [the argument from right design] is the most absurd argument one could choose. Apart from the vicious circle in the series of inferences from what we know, the argument has the further disadvantage of countenancing every whim and pious speculative figment of the imagination.[20]

It would seem that Kant is correct in his estimation, but the point bears further examination. Descartes provides a good stalking horse to this end. In particular, there are three reasons why some of Descartes' writings are of special relevance. First, Descartes use of the "right design" argument is perhaps the most famous. Second, the charge of circularity was brought against Descartes' version of this argument even in his own lifetime, and much has been said since about whether Descartes' argument is in fact circular. Third, Descartes, interestingly, seems to be aware of the tension between subjective and objective necessity. It will be argued that there is a form of circularity in Descartes' reasoning in the Meditations which is more serious than the usual charge of circularity that is raised against Descartes.
164. It is worth distinguishing these various circles. Arnauld, it seems, was the first to formulate the so-called 'Cartesian Circle' objection, he says:

The only remaining scruple I have is an uncertainty as to how a circular reasoning is to be avoided in saying: the only secure reason we have for believing that what we clearly and distinctly perceive is true, is the fact that God exists.

But we can be sure that God exists, only because we clearly and evidently perceive that; therefore prior to being certain that whatever we clearly and evidently perceive is true. [21]

The charge of circularity in the Cartesian circle is generally assumed to be over the criteria of truth for particular beliefs. The criteria of 'clear and distinct ideas' is guaranteed to yield truth only if God exists, but Descartes' proofs of the existence of God rely on these criteria. The 'Cartesian Circle' is the name used to designate the particular problem which Descartes faced in arguing that clear and distinct ideas will prove the
existence of God; and God in turn will insure the veracity of clear and distinct ideas.

165. Whether Descartes is guilty of the charge of petitio principii is not universally agreed. It has been suggested, for example, that Arnauld's criticism is of a strawperson:

It is by now clear why there is no circle in Descartes' argument. The clear and distinct perception used in the proofs of God's existence are perception propositions...The veracity of God is used to establish not any particular clear and distinct perception, but the general proposition that whatever I clearly and distinctly perceive is true. [22]

Even if this line of argument were successful in extricating Descartes from the 'Cartesian Circle' there is still the problem of vindicating reason in general. This can be seen by examining how Descartes proceeds in the Meditations.

166. A step-wise progression of doubt concerning the veridicality of our beliefs is introduced via the
discussions of the possibilities that we are deluded, dreaming, or deceived by an evil demon. The evil demon hypothesis is the nadir in the Cartesian quest for truth and certainty. At this point (i.e., the second Meditation) the all too familiar story is told. "I am, I exist" is said to be a necessary truth each time it is said or thought. A little later (in the third Meditation) the evil demon hypothesis is discarded as Descartes provides a proof that God exists, and of course, God would not allow us to be radically deceived. It is throughout these reflections that Descartes seems to be (at least dimly) aware of subjective or epistemological necessities, on the one hand, and objective or metaphysical necessities on the other.

167. One place in which this tension is manifest is in Descartes' discussion of the inability of the evil demon to deceive him about the truth of the claim 'I am, I exist'. Descartes, reflecting on the status of his existence if the evil demon exists, argues thus:

Then without a doubt I exist also if he deceives me, and let him deceive me as much as he will, he can never cause me to be nothing so long as I think that I am something. So that having reflected well and
carefully examined all things, we must come to the definite conclusion that this proposition: I am, I exist, is necessarily true each time that I pronounce it, or that I mentally conceive it. [23]

The question one might put to Descartes is how it is that he knows that this proposition is necessarily true everytime it is thought or said. Descartes himself seems to raise this question:

But when I took anything very simple and easy in the sphere of arithmetic or geometry into consideration, e.g. that two and three together make five, and other things of the sort, were not these present to my mind so clearly as to enable me to affirm that they were true? Certainly if I judged that since such matters could be doubted, this would not have been so for any other reason that it came into my mind that perhaps a God might have endowed me with such a nature that I may have been deceived even concerning things which seem to me most manifest. But every
time that this preconceived opinion of the sovereign power of a God presents itself to my thought, I am constrained to confess that it is easy to Him if He wishes it, to cause me to err, even in matters in which I believe myself to have the best evidence. [24]

Descartes, here, considers the possibility that even the most seemingly trivial and easily comprehensible necessary truths might not actually be true, but only seem to be true because of the constitution of the human mind. That is, in Cartesian terms, that particular "clear and distinct ideas" might be false. They may seem true because some powerful being has so constructed us to think in this manner. Descartes, in other words, seems to be gesturing towards the possibility, suggested above, that subjective necessity may not match up with objective necessity. This lack of harmony between the subjective and objective being the result of the workings of a powerful God out to deceive us. And yet having seen the problem, Descartes never really seems to address it, for example, he continues from the quote above thus:

And, on the other hand, when I direct my
attention to things which I believe myself to perceive clearly, I am so persuaded of their truth that I let myself break out into words as these: Let who will deceive me, He can never cause me to be nothing while I think that I am, or some day cause it to be true to say that I have never been, it being true now to say that I am, or that two and three make more or less than five, or any such thing in which I see a manifest contradiction. [25]

But of course this passage does not answer the problem raised in the previous one. There is no argument here as to why a God or the evil demon could not have deceived us about necessary truths. All that is said concerns Descartes' subjective states, "I am so persuaded", and about his dispositions, "I break into these words". Descartes never addressed this problem in a more satisfactory form. Consider, for instance, the following passage from the fourth Meditation:

...when I lately examined whether anything existed in the world, and found that from the very fact that I considered this question it followed very clearly that I myself existed,
I could not prevent myself from believing that a thing I so clearly conceived was true: not that I found myself compelled to do so by some external cause, but simply because from great clearness in my mind there followed a great inclination of my will; and I believe this with so much the greater freedom or spontaneity as I possessed the less indifference towards it.[26]

But how, one might wonder, does Descartes know that he was not caused to believe that he existed by some external agency, (the evil demon)? Descartes simply asserts that he did not find himself compelled. If a God had so constructed him to believe that his conclusions were reached by rational processes, then might it not seem to Descartes that he was not compelled by some external cause, even though he in fact was so compelled? The idea being that Descartes might believe, e.g., claims such as "I am, I exist" even though they are not metaphysically necessary. In other words, Descartes does not address the problem he himself raises, namely, whether the "felt" subjective necessity corresponds to objective necessity.

168. The idea that there is a potential gap for the realist between subjective or epistemological necessities,
on the one hand, and objective or metaphysical necessities on the other, cannot be underscored enough. As noted, Descartes to his credit seems to realize this problem. Consider the following series of quotes from Descartes some of which predate the Meditations of 1641 and some which postdate publication:

The truths of mathematics...were established by God and entirely depend on Him, as much as do all the rest of His creatures. Actually, it would be to speak of God as a Jupiter or Saturn and to subject Him to the Styx and to the Fates, to say that these truths are independent of Him.... You will be told that if god established these truths He would be able to change them, as a king does his laws; to which it is necessary to reply that this is correct.... In general we can be quite certain that God can do whatever we are able to understand, but not that He cannot do what we are unable to understand. For it would be presumptuous to think that our imagination extends as far as His power. (Letter to Mersenne, 15 April 1630).
God was as free to make it false that all the radii of a circle are equal as to refrain from creating the world. (Letter to Mersenne, 27 May 1630).

I would dare not even dare to say that God cannot arrange that a mountain should exist without a valley, or that one and two should not make three; but I only say that He has given me a mind of such a nature that I cannot conceive a mountain without a valley or a sum of one and two which would not be three, and so on, and that such things imply contradictions in my conception. (Letter to Arnauld, 29 July 1648).

As for the difficulty in conceiving how it was a matter of freedom and indifference to God to make it true that the three angles of a triangle should equal two right angles, or generally that contradictions should not be able to be together, one can easily remove it by considering that the power of God can have no limit.... God cannot have been determined to make it true that contradictions cannot be together, and consequently He could have done
the contrary. (Letter to Mesland, 2 May 1644). [27]

While Descartes is aware of the tension between subjective and objective necessities, again, his solution is inadequate. For why could a deity not deceive one about the proposition "I am, I exist"? The answer, which is sometimes offered, is that there is a contradiction in believing both that a deity is or has deceived me, and that I do not and have never existed. If God can make it that one and two do not make three or a mountain without a valley, then, surely it would not be too onerous for him to make it the case both that I am deceived, and that I have never existed. The question then is how do we know that such contradictions cannot be true?

169. It can be seen then how the problem of circularity arises for Descartes. In particular, the question is whether Descartes can close the potential gap between subjective and objective necessity, i.e., whether he can demonstrate that the principle of noncontradiction holds objectively as well as subjectively. The natural move for Descartes would be to invoke God's benevolence to show that we could not be deceived about the principle of noncontradiction. But God's existence will have to be established on the basis of argumentation—Descartes does
in fact attempt this in the third and fifth *Meditations*. Since the notion of an argument presupposes the principle of noncontradiction, Descartes is no further ahead. For either Descartes presupposes that the principle of noncontradiction does not distort objective reality, in which case the appeal to God is gratuitous; or he does not presuppose that the principle of noncontradiction does not distort objective reality, in which case the appeal to God to underwrite the veracity of this principle is circular. It was precisely the question of whether this principle distorts the (alleged) mind independent reality which in turn motivated the appeal to God—God being, of course, part of objective reality. Alternatively, if it is not presupposed that the principle does not distort objective reality, then, it still seems an open question for Descartes whether the compelling conclusion of some argument for the existence of God really does lead to the truth of the matter; or whether the evil demon has so tampered with one's cognitive processes that one is deceived into accepting the conclusion that God exists.

170. Evolutionary theory is sometimes called upon by modern epistemologists as a substitute for God. However, evolutionary theory need not be utilized in this manner. That this is so is made clear in the following passage where a contemporary epistemologist distinguishes between naturalized epistemology and first philosophy.
Accordingly, the naturalized program:

accepts present scientific theories as a contextually necessary starting point, and extracts from them as much information and explanation as it can about the nature of knowledge itself, and processes of acquiring it. In the days of first philosophy, when it was thought that we did not know all that much for sure, there was correspondingly less that we could know about what we might know and how we might know it. In the wake of major scientific revolutions since then, scientific knowledge has extended the potential reach of its descriptions and explanations to the point where it can become its own object. [28]

The author then goes on to suggest that this strategy for carrying on epistemological investigation is question begging from the perspective of the first philosopher. The evolutionary epistemologist, who accepts much of current scientific theory, has not addressed the fundamental problem of epistemology according to the first
philosopher, namely: whether we might not know anything at all. The writer continues, "but to the naturalized philosopher, one does not "beg" the question in this way. One has to bury it." The task then of the evolutionary epistemologist is to extract "information and explanation" from our current science. The contrast between the evolutionary epistemologist and the first philosopher might be put as follows: The first philosopher attempts to justify our claims to know, for example, the paradigm of the first philosopher, Descartes, is often read as trying to justify the knowledge claims of the newly arising sciences. Evolutionary epistemology and other naturalized versions of philosophy, on the other hand, seek to explain our knowledge claims. Kant is instructive here. As he notes, two quite distinct questions may be asked about concepts and our conceptual scheme in general. There is the empirical question, the "question of fact," namely, "how do we come to have this concept, and what is involved in having it?" Kant reads Locke as attempting to answer this question (although Locke was probably just confused on this issue). The other question is the question of "right", i.e., our justification for using these concepts.

171. The problem for the evolutionary version of the right design argument is this: either the theory is put forward as an explanation or justification--as either answering the first or second question. (Or perhaps it
might be understood as answering both--this possibility will not affect the argument however). Taken as an explanation, evolutionary theory is of no use in establishing the epistemological credentials of the law of noncontradiction. Explanations take the explanadum as given, as already established. But the explanadum in this case--the law of noncontradiction--is precisely what is at issue for the realist. What is required of course is answer to the second sort of question distinguished by Kant, viz., the justification for this principle.

172. Evolutionary theory, as noted above, has sometimes been called up to perform the same task for realism as God did in the past. The suggestion sometimes made is roughly this. We have good evolutionary reasons for believing that our conceptual scheme mirrors the world as it is in itself. Ross Harrison has recently put forward this line of argument. Harrison acknowledges that his argument is derived from a rhetorical question made by Jonathan Bennett in his Kant's Dialectic. Bennett says that if Kant were asked why it is that experience of the world just happens to be of the sort our minds are receptive too, then "what is wrong with an analogue of the explanation of why the air on this planet 'happens' to be just the sort human lungs insist on having". [29] Harrison argues that natural selection can account for the harmony between an organisms general form of judgment and the world, just as
it can account for the harmony between its organs and its environment:

In both cases it depends neither upon a designer nor upon luck, but is the result of normal causal process. Any individual who thinks (or acts as if) there is no causation in the world, or that the future does not resemble the past, is unsuccessful and ill-adapted to survive or breed. [30]

The realist, following Harrison's line of thought, might add the principle of noncontradiction to the list of well adapted traits.

173. The argument relies on the questionable premise that knowing the truth about the environment is conducive to survival. Even if this premise is granted, however, the evolutionary response suffers from the same problem which plagued Descartes theistic response. Evolutionary theory presupposes the law of noncontradiction for its formulation—but it was precisely the principle of noncontradiction which the appeal to evolutionary theory was supposed to establish. The skeptical doubt about whether the principle of noncontradiction distorts the
world in itself cannot be put to rest by appeals to evolutionary considerations, since evolutionary theory, and the arguments for it, are tainted through and through with the principle of noncontradiction. Evolutionary theory is in fact as circular as Descartes' theological move.

174. Of course this point generalizes: no justification for the claim that the law of noncontradiction mirrors the nature of the things in themselves is possible, since all our justifications take place within our conceptual network; and our conceptual network is permeated with the law of noncontradiction. We cannot stand outside our conceptual network, as it were, and check its validity with some conceptually independent reality. Alternatively, we cannot use part of our conceptual network (such as evolutionary theory) to underwrite the whole of our conceptual apparatus. Employing one of these alternatives, however, would be necessary in order to justify our belief that the principle of noncontradiction mirrors the true nature of some conceptually independent reality.

175. Before summarizing the discussion of this chapter one point left-over from the previous chapter requires discussion. The point is that if one holds both that logical laws are a priori knowable because they are true in virtue of the meanings of their terms, and, logical
laws are (in some sense) about the mind independent world, then one is a 'rationalist' in the sense defined here, for then one holds that we have a priori knowledge about a mind independent reality. However, this position is subject to the same difficulties which plagued traditional rationalism. For it may be asked: how do we know a priori the logical structure of our language, if logic also describes a mind independent reality? One answer might be that we have "linguistic intuitions", but then these "intuitions" are subject to the same sorts of problems which Godel's "non-sensous" intuition was subject to, namely, how do we know that these intuitions are not misleading? Similarly, if one believes that our knowledge of the meanings of logical terms is innate then how do we know that we have the right design in terms of our linguistic competence? In short, if one believes that logical laws are a priori knowable and about the world, i.e., if one endorses rationalism, then the linguistic theory of the a priori provides no additional justification for our knowledge of logical laws. For on the rationalist's construal of the linguistic theory of the a priori, one must appeal to either of the traditional rationalists' notions of "intuition" or "innate ideas" to solve the skeptical problem.

176. To summarize this chapter: the dogmatist cannot square a rationalist epistemology with a realist
metaphysics. In other words, the tension here is a result of three distinct notions: (i) a realist metaphysics, (ii) a rationalist epistemology, and, (iii) the Platonistic conception of philosophy. If the argument of this chapter is successful then all three notions cannot be maintained consistently. The next chapter is an exploration of the idea that more headway might be made if (i) is abandoned. The previous two chapters were an exploration of thought that (ii) need not be endorsed, i.e., that it is possible to maintain an empiricist epistemology. The idea that (iii) might be renounced in favor of some alternative conception of philosophy is explored in more detail in chapter nine. The one example of a non-Platonistic conception of philosophy cited thus far was Lewis' view that all philosophy is ultimately rooted in opinion. On Lewis' view (i) and (ii) could easily be maintained. To the question: "how is it possible to know a priori that the mind independent world is not contradictory?" Lewis might simply respond that this is his opinion. In other words, Lewis might say that on his conception of philosophy there is no need to "ground" one's belief that the world in itself is not contradictory in a manner which makes it immune from skeptical doubt. The demand for ultimate justification against the skeptic is to misconceive the nature of the philosophical enterprise. Lewis might say to the argument of this chapter that if
skepticism is the "price" we pay for adopting realism and a rationalist epistemology then so be it. Such a response is perfectly legitimate on Lewis' view, but not the Platonistic view outlined in chapter 2.
End Notes: Chapter Five


2. Pace Philip Pettit who seems to believe that idealists are committed to the claim that there is some sort of causal connection between human representation and reality. "Realism and Response-dependence", unpublished draft, pp. 3-5.


5. CPR. B41.

6. Ibid.


8. CPR. B276.

9. Ibid.


11. R. Rorty, "The World Well Lost" reprinted in The


15. It is perhaps worth noting here that the argument does not depend on the more "radical" version of realism described in the text which allows that all our beliefs about the world might be false. Davidson, for instance, suggests that he is a realist but that "...the independence of belief and truth requires only that each of our beliefs may be false" ("A Coherence Theory of Truth and Knowledge", reprinted in Truth and Interpretation, ed. E. Lepore, Oxford: Basil Blackwell, p. 309 emphasis added). Such a more moderate view of realism would still have to contend with the present argument since, if the
line of argument in the last chapter is successful, one of our beliefs about the world is that the minimal principle of noncontradiction is true of it. According to Davidson's version of realism, however, it must be the case that this belief might be false.


19. Meno 81.


24. Ibid., p. 158.
26. Ibid., p. 176.
30. Ibid.
177. Thus far the strategy has been to assume realism while examining the adequacy of various epistemological models. In particular, it has been shown that neither of the two variants proposed by the empiricists, nor that of the rationalists, is capable of answering the question of our knowledge of the logical structure of the world. Given the failure of these various epistemological models, a metaphysical solution suggests itself. This metaphysical solution is of course idealism. While such a proposal is Kantian in spirit, it will be useful to concentrate, initially, on those aspects of Kant's work where realism is still apparent. This procedure will set the stage for a more encompassing form of idealism.

178. Kant, as is well known, makes an analogy between his revolution in metaphysics and Copernicus' in astronomy. A brief reminder of the history of cosmology may make one wonder whether Kant has given the most apt interpretation of his cosmological analogy. Ptolemaic cosmology had the earth as the center of the universe, the sun and the remaining planets were said to revolve around it. Copernicus suggested a heliocentric conception in contrast. Tycho Brahe, unable to accept the absurd idea that the earth itself was in motion, proposed an
alternative model which combined the Ptolemaic with the Copernican: the sun revolves around the earth whilst the remaining planets revolve around the sun. Extending Kant's analogy, one might think of the sun as thought and the planets as Being. The realist, according to this analogy, should be seen as endorsing the Ptolemaic view, as they believe that thought must conform to its object, i.e., in terms of this analogy, that the path of the sun is determined in relation to the fixed center of the universe, the earth. On the Copernican view, the model appropriate for some idealists, the sun (thought) determines the path of the planets (Being). On the Tychonian view the sun (thought) determines Being in part (some of the planets) while one of the planets (the earth) determines the course of the sun (thought). But if Kant is taken at his word, then his project is more like that of Tycho's, since thought does not wholly determine Being on his account. Kant believes that thought does determine Being, at least to some extent: "However exaggerated and absurd it may sound, to say that the understanding is itself the source of the laws of nature, and so of formal unity, such an assertion is none the less correct..."[1] But thought does not completely determine Being, for, as Kant adds in the next sentence: "Certainly, empirical laws, as such can never derive their origin from the pure understanding." But to say that Kant is a Tychonian is
merely to admit what is often acknowledged: Kant stands halfway between realism (the Ptolemaic system) and complete idealism (the Copernican system)—e.g., the subjective idealism of Fichte. [2] On the path to the Copernican revolution (and beyond) lies Kant's notion of the things in themselves, for the vestigial of realism left in Kant's work is the notion of the things in themselves.

179. As a purely exegetical point it ought to be noted that the ontological reading of the notion of the things in themselves offered in the last paragraph is only one interpretation. The notion of the thing in itself, for instance, has also been interpreted along epistemological and methodological lines. The ontological interpretation is not defended here other than to say about the Tychonian Kant what has been said about a certain Bishop, namely: if the Tychonian Kant had not existed it would have been necessary to invent him.[3]

180. The problem to be put to Kant's notion of the things in themselves ought to be very familiar by now: how is it possible to know a priori the claim that the things in themselves are not contradictory?

181. Kant does not even countenance the suggestion that the things in themselves are contradictory. Indeed, Kant's whole edifice turns on the assumption that the things in themselves are not contradictory. Kant suggests
that the Critique can be viewed as an examination of the hypothesis "...that we can know \textit{a priori} of things only what we ourselves put in them." \cite{4} The experiment has two parts. The first part, provided for the most part in the "Transcendental Analytic", concerns the mind's contribution to experience, or, to use Kant's phrase, what we put into things:

This experiment succeeds as well as could be desired, and promises to metaphysics, in its first part--the part that is occupied with those concepts \textit{a priori} to which the corresponding objects, commensurate with them, can be given in experience--the secure path of a science. For the new point of view enables us to explain how there can be knowledge \textit{a priori}; and, in addition, to furnish satisfactory proofs of the laws which form the \textit{a priori} basis of nature, regarded as the sum of the objects of experience--neither achievement being possible on the procedure hitherto followed \cite{on realist assumptions--M. A. W.}[5]
The second part of the experiment, provided in the "Transcendental Dialectic" seeks to show how contradictions abound if one supposes that experience, as structured by the human mind, applies to the things in themselves:

But this deduction of our power of knowing a priori, in the first part of metaphysics, has a consequence which is startling, and which as the appearance of being highly prejudicial to the whole purpose of metaphysics, as dealt with in the second part. For we are brought to the conclusion that we can never transcend the limits of possible experience, though that is precisely what this science is concerned, above all else, to achieve.... If, then, on the supposition that our empirical knowledge conforms to objects as things in themselves, we find that the unconditioned cannot be thought without contradiction, and that when, on the other hand, we suppose that our representations of things, as they are given to us, does not conform to these things as they are in themselves, but that these
objects, as appearances, conform to our mode of representation, the contradiction vanishes; and if, therefore, we thus find that the unconditioned is not to be met with in things, so far as we know them, that is, so far as they are given to us, but only so far as we do not know them, that is, so far as they are things in themselves, we are justified in concluding what we first assumed for the purposes of experiment is definitely confirmed.[6]

Notice then how the experiment turns on the assumption that the things in themselves are not contradictory. For suppose one had some reason to believe that the things in themselves are contradictory, then it would seem that Kant's experiment would prove the opposite conclusion, i.e., that our representations do conform to the things in themselves. In other words, Kant argues as follows: suppose empirical knowledge conforms to things in themselves, in which case certain antinomies arise, but the things in themselves are not contradictory. Hence, the original supposition, that empirical knowledge conforms to things in themselves, is false. Without the assumption that the things in themselves are not contradictory, the
antinomies prove nothing for Kant. Consider that if one believes that the world in itself is contradictory, then one could argue as follows: suppose empirical knowledge conforms to things in themselves, in which case certain antinomies arise. But, of course, this is to be expected, since the things in themselves are contradictory. Hence, the original supposition, that empirical knowledge conforms to things in themselves, is true (or has confirming evidence).

182. Kant is faced with a dilemma: either we have a priori knowledge that the world in itself is not contradictory, or, it is not the case that we have a priori knowledge that the world in itself is not contradictory. Kant cannot take the former disjunct, since, according to his own scruples, a priori knowledge only informs about the world of appearances, not the things in themselves. As was just noted, the hypothesis of the first Critique is "...that we can know a priori of things only what we ourselves put into them." The world of things that are "put in" by us is the world of appearance, not the world in itself. Kant cannot take the first horn of the dilemma without giving up the hypothesis which is the keystone to the whole Critique. Taking the latter horn, Kant is left with the problem that, if it is not known whether the things in themselves are logically structured, then, neither can it be known whether the
things in themselves are something which can be coherently spoken of. This follows if, as was argued previously, and as Kant himself believes, that for something to be intelligible or thinkable [7] it has to be noncontradictory. And yet, Kant himself is committed to the claim that the things in themselves are thinkable:

But our further contention must also be duly borne in mind, namely, that though we cannot know these objects as things in themselves, we must yet be in a position at least to think them as things in themselves; otherwise we should be landed in the absurd conclusion that there can be appearance without anything that appears.[8]

In another passage with a similar theme (incidentally, one of many) Kant argues that,

...for thought the categories are not limited by the conditions of our sensible intuition, but have an unlimited field. It is only the knowledge of that which we
think, the determining of the object, that requires intuition. In the absence of intuition, the thought of the object may still have its true and useful consequences, as regards the subject's employment of reason. The use of reason is not always directed to the determination of the object, that is, to knowledge, but also to the determination of the subject and of its volition—a use which cannot therefore be dealt with here.[9]

Kant, in this passage, is hinting at the subject matter of the second and third Critiques. In these later works, Kant provides instruction on how to reason in a practical, versus theoretical, manner about matters of morality, teleology and art, i.e., to reason about matters beyond the realm of Kant's phenomenal world. Kant, as the quote above suggests, must allow that the world beyond the phenomenal world is intelligible to thought, even if it is not knowable, for the later Critiques crucially rely on the claim that we can think about the noumenal realm.

183. To sum up Kant's idealism, it is perhaps fair to say that he is idealistic about the objects of knowledge but realistic about the objects of thought. We cannot know
the nature of the things in themselves, but at least we
can think about their nature.

184. While Kant did not extend idealism to the objects
of thought, such a form of idealism is perhaps worthy of
consideration—at least that is what will be argued. The
arguments for this more encompassing form of idealism are
transcendental in nature.

185. It will be recalled that in their most basic form
(at least on some interpretations) the structure of
transcendental arguments is as follows: we infer from the
fact that we have experience of a certain kind, or certain
concepts, to the pre-conditions which would allow us to
have such experience or concepts, i.e., to the features
which our consciousness must have in order that we might
have experience or concepts at all. The conclusion is that
our consciousness must have some certain feature or
features. In their more specific form, transcendental
arguments will start with the premise that we have
experience of a certain kind, e.g., spatio-temporal
experience, and then attempt to infer the necessary
features that consciousness must have for this specific
type of experience.[10]

186. The transcendental argument for idealism proposed
here is framed in terms of judgments as opposed to
experience. One virtue of this procedure is that it avoids
some problems of elucidating the notion of experience. The
argument will be elaborated in two steps using Kant's distinction between the world of appearance and the things in themselves. The first step then will be to see that the law of noncontradiction determines the phenomenal world.

187. Judgments about the world are made. Judgments are intelligible (although what is intelligible is not necessarily a judgment). Whatever is intelligible for consciousness is structured by the law of noncontradiction. Therefore, judgments about the world are structured by the law of noncontradiction. That is, a judgment about the world of the form, 'P and not-P is true', is unintelligible.

188. At this stage the argument seems fairly innocuous. There has been a long history of this sort of thinking. Aristotle, for example, made remarks of a similar nature in his *Metaphysics*:

...it is impossible for anyone to suppose that the same thing is and is not...then clearly it is impossible for the same man to suppose at the same time the same thing is and is not; for the man who made this error would entertain two contrary opinions at the same time. Hence all men who are anything refer back to this as the ultimate
belief; for it is by its nature the starting
t point for all other axioms as well.[11]

Kant provides a similar argument in "The only possible
Basis for a Proof of the Existence of God":

If I now reflect for a moment as to why that
which contradicts itself should be altogether
nothing and impossible, I notice that through
it the Principle of Contradiction, the last
logical ground of everything thinkable, is
destroyed, and that therefore all possibility
vanishes, and nothing remains over to be
thought.[12]

189. As the argument of chapter three suggests, one
ought to agree with Kant and Aristotle that it is
impossible to conceive of something which is
contradictory. [12a] But what neither of these thinkers
have shown is that the inference from "we cannot conceive
of the world as contradictory" to "therefore the world is
not contradictory" is justified. Furthermore, both Kant's
and Aristotle's arguments were made before Kant's critical
philosophy, before Kant made the distinction between the phenomenal world and the things in themselves. The inference from "we cannot conceive of the world as contradictory" to "therefore the world is not contradictory" might be justified in one sense of 'the world' but not the other. If such an inference is licit, then it ought to be justified for both senses of 'the world'.

190. With respect to the world of appearances, the inference is easily made to the conclusion that the world of appearances is not contradictory. The world of appearances is constituted by the subject so as not to be contradictory -- after all the principle of noncontradiction is a law of thought. In other words, that the world of appearance is noncontradictory follows immediately from the fact that the world of appearance is just simply that which is constituted by the subject.

191. The strategy thus far has been to point out that the same procedure utilized by Kant, to demonstrate the necessity of employing the categories and space/time intuitions in constructing the phenomenal world, can be used to demonstrate the necessity of employing the law of noncontradiction in constructing the phenomenal world. The second stage of the argument is to ask whether an analogous procedure might be employed with respect to the things in themselves, i.e., whether a transcendental
argument might reveal the structure of the things in themselves. The problem of course is how to close the gap between how "we judge the world of appearance" and how "the world is in itself". It was precisely this gap that Kant believed could not be closed—even with transcendental arguments. [13]

192. A line of argument which seems to hold out promise is simply a dilemma: either the things in themselves are logically structured, or it is not the case that the things in themselves are logically structured. The latter is absurd, unintelligible, unthinkable, hence, the things in themselves are logically structured. This argument does not make much advance, since it relies on the premise: if we cannot think it as contradictory it cannot be contradictory. It assumes that human thought is adequate to grasp the real nature of the things in themselves. The argument does have the virtue, however, of revealing the fundamental question here: is human thought capable of thinking about the nature of the things in themselves?

193. In order to finish the argument for idealism, it will be assumed that the world in itself is thinkable, i.e., that human thought is capable of forming an adequate conception of reality. This assumption will be examined in the discussion of skepticism immediately below.

194. If the thing in itself is thinkable—i.e., a
possible object of human thought—then it has to be structured noncontradictorily, otherwise, of course, it is not a possible object of thought. That is, if the things in themselves are contradictory then they are not possible objects of rational thought. If this is so, then something about the world in itself is known, contrary to Kant’s strictures. Indeed, an infinite number of truths are known, e.g., if the argument is sound then it is known that it is false that the world or universe is finite and that it is not the case that the world is finite. We know of the things in themselves that only one of these statements is true of them.

195. The connection with the realism/idealism issue then is this: realism, as it was defined in chapter 5, allows that it is possible that there is some ultimate gap between appearance and the things in themselves such that the things in themselves might never be known. But, as the present argument demonstrates, if the world in itself is something which is a possible object of rational thought, then the world in itself is knowable a priori.

196. To put the point another way, the argument here shows that the following biconditional obtains:

\[ X \text{ is a possible object of thought if and only if } X \text{ is knowable.} \]
Proceeding from right to left on this biconditional is relatively uncontroversial. Most would grant that if one knows some proposition \( P \) then one might have the thought that \( P \). The inference from left to right, if \( X \) is a possible object of thought then \( X \) is knowable, is more interesting as it undercuts realism. For if the world in itself is thinkable—i.e., a possible object of human thought—then it is necessarily knowable (at least for subjects capable of reflecting on such matters). It is not, as the realist suggests, that each of our beliefs about the world might be false, i.e., that appearance and reality can vary completely independently of one another.

197. With respect to the law of noncontradiction, the phenomenal world and the world in itself must coincide; there can be no gap between the way the world appears and the way the world is in itself. In other words, the appearance/reality distinction collapses at this point.

198. Before examining the assumption upon which the argument for idealism turns, namely, that thought can think being—i.e., that the world in itself is a possible object of human thought—it might be useful to consider the nature of the idealism which issues from the argument above. Realism, of course, says that the world is completely mind independent. Kant's transcendental idealism asserts the same of the notion of the things in themselves—the vestige of realism in his theory.
Subjective idealism suggests that the world is completely mind dependent. Such a conclusion seems to follow from the rejection of the notion of the things in themselves as completely mind independent. In terms of the reinterpretation of Kant's celestial analogy, subjective idealism corresponds to the Copernican revolution: all the planets revolve around the sun and, analogously, thought determines Being.

199. It took Newton to realize that the either/or of the sun or the earth as determining the trajectory of the other had to be overcome. The sun exerts a gravitational pull on the planets, but the planets also exert a gravitational pull on the sun. All the bodies of the solar system orbit around the center of mass of the solar system. To make the metaphysical analogy this would be equivalent to saying that thought and the world are interdependent, this is the position of absolute idealism. The arguments of this chapter tend to support the absolute idealism picture, although only a very brief indication is possible of why this is so.

200. Underlying the debate between realists and subjective idealists are certain metaphors which attach to the epistemological subject. Realists typically view the epistemological subject as related to the world in what might be termed a 'passive' fashion. For instance, realists think that if knowledge of the world is possible,
then it is a matter of discovery—the activity of discovering is thought to affect the world only in nonsignificant ways. (The activity of discovery in quantum physics is of course another story). Realists with empiricists leanings see the relation of discovery as empirical in nature, whereas rationalists understand the relation as a priori. Subjective idealists typically endorse a more "active" relation between the epistemological subject and the world. One can think of the metaphors of the subject "constituting the world" or "creating the world". Absolute idealists, in opposition to both parties, rely on what might be termed—to borrow from Plato—a "participation" metaphor. Both the world and the epistemological subject participate in what might be thought of as the structure of rationality itself. For instance, Hegel believed that rational epistemological subjects must have a certain structure to their thought (articulated in the Logics) but so must the world. Both thought and the world participate in this rational structure. Neither has epistemological priority. The idealism of this chapter is perhaps closest to Hegel's in spirit. The reason is that the active metaphors, which underlie the subjective idealist's epistemological subject, seem to imply that the subject somehow has responsibility for the nature of the world—as if the world might somehow have been different. The present
argument is simply that a subject's thought must have a certain logical structure, and so too must the world. Both "participate" in logical structure, as it were. The question of responsibility—of what determines what—does not arise, since neither could be otherwise. Hence, the traditional strawperson of idealism, namely, that idealists must believe that the world is completely pliable to the human will, can be seen for what it is. For absolute idealists, in this sense, there is no question of whether the world conforms to the will of the subject since both the world and rational thought must have a certain isomorphic structure. In the present case, this isomorphic structure is of course the law of noncontradiction—a law which describes both the nature of rational thought and the world.

201. Obviously this terse discussion of the complex relations between the various metaphysical positions is less than satisfactory. However, the exact form of idealism which issues from the arguments above is of little moment if the arguments for idealism themselves are flawed—as will be argued below.

202. This completes the argument for idealism. The major assumption of the argument, that thought can think the world in itself—i.e., that the world in itself is a possible object of human thought—now demands attention, for there are some that are skeptical of this type of
assumption.

203. Skeptics are traditional allies of realists. Indeed, as Kant indicates, they are often one and the same person. Arguments for idealism typically have anti-skeptical results, thus, such arguments offend both realists and skeptics. One common reply made by realists and skeptics is that arguments for idealism tend to be verificationist. This line of criticism has been made forcefully by Barry Stroud.

204. Stroud suggests that the conclusions of (at least most) transcendental arguments reveal only the nature of consciousness or what must be believed about the world. A conclusion of a transcendental argument, for instance, might be that we must believe that the world is causally ordered. What these arguments are not capable of proving is that the world in itself must have certain features, e.g., that the world in itself must be causally ordered. This leaves a gap between "what one must believe about the world" and "how the world is in itself". Stroud further claims that the verificationist principle is often invoked, by those employing transcendental arguments, to close this gap between how the world must appear to the subject, and how it is in itself. The verificationist principle is (roughly) that only if a statement's truth value can be in principle determined, i.e., only if the statement can be verified or falsified, is the statement
cognitively meaningful. Thus, this principle allows the gap between "the way the world must be viewed by subjects" and "the way the world is in itself" to be dismissed; if the latter can be shown to be unverifiable. For if the statement "the way the world is in itself" is unverifiable then, according to this doctrine, it is not meaningful. Of course the conclusion of transcendental arguments play right into the hands of the verificationist, since these transcendental arguments usually reveal some epistemic limitation, which in turn reveals a limitation on what might be verified. To continue the example, suppose the conclusion of a transcendental argument is that subjects must view the world as causally ordered. The question arises--at least from the anti-verificationist's perspective--as to whether the world in itself really is causally ordered. But since subjects must see the world as causally ordered, they have no way of verifying or falsifying the claim that the world in itself is causally ordered. The verificationist will conclude that the statement, the world in itself is causally ordered, is not meaningful.

205. As previously noted, transcendental arguments are often wielded against skeptics, e.g., Kant's argument in the second analogy that we must view the world as causally ordered is often seen as a rebuttal to Humean skepticism about the notion of necessary causation. But as Stroud
argues:

The skeptic distinguishes between the conditions necessary for paradigmatic or warranted (and therefore meaningful) use of an expression or statement (S) and the conditions under which it is true. Any opposition to skepticism on this point would have to rely on the principle that it is not possible for us to establish whether S is true...[14]

But, of course, this sort of opposition involves invoking the verificationist's principle. And, as Stroud points out, if one invokes the verificationist principle, then transcendental arguments become superfluous. If one supposes that the skeptic's position is unintelligible by invoking the verificationist's principle, then, there is no need to discuss the necessary conditions of experience (or judgments for that matter). That is, if the skeptic's position is unverifiable, as seems likely, then the skeptic's position is unintelligible. Given the verificationist principle, the skeptic will have lost even before the first transcendental argument is made.
206. Stroud's objection against transcendental arguments leaves the present argument for idealism in a bit of a dilemma: either the verificationist principle is adopted in order to dismiss the epistemic gap between "the way we must conceive the world" and "the way the world is in itself"—in which case the transcendental arguments offered above are superfluous; or, the verificationist principle is rejected, in which case the gap between "the way we must conceive the world" and "the way the world is in itself" remains, and the idealism argued for above is untenable. This dilemma relies, obviously, on the claim that some sort of verificationist principle is required to dismiss the epistemic gap. The rejoinder to this dilemma will be that some sort of intelligibility thesis is sufficient to dismiss this epistemic gap, but that one does not have to connect intelligibility with verifiability (at least in any strong manner, see below).

207. The argument for idealism does not depend on the claim that it is not possible to verify or falsify the claim that the world in itself is contradictory, rather, the argument requires simply that this claim is unintelligible. Unlike the verificationist refutation of skepticism, the present suggestion is that the claim that the world in itself might be contradictory is unintelligible simpliciter, not that it is unintelligible because it is unverifiable.
208. Stroud is instructive on this point. He suggests that the skeptic maintains both:

"(i) a particular class of propositions make sense,"

and that

(ii) "we can never know whether or not any of them are true." [15]

Stroud is perhaps correct in his arguments against neo-Kantians, such as Strawson and Shoemaker, in that they presuppose that if (i) then not (ii), i.e., Strawson and Shoemaker presuppose some sort of verificationist principle. Nothing, however, in the present argument requires denying Stroud's suggestion that there may be some propositions which meet criterion (i) and criterion (ii). For the argument for idealism relies on the premise that the claim that the world in itself is contradictory does not meet criterion (i). Of course, if a proposition fails to meet criterion (i) this seems sufficient to say that it also fails to meet the second condition. That is, the inference from not (i) to (ii) seems licit:

If not (i) then (ii).

The verificationist principle, which is assumed for the present purposes to be illicit, is
If (ii) then not (i).
In short, verifiability presupposes intelligibility but not vice versa.

209. Returning now to the assumption made in paragraph 188, that the world in itself is a possible object of thought, a reply to the skeptic can be made. To the skeptic who suggests that it might be true that the world in itself is contradictory, and thus, not a possible object of thought, one may respond as Strawson has: in such a case "the skeptical problem does not arise"—its very formulation "involves the pretended acceptance of a conceptual scheme and at the same time the silent repudiation of one of the conditions of its existence."[16] In the present case, the skeptic rejects the law of noncontradiction, and hence, our conceptual scheme.

210. Whether this Strawsonian point is successful against the skeptic depends, in part, on the type of skepticism one attributes to "the skeptic".

211. While it is often referred to as a unified doctrine, skepticism comes in a number of forms. One common distinction is between Pyrrhonian skepticism and a more modern form of skepticism, often termed 'Cartesian skepticism'. One author makes the distinction thus:
I want to distinguish between "mere," or Pyrrhonian, skepticism and the specifically "Cartesian" form of skepticism which invokes the "veil of ideas" as justification for a skeptical attitude. "Pyrrhonian" skepticism, as I shall use the term, merely says, "We can never be certain; so how can we ever know?" "Veil of ideas" skepticism, on the other hand, has something more specific to say, viz., "Given that we shall never have certainty about anything except the contents of our own minds, how can we ever justify an inference to a belief about anything else?" [17]

212. A further distinction is that between academic skepticism and Pyrrhonian skepticism. According to the Pyrrhonians, academic skepticism is dogmatic in its insistence that we do not in fact know. The Pyrrhonians held that their position was superior because they did not claim to know that knowledge is not possible.

213. The Strawsonian reply is perhaps effective against the "veil of ideas" form of skepticism, for if it is assumed that the law of noncontradiction is part of the content of our minds, and that we have certainty about the contents of our mind, then such a skeptic cannot both
accept the certainty of the law of noncontradiction and deny it in the same breath. To do so "involves the pretended acceptance of a conceptual scheme and at the same time the silent repudiation of one of the conditions of its existence."

214. A similar point can be made against the academic skeptics, since these skeptics thought it could be established that knowledge is not possible. Naturally, to establish such a conclusion these skeptics must accept our conceptual scheme. But again, such a position "involves the pretended acceptance of a conceptual scheme and at the same time the silent repudiation of one of the conditions of its existence." In particular, the arguments of the academic skeptics must presuppose the law of noncontradiction; hence, they cannot also deny this law.

215. The Pyrrhonians are in a better position to respond to the Strawsonian objection. If it is pointed out against the Pyrrhonians that their doubt presupposes the very conceptual scheme which they are calling into question, they could reply that they do not claim to know whether their doubt is well founded.

216. In terms of the present argument, the dialectic with the skeptics runs as follows. The idealist argues that the law of noncontradiction is at the heart of our conceptual scheme. The skeptics hope to show that the manner in which the world appears to the subject may not
be anything like the way the world is in itself, that is, that knowledge of the world in itself is not possible. The idealist replies that to discuss the world in itself is already to commit oneself to accepting the world in itself as an object of our conceptual scheme. If the world in itself is an object of our conceptual scheme, that is, something which we may think about, then we know something about the world in itself, namely, that it is not contradictory. Those skeptics which accept our conceptual scheme, the academics and those who maintain the "veil of ideas" doctrine, are forced to admit that knowledge of the world is possible. The Pyrrhonians escape this condrum by refusing to accept our conceptual scheme.

217. In the end, the only sort of response to the Pyrrhonian skeptic is perhaps pragmatic in nature: it is just not an interesting skepticism for there is no way in principle to respond to such a skeptic. Any response would require employing the very conceptual scheme which they doubt. And one cannot turn the tables on the skeptic here by asking for a fuller articulation or description of how such radical deception is possible, since this too would beg the question against the Pyrrhonians. They might reply that their position is that the world, and our relation to it, is perhaps not comprehensible by our limited conceptual scheme; hence they would be contradicting themselves if they attempted to describe how such radical
deception is possible. The Pyrrhonian position is thoroughly impregnable, and hence, uninteresting.

218. The argument for the assumption that thought is capable of thinking reality is simply that to deny this assumption is to endorse what seems to be the darkest form of skepticism: Pyrrhonian skepticism. It is true that such a skepticism would allow realists to save their metaphysical doctrine, but there is no independent motivation for this position, for the Pyrrhonians do not even maintain that there are good reasons for maintaining their doubt. (But like the academic skeptics the Pyrrhonians thought there were reasons for rejecting claims to knowledge made by others, these were invariably ad hominem reasons. What the Pyrrhonians rejecting was the claim that such reasons were sufficient to underwrite their own doubt).

219. What philosophical motivation could there be for endorsing Pyrrhonian skepticism? For Pyrrhonians deny reason itself. Thus, it would seem that faith and not reason is the motivation for Pyrrhonians. Similarly, if the realists are to maintain their position then faith, not reason, is their only recourse. What? Does the path to realism lie with Kirkegaard rather than Moore, Russell or any of their spiritual heirs?

220. If one endorses Lewis' metaphilosophical position, then one might maintain Pyrrhonianism on the
basis that this position is merely one's opinion. Yet such a defence is not acceptable on the Platonic view. Hence, it would seem that idealism is the only acceptable alternative for those that accept the Platonic view of philosophy.
End Notes: Chapter Six

1. CPR, A127.


4. CPR. Bxvii.
5. Ibid. Bxix.

7. The locution 'X is thinkable' is intended as short for one can intelligibly entertain the notion that X is a possible object. For example one might think that "round-squares" are impossible objects, hence, round-squares are not thinkable. Of course we can think of round-squares under a certain description, i.e., as impossible objects. But they are not 'thinkable' as defined here. Similarly, the suggestion that it is true that the world is contradictory is unintelligible, and hence unthinkable.

8. CPR, Bxxvii.
12. Quoted in Kant op cit. p. 23.

12a. It may be appropriate to recall here the point made in the latter part of paragraph 80. It was suggested that while I proceed in the subsequent portion of the work as if chapter 3 demonstrated certain things about the
traditional law of noncontradiction, this was not the case. All I defended was the minimal principle of noncontradiction. Accordingly, the transcendental arguments of this chapter should, strictly speaking, have premises which invoke the minimal principle of noncontradiction, not the traditional law of noncontradiction. Again, I invoke the traditional law for ease of exposition only.


15. Ibid., p. 248.


221. Part I of this work concluded with the (dogmatic) idealist dismissing the Pyrrhonian skeptical doubts as unintelligible. Part II, chapters 7 and 8, is a defence of a slightly more refined version of the skeptical doubt. The argument of this chapter is that idealism itself is unable to meet the standards of the Platonic conception of philosophy—in particular the standards of a presuppositionless methodology. The next chapter, chapter 8, is a defence of skepticism against the charge that it is unintelligible.

222. In order to provide a critique of Platonic philosophy, it might be useful to summarize the results of part I. The various models canvassed in the first part of the work, empiricism, rationalism, and idealism all speak to the telos of the Platonic conception of philosophy in that they say something about the relationship between thought and being, about what (philosophical) knowledge of the world would look like. The first model examined, that of radical empiricism—the thesis that all truths are empirical—was criticized on the basis that if the minimal principle of noncontradiction were empirical, then there ought to be experiential evidence which has a bearing on its truth—i.e., that there ought to be experiential
evidence which justifies the minimal principle of noncontradiction. However, since the minimal principle of noncontradiction is a law of thought or language, no thought or language could express evidence which did not confirm or justify the truth of the minimal principle of noncontradiction. The second model examined, that of the empiricist's appeal to the linguistic theory of the a priori, concedes that there is a priori knowledge but suggests that this knowledge is not about the world, but is about truths of language. However, this model was found unsatisfactory as it relies on the idea of a prelogical language, a language which does not presuppose any logic. Since no sense could be attached to the idea of a prelogical language, this model was abandoned in favor of a form of rationalism. The rationalism considered was one which held to both a realist metaphysics and the nonempiricist epistemology, an epistemology which allows a priori knowledge of the world. This model was criticized on the basis of the fact that it was unable to demonstrate that we do in fact have a priori knowledge of the world in itself. The idealists suggest that the puzzle about how a priori knowledge of the world in itself is possible is easily solved once the idea of the mind independence of the world is abandoned, i.e., once one gives up realism.

223. As noted at the end of the last chapter, the arguments of the previous chapters are dependent on a
certain conception of the nature of philosophy. In particular, this is the Platonic conception of philosophy outlined in chapter 2. This is perhaps most obvious in the demand that the various models canvassed are capable of demonstrating knowledge claims in a manner which makes them immune to skeptical doubts. Thus, the skeptical "possibility" that unbeknownst to us the world in itself might be contradictory is continually raised as an objection. However, if the desideratum of thwarting skepticism is not used as a standard of evaluation, then it is not clear that either of the two empiricists' models or that of the rationalist have been refuted. In other words, the suggestion here is not that rationalism or empiricism is "self-refuting" considered in and of themselves, but only that they are refuted when evaluated against the Platonic standard. (Recall that the third and fourth parts of this work are concerned with alternative conceptions of philosophy. One virtue that is sometimes cited in favor of these alternative conceptions is that they skirt the skeptical problematic). Similarly, it will be shown that idealism itself cannot meet the standards set by the Platonic conception of philosophy.

224. The greatest structural weakness--to use the time honored building metaphor--in the argument for idealism is in its rejection of Pyrrhonian skepticism. The issue, it will be recalled, was whether thought is capable
of thinking being--i.e., whether the world is a possible object of human thought. The absolute idealist believes that thought has this capacity, whereas the Pyrrhonian is skeptical about such a claim. The thrust of the argument used against the Pyrrhonian is that the Pyrrhonian could not consistently articulate a defence of their position. However, it may be that the absolute idealist has begged the question against the Pyrrhonian. (Indeed, one might have been suspicious of the absolute idealist's rejection of Pyrrhonianism on the basis of pragmatic considerations, namely: Pyrrhonianism is not interesting. Of course it may be that Pyrrhonianism is not an interesting form of skepticism. But to invoke such pragmatic considerations in evaluating a philosophical theory seems to go beyond the Platonic conception of philosophy. Platonism does not say that a presuppositionless demonstration of the unity of thought and Being (or a refutation thereof) ought to be interesting).

225. The argument made by the absolute idealist might be more perspicious if it is reconstructed as a dilemma. The idealist then argues as follows: either thought is capable of thinking being, or it is not the case that thought is capable of thinking being--i.e., either the world is a possible object of human thought, or it is not the case that the world is a possible object of human thought. If thought is capable of thinking being, then the
idealist is victorious. If, on the other hand, one endorses the position that thought might not be capable of thinking being, then reasons must be marshalled in support of this position. In particular, such reasons must show that it is possible that thought is not capable of thinking reality. Such reasons would entail describing reality, at least in terms of the subject's inability to think this reality, in which case the skeptics will have contradicted themselves. The only other option available to the skeptics is to refuse to offer reasons for their position, in which case there is little reason to endorse such a position.

226. Once the argument is put in these terms it is easy to see where the idealist begs the question: the idealist asks the skeptic to perform the feat which the skeptic maintains might not be possible, namely, to think or form a conception of reality. An analogy might fix this point. Let the idea that reality is a round circle stand for the idealist's assertion that human thought is capable of thinking being, and, the idea that reality is a round square stand for the skeptic's doubt that thought is capable of thinking reality. The idealist then charges the skeptics with contradicting themselves if they discuss round-squares, and if they refuse to do so, the idealist complains that their position is unsupported and uninteresting. Of course, from the skeptics' point of view
they are entirely consistent in their refusal to speak about that which they believe might not be thinkable. Furthermore, the skeptic's might quite rightly complain that the idealist begs the question against them by demanding that they think what they maintain is perhaps unthinkable.

227. If these criticisms of the idealist's position are sound, then the idealist's position is only hypothetical at this point. In particular, idealists have the following premises available to them from the previous chapters.

P2: If subjects are capable of thinking being, then subjects know a priori being.
P3: If subjects know a priori being, then idealism is true.
C: Therefore, idealism is true.

The conclusion then is only hypothetical since the argument requires the premise:

P1: Subjects are capable of thinking being.

In other words, (P2) summarises the idealist's argument of the last chapter that, if it is assumed that the world is a possible object of human thought, then, it is possible
to know an infinite number of truths about the world. For if the world is a possible object of human thought, then we may know a priori, e.g., that it is not the case that the world is both infinite and finite, that it is not both eternal and not eternal, etc. And (P3) indicates the argument that only idealism can justify a priori claims to knowledge of the world--i.e., that the only other alternative here, rationalism, is unacceptable. The idea that the world might transcend our ability to form a conception of it, that the world might not even be a possible object of thought, is expressed by (Pl). The idealist, so close to victory, needs only to support (Pl).

228. While the argument for idealism turns on the assumption that thought is capable of thinking being--that the world is a possible object of human thought--the argument in the present chapter is better focused by concentrating, again, on the claim that the world is structured in accordance with the law of noncontradiction. Since this latter claim is a necessary condition for the former--if the argument of chapter three is correct--an argument which shows the latter to be unjustifiable also demonstrates that the former is unjustifiable. In other words, the argument will have something like the following form. If thought is capable of thinking being then being is structured in a noncontradictory fashion. But the claim that the world is not contradictory cannot be justified to
the Platonist's standards; hence, the claim that the thought is capable of thinking being—that the world is a possible object of human thought—is not so justifiable.

229. In particular, the skeptical argument against idealism will be that it is not possible to justify the law of noncontradiction in accordance with either the terminal or circular view. Hence, the argument will require considering both of these options.

230. Recall, that the terminal theory of the system typically starts with a few indubitable axioms and builds the system from these, on the basis of the deductive consequences of the original propositions. It is perhaps worth noting that the idea that the system can be deduced from a few or even one axiom is optional. That is, one might conceive, at least in the abstract, a version of the terminal justification which does not require any part of the system be deduced from any other. Each part of the system could be an axiom unto itself. For instance, Spinoza's attempt to derive the finite modes from the causa sui could—again, in the abstract—without violation of the form of the terminal justification, be undertaken by considering every finite mode as an axiom unto itself. Obviously, the reason that such a version of the terminal justification has not been put forward is that, typically, the more specific the claim, the less likely it will appear to be an axiom.
231. Even if such a radically terminal position were proposed, i.e., a system where every proposition appears as an axiom, this in itself would not be sufficient for removing the problem of the justification of our logic. While it is true that the problem would not arise as to the validity of inferences drawn from the proposed axioms, the problem would reemerge in that the logic of the system would have to be expressed in one or more of the axioms. For as was argued previously (chapter 4), logic and content cannot be separated, every content presupposes a logic. The point of system, it will be recalled, is to make for a presuppositionless science. Thus, even in this imaginary radically terminal view of justification, the logic of the system will have to appear as an axiom. It is precisely at this point that we may raise the question of its justification.

232. There is no conflict between the terminal view of justification and the normative notion of philosophy as presuppositionless taken in and of themselves. Axioms, of course, differ from suppositions in that their status is not hypothetical, axioms are intended to express truths which require no further justification. Given a set of axioms upon which all other truths of the system can be derived, we have a successful fulfillment of the normative view of philosophy as promulgated by Plato. For there would be no presuppositions in such a system, as the
axioms are not presupposition, they are truths which require no further justification. Those truths which are derived from the axioms are justified because they are deductive inferences from known truths.

233. The conflict with the normative view of philosophy arises when the terminalist attempts to justify the selection of some set of statements as axioms. The problem, tersely, is that some criteria for axiom selection must be proposed by the terminalist, and then the question arises as to the status of the criteria themselves. Either the criteria themselves must be an axiom in that set, in which case the justification is circular, or there must be some additional criteria upon which the first criteria were chosen, in which case we get a regress. This ancient and well known argument of course requires further investigation.

234. The first point to note is the distinction between the justification for some class of statements, call this set S, and the criteria employed for delineating the set. The distinction can be confusing since the two are often closely associated. Take an example: the justification of empirical statements is often said to be the "testimony" of the senses. The criterion for delineating empirical statements is sometimes thought to be those statements which are evidenced by the senses. Hence, the criteria for selecting the members of S are
sometimes closely associated with the justification of statements of $S$.

235. To illustrate this point consider a case where the justification for a certain set is not necessarily the same as the criteria for the selection of that set $S$. Recall, that a posteriori propositions are defined by Kant as propositions which are knowable on the basis of experience. On the basis of this criterion—statements which are knowable on the basis of experience—statements such as "All men are bachelors" and "57-27 = 30" are a posteriori. The reason, of course, is that such statements are knowable on the basis of experience. Recall the example that one can do a survey of bachelors and find out that no women are among them. Or one could remove 27 marbles from a bag, and then count the remainder to discover what 57-27 equals. These statements might also be justified on an a priori basis as well. Therefore, the claim that "All bachelors are men" is an a posteriori statement which can be justified a priori or experientially. Here we have a clear example of where the criterion for statement selection differs from the justification for the statements—at least in some cases.

236. Elucidating the justification required for the class of statements in question presents no problem: we are interested in those statements which require no justification by other propositions, i.e., they will form
terminal points in the system. The problem is discovering the criteria, C, for these statements. In particular, the problem is justifying the selection of C. C may select itself as a member of the statements which do not require justification, but then the justification for C is circular. The alternative of course is to propose some further criteria C' upon which C might be selected, but then the problem starts anew. For then the selection of C' requires justification. It will be useful to work through some concrete examples.

237. It is sometimes suggested that axioms are self-evident truths. These truths are supposed to be the foothold from which knowledge of being is had. The skeptic will want to know what assurance we have that truths which are "evident" to the self are in fact true. It might be replied that it is self-evident that self-evident truths are true--but this response does not advance the dialectic. The circularity is plain to see: the response assumes that we know self-evident truths. The alternative to this response, as we noted above, is to propose further criteria for evidencing the criteria in question.

238. Thus, it is sometimes added that self-evident truths are ones which cannot be consistently denied. This response at least has the virtue of providing some independent test for self-evidence. However, this response is not satisfactory either. For now some guarantee must be
given that because we cannot consistently deny some statement it must be true. After all, this is precisely the question at hand. That is, if one had already established that inconsistent statements cannot be true, then the standard of consistency might provide an additional criterion for establishing further axioms. But one cannot argue that 'it is self-evident that statements which cannot consistently be denied are self-evident because to deny this would be to assert what cannot be consistently denied' since such an argument is inherently circular.

239. A further move sometimes made in the debate is to connect the nature of the self-evident truths with the nature of the subject: self-evident truths are truths which no rational subject could deny. No further ground is gained here either. For the question may be raised: what justification is there for the claim that truths which appear self-evident to rational subjects are true? To argue that it is self-evident to rational subjects that truths which appear self-evident to rational subjects are true, is to move in a very small circle. Some further criteria must be proposed here, if only to rule out the suggestion that self-evident truths are those which no irrational subject could deny. In other words, further criteria are necessary for making the connection between truth and rationality.[1]
240. The circular view of system offers promise of succeeding where the terminal failed, for with the circular system there is no need, so we are told, to go outside of the system, as it were, in order to justify it. The system is self-contained and self-justifying. Each part in essence presupposes all the others and in this manner each part is demonstrated by its inclusion in the whole.

241. Note how the concept of deduction or demonstration is necessarily part of the form of this system. Since no point of the system is terminal, and each part is presuppositionless in virtue of its interrelations with all the others, it follows that the idea of support through mutual demonstration is necessarily part of its form. This contrasts with the terminal view in which the concept of demonstration only need be part of the content of the terminal system.

242. The circularist in effect suggests that the traditional notion of demonstration must be relaxed in order to allow for circular justifications. That is, there is a long tradition of criticism of circular reasoning, dating back at least as far as Aristotle, which has to be rejected. The criticism to be layed against this view is that either it is based solely on the formal point that circular justifications are appropriate, in which case too many "demonstrations" are possible, or, further criteria
are introduced to delimit a set (perhaps a unique set) of permissible justifications, in which case the view collapses into the terminalist's position.

243. It is easy to see that if the circularist's view is based solely on the formal point of allowing circular arguments, then, every philosophical position is justifiable. For then Heraclitus might argue as follows:

Pl: Becoming is the ultimate principle of reality
C: Therefore, Becoming is the ultimate principle of reality.

while Parmenides might argue that:

P2: Being is the ultimate principle of reality.
C: Therefore, Being is the ultimate principle of reality.

It is clear then that both arguments respect the normative view of philosophy in question, that of a presuppositionless science, since premise and conclusion of the arguments are mutually supportive. Of course, the problem here is the traditional criticism of circular arguments that every position is equally well justified. Philosophical debate becomes entirely gratuitous if every circular argument is allowed.
244. A reply to this criticism is perhaps suggested by Hegel who is, arguably, the greatest circularist. A brief look at one aspect of Hegel's circular system will prove instructive.

245. Hegel's ambition, very roughly, is to demonstrate, by means of transcendental arguments, that each of the concepts of our conceptual scheme presupposes one another. [2] The initial concepts Hegel considers provides illustration of his general strategy. Thus, Hegel argues something like the following in the beginning of his Logics: Let us suppose the concept of Being is purely abstract as some imagine. We must not imagine this or that particular being but pure Being in its undifferentiated unity. However, such a concept of Being is devoid of any characteristics, for any characteristics ascribed would tell against the contentlessness of pure Being, in other words we would be describing a particular type of being. The problem then, says Hegel, is that this pure abstraction of Being cannot be differentiated from Nothing, since Nothing cannot be differentiated from the characterlessness just described. That is, pure Being, which is predicateless, turns out to be the same as that which is devoid of all predicates, Nothing. Thought holds a) that Being and Nothing are distinct and b) that pure Being and Nothing cannot have any content, thus c) Being and Nothing cannot be distinct. The results Hegel notes
are twofold: on the one hand there is the recognition that there is in fact a result, pure Being and pure Nothing are not self-sufficient concepts; they imply further concepts. The category of Becoming is a result of thought's recognition of thought having a result, that a beginning has been made. Secondly, in order to differentiate Being and Nothing we must presuppose that Being is predicable, that Being has certain characteristics or content. This is no longer the concept of Being in its purity but what Hegel calls determinate Being.

246. If Hegel is correct to hold that the various concepts canvassed above are conceptually linked, then a reply to the criticism noted above seems at hand. For now it is open to Hegel to reply to Heraclitus and Parmenides that their positions contain latent contradictions. These Presocratics each thought they had discovered the ultimate principle of reality, whereas in fact the two principles, Becoming and Being, are conceptually linked. Neither can be upheld to the exclusion of the other.

247. Whether Hegel's reply has advanced the issue is doubtful, however, when one spells-out his reply. In effect, Hegel is saying that consistency is a standard by which philosophical positions ought to be compared. But naturally the question arises as to the justification of this standard. (Obviously this same point applies to Hegel's procedure in the Phenomenology where, in paragraph
Hegel makes his famous remark that philosophical systems or forms of consciousness can be evaluated by seeing whether they meet their own standards of success. The contrast of course is to compare them with some standard which is external, one which is not accepted by the philosophical position or form of consciousness under phenomenological investigation. As Hegel points out, in effect, such a procedure is unfair. But the question remains whether such a procedure has universal application, as Hegel seems to believe. For consistency itself seems to be at issue. A philosophical theory which did not demand self-consistency, one which does not require that it meet its own standards of success, would be immune from the phenomenological procedures Hegel outlines.

The question of the status of the law of noncontradiction is obviously not indigenous to Hegel's circular theory. For circularist theories are a composite of theorems; as opposed to axioms. That is, each part of the theory is deduced from the remaining whole. If it is to be endorsed, the law of noncontradiction must appear as a theorem in the circularist's theory. For if the law of noncontradiction is only used in the deduction of the various parts of the system, but is not mentioned in the system itself, then the law of noncontradiction remains unjustified. Only that which appears as a theorem is
justified in the system, hence, the law of noncontradiction must appear as a theorem.

249. Obviously then, if the law of noncontradiction must appear as a theorem in the circularist's theory then other rules of inference employed in justifying a philosophical theory must appear as theorems as well. In which case, a reply must be made to the suggestion that the denial of the law of noncontradiction appears as a theorem in a circularist's theory. For nothing in the pure form of the circularist's theory can prevent any rule of inference as providing justification for itself. Consider the original examples again. Heraclitus might argue as follows:

\[
\begin{align*}
P_1: \text{Becoming is the ultimate principle of reality.} \\
P_3: \text{The law of noncontradiction is not true.} \\
C: \text{Becoming is the ultimate principle of reality and the law of noncontradiction is not true.}
\end{align*}
\]

Parmenides could of course argue the same, mutatis mutandis. Hegel's transcendental arguments which are intended to show the interrelation of various concepts are powerless against the modified version of the Presocratics position, since such arguments rely on a rule of inference which is not part of their circular system.

250. This problem is only exacerbated when one
realizes that the circularist's position does not even rule out the maximal principle of contradiction as describing the logic of the world. That is, it would be in keeping with the circularist position to argue that every statement about the world is true and false, thus every statement about the world is true and false. Given the maximal principle of contradiction any and all philosophical theories are equally justified.

251. The upshot of these reflections is that the pure form of the circularist's theory is unable to justify the ontological version of the law of noncontradiction—i.e., the law of noncontradiction as applying to the world as opposed to being conceived merely as a law of thought—over and above its denial.

252. The pure form of the circular epistemology is, of course, a strawperson, since no major historical figure has endorsed anything so crude. Further criteria or standards have always attended the demand that a philosophical theory be self-justifying. Hegel's theory is a case in point. Hegel placed at least two further demands on a philosophical theory: that it should be a science, i.e., a comprehensive explanation of the phenomena in question; and that philosophy should accord with the empirical realities of the world. [3] Thus, Hegel might complain that the caricatures of the Heraclitean and Parmenidean theories above are not up to the level of a science, for
they are not comprehensive in their explanation of the nature of the world, and furthermore, they do not explain the empirical phenomena of the world.

253. What these two further demands on philosophical theories amount to is of little moment. What is of more concern is the epistemological credentials of these demands. One very unpromising suggestion is that these demands on a philosophical theory are self-evident truths. But this move only promises to raise the problems with the terminalist's system anew.

254. A suggestion more in keeping with the spirit of circular epistemology is to say that these demands are justified within the philosophical theory itself. But again little advance is made since alternative philosophies can be imagined which deny these demands. In other words, Hegel, it will be imagined, argues:

\[ \text{Pl: Philosophy must raise itself to the level of a science.} \]
\[ \text{P2: Philosophy must accord with empirical evidence.} \]
\[ \text{C: Philosophy must raise itself to the level of a science and accord with the empirical evidence.} \]

On the other hand, an opponent of Hegel might argue:

\[ \text{Pl': It is not the case that philosophy must raise itself up to the level of a science.} \]
P2': It is not the case that philosophy must accord with empirical evidence.

C': It is not the case that philosophy must raise itself to the level of a science and accord with the empirical evidence.

These additional standards actually proposed by Hegel then advance the argument no further.

255. Neither the terminal nor circular system of justification is able to justify the claim that the world in itself is not contradictory in a manner consistent with Platonic philosophy.

256. It may be appropriate to pause for a moment to note that, if the argument immediately above is sound, then the assumption that circular justifications of a philosophical theory are unacceptable has now been discharged. That is, it was assumed in the first part of this work that such justifications are not acceptable, even though the Platonic model of philosophical justification described in chapter 2 allows at least the possibility of such a form of justification. Much of the argument of the first part of the work is dependent on this assumption. For example, rationalism was criticized on the basis that an appeal to God or evolutionary forces in order to guarantee the veridicality of our beliefs is dependent on a small circle of inferences. Of course, if
the argument against circular justifications is unsuccessful then so too is the argument against rationalism.

257. The argument of this chapter thus far has been that the principle of noncontradiction--conceived as a law about the world, not merely as a law of thought--cannot be supported in a manner consistent with the conception of philosophy as a presuppositionless science. Since the justification of the claim that the world is not contradictory is necessary for the claim that thought can think Being, it follows that the claim that thought can think being is inconsistent with the conception of philosophy as a presuppositionless science. In other words, since the justification of the claim that the world is not contradictory is a necessary condition for claiming that the world is a possible object of human thought, it follows that the claim that the world is a possible object of human thought is inconsistent with the Platonic conception of philosophy as a presuppositionless science. Furthermore, since the claim that thought can think being is necessary for the vindication of idealism, it follows that idealism itself is incompatible with the conception of philosophy as a presuppositionless science. This seems to leave the door open to realism. However, it will be argued that realism itself is incompatible with the conception of philosophy as a presuppositionless science.
The problem, it will eventually be seen, lies not with realism and idealism but with an inherent contradiction in the conception of the methodology and goals of philosophy as that of a presuppositionless science, i.e., with an inherent contradiction in the Platonic conception of philosophy.

258. The incompatibility of realism and philosophy conceived of as a presuppositionless science follows in a rather straightforward manner from the critique of realism in chapter 6. It will be recalled that it was argued that realism requires the mind independence of the world, which implies that the world might transcend our ability to think about the world. This in turn raises the question of whether the world is something which we can even think about. In other words, if the dogmatist wishes to endorse realism then they too must confront Pyrrhonian skepticism.

259. It was argued further, in chapter 6 that Pyrrhonian skepticism is not even a consistently articulable position, since this form of skepticism doubts even our conceptual scheme, but naturally, such a position is not articulable without the use of our conceptual scheme. Pyrrhonian skepticism falls short of the methodological ideal of philosophy conceived of as a presuppositionless science because it cannot even justify its own doubt. In other words, the adoption of Pyrrhonianism is itself an assumption which requires
philosophical motivation; yet this is precisely what Pyrrhonism seems incapable of. As noted previously, one might adopt Pyrrhonism as a mere article of faith, but this is not consistent with the methodological ideals of Platonic philosophy.

260. Yet is seems that Pyrrhonism need not be assumed or endorsed as a mere article of faith, rather, Pyrrhonism issues from the very methods of Platonic philosophy itself. For this method does not allow mere assumptions, just as Pyrrhonism is destructive of all assumptions. In other words, Platonistic philosophy must be skeptical in its methods, although perhaps not in its results, in that it cannot allow mere assumptions into a theory. All such assumptions are to be doubted until they have been demonstrated. Thus, one need not assume Pyrrhonism, but rather, it seems to follow from the very nature of Platonic philosophy.

261. The conclusion to be drawn is that there seems to be an antinomy in Platonism philosophy itself. For the conclusion of part I of this work is that there is no satisfactory formulation of dogmatic realism (of either an empiricist or rationalist variant thereof). And yet, the conclusion of this chapter is that dogmatic idealism is unsatisfactory as well. The antinomy arises of course because idealism and realism are defined here as contradictories. It may be, as many have suggested, that
this antinomy results because Platonism itself demands the impossible, namely, a presuppositionless demonstration. Yet the dogmatic idealist might still have a reply to make. The dogmatic idealist might concede that the Pyrrhonian need not provide a presuppositionless demonstration of their position (as paragraph 260 suggests) but it would seem that the Pyrrhonians ought to be able to at least defend the intelligibility of their position. It is the intelligibility of Pyrrhonianism itself then which the dogmatic idealist ought to question. For if such a line of argument could be made out, then, dogmatic idealism might be able to justify itself by the exclusion of the alternatives, namely, dogmatic realism and Pyrrhonianism.

262. In other words, one might think that an idealist could agree with the argument thus far by saying that it demonstrates that there cannot be a direct proof of idealism in a manner consistent with the Platonic conception of philosophy. However, so the dogmatic idealist might maintain, it might be possible to argue for idealism by means of a indirect proof, if one can show the absurdity of Pyrrhonian skepticism. [4] The question of the coherency of Pyrrhonianism is the topic of the next chapter.[5]
End Notes: Chapter Seven

1. Pace Hegel who says "What is rational is real; and what is real is rational. Upon this conviction stand not philosophy only but even every unsophisticated consciousness" *Philosophy of Right*, trans. S. W. Dyde, London: George Bell and Sons, 1896, p. xxvii. But what if the irrational is real and the real is the irrational?

2. V. Taylor's *Hegel, op. cit.*


4. One well known interpretation of Hegel's writing is that he has a two part strategy for defending his version of dogmatic idealism. On the one hand, his system forms a self-justifying circular system. This was the view discussed in the text. On the other hand, he attempts to show the inadequacy of any view which is not identical with his own, including, of course, various forms of skepticism. The former view is most often associated with *Encyclopedia* and the latter with the *Phenomenology*. In terms of this work, this chapter is more concerned with the former strategy and the next chapter with the latter strategy.

5. The following note deals with an objection raised by one of the examiners. Concerning Chapter 7 an Examiner
points out that the skeptical arguments therein are "fairly standard". He goes on to claim:

As such, they would seem to apply quite generally.... If this is correct then these argument[s] could have been used to attack an a prioristic conception of philosophy straight away, rendering chapters 3-6 redundant.

The Examiner, I believe, is entirely correct. These chapters are logically redundant but not propaedeutically redundant. By this I mean that I hope these chapters teach us something even though I go on to criticize them in Chapter Seven. The examiner is quite correct in that the generality of the arguments of Chapter Seven seem to undermine any a prioristic conception of philosophy, but this does not mean that nothing can be learned from these chapters. It may be helpful to consider a parallel case.

One could argue, for instance, that most of the First Meditation is redundant. Again, however, the First Meditation might be considered logically redundant, not propaedeutically redundant. The whole evil demon thought experiment is logically redundant in the sense that Descartes' proof of the existence of God, conjoined with his claim that God would never allow us to be radically
deceived, would have allowed him to dispense with much of the First Meditation. After all, Descartes argues in the First Meditation that it seems entirely possible that we are radically deceived by an evil demon, but then he goes on to argue against this very claim. In this sense, then, the argument to show that we might be radically deceived because of the conceptual possibility of an evil demon is logically redundant. Indeed, the very generality of Descartes' anti-skeptical strategy is such that it seems to preclude any thought that we are radically in error, whether this is from an evil demon, a mad scientist who has placed our brains in a vat, etc. Of course the First Meditation has an invaluable propaedeutic function: it teaches us how plausible the skeptic's position can be made to seem. Of course similar remarks apply to many sections of many famous philosophical works, e.g., one might argue that much of Book One of The Republic is logically redundant but of great propaedeutic value.

Thus, chapters 3-6 serve a similar function in my thesis as the First Meditation does in Descartes' work. I hope to make out the best case possible for the dogmatic Platonist in these chapters even though I go on to criticize this position in later chapters. Furthermore, I hope to show just exactly what is at stake, namely, some of the greatest theories about the relation between thought and Being: Empiricism, Rationalism, and Idealism.
Moreover, I hope to show that in order for the skeptic to maintain her position she must not only cast doubt on our claims to know reality, but also, to our claims to be able to think reality in all its complexity.
Chapter Eight: Anthropic Skepticism

263. The skeptic's rebuttal to the dogmatism of part I has a negative and positive aspect. The negative task, undertaken in the previous chapter, was to demonstrate the impossibility in principle of maintaining the Platonic goal of philosophy, the unity of thought and being, with the Platonic conception of the methodology of philosophy, viz., presuppositionlessness. The positive aspect of the argument requires defending the skeptical view itself. Recall that the idealist argued in chapter 6 that the skeptic could only make sense of her doubts by presupposing a notion of "the world" which is beyond the reach of all language or rational discourse, but such a notion of the world is absurd or uninteresting. The argument of this chapter is that such a skepticism is neither absurd nor uninteresting. The dogmatist's point, in other words, might be put in terms of the following analogy. Just as it might be thought that the skepticism which suggests that, the area of a circle is not necessarily expressed by the following formula: "A = \pi r^2", since there might be roundsquares, might be dismissed as absurd or uninteresting, so too, it might be thought, can the skepticism which asserts the notion of a world which is beyond all language and rational discourse
be dismissed. The dogmatic idealists might concede that no direct proof for their position is possible, for reasons given in the last chapter, nevertheless, if the only alternative to such an idealism is the absurd form of skepticism noted above, then this might constitute an indirect proof for dogmatic idealism. It is of course this move which must be resisted.

264. The argument thus far has proceeded in terms of some traditional skeptical distinctions: academic skepticism, pyrrhonian skepticism, and Cartesian skepticism. In the background of the discussion has been lurking another distinction; one which it might prove useful at this point to make explicit, thus, one might distinguish between 'justificatory' and 'noetic' skepticism. The former concerns the limits of our justificatory abilities, the latter concerns the limits of our thoughts. Although these limits are not always clearly distinguished, both it seems are relevant to the skeptical issue. [1] A preliminary way to get a handle on this distinction is to think of it in terms of attributions of error and ignorance. Typically justificatory skeptics present their case via the possibility of error, while noetic skepticism is explicated in terms of ignorance. It might be useful to think of such attributions in terms of a (quasi) scientific example. For simplicity sake, let us suppose that there are just two contested hypotheses about
the nature of the universe as a whole. The standard model or "big-bang" theory, H1, suggest that the universe evolved from some primordial singularity. The steady state hypothesis, H2, suggests that the universe has always been more or less as it is now. In terms of this example, the justificatory skeptic might be seen as suggesting that we do not know that H1 is true because there is at least a conceptual possibility that we are in error, for it is logically possible that H2 is true. The justificatory skeptic does not suggest that we are ignorant of the conceptual alternatives, for they allow that we might entertain the possibility that H2 is true. Noetic skepticism, in contrast, does not question the justification for any particular hypothesis, but questions whether we are capable of formulating the correct hypothesis in the first place. Noetic skepticism suggests that the hypothesis which correctly describes the truth might be beyond the "reach of our minds"—to use Nagel's formulation. We cannot even entertain the true hypothesis as a possible object of belief, according to this line of skepticism, never mind the subsidiary question of whether such a hypothesis can be justified. To extend the example above, the noetic skeptic might agree that H1 and H2 describes the only two hypotheses about the universe which are capable of scientific scrutiny. However, suppose the "complexity" hypothesis H3 is true. It suggests that the
theory which best describes the universe must posit a billion billion billion billion billion initial conditions and each initial condition requires at least the same number of bits of information to describe it. Such a hypothesis, let us suppose, is far too complex for any human to conceive. The noetic skeptic then suggests that the possibility of H3 shows that we might forever be ignorant about the truth of the universe.

While the distinction between error and ignorance provides some preliminary indication of these terms, it will prove useful to provide a more rigorous analysis in terms of the argumentative strategy employed by each.

Justificatory Skepticism: The justificatory skeptic argues that if (1) we believe some hypothesis, H, and (2) if there is at least one alternative hypothesis to H, H', which is logically compatible with all our evidence for H, then (3) we do not know H.

It is this sort of pattern of reasoning which is most often attributed to the Cartesian skeptic, particularly where the evil demon is involved. The other type of skepticism of concern here might be defined as follows:

Noetic Skepticism: It is possible that there
is some hypothesis $H$, which is (4) true, (5) which is beyond our ability to think about or believe $H$, (6) and therefore we cannot know $H$. [2]

While justificatory skepticism is often thought of as the single form of skepticism which Descartes was concerned with, evidence was cited in chapter 5 which suggests that he might have also had noetic skepticism in mind. Recall that Descartes suggests that, while he cannot think that a statement such as '2+2=5' is true, he does not conclude that such a statement is false. He suggests, rather, that God has given him such a mind that he cannot help but think that 2+2=5 is false. According to Descartes, God could have made this statement true. Descartes seems to believe that there are some truths which might be beyond our ability to comprehend. In any event, it is important for the present purposes to distinguish between justificatory and noetic skepticism.

266. What will be defended in this chapter is a more specific form of noetic skepticism:

**Anthropic Noetic Skepticism**: It is possible that there is some hypothesis $H$, which is (4) true, (5') which is beyond our human ability to think about or believe $H$, (6') and
therefore we humans cannot know H.

(This view will be referred to as simply 'anthropic skepticism'). Anthropic skepticism is a species in the genus of noetic skepticism. It is more specific than noetic skepticism, since it refers to specific epistemological subjects, namely, humans. The contrast here is with other species of epistemological subjects. Of course, it might be thought that the anthropic qualification to any skepticism is somewhat gratuitous, since it has always been implicit in philosophical discussions. Certainly it seems that most skepticisms in the history of philosophy have assumed that some such anthropic qualification is attached to skepticism (in both the noetic and epistemological senses). Descartes, for instance, never suggests that God might be deceived by an evil demon, but rather, it is the finite being Descartes which might be subject to the antics of the evil demon. However, making explicit this assumption will perhaps make the doctrine more plausible. The general strategy of this chapter will be to suggest that a similar disambiguation of notions such as "language" and "rational thought or discourse" tends to support the idea of anthropic skepticism.

267. The presentation of the argument hitherto, therefore, contains an ambiguity which must be clarified.
The ambiguity revolves around the locution 'our thought'. For one might think of 'our thought'--in the present case human thought--as signalling one species among the genus of 'thought'. It might be suggested that there are other possible (perhaps even actual) forms of thought which differ from human thought. Accordingly, there might be Martian thought, Jupiterian thought, etc. If one allows the possibility of alternative modes of thought then this at least opens up the possibility that, although humans do not have the ability to think about reality in itself, other sentient species might enjoy this ability. Perhaps God is in a position to think and understand reality in all its complexity. The contrast is to think of all thought as having (more or less) the same form. According to this doctrine, if there are nonhuman species which are thinkers, then their thought is very similar to that of humans. Accepting this latter alternative means that, if humans are not capable of thinking of reality in itself, then no thinker is capable of this feat. We may refer to the former view of thought as leaving open the possibility of being 'other minded' and the latter as being 'one minded'. [3]

268. To return then to the main concern of this chapter, undermining the dogmatic idealist conclusion of part I, the absolute idealist might object to the anthropic skeptic along the following lines. Either the
conception of "world" or "being" which the skeptic employs must be explicated in terms of being "other minded" or "one minded". If the "other minded" option is taken, then the skeptic must make sense of the notion of differing conceptual schemes. Beings which are "other minded" have different conceptual schemes, but the idea of different conceptual schemes is problematic. On the other hand, if one accepts the "one minded" option, then the suggestion is that the world transcends the ability of all thinkers to think about it, but this conception of "the world" is absurd. Hence, there is no way for the anthropic skeptic to give any substance to the idea of reality which transcends only human thought, or the thought of all sentient creatures. In other words, a plausible line of response by the idealist to the alleged distinctions suggested by the anthropic skeptic is to suggest that, (1) in fact no sense can be made of the distinction between human thought and other forms of thought, and (2) no sense can be made of the idea that the world might transcend the ability of all thinkers to form a conception of it.

269. Something like this dilemma seems to lie in the thinking of three idealist philosophers, or at least who have been interpreted as idealists, viz., Hegel, Wittgenstein, and Davidson. [4] Hegel agrees with Kant that the basic features of our conceptual scheme delimit the basic features of our world. Of course by the word
'world' here Kant means the phenomenal world. On the Kantian doctrine, how the world might appear to a creature who had a different conceptual scheme--i.e., to a creature who was "other minded"--is not for us to say. Kant's transcendental idealism then is a form of skepticism, a skepticism about knowledge of things in themselves. [5] Hegel denies this second step, the idea of alternative conceptual schemes which transcend our human ability to comprehend, which leads to transcendental idealism and skepticism. In the end, according to Hegel, there is only one conceptual scheme (articulated in the Logic). If the basic features of our conceptual scheme delimit the basic features of the world, and ours is the only conceptual scheme, then there is no way to formulate the skepticism required by Kant's transcendental idealism. There is no way in which to contrast the world in itself, as it might appear to creatures with a different conceptual scheme, and how it appears to us. [6]

270. According to Jonathan Lear, a similar strategy is employed by Wittgenstein. Our forms of life are instrumental in interpreting the world, yet we cannot make sense of a different form of life which would allow a different interpretation of the world. [7]

271. Donald Davidson provides a more recent example of this strategy. [8] In his famous "On the Very Idea of a Conceptual Scheme" Davidson argues that we cannot make
sense of the idea of an alternative conceptual scheme. In Lear's terms, Davidson rejects the "other minded" option. If this is so then there is no way for the anthropic skeptic to articulate the idea of "the world" in terms of an alternative perspective. The basic structure of the thought of all sentient beings is more or less the same. If, therefore, the anthropic skeptic believes that human thought is "cut-off" from the world in itself, and all thought is more or less the same as human thought, then it would seem to follow that the anthropic skeptic must believe that thought in general is "cut-off" from the world in itself. Davidson, as we shall see, dismisses this idea.

272. If the arguments made by--or at least attributed to--either Hegel, Wittgenstein, or Davidson can be sustained, then of course the "other minded" option will have been refuted. Only Davidson's arguments will be considered in this work. While it may not be unreasonable to believe that the points made here against Davidson also tell against Hegel and Wittgenstein, an argument to this effect is beyond the scope of the present work.

273. The discussion of Davidson's work will proceed as follows. First, the ideas of "alternative conceptual schemes" and "being other minded" will be explicated in Davidsonian terms. This will allow for a more systematic restatement of the dilemma in paragraph 268. Next a brief
characterization of Davidson's argument will be presented. The characterization is brief, since the criticisms to be raised are not so much about what Davidson says in his argument, but what he omits. Davidson, it will be suggested, fails to consider the possibility of asymmetrical failure of translation as a means to defend the idea of conceptual schemes. Finally, it will be argued that, if one accepts Davidson's claim that all languages are intertranslatable, then the idea that language itself might not be an adequate vehicle for accessing the truth of reality may be defended. The discussion of Davidson should then make it possible to make a rebuttal to the dilemma proposed by the idealist in paragraph 268 (to be restated in paragraph 275).

274. Davidson investigates the notion of a difference in scheme by way of the idea of translating languages. Davidson makes the connection thus:

where conceptual schemes differ, so do languages. But speakers of different languages may share a conceptual scheme provided there is a way of translating one language into the other. Studying the criteria of translation is therefore a way of focusing on criteria of identity for
conceptual schemes. If conceptual schemes aren't associated with languages in this way, the original problem is needlessly doubled, for then we would have to imagine the mind, with its ordinary categories, operating with a language with its organizing structure. [9]

The question then of whether sense can be made of conceptual schemes turns on the question of whether sense can be made of the notion failure of translation between one language and another. Intuitively this criterion seems to make sense. If differences in conceptual schemes are to manifest themselves, then the most likely place, it seems, is in one's language. In any event, we may grant this criterion for the sake of the argument. [10] This criterion is also useful, for similar reasons, for cashing-out the metaphor of being "other minded", since this notion is in turn understood in terms of alternative conceptual schemes. Thus, if there is a difference in the "mindedness" of two groups then there will be a failure of translation between the two groups.

275. The objection proposed in paragraph 268 against the notion of anthropic skepticism might be restated thus. Either the conception of "world" or "being" which the skeptic employs must be explicated in terms of being
"other minded", or "one minded". If the "other minded" option is taken, then the skeptic must make sense of the notion of differing conceptual schemes. The notion of a differing conceptual scheme in turn relies on the idea of failure of translation between two languages, but this idea is absurd (at least according to Davidson). On the other hand, if one accepts the "one minded" option, then the suggestion is that the world transcends the ability of all thinkers to think about it. But, given the intimate connection between thought and language suggested by Davidson, this implies the absurd idea that all languages are some sort of "distorting medium". Hence, there is no way for the skeptic to give any substance to the idea of reality which transcends only human thought, or the thought of all sentient creatures.

276. Although most of Davidson's argument in "On the Very Idea of a Conceptual Scheme" is concerned with the former horn of this dilemma, Davidson does consider briefly something like the latter horn only to dismiss it:

...there is the idea that any language distorts reality, which implies that it is only wordlessly if at all that the mind comes to grips with things as they really are. This is to conceive language as an inert (though
necessarily distorting) medium independent of the human agencies that employ it; a view of language that surely cannot be maintained.

Davidson suggests rather that, "languages we will not think of as separable from souls; speaking a language is not a trait a man can lose while retaining the power of thought." [12] This point may be granted for the moment. In the end, the acceptability of Davidson's suggestion here, that "languages are not separable from souls" will depend on what is meant by the idea of a "language". More on this below. With these preliminaries dispensed with we may turn to Davidson's argument against the notion of failure of translation; bearing in mind that these notions are required to explicate the idea of an alternative conceptual scheme and being "other minded".

277. Davidson investigates the idea of translation failure by breaking it down into two sub-problems: complete and partial failures of translatability:

There would be complete failure if no significant range of sentences in one language could be translated into the other;
there would be partial failure if some range could be translated and some range could not...[13]

The focus here will be on Davidson's discussion of complete failure of translation, since the notion of a complete failure of translation seems to be required by the sort of "global" skepticism suggested by the anthropic skeptic. At worst, arguing for the idea of complete failure of translation is a bit of "overkill", that is, it seems reasonable to assume that if we can make sense of the notion of complete failure of translation, then the idea of a partial translation is also coherent.

278. Davidson suggests that the notion of total failure of translation relies on some variant of the scheme/content distinction, since only this distinction which would allow us to provide some sense to the notion of a language which was not translatable into our own. Davidson writes:

The idea is then that something is a language and associated with a conceptual scheme, whether we can translate it or not, if it stands in a certain relation (predicting,
organizing, facing, or fitting) experience (nature, reality, sensory promptings). The problem is to say what the relation is, and to be clearer about the entities related.

Davidson then seems to attribute the following argument to the conceptual schemer:

\[\text{P1: If some X stands in a certain relation (predicting, organizing, facing, or fitting) experience (nature, reality, sensory promptings), then X is a language and associated with a conceptual scheme whether we can translate it or not.}\]

\[\text{P2: Some X stands in a certain relation (predicting, organizing, facing, or fitting) experience (nature, reality, sensory promptings).}\]

\[\text{C: Therefore, X is a language and associated with a conceptual scheme whether we can translate it or not.}\]

Davidson's strategy is to challenge the coherence of P2. He does this by challenging the conceptual schemer to make sense of the two main images or metaphors which underlie the idea of conceptual schemes: "conceptual schemes either organize something, or they fit it." [15] The challenge is
to say what these metaphors amount to, i.e., to provide explication of the metaphor of a conceptual scheme organizing or fitting some nonlinguistic reality, either nature or experience.

279. With respect to the family of metaphors which include organize, systematize, divide up, [16] Davidson offers the conceptual schemer a dilemma. Either this nonlinguistic reality is conceived of as a unity or plurality. It cannot be conceived of as a mere undifferentiated something, for "we cannot attach a clear meaning to the notion of organizing a single object (the world, nature etc.) unless that object is understood to contain or consist in other objects." [17] Davidson offers the homely example of someone organizing a closet who sets out to organize its contents. Yet "if you are told not to organize the shoes and shirts, but the closet itself you would be bewildered." [18] On the other hand, if nature or experience is conceived of as a plurality, then we end up individuating objects "according to familiar principles". As Davidson argues:

The notion of organization applies only to pluralities. But whatever plurality we take experience to consist in--events like losing a button or stubbing a toe, having a
sensation of warmth or hearing an oboe—we will have to individuate according to familiar principles. A language that organizes such entities must be a language very like our own. [19]

280. The other family of metaphors which suggest that conceptual schemes fit, predict, account for, or face the tribunal of experience, fare no better. "The trouble", writes Davidson, "is that the notion of fitting the totality of experience, like the notion of fitting the facts, or of being true to the facts, adds nothing intelligible to the simple concept of being true." [20] If Davidson is correct here, [21] then the idea of a conceptual scheme different from our own comes down simply to the idea of a language being true but not translatable into our own. Of course, at this point Davidson is on very familiar territory, for now we are being asked to consider a notion of truth which does not necessarily admit translation into our own language. But this is unacceptable since such a proposal violates Davidson's version of the principle of charity:

Convention T suggests, though it cannot state
an important feature common to all the specialized concepts of truth. It succeeds in doing this by making essential use of the notion of translation into a language we know. Since Convention T embodies our best intuition as to how the concept of truth is used, there does not seem to be much hope for a test that a conceptual scheme is radically different from ours if that test depends on the assumption that we can divorce the notion of truth from that of translation. [22]

Since, according to Davidson, we cannot divorce the notion of truth from that of translation the conceptual schemer has no way in which to cash-out the metaphors mentioned above.

281. Davidson concludes that if we attempt to make sense of the notion of conceptual schemes in terms of an uninterpreted reality we end up speaking nonsense.

282. There is of course much merit in Davidson's argument. Certainly if the conceptual schemer had to rely merely only on the somewhat lame family of metaphors of "organizing" and "predicting", then such a position would be very unattractive indeed. However, it will be argued
that the conceptual schemer would be better off to abandon these metaphors for the notion of asymmetrical failure of translation. Davidson himself says paranthetically that "...(I shall neglect possible asymmetries)." [23] Thus, unfortunately, Davidson acknowledges but does not discuss this strategy.

283. The idea of asymmetrical failures of translation is perhaps plausible if it is allowed that languages may differ in their expressive resources. A language with rich expressive resources might be able to translate a language with impoverished expressive powers, but not vice versa. If we limit the field to two languages, our home (H) language and the target (T) language to be translated, then the following translation possibilities present themselves:

1. H <-- T
2. H --> T
3. H <-- T
4. H --> T

The arrows in the schema represent the direction of full translatability. Thus, the first case represents the idea that our home language is fully translatable into the target language and the target language is fully translatable into our home language. The second case
represents the idea that our language is fully translatable into the target language, but our language lacks the expressive powers necessary to fully translate the target language. If we allow the idea of giving some sort of numerical indices to languages to represent their expressive powers, then we might think of the second case as that where the home language is less than the target language in expressive power. The third case of course represents the idea that the home language is greater than the target language in expressive power. In this case, imagine that the home language is able to fully translate the target language, but there is a failure of translation in the opposite direction. The fourth case represents the idea of symmetrical failure. We cannot translate the target language with our language, and the target language cannot translate our language. In such a case, it might be plausible to suggest that the languages differ in their expressive resources, although one is not necessarily richer than the other.

284. Of these four, prima facie at least, logical possibilities, Davidson considers only two, the first and the fourth case. That is, Davidson attempts to show that the fourth case is a conceptual impossibility, we cannot make sense of mutually untranslatable languages. The conclusion of Davidson's argument is that all languages must conform to the first case, that is all natural
languages are essentially intertranslatable. Obviously, Davidson owes us some account of the second and third case. (Davidson says, as we have seen, that he neglects possible asymmetries, presumably, however, he thinks that one might deal with these cases by a natural extension of his arguments. It will be argued that this is in fact not possible).

285. The importance of the idea of asymmetrical failure can be illustrated by considering it in conjunction with Nagel and Rorty's discussion of the idea of a "higher intelligence". The idea is that there might be beings who possess a conceptual scheme which is superior to that which is possessed by some other beings. While their examples are similar, Rorty and Nagel disagree about what such examples show. It will be argued that the radically different conclusions reached by these two thinkers stems from the fact the Rorty fails to consider the idea of asymmetrical failure of translation, while Nagel accounts for such a possibility.

286. Rorty's example is an extrapolation based on historical change. The idea is that, while we share many beliefs with the ancient Greeks, some beliefs have been revised. Rorty makes use of Neurath's analogy of our beliefs being the planks of a boat at sea. Only a few planks can be changed at any one time, but given enough time, it seems, every plank might be changed. Accordingly,
it may be the case that in some future era a civilization has evolved which shares no belief with the ancient Greeks, and indeed, with ourselves. If this example is coherent, it presents a real challenge to Davidson's thesis that all languages are essentially intertranslatable, for it would seem that the Galactic language is forever beyond our ability to translate. As Rorty (with more than a touch of sarcasm) puts it:

A Galactic time-traveler come among us, we now realize, would eventually be forced to abandon his original presumption that we were persons when he failed to correlate our utterances with our environment in any way that enabled him to construct an English-Galactic lexicon. Our initial assumption that the Galactic emissary was a person would be frustrated by the same sort of discovery. How sad that two cultures who have so much to offer each other should fail to recognize each other's existence! What pathos in the thought that we, time-travelling among our Neanderthal ancestors, might stand to them as the Galactic stands to us! [24]
The problem Rorty sees with this example is that it leads down a very slippery slope. If we accept the idea that for all we know the Galactians are among us now, but are unable to communicate with us, what is to rule out the possibility that the world is filled with beings which we are incapable of communicating with? "Why", asks Rorty, "should we ignore the possibility that the trees and the bats and the butterflies and the stars all have their various untranslatable languages in which they are busily expressing their beliefs and desires to one another?" [25] Rorty's suggestion then is that we are left with a dilemma: either we agree with Davidson that the idea of a language user cannot be separated from that of the potentiality for translatable speech, in which case the Galacticians and the butterflies do not qualify as language users. On the other hand, if we allow that the idea of a language user can be separated from that of the potentiality for translatable speech, in which case we have to accept the idea that the Galactians as well as the butterflies might be language users. Rorty, of course, wants to reject the latter alternative for reasons which will be considered below.

287. Nagel's counterexample to Davidson's intertranslatability thesis is also based on an analogical
line of reasoning. Nagel's suggestion is that there might be higher beings which stand to us as we stand to nine year olds. Just as there are some aspects of reality which we can conceive and discuss, but which (at least most) nine year olds cannot conceive nor discuss, so too might there be aspects of reality which these higher beings can conceive and discuss which are fundamentally beyond our ken. As Nagel notes, "the problem is that Davidson's notion of translation seems to be asymmetrical. I might be able to translate a sentence of someone else's language into a sentence of my language, even though he cannot translate my sentence into his." [26]. Thus, it seems to follow that it might be the case that, while we can translate all the sentences of the nine year old's language, they might only be able to translate some of ours. In which case, of course, we have a failure of translation, and thus, a difference of conceptual schemes--according to Davidson's criterion--between us and the nine year olds.

288. Nagel's counterexample, then, has the virtue of not following in the trap of having to describe in our language that which cannot be described given the expressive powers of our language. The virtue of the analogy, in other words, is that one does not have to describe in any detail those aspects of reality which these higher beings are aware of but which we fail to
grasp. All that is required is the very abstract characterization that the higher intelligences might grasp aspects of reality which we fail to grasp, just as there are aspects of reality which we grasp and nine year olds fail to grasp. Similarly, the nine year olds will have difficulty in describing in detail an adult conceptual scheme, since they lack the language necessary to describe the sentences of our language which they lack. To put it as simply as possible, we can say everything the nine year olds can, but not vice-versa. Nevertheless, the nine year olds could describe their relation to our conceptual scheme in very abstract terms by a similar analogy. One nine year old might suggest to another, that an adult conceptual scheme stands to their more limited conceptual scheme in the same manner in which, say, a five year olds' conceptual scheme stands to the nine year olds.

289. It seems that at best the argument thus far suggests that there might be a partial failure of translation. For while some of our sentences might not be translatable by nine year olds, it would seem that much of our language is translatable. Nine year olds might not be able to understand some concepts in physics, or even philosophy for that matter, yet most of our workaday language is translatable, e.g., we can discuss topics such as the weather, sports and muse over questions like 'what is for dinner?' etc. The question arises whether complete
failure of translation is plausible using the same sort of example. Nagel's analogy at least provides a starting point for further investigation. In other words, for the present purposes, the problem with Nagel's argument is that it proves too little. For as we have said, there seems to be too much in common between our language and the language of the nine year olds to say that there is a complete failure of translation. Indeed, the example trades on the fact that there is a large overlap between our language and theirs, for this is what provides us with evidence that they speak a language, albeit, a limited language from our perspective.

290. Let us suppose for illustrative purposes—not that any solid idea could be given to such an example—that the nine year olds are able to translate 70 percent of our utterances while we are able to translate 100 percent of theirs. Let us imagine that there are beings with a higher understanding such that they are able to translate 100 percent of our utterances, but we are able to translate only .1 percent of theirs. If such an example can be shown to be coherent, then it will have been shown how complete failure of translation is possible. For Davidson, it will be recalled, suggests that "there would be complete failure if no significant range of sentences in one language could be translated into the other". If we can only translate .1 percent of their
language, then this would seem to qualify as an instance where no significant range of their language could be translated by us, and thus, as an example of complete failure of translation on our part. But is the example coherent and how might it be evidenced?

291. The fact that such beings are able to fully translate our language says at least that the creatures are language users. Thus, these creatures are not Rorty's Galactians, since they are able to speak our language. Indeed, it can be seen that much of Rorty's argument depends on the assumption that the Galactians cannot translate our language, and vice-versa. In other words, Rorty's example trades on describing the relation between ourselves and the Galactians according to the fourth translation possibility above, namely, symmetrical failure of translation. This is why Rorty thinks he is entitled to lump together the conjecture that the Galactians have a language and the (presumably absurd) conjecture that butterflies have a language, namely, because Rorty (like Davidson) considers only symmetrical failures of translation (i.e., (iv) above). Yet, the present example turns on describing the situation according to the second translation possibility noted above. Hence, we might think of these beings as the new and improved Galacticians or the 'neoGalactians'. If we suppose that the neoGalactians land on earth, they would be able to translate our
language and, indeed, speak with us using our native tongue. This in itself will stop us sliding down Rorty's slippery slope which suggests that, for all we know, butterflies and rocks are speakers as well. The difference, of course, lies in the fact that we are able to converse fluently--up to the limits of our own language of course--with the neoGalactians, but not with butterflies and rocks. Thus, we will have reason to deny butterflies the appellation 'language user' but not the neoGalactians.

292. But what sort of evidence would bear on the claim that their language was vastly superior to ours in expressive power? This is where the example seems to flounder. For the neoGalactians, we can imagine, make a variety of sounds some of which we are able to translate, that .1 percent of their hypothesized language which, we may suppose, only correlates with a small fraction of the sounds which they make. What would lead us to believe that the remaining noises correlate with words and sentences which we cannot translate? Why wouldn't we be entitled to suppose that these noises are more like the sounds we make when we hum than as sounds which correlate with language production? Or, to utilize Rorty's example, how do we know that the sounds they admit have as much linguistic meaning as the accoustic vibrations of a butterfly's wing?

293. Although it may sound naive, what is wrong with
the answer that we believe that these sounds correlate with language production because the neoGalactians told us so? They might tell us, in our language, that their language is almost completely untranslatable into our language (save for .1 percent of it of course). We can imagine them suggesting, by way of analogy, that we have about as much chance of understanding their language as chimpanzees do of understanding English. Imagine that it occurs to us that they speak to us in much the same way that many adults speak to children under five. Such adults use a very limited and basic vocabulary and speak slower and with a higher voice when they speak with children. In other words, adults attempt to pitch their conversation to their audience. Well, suppose that the neoGalactians do the same. We note that when they speak with us, the neoGalactians speak much slower than when they speak with each other. Suppose we ask them and they say that they are deliberately simplifying their speech in conversations with us in order not to confuse us. We might suppose too that when we listen to the neoGalactians speaking amongst themselves they occasionally use words which we are able to translate, but such words occur in very long sentences which we are unable to translate as a whole. It seems that, if such a situation were to obtain, we would have every reason to believe that most of their language is untranslatable.
294. Suppose it is objected that we are on the edge of another slippery slope here. If we believe the neoGalactians when they say that they have an understanding and a language which far transcends ours, then, we are not able to independently check the validity of their claims with our reason. But once we allow this, then there seems to be any number of claims which ought to be assented to by parity of reasoning. Suppose, for example, some human tells us he is the Buddha and all of existence, all of the universe, is only so much lint in his navel. Of course we are likely to dismiss this as so much nonsense. But suppose this person who calls himself the Buddha says that he must resort to such metaphors, as "lint in navels", because of our limited understanding. If we enjoyed his higher understanding, we would be able to see what was correct about the lint in the navel metaphor. He might suggest further that our language is not able to fully translate his more expressive language. Naturally, we are not likely to be more inclined to accept his metaphor even with such an explanation. The trouble is that it seems that any reason for rejecting this Buddha-imitator will also be a reason for rejecting the claims of the neoGalactians. After all, the Buddha-imitator might say precisely the same things which we supposed the neoGalactians might, e.g., that we have as much likelihood of understanding him as chimpanzees do of
us, and so on.

295. Perhaps we would have reason for accepting the claims of the neoGalactians, but not the fakir's, if there was a difference not so much in what they say, but in what they are able to do. Suppose that the neoGalactians claim that, while their most impressive achievements are not appreciable by us, any more than a chimpanzee might be expected to understand the subtlety of the Critique of Pure Reason, or the complexity of the Hubble telescope, nevertheless, they are willing to put on a display of their talents. Suppose they begin by travelling faster than the speed of light, by proving Goldbach's last conjecture, by simultaneously beating the top one hundred ranked chess players, reveal an inconsistency in Godel's incompleteness proof, etc. Suppose further that they satisfy our every material need, they provide us with a safe, unlimited, and self-renewing energy source, and provide us with devices that convert this energy into food, clothing, shelter. In short, they create for humans a (material) utopia. Perhaps they even arrange the stars in the night sky to form the outline of the young Elvis. Under such circumstances it might seem reasonable to believe that these beings had superior cognitive capacities to our own, and, to trust them when they say that their language far exceeds the expressive resources of our own language. Would it be that unreasonable to
attribute a "higher understanding" to creatures who are able to move stars thousands of light years away to form the shape of the young Elvis in the night sky? After all, it would demonstrate that our best physical theory of the universe was false--since the neoGalactians are capable of manipulating stars which are light years away. (If the neoGalactians have this ability then it means that causes must be able to propagate faster than the speed of light, contrary to our best current physical theory). Our fakir, on the other hand, is not able to accomplish any of these feats. In such a case, although there is great similarity in what they say to us--the neoGalactians and the fakir both say that they have an understanding which transcends ours--there is a disanalogy between what they are able to do.

296. This completes the objection from asymmetrical failures of translation. The basic strategy has been as follows. Davidson's rejection of the notion of an alternative conceptual scheme is dependent on demonstrating that all natural languages are essentially intertranslatable. However, Davidson himself does not consider the possibility of asymmetrical failures of translation. Following Nagel's lead, it can be seen that the idea of asymmetrical failure of translation provides a way to undermine Davidson's claim that all natural languages are intertranslatable. The idea that beings with
greater conceptual abilities and a more expressive
language might be evidenced, at least in some cases, by an
attendant increase in their nonlinguistic abilities. To
put it as simply as possible, the fact that other beings
might be able to do things which we cannot do nor even
explain how they are able to do them, suggests, at least
in some cases, that they might be able to say things which
we cannot say, and that they can think thoughts that we
cannot think.

297. The second objection to be raised against
Davidson's argument does not depend on the idea that there
might be asymmetrical failures of translation. Indeed, it
will be assumed that Davidson's claim that all natural
languages are essentially intertranslatable is true. The
objection runs along the following lines: If all natural
languages are essentially intertranslatable, then it
follows that creatures which are "lower" on the
phylogenetic scale, such as chimpanzees and honey bees, do
not possess languages.[25] Nevertheless, such creatures
are able to glean information about the world and
communicate it amongst themselves. The fact that such
creatures can communicate amongst themselves such
information suggests that their means of communicating
might be thought of as 'protolanguages'. By analogical
reasoning, then, it seems that for all we know it is
possible that there are other forms of communicating and
gleaning information about the world which stand to languages, as languages stand to protolanguages. That is, suppose that beings which stand to us in intelligence as we do to chimpanzees communicate by means of a "hyperlanguage". Hyperlanguages transcend human languages in the same manner which human languages transcend the protolanguages of chimpanzees. If this case can be made out, then it is possible to maintain the skeptical attitude that our thought and language might not be able to comprehend reality in all its complexity; even though all languages are essentially intertranslatable.

298. To fill in the details of this argument it will be useful to begin by saying why chimpanzees and monkeys might be thought of as having a "protolanguage". To what extent the other primates possess a "language" is a much contested issue. For the present purposes, it is sufficient to make the somewhat banal observation that at least some of the other primates possess a form of communication with enables them to communicate information about their environment. It has been known for some time now, for example, that the East African vervet monkeys give different-sounding calls in response to three different predators: leopards, eagles and snakes. Commenting on this observation, Seyfarth and Cheney write:
Each call elicited a distinct apparently adaptive, escape response from nearby vervets. Alarm calls given about leopards caused vervets to run into trees, where monkeys seemed safe from feline attack. Eagle alarms caused them to look up in the air or run into the brushes. Snake alarms caused the animals to stand on their hind legs and look into the grass.[27]

Yet the information gleaned and communicated by the nonhominid primates does not merit the appellation of a 'language', since even the chimpanzee is not capable of understanding all the information which might be communicated by means of a language. No chimpanzee, for instance, is ever going to be able to translate the terms necessary to express quantum physics. Thus, according to the Davidsonian criteria of languagehood, chimpanzees do not have a language. For obviously on Davidson's view, if chimpanzees had a language, then they would have to be capable of translating our language into theirs.

299. But at this point, it can easily be seen that Davidson does not have the resources to deny the possibility of a "hyperlanguage". Hyperlanguages stand in
the same relation to languages which languages stand to protolanguages. That is, hyperlanguages, languages, and protolanguages all share the feature that they are used by creatures in gleaning information about the world, and communicating it with conspecifics. Where they differ is in the complexity of the information which might be represented. Thus, languages are capable of representing information of greater complexity than that of protolanguages and hyperlanguages are capable of representing information of greater complexity than languages.[28]

300. The distinctions between protolanguages, languages and hyperlanguages, allows for a redescription of Nagel's example of the nine year olds, and the neoGalactians in a manner which does not contradict Davidson's claim that all languages are intertranslatable. That is, one may grant Davidson his claim that all natural languages are intertranslatable, yet still preserve the insight suggested by Nagel's example and that of the neoGalactians. Nagel's nine year olds, because they cannot fully translate our language into their "language" ought to be described as having a only a "protolanguage". Of course the "protolanguage" of the nine year olds is more sophisticated than that of the vervet monkeys but this is not of particular concern; there may be different "grades" of complexity among the "protolanguages". On the other
hand, the neoGalactians, to the extent that they communicate with us, possess a language. But to the extent that they communicate information amongst themselves which transcends the expressive powers of languages (i.e., natural languages), they speak a hyperlanguage. That is, we may note the following asymmetries. Chimpanzees are "protolanguage" users. They communicate information about their environment to their conspecifics. Adult humans are, obviously language users, but they are also protolanguage users. This follows from the fact that we can communicate information to chimpanzees and they may communicate with us. The neoGalactians are "hyperlanguage" users, since they are capable of communicating information about the environment which is not translatable into natural languages. The neoGalactians are also language users, since they are able to communicate with us in our language. Finally, we may suppose that the neoGalactians are also "protolanguage" users, since it seems reasonable to suppose that they could communicate with chimpanzees as well.

301. The moral that might be drawn from this second argument against Davidson is this. If one defines the notion of "natural languages" as Davidson and Rorty do in such a way as to ensure the intertranslatability of all natural languages, then, there is little reason to suppose that languages are the only means of communicating
information, or that they are the most sophisticated means of communication. Natural languages might be just that: a natural kind in the order of communication. Other forms of communication are more primitive, and hence, are termed 'protolanguages', and some are more sophisticated, they are "hyperlanguages".

302. One final point which bears directly on Davidson's argument has to do with his claim, noted earlier, that "Languages we will not think of as separable from souls; speaking a language is not a trait a man can lose while retaining the power of thought." If we deny that all languages are intertranslatable, as the first argument made against Davidson suggests, then one need not worry about the inseparability of souls, languages and thought. However, if, as the second argument suggests, we grant Davidson the claim that all languages are intertranslatable, such a concession seems to be more damaging. For then we are to imagine speakers of "hyperlanguages" without souls, (unless of course they "lower" themselves to speaking a language). However, it is perhaps reasonable to believe that the same considerations which motivated the distinctions between "protolanguages", languages, and "hyperlanguages", would allow for distinctions between "protothought", thought, and "hyperthought", on the one hand, and "protosouls", souls, and "hypersouls" on the other.
303. The completion of this chapter requires discussion of three further points. One is to say something further about the relation between the notions of anthropic skepticism, idealism and conceptual schemes. Another is to consider a possible rejoinder to the argument by the dogmatic idealist. The final point has to do with the necessity of appealing to analogies in making plausible the idea of alternative conceptual schemes and anthropic skepticism.

304. Kant defended his transcendental idealism in part by reference to the possibility of other forms of understanding. In particular, Kant draws a distinction between noumena and phenomena. For Kant, all knowledge claims are essentially connected with a form of intuition and all humans have a sensible form of intuition. [29] This means that for humans all knowledge claims are ultimately constrained by the information which can be gleaned by the senses. The corollary of this is that no knowledge claims can extend beyond the bounds of what can be known by the senses. Kant employs the term 'phenomena' to indicate objects as they are mediated by a sensible intuition. This raises the spectre that we never know objects in themselves, but that we know objects only as phenomena. To underscore this negative point Kant suggests, that for all we know, there might be other sentient beings which have a different form of intuition,
an intellectual intuition. Beings which access objects through an intellectual intuition would not know objects as phenomena--since they do not employ a sensible intuition--but as noumena. Kant writes:

The concept of noumenon--that is, of a thing which is not to be thought as object of the senses but as a thing in itself, solely through a pure understanding--is not in any way contradictory. For we cannot assert of sensibility that it is the sole possible kind of intuition. Further, the concept of a noumenon is necessary, to prevent sensible intuition from being extended to things in themselves, and thus to limit the objective validity of sensible knowledge. [30]

Kant is careful not to assert that there are in fact other beings with an intellectual intuition--only that we cannot rule out this possibility:

The concept of the noumenon is, therefore,
not the concept of an object, but is a problem unavoidably bound up with the limitation of our sensibility—the problem, namely: as to whether there may not be objects entirely disengaged from any such kind of intuition [i.e., a sensible intuition]. This is a question which can only be answered in an indeterminate manner, by saying that as sensible intuition does not extend to all things without distinction, a place remains open for other and different objects; and consequently that these latter must not be absolutely denied though...

[31]

One being who might have an alternative form of intuition is the primordial being, God. Indeed, Kant suggests "...all his [God's] knowledge must be intuition, and not thought, which always involves limitation." [32]

305. Hence, Kant illustrates his transcendental idealism and his skepticism about knowledge of things in themselves by way of an appeal to anthropic skepticism. Anthropic skepticism, it will be recalled is a particular version of noetic skepticism. In his speculation about God's intellectual abilities, Kant seems to suggest that
all thinkers may be unable to think about the things in themselves since thought, by its very nature, "involves limitation". Since Kant is endorsing the more general skeptical claim here, noetic skepticism, he also seems to be committed to the more specific claim, namely, anthropic skepticism. If all thought, by its very nature, is "cut-off" from the things in themselves, then, a fortiori, human thought is "cut-off" from the things in themselves.

306. Similar remarks apply to the skepticism which is endorsed here. The idealist in chapter 6, it will be recalled, suggests that no sense can be made of the idea of "the world" which might, for all we know, not conform to the law of noncontradiction. The response by the skeptic is that, although we finite humans might not be able to think about or describe such a world in detail, we can make sense of this notion by appealing to the idea of creatures with alternative conceptual schemes, creatures which are "other minded". Such creatures, it may be supposed, operate with a different logic, a "hyperlogic". Again there is no way for the skeptic to describe in any detail what such a "hyperlogic" amounts to other than by abstract analogies. The skeptic might say that their logic is several hundred orders of magnitude greater in difference than that between Aristotle's conception of logic and a modern dialethic logician's conception.

307. It is perhaps worth pursuing this line of thought
further. To see how the idea of conceptual schemes undermines the dogmatic idealism of part I consider again the argument proposed for this idealism. Idealism, it was argued in part I, is the only position which might justify our a priori knowledge that the world in itself is not contradictory. This conclusion turned on refuting both the rationalist-realist and the two variants of empiricism. The idea of alternate conceptual schemes is perhaps most damaging to the transcendental argument proposed to demonstrate that the world in itself must be noncontradictory. The argument was that we cannot make sense of the idea that the world in itself might be contradictory. This argument was made against the backdrop of Stroud's criticism that transcendental arguments typically require some sort of verificationist principle to secure their conclusions. Recall that Stroud suggests that the skeptic maintains:

(i) a particular class of propositions make sense,

and that

(ii) we can never know whether or not any of them are true.

The verificationist argues that if a particular class of
propositions meets criterion (ii) then it fails to meet criterion (i), i.e., if a particular class of propositions is unverifiable then it is meaningless. The rejoinder offered to Stroud was that the idea that the world in itself is contradictory is unintelligible simpliciter, not because the proposition is unverifiable. However, given the discussion of skepticism in this chapter, it is clear that the argument of chapter 6 requires a further premise such as the following:

(iii) if a particular class of propositions does not make sense then they are not true.

Yet if one accepts the possibility that there might be conceptual schemes which are vastly greater than our own, then, it is perhaps apparent that the argument of chapter 6 does not in fact establish the denial of (i). In particular, of course, the question was whether we could make sense of the idea that the world in itself is contradictory. This was supposed to be a member of a class of propositions which do not make sense. But for a conceptual schemer of the sort outlined above, the argument at best demonstrates that:

(i') a particular class of propositions do not make sense to us.
Since the denial of (i) forms the antecedent of (iii), (iii) itself must be amended to,

(iii') if a particular class of propositions do not make sense to us, then they are not true.

There is little motivation for the anthropic skeptic to accept something like (iii') since it is always open to them to say that, while a particular class of propositions do not make sense to us, they may make sense to another form of intelligence such as the neoGalactians. On the other hand, (iii') is much more plausible given the sort of position which Davidson, inter alia, endorses. Recall that Davidson believes that languages and thought are not "distorting media", and all thought and language is (more or less) the same (since they are intertranslatable). Hence, for Davidson, if a particular class of propositions do not make sense to us, then they do not make sense in any language (since all languages are intertranslatable). Since languages are the only vehicles for truth--no sense can be attached to the idea of extralinguistic truths on Davidson's view--(iii') follows. In other words, if one wants to maintain the idea that a proposition, such as the world in itself might be contradictory, is true despite the fact that we cannot make sense of it, then, there
seems to be only two options. Either one believes that such a statement might be intelligible or make sense in another language, or, the truth of this statement can be accessed only by some extralinguistic means. The argument against Davidson here has two fronts. It was argued that sense can be made of languages which are not translatable by us. The second argument was that we can make sense of an extralinguistic means of accessing reality, namely, protolanguages and hyperlanguages.

308. The moral of the last paragraph might be stated as follows. From the anthropic skeptic's point of view, the conclusion of the dogmatic idealist is a non sequitur. For it depends on an inference such as (iii') above which is question begging. In other words, the argument of part I presupposes the incoherency of the idea of alternate conceptual schemes for its validity. But since the argument of this chapter is that sense can be made of the idea of alternate conceptual schemes, the argument of part I is not valid.

309. The point of the last two paragraphs might be further clarified by reference to the discussion of chapter 3. One of the main lines of argumentation of this chapter was that we cannot make sense of the idea that Mr. Contradiction might speak a language which obeyed the maximal principle of contradiction. However, it may be clear at this stage how the argument of chapter 3
presupposes the incoherency of the idea of alternate conceptual schemes. Suppose for a moment that Mr. Contradiction is a member of the neoGalactians. For all we know, it may be that the hyperlanguage of the neoGalactians employs the maximal principle of contradiction. Suppose that Mr. Contradiction tells us (in our language) that the hyperlanguage he speaks with his fellow neoGalactians employs the maximal principle of contradiction. Of course, we might object that we cannot understand how a hyperlanguage could operate with the maximal principle of contradiction. To which he might reply (in our language) that we will just have to trust him that this is so because we are congenitally incapable of understanding a hyperlanguage for ourselves. And furthermore, Mr. Contradiction might inform us that the neoGalactians believe the maximal contradiction is an empirical claim. Again, he might suggest that we have to take this on trust since we are congenitally incapable of understanding this claim for ourselves. Thus, the argument of chapter 3 fails. For although it perhaps shows that no language might employ the maximal principle of contradiction; it fails to demonstrate that a hyperlanguage could not employ the maximal principle of contradiction on the basis of empirical considerations.

310. It might be useful at this point to consider a line of rebuttal which conjoins idealism with the idea of
conceptual relativism. For instance, consider the following line of objection:

The idealist may concede that there are alternative conceptual schemes of the world, but insist that this does not give solace to the skeptic. Just because of idealism, each conceptual scheme characterizes a different world. There is no sense in which the major outlines of any conceptual scheme could be wrong. [33]

It is easy to see that this line of criticism misses the point. For the main point of invoking the idea of conceptual schemes in this chapter is to suggest that we might be ignorant about large aspects of reality, rather than suggesting that our conceptual scheme is radically in error. If this is correct, then it would seem that the skeptic could quite easily concede that every conceptual scheme is correct in its major outlines, while still maintaining (anthropic) skepticism. For the skeptic might suggest the possibility that our knowledge is deficient in that our conceptual scheme does not allow us to conceptualize large aspects of reality. In other words,
the skeptic might concede that our conceptual scheme is correct as far as it goes, but that there are more things in heaven and earth than are dreamed of in our conceptual scheme.

311. It may be useful to work through an example to solidify this point. Thus, we might think of the Earthlings conceptual scheme, EC, is true in its major outlines. The Jupiterians, we may suppose, have a completely different conceptual scheme, JC, which is also correct in its major outlines. We may even suppose that the Martian conceptual scheme, MC, is the union of EC and JC. That is, $MC = JC + EC$. Given that every conceptual scheme is correct in its major outlines, it seems that there are truths which the Jupiterians know about reality, but which we are radically ignorant. Conversely, there are aspects of reality about which we have knowledge but which the Jupiterians, with their completely different conceptual scheme, are radically ignorant. The Martians on their tour of the solar system would be in a position to appreciate this ignorance, since they possess a conceptual scheme which encompasses both EC and JC. The Martians would be in a position to say that EC was both true in its major outlines, yet an incomplete view of reality. In other words, the Martians could admit the proposed line of defence by the idealist, while still maintaining that humans lack the complete truth about the universe.
312. To further illuminate this point it might be useful to consider a more relevant line of defence which the idealist might make. [34] Rather than saying simply that there is no sense in which the major outlines of any conceptual scheme might be wrong, the idealist might say, in addition, that there is also no sense in which the major outlines of any conceptual scheme might be incomplete. Such a view might guarantee then that we were not in error, since the scheme cannot be wrong in its major outlines, nor are we ignorant, since the scheme provides us with the outlines of the complete truth. If the idealist could justify such a view, then this would constitute a successful rebuttal to the argument of this chapter.

313. The trouble with this line of thought is to make sense of the idea of every conceptual scheme somehow providing the complete truth of the world. For we are often invited to think of conceptual schemes in one of two ways: either we think of conceptual schemes as providing different characterizations of one common thing, The World, say; or else it is sometimes suggested that each conceptual scheme describes its own world. The former interpretation is suggested by the remark in the quote in 310 that "the idealist may concede that there are alternative conceptual schemes of the world..." Given this interpretation, it is difficult to see how every
conceptual scheme might provide the complete truth about the world. In our own case, for instance, it seems that we can imagine the possibility of our entire conceptual scheme forming only a part of another creatures' conceptual scheme, e.g., MC is supposed to be the union of EC and JC. In other words, we can imagine another conceptual scheme which is more complete than our own in that it includes all the truths of our conceptual scheme plus some additional ones. (This is not to say that every conceptual scheme might be incomplete from some other perspective. It might be that God is characterized as having a conceptual scheme which encompasses all other conceptual schemes. It is sufficient for the purposes of the argument to say that not all conceptual schemes are complete in the sense that they provide all possible truths about The World, and that our own conceptual schemes may well be among the set of incomplete schemes).

314. The other suggestion mentioned is to think of each scheme as characterizing its own world. This interpretation is suggested by the remark in the same quote that "just because of idealism, each conceptual scheme characterizes a different world." This interpretation seems to show more promise in demonstrating that our view of the world is both true and complete. For corresponding to EC, for example, is the earthling's world, EW. EW, in its major outlines, is simply what EC in
its major outlines says it is. There is a sense in which EC defines EW. Now it is difficult to see in what sense EC could be incomplete. To say that EC is incomplete seems to suggest that EW somehow transcends EC, i.e., that EC does not grasp the full complexity of EW. But, the idealist might argue that EW in its major outlines is simply defined in terms of EC; hence, there is no solid sense to the idea that EW might extend beyond the reach of EC. Even if the idealist could maintain this line of thought the skeptic still has a response. The idealist's argument would only demonstrate that we have complete knowledge of a world, viz., EW, yet we would still be ignorant of knowledge of other worlds. The Martians, for example, have knowledge of both EW and JW, whereas we have knowledge only of EW.

315. To summarize, then, if the goal is the unity of thought and Being the above line of response falls short in one of two ways. If the idealist proposes that our conceptual scheme provides both a correct and complete view of The World or Being, then, the idealist would have to deny the possibility that our view was incomplete from the perspective of some more encompassing view by some higher intelligence. Alternatively, if the idealist proposes that our conceptual scheme provides both a correct and complete view of a world (namely: our world), then, the idealist would have to deny the possibility that
our world was only a part or aspect of a larger world, (namely: the world as conceived by a higher intelligence). In either case, the idealist would have to deny the possibility of a higher intelligence: but of course this is the very issue at hand. Thus, the conjunction of idealism with a certain form of conceptual relativism does not advance the issue.

316. It is perhaps worth emphasizing that the skeptical argument of this chapter does not turn simply on the idea of alternative conceptual schemes, but also of higher intelligences than our own. Hegel, at least on some interpretations—-I am thinking of Kojève's in particular—-endorses the idea of conceptual schemes, but does not admit the sort of skepticism suggested here. Hegel, according to this interpretation, in effect argues that the Hegelian philosophy provides a conceptual scheme which is both true and complete in its major outlines. For Hegel, history is a process whereby various incomplete conceptual schemes yield successively until the complete Hegelian conceptual scheme arrives. Thus, I do not think that the mere admission of the idea of conceptual schemes necessarily leads to skepticism. Hegel's position, I believe, is an example where skepticism is not admitted, but the idea of conceptual schemes is countenanced in a consistent fashion. Against the Hegelian position, I raise the spectre of the possibility of higher intelligences,
and thus, provide a means whereby the incompleteness of our own conceptual scheme may be raised as a conceptual possibility.

317. It may be helpful to step back for a moment and consider the strategies employed in the dialectic. On the one hand, anthropic skeptics such as Kant and Nagel must appeal to analogies to support their position. For there is no way, on pain of contradicting themselves, they can describe in any detail what it is that we humans might not be capable of thinking or speaking about. Kant appeals to the analogy of God having a form of intuition, but this intuition is not our sensible intuition, but an intellectual intuition. Kant sees quite clearly that he can never describe such an intuition in any more detail than this very abstract characterization—"not like our sensible intuition"—on pain of contradicting himself. Nagel makes plausible our inability to think or say certain things by appealing to an even more limited perspective, a child's conception. But Nagel too, sees all too well, that such an analogy is necessary, since it is impossible to describe in any detail the perspective of a higher intelligence—on pain of inconsistency. But the necessity of having to appeal to analogies seems to cause some philosophical worry. One might think that analogies are useful for pedagogical purposes but ought to be ancillary to the philosophical work itself. Thus, on the
other hand, thinkers such as Hegel and Davidson (and perhaps Wittgenstein) who deny the coherence of these analogies seem to be on firmer philosophical terrain.

318. Yet the position endorsed by Davidson and Hegel is also not without a philosophical price. For the claim that we cannot make sense of the idea of alternative and superior perspectives seems to imply the infinitude of human reason. For how else, Kant and Nagel might ask, could the inference from "we cannot conceive of a higher perspective" (in detail, i.e., in non-analogical terms) to "therefore there cannot be such a higher perspective" be considered licit? It seems that for finite creatures the inference from we cannot conceive of some X, to, therefore there could not be such an X, is not necessarily licit. For as finite creatures, we could not rule out the possibility that our finite conception makes it impossible to conceive of something, which is in fact possible—and might be acknowledged as such from a higher perspective.

319. Interestingly, both Davidson and Hegel are prepared to say that there are intimate links between a human perspective and a divine perspective. Davidson has argued that we would share most of our beliefs in common with an omniscient being. [36] There could be no radical disagreement, of the sort suggested by Kant and Nagel, between our perspective and that of an infinite and omniscient perspective. Davidson does not in fact say that
we are infinite nor omniscient, but clearly, according to Davidson, we are much closer to such a position than would ever be acknowledged by Kant or Nagel. Hegel, it seems, is not so reticent on this point: although humans were initially finite in their perspective, at the end of the ontogenetic sequence of humanity the human perspective becomes infinite, this perspective is articulated in the Logic. Thus, in all modesty, Hegel thought he was the first "man-god". To what extent Davidson and Hegel acknowledge intimate links between the human and a divine perspective is really a moot point. For the argument here has been that this is a consequence of their position, whether they acknowledge it or not. (Of course Davidson and Hegel could allow that other sentient beings exceeded us in their ability to justify certain claims, and thus in this sense we might be said to be finite, but in terms of the expressive powers of thought or language ours is the same as the divine).

320. It seems we are left with two rather unattractive alternatives. If we side with Kant and Nagel and suggest the idea of a higher understanding on the basis of an abstract analogy, then we call into question our own ability to philosophize. Kant of course said that metaphysics was not a discipline which could be pursued by human beings. Nagel too wonders about our ability to ever satisfactorily answer philosophical questions. [37] The
view promulgated here of course has deep sympathies with that of Kant and Nagel, for the anthropic skepticism endorsed here suggests that, contrary to the dogmatic idealist, it is absurd to assume that God or beings with a higher understanding must be bound by our laws of logic—to paraphrase Descartes. On the other hand, if we side with Davidson and Hegel and deny the very contrast between our human understanding and an infinite understanding which might be forever beyond our ken, then of course Kant and Nagel's worries are misguided. For their position rests on such a contrast. Yet if we side with Davidson and Hegel it seems to make the human perspective much closer to an infinite, omniscient or divine perspective than could plausibly be maintained. Even if such an intimate connection between a divine perspective and our own were plausible in Hegel's day, it is hard to see how such a view could be maintained in light of the success of secular etiologies of homo sapiens, i.e., Darwinianism. (More on this in the following chapters).

321. The unattractiveness of either of these alternatives might suggest reevaluating the conception of philosophy which throws-up such alternatives. This is what philosophical naturalism proposes to do.
End Notes: Chapter Eight

1. This distinction seems to be operating at some level in Kant—see the discussion of Kant's notion of an intellectual intuition near the end of this chapter. A closely allied distinction is made by Nagel in his *The View From Nowhere*, Oxford: Oxford University Press, 1986, p. 90: "In the last chapter we discussed skepticism with regard to knowledge. Here I want to introduce another form of skepticism—not about what we know but about how far our thoughts can reach. I shall defend a form of realism according to which our grasp on the world is limited not only in respect of what we can know but also in respect of what we can conceive. In a very strong sense, the world extends beyond the reach of our minds." His distinction is not exactly the same as the one discussed here. The difference lies in the fact that Nagel seems to suggest at certain points that the world does in fact transcend our ability to conceptualize it, whereas, the skepticism of this chapter suggests merely that we leave open the possibility of such a transcendence.

2. If one thinks of knowledge as defined as justified true gettier belief, where 'gettier' refers to the concept or condition which handles the Gettier-type counterexamples, then three types of skepticism might be distinguished. Justificatory skepticism, as its name
suggests, suggests that we might fail to know because of the justification component in knowledge. Noetic skepticism suggests that we might fail to know because of the belief component—our finite minds might not be capable of formulating the correct belief.

"Gettier-skepticism" might suggest that, although our beliefs are perhaps true and justified, they might only be fortuitously so.

3. The phrase "other minded" is taken from J. Lear's "The Disappearing 'We',' Proceedings of the Aristotelian Society, Supplementary Volume LVIII, pp. 219-42.


5. V., Hegel's Idealism, op. cit., especially, pp. 94-99.

6. Cf. ibid., p. 250 and "The Disappearing 'We',' op
7. Ibid.
8. Ibid.


11. Davidson, op. cit. p. 185.
12. Ibid.

13. Ibid. In my view Davidson has two quite distinct arguments against the ideas that there may be total failure of translation and partial failure of translation. That Davidson has these two distinct arguments is not always clear in the writings of others, for instance Rorty does not acknowledge this fact in either "The World Well Lost" reprinted in The Consequences of Pragmatism, Minneapolis: University of Minnesota Press, 1982, 3-13 nor in "Transcendental Arguments, Self-Reference, and Pragmatism," in P. Bieri, R. P. Horstmann, and L. Kruger ed. Transcendental Arguments and Science, Dordrecht: D. Reidel Publishing Company, 77-103. Crumley, op. cit., acknowledges Davidson's two part strategy but only defends the argument against total failure of translation.
15. Ibid.
16. Ibid.
17. Ibid., p. 192.
18. Ibid.
19. Ibid.
20. Ibid. 193-4.
21. Davidson argues this point in "True to the Facts", in Inquires into Truth and Interpretation, op cit.
23. Ibid. p. 185.
25. Ibid.
29. CPR, B308.
30. Ibid., B310.
31. Ibid., B344/A288.
32. Ibid., B71.
33. This quote is from one of the examiner's
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objections.

34. This line of defence was not suggested by the examiner mentioned in the previous note.

35. Nagel, op. cit., p. 98. Interestingly, Nagel seems to think that there cannot be contradictory things, pp. 97-8. However, Nagel does not explain how we might arrive at this knowledge.


37. Nagel was quoted in the preface as saying that philosophical questions might require philosophers of a different order of intelligence.
Chapter Nine: Naturalism, Dogmatism, and Skepticism

322. The purpose of this chapter is to discuss the relation between "naturalism", dogmatism and skepticism. The primary issue is whether the dogmatist might have more success if the Platonic conception of philosophy is abandoned in favor of a naturalistic conception of philosophy. The term 'naturalism' is intended in the sense that the goals and methods of philosophy ought to be modeled after that of the empirical sciences. It may be recalled that Boyd suggests, philosophical naturalism is the view that "philosophy is itself a sort of empirical science." [1] One idea heard frequently in the various "manifestos" offered by naturalists runs as follows: the skeptical problematic, especially the more "global" forms thereof, is simply the result of a certain conception of philosophy, generally this is thought to be what was described in chapter 2 as the Platonic conception of philosophy. Once this "outdated" conception of philosophy is abandoned in favor of naturalism, the traditional skeptical problematic disappears. The argument of this chapter is that naturalism in fact does not mitigate the skeptical problematic, rather, naturalism positively encourages skepticism. The conclusion of this chapter is that naturalism allows a defense of (at least one form of)
anthropic skepticism. The argument will be that anthropic skepticism can be raised as an empirical-scientific hypothesis; hence, there is no danger of begging the question against the naturalist.

323. Much of the discussion concerning naturalized philosophy is found under the rubric of 'naturalized epistemology'.[2] However, it seems pretty clear from the tenor of most discussions that 'naturalized epistemology' is not to be distinguished from the more general idea of 'naturalized philosophy'. That is, proponents of naturalized epistemology are inclined to believe that any philosophy worth pursuing must be consonant with naturalized epistemology. For example, if metaphysics or ethics are subject matters worthy of consideration then they too must be susceptible to naturalization. Although in another context there might be some call for distinguishing 'naturalized epistemology' and 'naturalized philosophy', for the present purposes these terms might be thought of as synonyms (following the example of much recent discussion).

324. A point which needs to be underscored is that philosophical naturalism is a metaphilosophical position which breaks in a radical way from Platonism. No longer is philosophy conceived of as an a priori and assumptionless discipline, rather, philosophy joins the ranks of the (empirical) sciences as an empirical and nonassumptionless
discipline. But the issue of to what extent naturalism rejects apriority is a moot question within naturalism.

325. As Maffie observes, "naturalists are united by a shared commitment to the continuity of epistemology and science." [3] Conversely, of course, traditional epistemologists are seen as denying the continuity of science and epistemology. However, continuity comes in degrees, and naturalists disagree amongst themselves as to how far this continuity extends. Maffie distinguishes between 'unlimited naturalism' and 'limited naturalism'. Unlimited naturalism is characterized as the attempt to "fit epistemology into science" whereas limited naturalism attempts to "fit science into epistemology". [4] One issue which seems to divide naturalists into these two camps is the epistemological question of to what extent is epistemology to be conceived of as an empirical science. Boyd, for instance, exemplifies the unlimited naturalist position in his contention that "there are simply not going to be any important analytic or conceptual truths about any scientifically interesting subject matter". [5] A limited naturalist such as Goldman allows that a priori considerations are relevant at least to "foundational" issues in epistemology. [6]

326. The distinction between limited and unlimited naturalism suggests that there might be a continuum between naturalistic and traditional epistemologists, at
least with respect to the question of the apriority of the discipline. At one end of this continuum lie traditional epistemologists, such as Kant and Descartes, who believed that epistemology ought to proceed entirely on an a priori basis. At the opposite end of the continuum lies the unlimited naturalism of Boyd and others. Limited naturalism sits at some point between these extremes: it allows that empirical-scientific investigations are relevant to epistemology, but allows some place for a priori reflection.

327. The relevance of this distinction is simply to indicate the compatibility of the present argument with the most extreme form of naturalism. As indicated above, the skepticism to be argued for is intended as a scientific-empirical hypothesis. Hence, the argument does not require an a priori methodology associated with traditional epistemology; nor the more limited use of a priori reflection associated with limited naturalism. The argument, in other words, does not depend on the assumption that there is some place left in naturalized epistemology for a priori reflection: the skepticism to be raised is relevant to both limited and unlimited naturalists alike, for both limited and unlimited naturalism take scientific results to be relevant to epistemology. Hence, if skepticism can be formulated as a scientific hypothesis, then skepticism is relevant to both
forms of naturalism; since both believe scientific results are relevant to epistemology. All scientific forms of skepticism are relevant to naturalized epistemology, but naturalistic epistemologists, as will be seen, deny that all forms of skepticism are relevant to the naturalistic point of view.

328. The naturalized program often sees its mandate as arising from the failure of traditional epistemology. For traditional epistemology, according to some naturalists at least, sets for itself the task of overcoming skepticism. The traditional epistemologist finds that she is unable to overcome skepticism, and thus, becomes a skeptic herself. The futility, or perhaps even absurdity of skepticism suggests that there must be something wrong with the methodology of traditional epistemology.[7] Devitt express such sentiments in the following passage:

The thoroughgoing sceptic sets the standards of knowledge (or rational belief) too high for them ever to be achieved. Our best science shows this. It shows us, for example, that if knowledge is to be gathered, we must eliminate implausible hypotheses without being able, ultimately, to justify that elimination. It shows us that there is always
an (empirical) possibility of error with any (normal) knowledge claim. Standards that our best science shows cannot be met short of instantaneous solipism—a doctrine that is literally incredible—should be ignored. Scepticism is simply uninteresting: it throws the baby out with the bath water.

Having dismissed the quest for certainty, for rock-hard foundations, and for ultimate justification, what then remains for epistemology? It is left with the task of explaining our coming to know science (and common sense)... The epistemic relation between humans and the world itself becomes the object of scientific study. Epistemology becomes naturalized. [8]

On this view philosophy might act in concert with various other empirical disciplines, e.g., psychology and evolutionary biology, to explain, as opposed to justify, our common sense and scientific beliefs about the world. Thus, naturalists such as Devitt might welcome the conclusions developed in the first eight chapters. The naturalist might think that the fact that the Platonic conception of philosophy cannot avoid anthropic skepticism
is further proof of the futility of pursuing the traditional or Platonic conception of philosophy. In fact, naturalists often present their position as a choice between the futile skepticism implied by the Platonic demand for a presuppositionless justification of our knowledge, and the fertile ground of an interdisciplinary empirical study which seeks to explain our knowledge. Given such a choice, the decision which ought to be made might seem obvious.

329. As the discussion in the opening paragraph of this chapter indicates, there is a tendency by naturalists to be dismissive of skepticism. Certainly if all skepticism were simply a consequence of adopting the Platonic conception of philosophy, then it would seem that a committed naturalist would have every reason to dismiss skepticism completely. However, as Maffie observes:

Naturalists typically leave open the possibility of a scientifically-based skepticism: whether or not we have knowledge of the external world is a contingent matter to be decided on the basis of the picture of human cognitive process, etc., given to us by science. [9]
Quine is even more to the point: "Skeptical doubts are scientific doubts." [10] Devitt too is careful not to completely dismiss all forms of skepticism. Immediately following the passage quoted above, where he suggests that the sort of skepticism which can be answered only by adopting instantaneous solipsism is uninteresting, Devitt parenthetically remarks:

(Though this form of skepticism is uninteresting, an example of Hartry Field (sic) brings out that something like it might not always be so. Suppose a person has the following theory. His life is humdrum except for his job. He works as the laboratory assistant for Superscientist, who has nineteen brains in a vat. Superscientist stimulates each of these brains to believe that it has a humdrum life except for its job. It believes that it is the laboratory assistant for Superscientist who has nineteen brains in a vat, each one being stimulated to believe...In these circumstances a sceptical hypothesis is certainly interesting.) [11]
Naturalists then are not dismissive of all forms of skepticism, only unscientific forms of skepticism. In particular, they are dismissive of the sort of skepticism which issues simply from the demands of traditional or Platonic philosophy.

Accordingly, it might seem to follow that the anthropic skepticism developed in the last chapter ought to be dismissed by the methodological naturalist. After all, if the arguments of the first eight chapters are sound, then such skepticism is the result of the Platonic conception of philosophy. Yet to say that anthropic skepticism can be dismissed simply because it is a result of the Platonic conception of philosophy is a non sequitur. For the dismissal of any skeptical doubt by the naturalist depends on the assumption that the skeptical doubt is not a scientific doubt. That is, if anthropic skepticism can be shown to be a scientific doubt, then anthropic skepticism must be considered by the naturalist.

Devitt's comments on Hartry Field's example further illustrate this point. One might think that the skeptical doubt, that we do not know our environment--because we cannot rule out the possibility that we are brains in a vat being deceived by a Superscientist--might be dismissed by the naturalist. To
think that in order to underwrite our claims to knowledge (or rational belief) we must rule out such "non-standard" hypotheses about our relation to our environment is to fall into the Platonic conception of philosophy. Papineau seems to capture the essence of this naturalistic reply:

The idea that the conceptual possibility of error suffices for epistemological error runs very deep. But...there is no immediate inference here. That we may be in error does not show that we are in error (nor even that it is the slightest bit probable that we are). [12]

Thus, unlike the traditional epistemologists, the naturalist does not see knowledge claims undermined by the mere logical or conceptual possibility of error. The claim to know that some hypothesis is in fact true is not undermined by the fact that there are alternative hypotheses which are also logically compatible with the data. On the naturalist's conception, in order for skeptical doubt to be taken seriously, it must be the case that there are good scientific and empirical reason for doubt. Thirty years ago, for example, it might have been
reasonable from a naturalistic perspective to doubt the "big-bang" theory (the so-called standard model) since most of the data (such as the background radiation of the universe) which is said to confirm it, were not yet known. However, this theory is now well confirmed by scientific standards. From the naturalist's perspective the skeptic begs the question if the big bang theory is doubted merely because there is a logical possibility that the steady state theory is true.

332. With respect to Field's example then, since the hypothesis that we might be brains in vats is not a scientific hypothesis, it follows that the naturalist might dismiss such a hypothesis. But as Devitt's remarks seem to indicate, it is possible that the hypothesis that we are brains in a vat might be one which is scientifically respectable. If the idea that scientists might be capable of maintaining and controlling a brain in a vat were not science fiction but scientific fact, then the hypothesis could not be cavillerly dismissed. (This seems to be what Devitt has in mind when he says that, "In these circumstances a sceptical hypothesis is certainly interesting".)

333. In any event, the argument to be presented is that anthropic skepticism is scientifically respectable; hence, it cannot be dismissed by the naturalist. The scientific version of this anthropic skepticism will be
presented prior to a consideration of what the naturalist might say in response.

334. It may be useful to set the stage here by considering a couple of quotes, one from Jerry Fodor and the other from Noam Chomsky:

...so long as the class of accessible concepts is endogenously constrained, there will be thoughts that we are unequipped to think. And, so far, nobody has been able to devise an account of the ontogeny of concepts which does not imply such endogenous constraints. This conclusion may seem less unbearably depressing if one considers that it is one which we unhesitantly accept for every other species. One would presumably not be impressed by a priori arguments intended to prove (e.g.) that the true science must be accessible to spiders. [13]

What is the relation between the class of
humanly accessible theories and the class of true theories? It is possible that the intersection of these classes is quite small, that few true theories are accessible. There is no evolutionary argument to the contrary. Nor is there any reason to accept the traditional doctrine, as expressed by Descartes, that human reason is a "universal instrument which can serve for all contingencies." Rather, it is a specific biological system, with its potentialities and associated limitations. It may turn out to have been a lucky accident that the intersection is not null. There is no particular reason to suppose that the science-forming capacities of humans or their mathematical abilities permit them to conceive of theories approximating the truth in every (or any) domain, or to gain insight into the laws of nature. [14]

Both Fodor and Chomsky seem to endorse anthropic skepticism, for both entertain the possibility that human reason might be limited with respect to the sorts of thoughts and truths which it might be capable of
entertaining. Furthermore, both do so according to what seems to be naturalistic precepts, namely, both see anthropic skepticism as a consequence of considering homo sapiens as a biological product formed by the process of natural selection. The remainder of this chapter is an attempt to amplify this insight.

335. The argument for anthropic skepticism requires premises which are acceptable to the naturalist. The first premise required by the argument is that there is a scientifically respectable notion of "difference in intelligence"; at least in some interspecies comparisons. It is commonly acknowledged that it is scientifically respectable to say, for example, that pigeons are more intelligent than salmon, dogs more intelligent than pigeons, chimpanzees more so than dogs, and finally humans are more intelligent than chimpanzees. This is of course not a definition of intelligence, but rather, this sort of data is what one might expect a scientific definition of intelligence to preserve. In other words, any scientifically respectable definition will preserve (at least most of) these observed gross differences in intelligence. A more precise scientific definition of intelligence might allow for more fine grained orderings of intelligence, e.g., between salmon and trout, or Labrador Retrievers and German Shepherds, and so on. The argument here depends only on the availability of the
vaguer notion of "difference in intelligence" which allows the sort of interspecies comparisons noted above. (It is perhaps worth noting that psychologists make use of intraspecies comparisons of intelligence, although the question of how to measure such differences is a much contested question. Nevertheless, there seems to be agreement among psychologists on at least one point: that there is an increase in intelligence throughout the ontogenetic sequence of humans, i.e., that there is an increase in intelligence from birth to adulthood. Operational definitions of intelligence in psychology must be consonant with this sort of data). [15]

336. The second premise is that there is no scientific reason to believe that there could not be creatures which vastly exceed humans in intelligence. A crucial piece of evidence for this claim is that there is a well documented correlation between brain size and intelligence--other things being equal. Humans, for instance, have a brain volume of about 1300 ml whereas the brain of an orangutan is only about 400 ml. The positive correlation between brain size and intelligence implies what is in fact the case: humans are more intelligent than orangutans. (The qualification "other things being equal" glosses over an important qualification to the observed correlation: intelligence correlates with the log of the brain versus body weight of a species. [16] The correlation suggests
then that it is not the absolute size of the brain which is the best indicator of intelligence, but the size of the brain compared with the body weight of a species. The example above of the orangutans is as fair as a comparison as one can draw between homo sapiens and the great apes, since orangutans are the closest to us in body weight. For expository purposes it will be assumed in what follows that the comparisons made are between species of similar body weight thereby allowing the body weight part of the correlation to drop out).

337. However, suppose there was another primate--to use a familiar example--which had a brain which exceeded that of humans in (gross) size by the same margin as humans exceed that of chimpanzees. That is, suppose there was a primate which had a brain of 2200 ml. If this well documented correlation between brain size and intelligence holds, then such beings ought to exceed humans in intelligence by the same margin that humans exceed that of chimpanzees.[17]

338. It seems, in other words, a perfectly valid piece of scientific speculation to wonder whether this correlation might be true of counterfactual possibilities such as the following:

Hypothesis 1: A primate with a brain volume of 2200 ml will exceed humans in
intelligence by the same margin as humans exceed that of chimpanzees.

339. As a corollary to hypothesis 1 the following skeptical hypothesis might be entertained.

Hypothesis 2: A primate which exceeds humans in intelligence by the same margin as humans exceed that of chimpanzees will be capable of gleaning information and thinking about aspects of the world which exceeds human ability by the same order of magnitude that human ability in this regard exceeds that of chimpanzees.

The underlying idea of this hypothesis is perhaps familiar by now. It seems plausible to assume that there are aspects of the world which lie beyond even the best educated chimpanzee to comprehend, such as, to use an earlier example, quantum physics. The information which a chimpanzee gleans, and its thoughts, (if it has any) seem to be about its "workaday" environment. The chimpanzee's "world" seems to be "carved-up" in relatively simple terms--at least from a human perspective. For the
chimpanzees or orangutans the salient aspects of the world seem to be such things as interspecies threats, leopards, eagles, and snakes; intraspecies threats, intraspecies opportunities for mating, grooming, playing; and the procurement of food such as fruits and bugs. Chimpanzees do not seem capable of entertaining such thoughts as the virtues of the big-bang theory as opposed to the steady-state theory and so on. Similarly, the human viewpoint might look very limited from the perspective of a primate with a brain of 2200 ml. As should be obvious from the discussion in the previous chapter, it is difficult to say other than by way of analogy in what sense our human perspective is limited. To describe in detail the limits of our viewpoint seems to presuppose that we have access to another "higher" point of view. Nevertheless, one might think, for example, that such primates might be amused that we humans are interested in only a few dimensions--four or twenty-six or whatever our current physics suggests. Suppose these primates investigate the universe on the understanding that there are as many dimensions as there are decimal places in the expansion of Pi. To such primates a human perspective will look as limited as the chimpanzee's perspective looks to humans.

340. If this line of argument is successful, then it seems that naturalism does not discourage the anthropic
skepticism, but rather, positively encourages it. For if one takes a naturalistic perspective, then one may assume the scientifically well documented correlation between brain size and intelligence. This coupled with the fact that there is no scientific reason to suppose that homo sapiens is the crowning phylogenetic achievement of brain development suggests the possibility of anthropic skepticism. This conclusion might be criticized from at least two different directions. One might think that this line of argumentation is not consonant with naturalism, on the one hand, or anthropic skepticism on the other. These points may be taken in turn.

341. The main reason one might think that the above line of argumentation is not consistent with naturalism is that, although the possibility of larger brained primates is a logical possibility, it is not a scientific possibility. Such an objection might run as follows. The idea of a primate with a larger brain is so remote that it is not worthy of serious scientific consideration. There are in fact no such primates as far as we know. Perhaps if we did discover such primates—or they discovered us—such a hypothesis might be worthy of consideration. As to the suggestion that such creatures might evolve, this seems unlikely. Even if they did evolve as quickly as humans evolved this process would still take millions of years. Science is not in the business of speculating about such
remote and distant possibilities.

342. Even if the rather narrow view of what constitutes legitimate subject matter for scientific speculation presupposed in the objection of the previous paragraph was correct, the objection would still not be successful—for this objection also presupposes that if such primates were ever to appear it would be through the course of natural selection. However, it will be argued in chapter 10 that humans will have the technology in the next century to genetically fashion such primates. That is, such creatures might come into existence through a nonnatural process of selection, in particular, by human directed genetic engineering. An objection based on the idea that primates with larger brains than humans is too remote a possibility for serious scientific speculation would have to show fault with the assessment of what is scientifically possible provided in chapter 10.

343. The second criticism which might be offered by the naturalist might be thought of as the mirror image of the first. The first criticism, in effect, says that if the hypothesis concerning primates with a higher form of understanding supports anthropic skepticism, then, this hypothesis is not a naturalistic one. Given that this hypothesis does support anthropic skepticism, the first criticism concludes that this hypothesis is not in fact a naturalistic one. The second criticism explores the
converse thesis, namely, given that the hypothesis about primates with a higher understanding is a naturalistic thesis, this hypothesis does not support anthropic skepticism.

344. This second line of criticism might be expounded as follows: Anthropic skepticism provides a "global" challenge to our beliefs. To say that our finitude might stand in the way of humans ever arriving at a correct view of the world--achieving the unity of thought and being--provides a challenge to our beliefs en masse. But science never proceeds on such a grand scale. Science can only provide more "local" challenges to our beliefs, since scientific discovery must always assume a massive background of unchallenged belief. One might think of it in terms of Neurath's metaphor of our beliefs being like the planks of a ship at sea: we can only replace these planks piecemeal--not en masse--without sinking. In the present case, one might think that the hypothesis about primates with a higher form of intelligence requires assuming certain empirical beliefs, e.g., the correlation between (body and) brain size versus intelligence. This correlation itself is based on data from such diverse fields as zoopsychology and paleoneurology. How then, it may be asked, can one challenge all our beliefs, including our scientific beliefs, on the one hand, and yet, on the other, appeal to certain scientific beliefs (such as the
brain/intelligence correlation) on the other? Given that the hypothesis about primates with a higher understanding is a scientific one, and scientific hypotheses never provide a global challenge to our beliefs in the manner required by anthropic skepticism, it follows that this hypothesis cannot support anthropic skepticism.

345. Before assessing the significance of this line of criticism it is perhaps worth noting that it does not need rely on what is often considered a naive view of science. That is, the objection above presupposes that science works piecemeal on our "web" of beliefs but thinkers such as Kuhn have taught us that science sometimes (in its revolutionary stages) challenges and changes large "blocks" of our "web" of belief. However, the above objection does not rely on any such "naive" view. For even Kuhn himself admits that scientists working in different "paradigms" still share their everyday beliefs and most of their scientific beliefs. [18] Thus, even on the Kuhnian view, scientific revolutions never challenge our beliefs en masse in the manner required by the anthropic skeptic. Conversely, it seems that the objection of the previous paragraph can be stated even from a Kuhnian model of science.

346. In order to meet this objection, it will be helpful to recall that anthropic skepticism is a form of noetic skepticism, which in turn emphasizes the
possibility of ignorance as opposed to error. In other words, anthropic skepticism, as it is defined here, is more closely allied with the first term of the following distinction:

**Anthropic ignorance:** The thesis that our human finitude might be such that we are forever ignorant about certain aspects of Being.

**Anthropic error:** The thesis that our human finitude might be such that we are forever in error about the nature of Being.

Anthropic skepticism, it will be recalled, was defined as the thesis that our human finitude might be such that we are forever unable to realize the unity of thought and being. As noted in chapter 1, there are two ways in which one might fall short of the ideal of the unity of thought and being: error or ignorance might stand in the way of realizing this ideal. Obviously, anthropic skepticism may be subdivided along these same lines. The two thesis are of course not mutually exclusive: there may be aspects of being which transcend human ability to think about, and, to the extent that humans can think about being, they happen to have the wrong conception of it.

347. It should be fairly clear that anthropic
ignorance is compatible with the claim that scientific hypotheses can never overturn all our beliefs at once. It may be consistently maintained that most of our scientific beliefs are correct, yet these beliefs describe only a miniscule part of the universe (or being). Thus, to cite an example used earlier, an anthropic skeptic might suggest that our current physics is more or less on the right track in describing a four dimensional space/time continuum. But suppose that this four dimensional "universe" is only a small part of a giga-universe, a universe with a billion dimensions. If this is so, then we have a more or less correct view of one tiny speck of being, and are forever ignorant of the rest. This ignorance, it may be supposed, is due to our biological nature. Just as chimpanzees will probably never be capable of understanding the idea of a four dimensional universe, even if they hang-out, as it were, at Oxford everyday, neither will humans ever comprehend a giga-universe, even if we sit around some "hyperuniversity". Of course, the anthropic skepticism would not be able to completely avoid attributing some error, as opposed to just ignorance to our belief system, for beliefs of the type that say that we have more or less a complete view of all there is, for example, would be false. However, it is plausible to assume that such beliefs about completeness only form a small part of the total corpus of beliefs.
348. If this line of argumentation is correct then the dogmatist will find no solace from the skeptic in adopting naturalism.

349. The argument of this chapter might be further clarified by considering it in application to a contemporary debate. The debate has to do with the question of how close theoretical physics is to finding a "final theory", or what is sometimes known as a "theory of everything". Perhaps the most prominent in this debate is Stephen Hawking's lecture "Is the End in Sight for Theoretical Physics?", in which he argued that the goal of theoretical physics might be achieved by the end of this century. [19] Realizing this goal would mean that we "have a complete, consistent, and unified theory of the physical interactions which would describe all possible observations." [20] Hawking is not alone among physicists in making such prophetic statements--although most now extend the time frame beyond the end of this century. [21] In any event, the argument of this chapter suggests that these physicists are perhaps over-optimistic about human abilities to reveal the ultimate nature of reality.

350. The connection with the debate in theoretical physics as to how close it is to discovering the "final theory" is not to suggest that, if the "final theory" in physics is discovered, then the complete truth about the universe has been discovered, i.e., that the unity of
thought and being has been realized. Such a view is perhaps plausible if one believed say that all truths might be reduced (in some sense) to truths of physics. Again, though, this is not the point. The point, rather, is that if there are good scientific (and thus naturalistic) reasons for being skeptical about human abilities to know that they have discovered the "final theory", then the naturalist cannot avoid the skeptical issue.

Interestingly, some of these physicists themselves raise the spectre of anthropic skepticism. Hawking speculates that computers might take over from humans as the physicists of the future. [22] Steven Weinberg in the following passage makes use of a Heraclitean sounding analogy:

There is another possibility that seems to me more likely and much more disturbing. Perhaps there is a final theory, a simple set of principles from which flow all arrows of explanation, but we shall never learn what it is. For instance, it may be that humans are simply not intelligent enough to discover or understand the final theory. It is possible to train dogs to do all sorts of clever
things, but I doubt that anyone will ever train a dog to use quantum mechanics to calculate the atomic energy levels. The best reason for hope that our species is intellectually capable of continued future progress is our wonderful ability to link our brains through language, but this may not be enough. [23]

Having raised the spectre of skepticism Weinberg does little to answer it. "My own guess", says Weinberg, "is that there is a final theory, and we are capable of discovering it." [24] The trouble it seems is that once you entertain such Heraclitean analogies they are not so easily dismissed. For if, as Weinberg allows, it is possible that we are not intelligent enough to discover the final theory, then it seems that there is no way for humans on their own to answer the question of whether they in fact are intelligent enough--after all, we are all party to the dispute. For instance, suppose that physicists today discover a "final theory" which meets all the desiderata that are usually suggested--it is a complete, unified, simple, beautiful theory. (One might wish to add other desiderata to this list, it would not affect the point). Such a theory, let us suppose, answers
all the questions theoretical physicists wish to raise. Suppose further that a hundred thousand generations of physicists are not able to challenge the theory--theoretical physics has had its last revolution (to use a Kuhnian term). Even under these circumstances there is no more reason to believe that humans are intelligent enough to discover the "final theory". For although the "final theory" proposed by the physicists might answer all our (human) questions, there does not seem to be any particular reason to believe that it answers all the relevant questions. Weinberg's own analogy is instructive. It is not simply that we are not going to be able to train dogs to answer questions about the atomic energy levels using quantum mechanics, it is that we cannot even get them to ask the questions. Similarly, beings with a higher form of intelligence might be amused that they are unable to train us to answer or ask certain questions. They might be amused that humans are completely satisfied with a dog's life. Given the possibility of higher forms of intelligence, it seems that we are not in a position to assume that any final theory proposed by physicists is final from the point of view of any species. At best we will have a physical theory which is "final" from the point of view of one particular hominid.

352. The optimism of physicists with respect to the question of human intelligence is further confirmed by
noting that scientists themselves, with a fair degree of frequency, use religious vocabulary to describe the aim of a "final science". Indeed, the history of science is replete with allusions to the aim of science considered as an attempt to discover the book of nature written by God, or even more directly, to discover the mind of God. While this is not unexpected with the scientists of the Enlightenment, such as Galileo and Newton, it is perhaps surprising to read Hawking describing the aim of science in more or less these terms. For Hawking refers to the ultimate laws of nature as the "mind of God". [25] However, if the argument of this chapter is sound, then there is no good reason to believe that the particular hominid, homo sapien, is intelligent enough to discover the ultimate laws of nature. For it may be the case, to paraphrase Heraclitus, that the wisest human physicist will appear an ape in relation to God, both in wisdom and beauty and everything else.

353. To conclude this chapter it will be useful to see how the skeptic's argument of this chapter actually goes further out on a limb than is strictly necessary. The argument of this chapter has been that our best empirical theory of the genesis of homo sapiens--Darwinian natural selection--also suggests that the dogmatic naturalists are incorrect in their belief that humans are capable of discovering the complete truth about the universe. The
idea, in a nutshell, is that there is no particular reason to believe that homo sapiens are some sort of crowning phylogenetic achievement in terms of the evolution of the brain, nor is there any reason to believe that beings with larger brains (ceteris paribus) will not be more intelligent and have a more complete view of reality. In particular, in terms of the argument above, hypothesis 2 encapsulates the skeptic's assessment of the data. However, suppose one disagreed with this theoretical assessment of the data. Suppose one believes that homo sapiens are as intelligent as any creature can be, or, perhaps more plausibly, even creatures who are more intelligent than us would agree with our (final) view of the universe. On such a view, then, hypothesis 2 above is false. Notice, however, how the assessment of hypothesis 2 has proceeded on a theoretical level. However, consistent naturalists will ultimately yield to the empirical data, to empirical observation. Thus, it seems that the ultimate way to adjudicate the debate between the dogmatic naturalist and the skeptical naturalist is by empirical observation. In particular, this means running the empirical tests implied by hypothesis 2 above. That is, one must test the intelligence of primates with brains of 2200ml. Of course, there are no naturally occurring primates with a brain this large, but then there is no naturally occurring einsteinium. In both cases science must
create the object of its investigation. The experiment proposed in the next chapter then is a crucial test to decide between the views of the dogmatic and skeptical naturalists.
End Notes: Chapter Nine


7. Cf., the relevant discussions in Goldman, Boyd, Maffie and Quine, op. cit. See also D. Papineau, Reality and Representation, Cambridge Mass.: Basil Blackwell, 1987, especially sections 10.7 and 10.8


11. Devitt, op. cit., p. 75.


17. Actually the correlation cited in the last note, of the log of the brain versus body weight is less than one (it is more like .66) which means that larger species typically have proportionately smaller brains. So a primate with the same body weight of an average homo sapiens but with a brain size of 2200 ml, according to this correlation, ought to exceed homo sapiens in intelligence by an even greater margin than that which humans exceed chimpanzees. (In other words, the example in the text assumes the correlation between the log of brain versus body weight and intelligence is 1.0. Again, this assumption is made simply for ease of exposition).


20. Ibid. p. 119.


22. "Is the End in Sight for Theoretical Physics?" op. cit., p. 139.


24. Ibid., p. 235.

Chapter Ten: The Task of Becoming Gods

354. This chapter continues a similar line of argument to that of the previous two chapters, namely: human attempts to grasp the unity of thought and being might pale in comparison to the attempts made by higher intelligences. The main difference between the version of the argument deployed against the dogmatic Platonist of Chapter 8, and the version deployed against the dogmatic naturalist of chapter 9, turns on the sense of 'possibility' employed by each argument. Against the Platonist, the logical possibility of higher intelligences was defended against Davidsonian objections. Against the naturalist, it was necessary to defend more than the mere logical possibility of higher intelligences: it was suggested that the idea of higher intelligences could be construed as a scientific possibility. It will be suggested in the next chapter that mere logical or scientific possibility is not sufficient to undermine the pragmatist's position. A (skeptical) rebuttal to the pragmatist's position will require demonstrating that the idea of higher intelligences is a practical possibility. The burden of this chapter is to show that the creation of higher intelligences is indeed a practical possibility. In effect, then, this chapter provides a reply to the
pragmatist, prior to a characterization of 'pragmatism' in the next chapter. While the discussion takes the reverse order one might expect—the reply is provided before the position is stated—this is done for exegetical reasons, viz., it will be useful to discuss pragmatism in conjunction with several other metaphilosophical issues in the next chapter.

355. There is perhaps a temptation to conclude from the line of argument developed in the first nine chapters, that philosophy is, or ought to be, dead. That is, the Platonic quest of demonstrating the unity of thought and being in a manner which makes no presuppositions, is impossible—if the argument of the first eight chapters is sound. The dogmatist's attempt to naturalize the quest for the unity of thought and being was also subject to skeptical questioning. One might conclude from this that philosophy—understood as the quest for the unity of thought and being—ought to fade from the cultural landscape much as alchemy did in an earlier period—a conclusion which Rorty has drawn from not entirely dissimilar considerations. But even if every argument presented in this work thus far were sound, this conclusion is a non-sequitur. At very best the conclusion which follows is that philosophy is impossible or dead, for humans.

356. But...philosophy might be possible for Gods.
Such a suggestion no doubt seems retrogressive. Western culture is still suffering the hang-over from two thousand years of religious intoxication. God and his doppelgangers have only recently died. Why exhume them? The idea of God or gods hitherto, not the least which is the Judeo-Christian idea of God, is just that: an idea. The present suggestion is that this idea could become more than that. It may be possible to create real physical Gods. Such Gods, in turn, may be able to complete the task of philosophy, at least that is what will be argued.

357. The argument of this chapter will proceed as follows. First, a recipe for creating Gods will be provided. Second, it will be necessary to justify the appellation of 'Gods' to the product of this recipe.

358. The essential ingredient for the creation of Gods is humanity. Humanity, however, must be altered to become more God-like. This task can be broken down into two subtasks: the creation of physically more god-like creatures, and the creation of conditions for creatures who are culturally more god-like.

359. On the physical side, the recipe for creating Gods out of humans requires that the new creatures have a much larger brain. The idea is that creatures with much larger brains will have greater intelligence than humanity, much as humanity has greater intelligence than apes, i.e., the suggestion is to create beings which stand
to us as we stand to apes.

360. To which it will be immediately objected that absolute brain size is not all that indicative of intelligence. Elephants, for instance, have much larger brains than humans, but even the most optimistic estimates of their intelligence rank them below most primates. This objection must be conceded. For often an increase in brain size is accompanied by an increase in body size. Larger bodies are generally more taxing on the brain's processing capacities, e.g., more neurons in the brain must be devoted to regulating the functions of the organs and muscles of the organism. What this means is that organisms with larger brains might not necessarily be able to devote all the extra brain size to intelligent functions. Thus, while elephants have larger brains than humans, they also have much larger eyes, livers, skin surface, etc., and all of these require a corresponding increase in brain capacity for the processing of greater amounts of information. The extra capacity of larger brains may have to be devoted to maintenance functions rather than intelligent functions; hence, the absolute size of a brain is no clear indication of the capacity for intelligent functions.

361. Recall, from the discussion in the last chapter, that research shows that there is a very strong correlation between, the log of brain versus body weight
ratio, and intelligence. To see this, one would plot the average log brain weight of all vertebrates against their average log body weight. For instance, according to such a graph if humans were an average species, then our body weight dictates that our expected brain weight would be about 210 grams. Our actual brain weight is 1350 grams. This is more than six times the mass one would expect if humans were an "average" vertebrate, if the correlation between our brain versus body weight was at the mean level. [1]

362. Even comparing humanity with arguably the second most intelligent animal, the chimpanzee, our brain is still comparatively large for our body size. If our brains were of the same logarithmic proportion to our body weight as a chimpanzee's, then our brains should be no more than about 500 grams in weight. Again, our brain mass of 1350 grams is more than twice the expected weight, if we were constructed with the same proportions as a chimpanzee.

363. The proportionately increased brain size is the most impressive morphological difference between homosapiens and chimpanzees. The morphological difference is more impressive when one considers that it has only been in the last two million years or so that the hominid line (including of course, homo sapiens) evolved from the other primates. This is a remarkably rapid rate of evolution—especially considering the large morphological
changes which have occurred. It is also interesting to note that there is an incredible genetic similarity between humans and apes. To make such a comparison the usual procedure is to compare the homologous proteins of nucleic acids. King and Wilson have found that "...the average polypeptide is more than 99 percent identical to its chimpanzee counterpart." [2] In more concrete terms, the genetic similarity corresponds to the genetic similarity between sibling species in other mammals. This point can be brought home when one considers that sibling species, such as lions and tigers, can produce hybrid offspring. Humans and chimpanzees, on the other hand, even though they are at least as genetically close as sibling species, cannot produce hybrid offspring.

364. On the basis of their genetic similarity, and the relatively recent evolutionary divergence, it would seem appropriate to expect that humans and chimpanzees would be morphologically similar. Since this is not the case, it raises the question of how it is possible for humans to have developed such a different morphology in such a short period of time, with such few genetic changes.

365. To answer this question consider the adult form of the chimpanzee which appears on the right in figure 1.[3] Morphologically the adult ape is less like humans, whereas with the neonate the resemblance is quite striking. The evolutionary explanation for this phenomena
is also the answer to the question of how the rapid divergence of chimps and humans was possible. Many of the morphological features of Homo sapiens are due to the preservation of neonate features of our ape-like ancestors into adulthood. This process of preserving the juvenile features of a species into adulthood is known as 'neoteny'.[4] Humanity is just one instance of this process that has occurred often in nature. Neoteny is achieved in some cases, including that of humanity, by a change in a few genes which control growth and development. To put it very crudely, genes which regulated development along the lines of the juvenile ape were emphasized, and genes which regulated growth from the juvenile to the adult form of the chimpanzee were suppressed.

366. The recipe for creating Gods calls for making genetic alterations to the human genome along the lines by which the genome of the chimps was transformed into that of humanity. While the ambition here is to have a similar effect on the genome of humanity, the cause in these two cases will be quite different. Evolutionary forces were the cause for the rise of the human genome. On the other hand, the rise of the genome of the Gods will probably best be effected by genetically engineering the human genome. Only a brief indication of how this problem might be tackled can be provided here.
Table 1. A comparison of body dimensions between adult "pygmy chimpanzee" and the ontogenetic sequence of the "common chimpanzee". [5]

<table>
<thead>
<tr>
<th>Body Dimensions (mm)</th>
<th>Chimpanzee:</th>
<th>Common</th>
<th>Pygmy</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Skull length</td>
<td>Infant 148</td>
<td>163</td>
<td>175</td>
</tr>
<tr>
<td></td>
<td>Juvenile 373</td>
<td>417</td>
<td>504</td>
</tr>
<tr>
<td>2. Arm length</td>
<td>Infant 1225</td>
<td>1405</td>
<td>1526</td>
</tr>
<tr>
<td></td>
<td>Juvenile 347</td>
<td>397</td>
<td>478</td>
</tr>
<tr>
<td>3. Arm span</td>
<td>Subadult 451</td>
<td>526</td>
<td>570</td>
</tr>
<tr>
<td></td>
<td>Adult</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Trunk height</td>
<td>Juvenile 451</td>
<td>526</td>
<td>570</td>
</tr>
<tr>
<td></td>
<td>Subadult 547</td>
<td>397</td>
<td>478</td>
</tr>
<tr>
<td></td>
<td>Adult</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
367. One fact overlooked thus far is that neoteny does not have to come-as-a-package, as it were. Different body parts can be disassociated in the development sequence such that some parts might be neotenic and not others. A case in point is the difference between the "common" chimpanzee and the "pygmy" chimpanzee. In table 1 it can be seen that the total skull length of the adult pygmy chimpanzee is the same as that of the juvenile stage of the common chimpanzee. All other parts of the body are closer in size to the adult form of the common chimpanzee, with the hindlimb length being almost equal. The lesson then is that the allometric curve may differ for different body parts, i.e., there may be different growth trajectories for different parts of the body. That is, various (genetically) disassociable body parts may vary in the degree to which they exhibit neoteny. For example, the pygmy chimpanzee has a neotenic head and "normal" hindlimb length. In the case of creating Becoming Gods, one wants to concentrate on increasing the growth of the skull and brain.

368. To genetically alter the allometric curve of the human skull and brain, naturally, requires that we are able to identify the appropriate genes. Currently more than 5 percent of the human genome has been mapped. Conversely, this still leaves about 95 percent of the genome unknown. However, the pace at which the human
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Genome is being mapped is increasing. Some noted biologists have gone on record as saying that we will have the outlines of the human genome by the turn of the century. [6] It should be emphasized, too, that the project outlined here does not require that we learn where all the genes are—just those that regulate the growth of the skull and the brain. The genes which perform this function may be very few in number.

369. One very good clue in this investigation is that both the common and the pygmy chimpanzee have similar genetic codes to ourselves and each other. It is more than likely that all three species will differ in the genes they have for regulating the growth and development of the brain. For as previously noted, all three species have different sized brains. Thus, by looking for just the differences in the genetic compliment between all three we may considerably reduce our work load. In fact it might be most fruitful, given the nearly identical genetic codes of the two chimpanzees, to first isolate the genes which have altered the growth trajectory of the pygmy chimpanzee's brain. Having discovered these we could look for analogies in the human genome.

370. Once the appropriate genes have been isolated the next step is to alter the genes, i.e., to perform some genetic engineering. A number of genetic engineering techniques are being developed. Only one such technique
will be discussed here, the one which, at present, seems most appropriate to the task.

371. The microinjection technique for genetic engineering allows the genome of a developing organism to be permanently altered. To put it simply, DNA is microinjected into a developing egg of an organism. The DNA attaches itself to the chromosome and then can be passed on genetically to succeeding generations by the usual mendelian processes. In this manner some researchers were able to partially correct a genetic defect in mice. The strain of mice in question suffer from reduced levels of a growth hormone which results in dwarfism. By inserting the DNA which contains the information for a rat's growth hormone, the researchers were able to effect a cure for the dwarfism. Unfortunately, the treatment was not totally successful as the growth hormone production was inappropriately controlled. An excess of growth hormone in the treated mice resulted in giganticism—mice one and half times their normal size. [7]

372. It is precisely this sort of growth control which the project of Becoming Gods hopes to achieve. It is encouraging to see that already such techniques are having limited success. Perhaps a conservative estimate of the time that it would take to develop and test such techniques for application to the human genome would be about twenty-five years, at the current rate of advances
in research. (It should be obvious that genetic engineering is only one possible way in which the end in question might be achieved. For instance, selective breeding of humans--Plato's suggestion--or the controlling of development through intrusion into the endocrine system are two others. However, only the most promising solution is discussed here).

373. The first part of the recipe for gods is straightforward, at least in theory. For the requirement here is simply to fashion a genome for a being whose intelligence we should expect exceeds our own, in much the same manner that our intelligence exceeds that of chimpanzees. The second part of the recipe calls for the creation of a god-like culture. There is, however, a certain theoretical obstacle for this part of the recipe.

374. The obstacle can be stated by way of a dilemma: The ambition is to provide these genetically altered beings with a god-like culture. If such a culture were available to us, then such genetically altered beings would be in fact unnecessary. If we had such a god-like culture then such beings could add nothing to it. We would already have in our possession the view sub specie aeternitatis. On the other hand, if we do not have in our possession such a god-like culture, then in what sense could such beings be said to be god-like? For these genetically altered beings will simply have larger brains
but none of the wisdom or knowledge associated with such deities.

375. This same objection can be put in a slightly different way: The best we could give such beings is our present culture. But our present culture is patently finite, that is very ungod-like. So the best we could do is to create beings with larger brains and provide them with our human, all too human, culture. But in what sense are these gods? or any more god-like than ourselves?

376. There is a sense in which this objection is correct. Obviously the best we can do for these genetically altered beings is provide them with our culture. Of course, this is the best we can do for any succeeding generation; be they gods or humans. However, the hope is that the succeeding generations will be able to improve on our mistakes, to overcome our limitations. Now in the case of succeeding human generations, if all goes well, then we hope for an arithmetical improvement in our culture. We hope that some individuals are capable of revealing new insights, we hope for Hegels and Nietzsches, for Darwins and Einsteins, for Cezannes and Munchs, Bachs and Curtises, to improve our culture. In the case of the genetically altered beings, the hope is for a geometrical increase in our culture. The hope is that these beings will be able to use our flawed, finite culture as a stepping-stone to an infinite culture, a god-like culture.
377. The sense in which this objection is mistaken is that the ambition was never to provide these genetically altered beings with a god-like culture, but only the conditions by which a god-like culture might be reached. Perhaps the most lasting contribution our culture might make to this god-like culture is the desire for a god-like culture. For we can only hope that they are able to improve on our vision of the truth, the beautiful and the good.

378. In practical terms this means that we must provide these genetically altered beings with the best education possible. How this should be carried-out in concrete terms is beyond the scope of the present work.

379. The question naturally arises whether the recipe for gods is successful. That is, would such genetically altered beings, empowered with the best education possible, merit the appellation of 'gods'. The answer depends in part on what one means by 'god', and also on the nature of the genetically altered beings. For instance, it would seem that even some present day humans might be deserving of the appellation 'god' if one adopts the homeric conception of deities. For the over-all impression one receives, as Plato saw, is that the Greek gods acted very human, all too human. The two things which seem to differentiate these gods from humanity is that they are immortal and have magical powers. Zeus has his
thunderbolt, Hades his helmet of darkness, and Poiseiden has his trident. It seems Zeus was correct to be worried about the increase in power humanity had received from Prometheus' gift of culture to humanity. For it seems today we could rout the Olympians just as they had once done so to the Titans. A thunderbolt is no match for a salvo of nuclear missiles.

While the post-homeric discussions of deities are more sophisticated, they lack the implicit consensus reached in the homeric world. The history of subsequent discussion, particularly by theologians and philosophers, reveals an uneasy tension between two ideas. On the one hand, there is what might be termed the 'metaphysical conception' of God which allows that God's essence is accessible to human reason. For instance, the metaphysical conception might suggest that certain predicates are applicable to God, omnipotence, omniscience and moral perfection, etc., and then invite speculation about the consequences which follow from attributing to God this essence. Questions such as "how can God's moral perfection be compatible with omniscience and omnipotence?" the so-called problem of evil, typically presuppose that human reason is capable of penetrating the divine nature. Much medieval and modern discussions presuppose something like this conception. On the other hand, there is what might be termed the 'existential conception' of Gods which says
that there is an unbridgeable gulf between God's infinite nature and our finite reason. (To put it in Sartrean terms, for us, God's existence precedes his essence). According to this conception, disputations about the problem of evil are merely exercises in human folly. Humans can penetrate the divine nature no more than chimpanzees can penetrate the nature of humans. The phylogeny of this view can be traced at least to the early Christians, and received eloquent expression in the writings of Luther, Pascal, and Kirkegaard. Even some of the writings of Descartes can be interpreted as being in accord with the existentialist conception of God. For it will be recalled that according to Descartes it is possible for God to legislate truths which are not humanly conceivable, e.g., that there might be mountains without valleys, and so on.

381. Many thinkers vacillate between the metaphysical and existential conception of God. For example, St. Thomas Aquinas thought that philosophical reflection on the nature of God is limited to saying what God is not, i.e., philosophical knowledge will yield insight into what predicates are incompatible with the nature of God. Aquinas believed that philosophers could not transcend the limitations of their human finitude which a complete understanding of God would necessitate. [8]

382. Not surprising then, the concept (or at least the
criteria for the application of the concept) of god is ambiguous. This complicates the task of making a judgment as to whether these genetically altered beings, Becoming Gods, merit the appellation of 'gods'. Further complication is added by the fact that the effect of such genetic alterations on intelligence is not known. Given our current knowledge, several scenarios are possible.

383. One scenario is that the increase in brain size has little or no effect on intelligence. Suppose that the initial attempt at genetic alterations creates a modest increase in brain size compared with humans: these beings have an average brain weight of 1500 grams as opposed to 1350 grams. Every test conceivable is given to these beings and no statistical difference in intelligence, when compared with humans, can be found. These beings do not outperform humans in any manner. It is then theorized that the increase in brain size was indeed too modest. The next generation of genetically altered beings are provided with brains which weigh 2000 grams on average. Again it is found that these beings demonstrate no greater intelligence than their human counterparts. At 3000 grams researchers actually discover a small decline in intelligence. At 4000 grams there is a massive fall-off in intelligence. A theory is proposed, and then finally accepted, to explain this phenomenon. Intelligence, it seems, requires a certain amount of integration of the
neural networks. An increase in brain size increases the number of neurons available for intelligence, but there is a corresponding loss of integration. As brains increase over 2000 grams the loss of integration outweighs the gain in neuron numbers, resulting in a net loss of intelligence. Below the 1200 gram level, the loss in neuron numbers is not compensated by an increase in integration. On this scenario then the level of human intelligence cannot be exceeded because of the very nature of the physical universe. The level of human intelligence can no more be exceeded than can the speed of light for both would require different sets of parameters for the physical universe. (Assuming here of course that the theory covers not only carbon based neural networks, but any analogue thereof, e.g., a silicon based intelligence).

384. It might seem that on this pessimistic scenario the genetically altered beings do not merit the appellation 'gods', since they are no more intelligent than humans. But such a conclusion is premature since it may well be that human, on this scenario, could, with some justice, be called gods, and, a fortiori, the genetically altered beings might also be called gods. The justification for such a description would be that no greater intelligence than that of humans is (physically) possible, hence, human intelligence is the most perfect which can be discovered in this universe. This scenario
accords well with the metaphysical conception of gods, which sees the nature of the gods accessible to human reason, since gods and humans are one and the same. Such a humanistic theism does not sit well with those that hold to the existentialist conception of the gods. Against these thinkers it might be pointed out that the gods they imagine are not (physically) possible, for no intelligence could exceed a human's (at least in this universe).

385. The previous scenario is really of little moment, since there is no empirical evidence whatsoever which suggests that the level of human intelligence is the ultimate in this universe. Human intelligence it seems is just one stage in the evolution of intelligence which we have every reason to believe can be exceeded, just as human intelligence exceeds that of other primates. The genetically altered beings will in all probability stand to us as we stand to chimpanzees in intelligence. And just as chimpanzees demonstrate only a limited understanding of humans, so too will humans be limited in their understanding of these beings. Thus, the most plausible scenario--given the available empirical evidence--is that the genetically altered beings will stand in relation to us just as the existentialist conception of gods suggests: these beings will far exceed our capacity to penetrate their nature. The existence of these beings would demonstrate the egoism of the metaphysical conception of
the divine: such a conception over-estimates the human intellect, or conversely, underestimates that of the divine.[9]

386. In the next chapter the experiment to create gods will be considered in connection with some of the philosophical problems discussed in earlier chapters.
End Notes: Chapter Ten


4. For discussion of the idea of neoteny see Gould, op. cit.


6. A good summary of the state of the art can be found in "Hacking the Genome", by Deborah Erickson, in *Scientific American*, April 1992, Vol. 266, no. 4, pp. 128-37.


8. *Summa theologiae*, la, 3, prologue. Of course Aquinas is continuing a tradition in Christian speculation which can be traced at least to Pseudo-Dionysius.

9. This is perhaps as appropriate a place as any to
respond to a criticism raised by one of the examiners. He writes: "I felt that Walker tried to make far too much use of the god metaphor." The examiner adds that this metaphor was appropriate in the beginning of the thesis "given its role in the history of the central issue", and that the metaphor might have been useful "as a figurative way of emphasising the intellectual gulf that might exist between higher intellects and humans." Unfortunately, it seems, I was not able to show such restraint: "Walker botches this, by suggesting that there would be a serious issue as to whether the higher intellects really were gods. (We're being naturalists here, right?)" Before responding to the criticism itself I should perhaps say what I take to be at stake. Even if I had "botched" the use of the god metaphor, as the examiner suggests, the main epistemological and metaphysical conclusions would remain unscathed. For as long as the examiner admits the possibility of higher intellects--as he seems to--then the relevant conclusions could be restated. Instead of saying that our comprehension of the complete truth might pale in comparison to the comprehension of a god, I could say that our comprehension might be much more limited than that of a higher intellect. Instead of saying that the best hope for making progress in metaphysics lies in creating gods, I could say that it lies in creating higher intellects. The text might be renamed **Becoming Higher Intellects.**
What would be affected are two subthemes of the text. One of these is that there is a continuity between the problems faced by Heraclitus and Plato regarding our relation to the divine, and our present situation. If, as the examiner suggests, the fact that naturalism somehow precludes taking seriously the suggestion of whether higher intellects were gods, then the sort of continuity I suggest in the work does not exist. For I suggest in the text that literally the same problems which Plato confronted must be taken seriously by the naturalist and the pragmatist. If the examiner is correct, then, there is at best a "figurative" association between Plato's problems and those of a pragmatist or naturalist today.

The other subtheme which receives only brief consideration in this work is the religious implications the creation of higher intellects might entail. Obviously, if we are not to take seriously the question of whether such higher intellects were gods, then the religious implications of this work would be greatly diminished. Certainly, for example, under such circumstances there would be little to my suggestion that becoming gods is inverted Christianity (see chapter 11).

While only parts of this work would be affected if this criticism is correct, nevertheless, it is a major criticism. Unfortunately, however, I cannot understand the examiner's reason for the criticism. As far as I can see,
the suggestion seems to be that there is some inconsistency, or at least tension, between holding to naturalism, while at the same time taking seriously the question whether the higher intellects were gods. It is perhaps true that there are certain uses of the term 'naturalism' which would in fact demonstrate an inconsistency here. There are some understandings of the term, for instance, where by definition a naturalist is committed to an ontology which excludes deities. The contrast here seems to be 'naturalism' versus 'supernaturalism'. This is certainly a legitimate use of 'naturalism', one which can be traced back at least to the scholastics. If this is the sense of the term which I employed in the work, then the examiner would be correct to claim that I had "botched it". The reason, obviously, is that I would be claiming that there are no divine entities, since "naturalism" is endorsed at this stage of the argument, and that it was an open question whether beings with higher intellects really were divine. According to the definition of 'naturalism' under examination, this question would have already been answered in the negative.

However, this is emphatically not the sense of 'naturalism' which I intended. At the beginning of chapter 9, I attempted to define 'naturalism' as a metaphilosophical doctrine which holds that philosophy is
itself an empirical science of sorts. I have trouble seeing where the tension or inconsistency arises when this sense of the term is employed. The argument would have to be that there was some inconsistency or tension between asking whether some creatures are divine, and holding a philosophy which is empirical. Certainly I am not suggesting that an a priori proof might answer the question of the divinity of such creatures. Instead, I suggest running an experiment, one which is fairly simple in theory: (i) attempt to create higher intelligences, and (ii) see if these creatures have (enough of) the attributes traditionally associated with deities. The first part of this chapter describes the task suggested by (i), and the second part discusses (ii).

Perhaps I am missing something here, for I fail entirely to see the examiner's point. The problem may lie in the fact that I do not understand what he means by "taking seriously the question". As far as I can see, a consistent naturalist should take seriously this question, at least in the sense of not prejudging the issue in absence of the empirical data—-but considering the empirical data along the lines suggested by (i) and (ii) is all the seriousness required by the argument.
387. The aim of this chapter is to show why it is plausible to endorse a position which might be thought of as 'metaphilosophical skepticism'. This will involve summarizing and drawing out the implications from the previous discussions of Platonism and naturalism. This metaphilosophical skepticism will also be related to two other metaphilosophical positions which have not figured very prominently in the discussion hitherto, viz., Lewis' "opinionism", and pragmatism. Finally, the religious dimension of this work will also require further discussion.

388. It may be useful to begin with a schematic summary of the conceptual relations between the various responses offered to these positions. The answers offered to the following questions, then, determine the response which is appropriate:

1. Ought we to ask whether the goal of the unity of thought and being might be realized?
   a). Yes  b). No
   lb. Pragmatism
2. Ought this goal be pursued in accordance with the percepts of naturalized philosophy?
   a). Yes b). No

3. Do we have reason to believe that this (naturalized) goal may be realized by humans?
   a). Yes b). No

   Do we have reason to believe that this (Platonistic) goal may be realized by humans?
   c). Yes d). No

Dogmatic Skeptical Dogmatic Skeptical
Naturalism Naturalism Platonism Platonism
(Weinberg) (Chomsky) (Hegel) (Kant)

Questions 1 and 2 are of a metaphilosophical nature while 3 is perhaps best seen as merely philosophical. The conclusion to be drawn is that one ought to endorse a position of metaphilosophical skepticism since there is no way for humans on their own to answer these questions. A couple of remarks about this schema are in order. The first is merely to emphasize that it is not intended to mark the conceptual relations among the various metaphilosophical positions themselves, but rather, the
responses which will be offered to them. As a classificatory scheme of the positions themselves this schema has glaring faults. For example, at least some pragmatists, James and Dewey among them, have prided themselves on their adherence to naturalism. Yet this schema does not consider the pragmatist/naturalist combination. This is not an omission but rather simply flags the fact that the response offered to pragmatists is the same whether they adhere to naturalism or not. The other remark is simply to note the absence of Lewis' position in this schema. While it does not fit neatly into this schema, Lewis's views will be discussed along with the other metaphilosophical positions. In fact, the positions will be discussed in this order: philosophical naturalism, Platonism, Lewis's opinionism, and finally pragmatism.

389. The particular version of naturalism considered here takes seriously then the question of whether the unity of thought and being might be realized. This puts the naturalist in opposition to the pragmatist who thinks that we ought not to ask such questions (as 1 above). The view that philosophy ought to be naturalistic in its orientation naturally puts the naturalists at odds with various forms of Platonism (question 2). With respect to the issue of skepticism (question 3) it was argued that there is not the slightest reason to suppose that homo
sapiens are the highest form of intelligence (physically) possible, nor that there is any reason to suppose that this species is capable of forming the most comprehensive view of the universe which is (physically) possible. Hence, the argument here sides with Chomsky against Weinberg. According to naturalistic precepts, however, this issue must ultimately be decided empirically. That is, against dogmatic naturalists which suggest that human scientific endeavours will (eventually) yield the unity of thought and being—the complete truth—the skeptical naturalist suggests that it is a legitimate scientific hypothesis to suggest that homo sapiens are not capable of forming an adequate conception of the unity of thought and being. This hypothesis was articulated as the suggestion that it seems a real physical possibility that there might be larger brained primates which stand to us in intelligence as homo sapiens stand to chimpanzees. Such beings, it was conjectured, might have a conception of the universe which transcends that of homo sapiens in the same manner in which the human conception transcends that of the chimpanzees' very limited conception of the universe. Moreover, as was argued in chapter 9, if this skeptical doubt were merely an artifact of the Platonic conception of philosophy, then the naturalists would be within their rights to dismiss such skepticism. However, since this is a scientific hypothesis, a scientific skepticism, as it
were, the dogmatic naturalist is not in a position at present to dismiss this doubt. Indeed, the last chapter described an experiment which would help decide the issue between the dogmatic naturalist and the skeptical naturalist, i.e., the genetic engineering of larger brained primates. If such an experiment were carried out, and such larger brained primates were far more intelligent (and thus 'Becoming Gods' seemed an apt name for them), then the issue would be decided in favor of the naturalistic skeptic. On the other hand, if larger brained beings showed no increase in intelligence, or perhaps even a decrease in intelligence, then this would be at least some evidence in favor of the dogmatic naturalist's position.

390. The skeptical naturalist's position might be further elucidated by considering what might be an effective criticism of the position. It was suggested at the end of chapter 9 that the disagreement between the dogmatic and skeptical naturalist can ultimately be decided experimentally, i.e., by undertaking experiments of the sort described in chapter 10. However, a possible rejoinder by the dogmatic naturalist is that the experiment is not technically feasible and never will be. Clearly the experiment described in chapter 10 is beyond our current abilities. The claim that it will be technically possible in the next century to perform such
an experiment is based on an extrapolation from our current abilities. However, it may be that this extrapolation is incorrect. Certainly a naturalist—not even a skeptical one—can dismiss a priori the possibility that there might be unforeseen difficulties in isolating or manipulating the appropriate genes. If a case could be made—out which suggests that it will never be technologically possible to create such a larger brained primate, then, the dogmatic naturalist might be in a position to dismiss the skeptical doubt. For if it is not technically possible for us to perform the relevant experiments to decide the issue, then, the skeptic's claim to the scientific status of the hypothesis might be put in jeopardy. For on this scenario there is no way for science to investigate the hypothesis. [1] Presumably the dogmatic skeptic might wish to dismiss such doubt as merely a symptom of "traditional philosophical skepticism". However, for the dogmatic naturalist to successfully rebut the skeptical naturalist along these lines, they would have to show not only that such genetic engineering is forever beyond our technical competence, but also that the same ends could not be achieved by some other means, e.g., by selective breeding. While this line of argument might save the dogmatic naturalist's position, there is in fact no solid evidence that performing such an experiment is forever beyond our technical competence. Hence, it seems
that at least until this experiment is carried-out, the skeptical naturalists has a solid position.

391. It is worth noting that even if the empirical evidence turned out in the skeptical naturalist's favor, i.e., the larger brained primates turned out to be far more intelligent than humans and had a more comprehensive vision of reality, this would not mean that science itself is not capable of yielding the unity of thought and being. What would follow is that human scientific endeavors would never yield the unity of thought and being. Whether the science of the Gods could yield the unity of thought and being is not for us to say. Indeed, even if the Gods are able to realize the unity of thought and being there is no reason to suppose that they will necessarily do so along naturalistic lines. Perhaps, the Gods will turn out to be Platonists or pragmatists--more on this anon.

392. Turning now to Platonism it will be recalled that the Platonist sides with the naturalist against the pragmatist on the question of whether we ought to ask if the unity of thought and being might be realized (question 1). The Platonist and the naturalist disagree on the methodological question of whether, or at least to what extent, philosophy ought to be naturalistic in its methodology (question 2). The argument of the second part concluded with a skeptical answer to the question of whether humans might be able to realize the unity of
thought and being (question 3). It may help to recall the dialectic of the first two parts. The argument of the first six chapters was that the most plausible position for the dogmatic Platonist to adopt was a form of idealism, in particular, one based on the metaphysics and epistemology of a certain logical law. Certainly this idealism was not a sufficient basis upon which to assert the unity of thought and being, i.e., the complete truth of the world, but it was certainly a step in the right direction. Indeed, given that there is no prelogical language this is a necessary step in proving the case against the skeptic. For if the skeptic has reason to doubt the truth of this logical law, then they have reason to doubt our whole language, since there is no part of the language which does not presuppose a certain logic—(that is, again, there is no prelogical language). This dogmatic idealism was criticized in chapter 7 for not being able to meet its own standards of success, i.e., the dogmatist's position was criticized for making undemonstrative assumptions. In chapter 8 the skeptic's position itself was defended by an appeal to the very idea of alternative conceptual schemes. Thus, it would seem that if the arguments of chapters 1 through 8 are sound, then the dogmatic Platonist position is not one which can be coherently endorsed.

393. As was the case with the dogmatic naturalist, it
might help to elucidate the dogmatic Platonist's position by considering what would constitute a successful rebuttal. Certainly it is conceivable that there is a fatal flaw in the arguments of chapters 1 through 8. Demonstrating this would of course nullify this critique of their position but this would not constitute a positive defence. What would constitute a successful demonstration of the dogmatic Platonist's position itself? It should be clear at this point that defending such a position would involve making plausible the claims attributed in chapter 8 to both Hegel and Davidson: (i) that we can attach no sense to the idea of a perspective which transcends our own, and (ii) that this can be demonstrated a priori. The dogmatic naturalist, it was argued, also believes (i) but on empirical grounds. In addition to the difficulties mentioned in chapter 8, the discussion of the last two chapters suggest further problems in maintaining both (i) and (ii). The trouble, it seems, is that on Hegel's and Davidson's view we may know a priori the outcome of the experiment to create larger brained beings. We know a priori that if these creatures are thinkers, then their thought will be more or less the same as ours. For recall that Davidson believes that the language of even an ideal epistemic agent, an omniscient interpreter, is fully translatable into our own language, since all languages are intertranslatable, and that even an omniscient
interpreter will translate such that most of ours beliefs are true. Thus, on Davidson's view we know prior to performing the experiment described in the last chapter that such beings will have more or less the same view of things (if they have a view at all). In other words, if one accepts Davidson's view, then, there is little reason to take the time and effort required to perform the experiment of the last chapter, since we know a priori the outcome. Indeed, we know a priori that even creatures with brains the size of a football field, if they are thinkers and language users, will have a language which we can fully translate and share most of our beliefs with us. The difficulty, of course, is to explain how we might arrive at such a priori knowledge about the world. This is perhaps not an insurmountable problem, but it does not seem to have been addressed by either Hegel or Davidson.

394. Suppose one believed that the various difficulties raised against the dogmatic Platonist are sound. It would seem then that dogmatic Platonism is untenable. Yet, this last thought is a non sequitur. For even if the arguments which comprise the skeptic's rebuttal to the dogmatist are sound, at best they would apply to humans (or creatures which share our same rational nature. The term 'human' of course is understood as applying not only to homo sapiens but any creature which shares our same rational nature). That is, at best
the skeptic's arguments (of chapters 7 and 8) demonstrate that dogmatic Platonism is untenable for humans. What the arguments do not show is that Platonism could not be endorsed by God, or perhaps Becoming Gods. Of course this is not to say that we know that Platonism is a coherent possibility for a higher intelligence, only that we cannot rule out this possibility. In other words, we cannot rule out the possibility that the Gods could form a presuppositionless demonstration of the unity of thought and being.

395. The point of the last paragraph might be reinforced by using an analogy which turns the tables on the skeptic. Consider for a moment a type of experiment performed by psychologists to test a child's concept mastery. It has been found that many children have initial difficulty mastering the concept of volume. This is sometimes demonstrated by having children examine two beakers of different dimensions but of equal volume. In a typical experiment one beaker is tall with a small diameter, the other is short with a correspondingly larger diameter. The usual mistake for children to make is to assume that the taller beaker is able to hold more water. Thus, when asked what will happen if the water from the (full) tall beaker is poured into the squat beaker children answer that the squat beaker will overflow. Immediately upon demonstrating that the squat beaker does
not in fact overflow when the water from the taller beaker is poured into it, children are asked if the squat beaker will fill the tall beaker when poured back into the tall beaker. Young children typically believe that the tall beaker will not be full—even if it is pointed out that the water from the squat beaker just came from the full tall beaker. The point of the analogy then is this. The skeptic's doubts about the possibility of dogmatic Platonism may be like that of the child's doubts about the volume of the tall beaker not being the same as the squat beaker. What from a child's perspective seems impossible—the tall beaker being equal in volume to the squat beaker—is perfectly possible and explicable from an adult perspective. Similarly, although dogmatic Platonism might seem an impossibility from a human perspective, nevertheless, the skeptic is not in a position to say that such a position could not be held by God, or Becoming Gods. For skeptics to suggest otherwise is for them to assume that they already know what is possible or impossible for beings with a perspective which stands to ours, as our perspective stands to a child's or a chimp's.

396. To summarize, then, the view here is that it would take Gods, or at least the effort to create Gods (larger brained primates), in order to decide the Platonism versus naturalism issue (question 2), and the dogmatism versus skepticism issue. In other words, the
view is what might be thought of as a metaphilosophical skepticism, we do not know which of the four philosophical views just canvassed—dogmatic versus skeptical Platonism, and dogmatic versus skeptical naturalism—ought to be endorsed. The way out of this difficulty is to carry out the experiment described in the last chapter. For either this type of experiment is a success, we are able to create beings with a higher form of understanding, in which case we may bequeath to them the problem of the unity of thought and being and the question of the methodology of philosophy; or, this type of experiment is not a success, we are unable to create beings with a higher form of understanding, in which case the skeptical naturalist's doubts might be dismissed as idle and the last hope for Platonism will have vanished. In other words, this would leave dogmatic naturalism alone which was both coherent (given the refutation of Platonism of parts 1 and 2) and which did not appeal to merely idle doubt—any residual doubt suggested by the skeptical naturalists might be dismissed as idle.

397. Two further metaphilosophical positions require discussion, Lewis' "opinionism" and pragmatism. Concerning the former, recall from chapter 2 that Lewis suggests that philosophy, in the final analysis, is a matter of opinion. Recall also that according to MacIntyre this is the most prevalent metaphilosophical view of analytic philosophers.
Thus, on Lewis' conception of philosophy, ultimately, there is no more to justifying this work than to say that it is the opinion of the author that it is correct--there is nothing more that one can do. This may sound awfully cavalier but in the end there is no more one can do in philosophy, according to Lewis at any rate. This is not to suggest that Lewis thinks philosophy is easy, it may take much effort and ingenuity to come up with a well worked-out view, it is simply that once the view is well worked-out there is nothing more to decide between competing philosophical opinions. This seems to hold across the board, whether one believes in realism about unactualized possibles or in realizing the ancient dream of becoming as godlike as possible. This metaphilosophical view seems to apply not only to what is believed but who believes it. Thus, in terms of their ultimate justification of a philosophical theory, the opinion of a professor at Princeton does not outweigh that of a mere graduate student. Applying this view consistently means that even if we are able to construct beings with a higher form of understanding, any philosophical views they hold, ultimately, are no more justified than are those held by Lewis. Hence, in terms of making progress in ultimately justifying a philosophical theory Lewis would probably be unmoved by this work--the philosophy of the Gods is a matter of opinion too. The trouble in evaluating Lewis'
view stems mainly from the fact that he does not say anything about the self-referential case, viz., is it an opinion that philosophy is ultimately a matter of opinion, or is the view that philosophy is a matter of opinion founded on something more substantial? In other words, are metaphilosophical considerations themselves a matter simply of opinion or not? If the former then Lewis ought not object if we proceed on the opinion that there might be more than mere opinion in resolving metaphilosophical disagreements than mere opinion. On the other hand, if the view that philosophy is a matter of opinion is rooted in something more than opinion—e.g., suppose that "opinionism" is demonstrated by means of a presuppositionless transcendental argument—then again Lewis ought not mind if we confirm this view with the Gods. For if "opinionism" is true of philosophy in general, as opposed to just human philosophy, then this view ought to be endorsed by the Gods. (To put it in the metaphysical vernacular: are there possible worlds where some sort of "foundationalism"—Lewis's term—as opposed to opinionism, is the correct metaphilosophical position to endorse?) The view here is that for all we know, the Gods might agree with Lewis. On the other hand, they may be Platonists or naturalists. Ours is not to say.

398. The last metaphilosophical position to be considered here is potentially more damaging. This
position is 'pragmatism'. Of course as Rorty notes, "'Pragmatism' is a vague, ambiguous, and over worked word." [2] The species of pragmatism to be considered here is the one endorsed by Rorty himself. Rorty's version of pragmatism is partly defined by its opposition:

...pragmatists see the Platonic tradition as having outlived its usefulness. This does not mean that they have a new, non-Platonic set of answers to Platonic questions to offer, but rather they do not think we should ask those questions anymore. [3]

Among the Platonic questions which Rorty would like philosophers to abandon is the question of the unity of thought and being. Indeed, this question is perhaps foremost among the questions which Rorty believes ought to be abandoned. Hence, Rorty's version of pragmatism is opposed to the views suggested in this work. For the present discussion is animated through and through with Platonic questions.

399. More specifically Rorty might be inclined to dismiss this work as a grotesque form of philosophical atavism. The reason Rorty might be so inclined can be
I can crudely sum up the story which historians like Blumenberg tell by saying that once upon a time we felt a need to worship something which lay beyond the visible world. Beginning in the seventeenth century we tried to substitute a love of truth for a love of God, treating the world described by science as a quasi divinity. Beginning at the end of the eighteenth century we tried to substitute a love of ourselves for a love of scientific truth, a worship of our own deep spiritual or poetic nature, treated as one more quasi divinity.

The line of thought common to Blumenberg, Nietzsche, Freud, and Davidson suggests that we try to get to the point where we no longer worship anything, where we treat nothing as a quasi divinity, where we treat everything --our language, our conscience, our community--as a product of time and chance.[4]
Rorty is of course citing a line of thought in the above passage with which he is deeply sympathetic. Presumably Rorty would see the idea of Becoming Gods as just one more attempt to worship something. The charge of "atavism" then stems from the fact that the work here seems to have more in common with the history of the Enlightenment which Rorty describes, than with the position Rorty attributes to Blumemberg, Nietzsche, Freud, and Davidson. For the most frequent criticism raised by pragmatists is that the very asking of such questions seems to presuppose a "god's eye" point of view. As Rorty says, we need to get beyond the need to worship something. Philosophy ought to have a "human face". [5]

400. How should the issue be decided between the pragmatist and those that wish to continue to ask Platonistic questions? Answering this question is particularly difficult from Rorty's point of view. For it is not as if Rorty proposes some master argument which demonstrates the incoherency of asking Platonistic questions. The procedure in such a case would be to evaluate the worthiness of the argument. However, any such argument, according to Rorty, "is bound to be inconclusive and question-begging". [6] Rather than attempting to show the incoherency of the Platonistic questions, Rorty suggests the pragmatist proceed more along the following lines: "try to ignore the apparently futile traditional
questions by substituting the following new and possibly interesting questions". [7]

401. But while the issue between the pragmatist and those that ask Platonistic questions cannot be decided on the grounds of logical coherence, according to Rorty at least, there do seem to be some criteria for adjudication. For Rorty suggests that the pragmatist's questions are "possibly interesting" as opposed to the Platonist's "apparently futile" questions. Also in the quote in paragraph 398 Rorty says that the Platonic questions have "outlived there usefulness". This then is the familiar pragmatists' demand to know the "cash value" of questions and proposals. As Rorty suggests on another occasion, Platonist and Kantian philosophers never offer "relativism or skepticism or nihilism as a serious suggestion about how we might do things differently. These positions are adopted make philosophical points—that is, moves in a game played with fictitious opponents, rather than fellow-participants in a common project". [8]

402. Whether the project of Becoming Gods meets Rorty's demand that those asking Platonistic questions show that they are still "useful", "interesting" and offer "serious proposals about how we might do things differently" is certainly open to question. If the project were successfully carried out it would most certainly meet these desiderata. In fact the potential
ramifications of realizing this project are so profound that there is really no equivalent in human history. Perhaps the closest analogue is the story of the birth of Christ, with two minor changes. One is that instead of God becoming a man, humanity would become Gods. The other minor change is that unlike the story of Christ, this one would be true. (Of course to expand upon this potentially controversial analogy is beyond the scope of this work. In aphoristic terms Becoming Gods is verkehrt Christianity).

403. A slightly different way to respond to Rorty's version of pragmatism is to ask what makes him so sure that the Platonic questions really are futile. To this end it is illuminating to consider a quote from Putnam's "Why is a Philosopher?". Putnam in the following passage is commenting on what he perceives is the failure of the grand projects of metaphysics and epistemology to explain such notions as truth, warrant, reference, and value.

...I can sympathize with the urge to know, to have a totalistic explanation which includes the thinker in the act of discovering the totalistic explanation in the totality of what it explains. I am not saying that this urge is "optional," or that it is the product of events in the sixteenth
century, or that it rests on a false presupposition because there aren't really such things as truth, warrant, or value. But I am saying that the project of providing such an explanation has failed.

It has failed not because it was an illegitimate urge--what human pressure could be more worthy of respect than the pressure to know?--but because it goes beyond the bounds of any explanation that we have. Saying this is not, perhaps, putting the grand projects of Metaphysics and Epistemology away for good--what another millennium, or another turn in human history as profound as the Renaissance, may bring forth is not for us today to guess--but it is saying that the time has come for a moratorium on Ontology and a moratorium on Epistemology. Or rather, the time has come for a moratorium on the kind of ontological speculation that seeks to describe the Furniture of the Universe and to tell us what is Really There and what is Only a Human Projection, and for a moratorium on the kind of epistemological speculation that seeks to tell us the One Method by which all our
beliefs can be appraised. [9]

Putnam, in this passage, raises a couple of issues which are germane to the present discussion. One issue of course is that Putnam suggests a "pragmatist's" response to the fundamental questions of metaphysics and epistemology. For it seems clear that Putnam would reject the question of the unity of thought and being for it is precisely the sort of question which Putnam believes we ought not to ask--that there ought to be a moratorium on. Thus, at least on this point Putnam is in agreement with Rorty. (Although it is clear that in this passage Putnam is attempting to distance himself from Rorty's analysis of why this project has failed, for instance, this may be seen in Putnam's reference to the "optional" metaphor which Rorty often uses). For the present purposes what is perhaps more interesting is Putnam's conditional rejection of questions such as whether the unity of thought and being might be realized. For Putnam does not say that these questions ought never to be asked by humanity again, only that at present we ought not to ask them. He allows that in another historical epoch these questions might yet be worth pursuing. As Putnam, notes, we cannot guess today what "another millenium, or another turn in history as profound as the Renaissance, may bring forth". Similarly,
it would seem that Rorty himself cannot dismiss the possibility that "another millenium or another turn in history as profound as the Renaissance" might allow the Platonic questions to be revived once again. Certainly this seems to be a consequence of Rorty's "historicism", i.e., "...that the investigations of the foundations of knowledge or morality or language or society may simply be apologetics, attempts to eternalize a certain contemporary language-game, social practice, or self-image." [10] Of course one would think that the same moral applies, mutatis mutandis, for pragmatism itself. For if, as Putnam and Rorty believe, we have failed in the project of finding foundations for knowledge and morality, it does not follow that a culture in a thousand years hence will also fail in this task. To say that because we have failed in this task no other culture epoch will be able to complete this task, seems to be an apologetic for our own failure, an attempt to eternalize a certain contemporary language game, social practice, or self-image. It seems plausible to believe that Rorty would concede this point. He might say that this does not affect his point that, at least for the present, the Platonic questions ought to be abandoned as futile. Whether the questions might be revived as interesting and useful a thousand years hence is not for us to say.
of as a (neo-) Hegalian line of reasoning. For it emphasizes the tentativeness of our conclusions precisely because humanity proceeds through a process of cultural-historical evolution. Since we stand at an intermediate stage of this development we are not in a position to deny that our present conclusions might be rejected as new insights are won. But of course this (neo-) Hegalian line of reasoning emphasizes only the cultural-historical aspect of humanity. If one thinks in (neo-) Darwinian terms, then, it seems that a similar conclusion ought to follow. That is, if the grand projects of Epistemology and Metaphysics might be revived by a turn in our history as profound as the Renaissance, then, it seems that a turn in our biology as profound as that of the development of Hominids from Australopithecines might yield the same result. That is, if you believe that our thought is constrained as well as enabled by both our culture and our biology, then, developments in either might lead to the revival of Epistemology and Metaphysics. For it would seem that the development of a new genus of primates might promise even more profound changes in history than the Renaissance itself.

405. Certainly it is not hard to imagine how (human) pragmatists might respond to this argument. One such possible response is that the (human) pragmatist might concede the conditional claim that, if we are to realize
the unity of thought and being then we ought to attempt to create Becoming Gods. But the pragmatist might suggest that for ethical reasons we ought not to attempt to create Becoming Gods, therefore, we are not to realize the unity of thought and being. If such an argument could be made out then the pragmatist might be in a good position to answer in the negative to question 1 "Ought we to ask whether the unity of thought and being might be realized?" The pragmatist reasoning then might be that the only way to answer this question involves unethical procedures--e.g., selective breeding or genetically engineering humans--hence the question ought not to be raised in the first place. Of course the ethical implications of this proposal have not been discussed so this line of argument cannot be dismissed. It is interesting to note, however, that such a response by the pragmatist is a retreat from their usual position. Typically, pragmatists argue that we ought not to ask such questions since we cannot answer them. The idea being that we ought not to ask questions which we cannot answer--such questions lack any "cash-value". However, the response by the pragmatist just considered does not argue that we cannot answer the questions but that we ought not to answer them. At any rate this line of criticism is noted only to defer answering it until another time. Clearly, however, if such a line of argument could be made out then
the pragmatist would be in a good position to reject the argument of this work.

406. If the experiment described in this work were performed would this mean that pragmatism ought to be rejected? The answer, it seems, will have to await the arrival of the Gods. For if some of the arguments from earlier chapters are sound, then humans are in no position to say what is possible or impossible for divine beings (anymore than chimps are in a position to delineate what is possible for humans—in either thought or action). So of course it might be that the beings we create themselves believe that they might not be capable of realizing the unity of thought and being; so they too create beings which are godlike in comparison to themselves. That is, we might imagine an iterative process where each new species creates one which transcends its own limitations. Whether such a process is even possible and whether it would terminate in some perfect being or continue on ad infinitum is of course not for us humans to say. [11] What is more frightening is that we have no assurance that the higher beings which we create will have any interest in the question of the unity of thought and being. Alas, the Gods themselves might be pragmatists. Clearly this is not a possibility that we humans can know will not obtain. But this does not change the fact that the creation of Gods is our best hope for realizing the unity of thought and
being. And, indeed, pace the pragmatists, our best hope for discovering whether the question is worth pursuing.

407. To summarize, metaphilosophical skepticism is the view that we do not know what the appropriate goal or method of philosophy is. Thus, against the pragmatist the metaphilosophical skeptic suggests that it is not clear that philosophers ought not to ask whether the unity of thought might be realized (question 1) since it not clear that we are incapable of creating beings which are able to answer these questions. That is, the Becoming Gods might be capable of answering this question, or perhaps they might agree with the pragmatist. We are not in a position at present to say. Of course the same point applies to the naturalist and the Platonist who believe that the goal of philosophy is to realize the unity of thought and being: it is not clear that the Gods will believe that philosophers ought to ask this question. Again, on this issue the Gods might side with the pragmatist. With respect to the methodological issue (question 2) which divides the Platonist and the naturalists: whether philosophy ought to proceed empirically or a priori, the metaphilosophical skeptic suggests that we have reason to doubt both alternatives since we do not know how the Gods will answer this question. Is skepticism or dogmatism correct (question 3)? Again, this question is better left in the hands of the Gods. Of course it is entirely
possible that the Gods might endorse a metaphilosophical conception which we have not even dreamed of. Or, it might be that the gods decide that philosophy is not even an activity worth pursuing—much the same way we think of alchemy today. This is the risk that philosophy, by its very nature, must take.

408. In terms of its religious element, this work might be summarised by saying that the goal of achieving the unity of thought and being requires a godlike conception of being. Since we humans are not godlike we have no reason to suppose that we will ever be able to achieve the unity of thought and being. But humans might be able to achieve what is perhaps second best: if we are not godlike then at least we can create beings who are godlike. Our children may become Gods.

409. The point of invoking the notion of Gods in the discussion in the last chapter is to signal that the solution offered is a response to the ancient question of the relation between humans, Gods, and the possibility of philosophy—where 'philosophy' is understood as the attempt to achieve the unity of thought and being. For it could be argued that a systematic study of the history of philosophy, from Plato to Nietzsche, would reveal that philosophers which describe humans as godlike are optimistic about the possibility of completing philosophy, of achieving the unity of thought and being, whereas,
those who emphasize the finitude of human beings are pessimistic about the possibility of achieving the unity of thought and being. For example, on the one hand, thinkers such as Plato, Aristotle and Hegel emphasize the infinite or godlike perspective which humans (at least those with a philosophical bent) might enjoy. These same thinkers are optimistic about the possibility of completing philosophy, of achieving the unity of thought and being. [12] On the other hand, there is an equally long tradition of thinkers, stretching from the ancient skeptics, through to Kant and Nietzsche, which emphasize the finite, and human, all too human, nature of human reason. These thinkers argued that the unity of thought and being could not be achieved. [13] The solution of the last chapter then is offered with this tradition in mind. Of course it is beyond the scope of this work to offer a recapitulation of this history.

410. As is perhaps already apparent, the metaphysical and existential conceptions of deities are the religious analogues of the philosophical positions of dogmatism and anthropic skepticism. For the anthropic skeptic's suggestion that realizing the unity of thought and being might require a being with a higher intelligence must rely on something like the existential conception of the divine. To say that realizing this goal might require a conceptual scheme which transcends that which can be
understood by a human, is also to say, in accordance with the existential conception of the divine, that the nature of such a higher intelligence is not comprehensible by humans. For if we could fully comprehend the nature of this higher intelligence then we would know the nature of the conceptual scheme used by this intelligence, and thereby, undermine the very reason for suggesting that this intelligence is indeed higher. Conversely, the dogmatist must deny that the possibility of such a higher intelligence, of a more encompassing conceptual scheme than our own, in order to guarantee that our human conception is as godlike as possible. The dogmatist then will favor the metaphysical conception of the divine. (As noted previously, the naturalist might need to interpret 'possibility' here only as 'physical possibility'. This was because the naturalist might dismiss the "possibility of a higher intelligence" if this is asserted as a mere logical possibility. However, if the "possibility of a higher intelligence" is a real physical possibility then the naturalist would have more reason to be concerned).

411. It may be useful to illustrate this conceptual link between dogmatism and the metaphysical conception of the divine, on the one hand, and anthropic skepticism and the existential conception of the divine on the other; by brief reference to Aristotle and Kant on these issues. Consider again the following passage from the Nicomachean
...the activity of our intelligence constitutes the complete happiness of man, provided that it encompasses a complete span of life; for nothing connected with happiness must be incomplete.

However, such a life would be more than human. A man who would live it would do so not insofar as he is human, but because there is a divine element within him. This divine element is as far above our composite nature as its activity is above the active exercise of the other kind of [practical] virtue. So if it is true that intelligence is divine in comparison with man, then a life guided by intelligence is divine in comparison with human life. We must not follow those who advise us to have human thoughts, since we are [only] men, and mortal thoughts, as mortals should; on the contrary, we should try to become immortal as far as that is possible and do our utmost to live in accordance with what is highest in us. [14]
Aristotle's recommendations then are diametrically opposed to that of Kant's. Where Aristotle believes that humans share in the divine nature Kant believes that human nature is radically different from that of the divine—recall that humans lack the intellectual intuition which God seems to enjoy. Where Aristotle enjoins us to think godlike thoughts as far as we can, Kant is at pains to curb the pretensions of human reason to know things in themselves—something which is not humanly possible; something which only God and perhaps the angels are capable of realizing. Aristotle seems to hold the metaphysical conception of the divine, since human flourishing consists in thinking divine thoughts. Kant's thought seems more in line with the existentialist conception of the divine, since, as we saw in the discussion of noumena in chapter 8, we are not in a position to say what God's knowledge is like. Kant thus agrees with the existentialist conception of the divine in that he believes that the divine nature transcends human ability to comprehend. (Of course one might expect this sort of conceptual link between philosophy and religion if one believes that "Christianity is Platonism for "the people" and that the philosopher is the "concealed priest"). [15]

412. The view of this work is that Kant is right in
theory and Aristotle right in practice. Kant is probably right in saying that our human finitude will forever prohibit us from realizing the unity of thought and being. That is, we will never be in a position to provide a complete and true theoretical description of the universe in itself. Yet Aristotle might not be completely mistaken in attributing to humans a divine element. For if we can create Gods, then it might be said with some justice that in our practical activities we share in the divine. For if we are the mothers and fathers of divine creatures, then at least to that extent we share in the divine.

413. Clearly the view outlined here has potentially revolutionary consequences for not only philosophy but for the wider arena of culture in general. Clearly, also, a conclusion of such magnitude is not going to be secured in a single work, or by a single author. It may be useful at this point to list some of the outstanding problems to this project:

(i) Is it technologically possible to create godlike beings?

(ii) Is it ethically justifiable to do so?

(iii) Is there a conceptual link between the possibility of beings with a higher form of understanding--i.e., godlike creatures--and the possibility of completing or at least making progress in
Questions (i) and (ii) were raised in connection with the discussion of naturalism and pragmatism respectively, hence, they require no further discussion here. With respect to (iii) of course the answer suggested here is an emphatic "yes". Yet by my own admission there is no such monolithic enterprise as 'philosophy' (any longer) where the goals and methods of the enterprise are agreed upon. I have suggested that by their own criteria four different conceptions of philosophy--Platonism, naturalism, opinionism and pragmatism--cannot ignore the possibility of creating Godlike creatures as a means to making progress in philosophy. The idea of progress, in the present case, is that the possibility of creating Godlike creatures might be a means to resolving the intertwined problems of metaphilosophical skepticism--which conception of 'philosophy' is correct?--and noetic skepticism--can the unity of thought and being be realized? This conclusion might be challenged in one of two ways: An "internal" critique of this conclusion might suggest that the arguments I have provided against one (or more) of the four metaphilosophical views canvassed are unsuccessful. [16] An "external" critique might suggest that there are other conceptions of philosophy which are able to by-pass the sorts of problems raised here. For instance, Thomists
might think that their conception of philosophy is not identical to any discussed in this work, and indeed, is not subject to any of the same problems. Similarly, those writers who look more to the Geisteswissenschaften for a model for philosophy, e.g., Kuhn, MacIntyre, Blumenberg, and Habermas, might also feel unmoved by the discussion. Such "external" critiques question the "completeness" of this work with respect to the question of whether the end of philosophy is Becoming Gods. Since such objections are beyond the scope of the present work it is clear that this work can stand only as a prolegomena to the end of philosophy.[17]

414. Even if an affirmative answer to these questions can be justified, there remains what seem to be enormous political obstacles to bringing this project to fruition. Certainly it should not be forgotten that the vast majority of the planet's population believes that there already exists some sort of deity. The suggestion to create gods might seem blasphemous--and perhaps it is to those who insist on worshipping such false idols. It does not seem too hazardous a guess to suggest that those who maintain there already exists a deity are not likely to be very supportive of the conclusion suggested here--indeed, some may even be hostile to such an impious conclusion. Academia of course has its own set of political obstacles to this conclusion. Academics which pride themselves on
their scholarship and learning do not seem very receptive to the idea that the wisest human academic will appear an ape in relation to the Gods, both in wisdom and beauty and everything else. Fortunately, there is very little need to prick the arrogance of academics. For to carry this project through to its fruition would require the labor of very few individuals—certainly less than the faculty of some universities. To this end it may be possible for a few individuals to form an enclave against the unreflective masses and those coxcomb academics.

415. The title of this work is perhaps ambiguous between a product and a process. This ambiguity is related to our own understanding of our identity. One way to think of ourselves is as constitutively identified with our bodies, with the biological species Homo sapiens. On this understanding then the title Becoming Gods might be understood as referring to the development of a new species, a godlike species. The term 'becoming' might be understood as indicating that these deities emerge at a certain point in history (much the same as the Olympians were said to emerge at a particular point in history). This is the "product" understanding of the title: a new species enters into being. Another way to think of ourselves is as essentially defined in terms of our culture. On such an understanding the title of this work refers to the process whereby we cast away these
biological shells--known as the biological species homo sapiens--for improved biological shells which are more attuned with our aspirations. In the process of **Becoming Gods** we overcome the limitations imposed by the small brains of homo sapiens. On either understanding, however, it is appropriate to say: Only,

from the chalice of this realm of spirits,
foams forth for Them their own infinitude.
End Notes: Chapter Eleven

1. Cf. Nietzsche: "...it is a hopeless curiosity that wants to know that other kinds of intellects and perspectives there might be; for example, whether some beings might be able to experience time backwards, or alternatively forward and backward..." The Gay Science, trans. W. Kaufmann, New York: Vintage books, 1974, p. 336.


by P. Bieri, R. P. Horstmann, and L. Kruger, Dordrecht: D. Reidel Publishing co., Rorty suggests that transcendental arguments are the "only hope for philosophy as an autonomous critical discipline", (p. 77) and Rorty thinks that Davidson has provided a transcendental argument to end all transcendental arguments (pp. 95-103). This might be a shift in position because in the earlier paper Rorty actually provides an argument for his pragmatism while in his latter work he thinks that all such arguments are bound to be question begging.

11. An examiner has questioned the relation between two lines of argument of this work. The first line of argument is summarized by the examiner as follows:

Cl: "The thesis argues that it is impossible for us to know that we possess the complete truth about reality because there may be beings who compare to us as we do to apes or five year olds".
C2: "...It may be possible for creatures with larger brains to know the [complete] truth."

The problem the examiner poses is that the same argument used to support C1 might be used, contrary to the argument of the thesis, to undermine C2. Thus, the examiner suggests:

Arg. 1: "...exactly the same argument would seem to refute this [C2] position: there may be beings who compare to them, as they do to us. (And so on indefinitely.)"

I actually consider something along the lines suggested by the Examiner's Arg. 1 very briefly in the paragraph to which this note is appended. My answer to the examiner then is exactly the same as the one I offer in the thesis, namely: yes, it may be the case that no creature can possess the complete truth because it is always possible that there is another creature with a more encompassing view of the complete truth, or, it may be that at some stage this process comes to an end where it is just not possible for any creature to have a more encompassing view. Which of these alternatives is correct, we humans are not likely to be in a position to say.

So my response to the examiner is that C1 and C2 are actually a slight misrepresentation of my position. I
actually hold something more along the following lines:

C1': "The thesis argues that, for all we now know, it is impossible for us to know that we possess the complete truth about reality because there may be beings who compare to us as we do to apes or five year olds".

The qualification 'for all we know' is meant to allow for the possibility that it is a physical impossibility for there to be beings who compare to us as we do to apes or five year olds. I suggest in Chapter 9 that we cannot dismiss a priori the possibility that our level of intelligence is the maximum which can be realized in our universe.

A similar point holds with respect to the following:

C2': "...For all we know it may be possible for creatures with larger brains to know the [complete] truth."

This is not to say that it is in fact possible for creatures with larger brains to know the complete truth, only that such a possibility is constant with our current knowledge. But of course the following ought also to be considered:
C3: For all we know, it may be impossible for any creature to know the complete truth because there is always some other creature which stands to it, as we do to apes or five year olds.

The fact that both C2' and C3 seem coherent possibilities suggests why Argument 1 fails. We simply do not know what limits, if any, there are to intelligence, and thus, the ability to know the complete truth. It may be that someday we have reason to accept C3 and reject C2', and thus endorse Argument 1, but not at present.

Consider an example. Suppose we find that for every increase in brain volume there is a corresponding increase in intelligence. Suppose further we find that the universe contains a finite amount of matter. Then a maximally intelligent creature would be one which incorporated every gram of matter in the universe as part of its brain volume. Suppose that such a brain came into existence. It might reason to itself that it has as good a claim to knowing the complete truth about the universe as any creature could have. It may concede that a larger brained and thus more intelligent creature is possible, but dismisses this thought as a mere logical possibility, one which is not scientifically testable (since there is no
matter left in the universe). On the other hand, as noted in the thesis, it may be the case that it is discovered that there is no increase in intelligence after a certain brain size $X$. This scenario would lend support to the idea that a creature with a brain greater than or equal to $X$, for all practical purposes, knows the complete truth. (The logical possibility of a larger brained creature is dismissed as just that: mere logical possibility). Or perhaps the universe contains an infinite amount of matter, and every increase in brain volume yields an increase in intelligence, in which case it seems that there is no largest brained and most intelligent creature (just as it is said that there is no largest natural number).

Another possibility is that some larger brained creature provides some sort of sophisticated transcendental argument for the claim that it knows the complete truth about reality. We might think of this example as a case where some large brained counterpart of Hegel, the 'UberHegel' if you will, writes the 'UberLogic' which purports to demonstrate by means of a 'Ubertranscendental argument' the unity of thought and being. Hegel's Logic, we might imagine, looks like a Dr. Seuss book in comparison. Conversely, we might imagine an "UberNietzsche" writing the UberGay Science, which purports to provide some "master deconstruction" of any
claim to knowing the complete truth.

In short, I want to say that the Examiner may be correct in saying that something like Argument 1 could be used to show that no creature can know the complete truth, but he also may be incorrect. At this point we simply do not know. As far as I can see, our only hope of ever discovering which of these possibilities is correct is to take the step I described in the thesis: attempt to create beings which transcend our conception in the same way that ours transcends that of an ape or a five year old. Again, it may be that this step does not in fact realize the goal of discovering the complete truth—-but, to point out the obvious, the possibility of failure accompanies most creative endeavours.

12. To the extent which Plato and Aristotle believed that humans might "participate" in a divine perspective see Stephen Menn's "Aristotle and Plato on God as Nous and as the Good" Review of Metaphysics 45, March 1992: 543-73. Plato suggests in the Republic (510c) that the task of philosophy is one which can be realized although it might take some time. Aristotle suggests the form of a completed science in his Posterior Analytics, one which Aristotle seems to have thought would be eventually completed by humans, (see especially 100b). While Plato and Aristotle thought that philosophy might be completed by humans at some future date, Hegel seems to have believed that he
himself had completed it. Yet at other times he is a little more diffident. As he announces in the Preface to the Phenomenology of Spirit (translated by A. V. Miller, Oxford: Oxford University Press, 1977, p. 3): "To help bring philosophy closer to the form of Science, to the goal where it can lay aside the title 'love of knowing' and be actual knowing--that is what I have set myself to do." One well known interpretation of the Phenomenology is that it is a telological account of human consciousness which terminates in a divine perspective, in "Absolute knowing".

13. The views of the ancient skeptics are perhaps best known from the works of Sextus Empiricus. I have discussed Kant's views on our relation to the divine and his pessimism concerning the prospects for achieving the unity of thought and being in chapter 8. Nietzsche's views on our relation to the divine are too well known to bear repeating--the death of God, and so on. Nietzsche is not able to resist sounding the death-tone knell for philosophers and Platonic philosophy throughout the works of his middle and later periods. See, for instance, in the The Gay Science, trans. Walter Kaufmann, New York: Vintage Books, 1974, pp. 33-5 and 231-2. His most sustained attack is in Twilight of the Idols.


15. Nietzsche, Beyond Good and Evil, trans. by R. J.
16. An example of such an "internal" critique is made by one of the examiner's of this thesis. He points out that I attempt to extrapolate from the cognitive gulf that separates adult humans, from children and apes, to "higher intelligences". He notes, quite rightly I believe, that this extrapolation is based on a notion of greater and lesser intelligence. He suggests, again quite rightly I believe, that more philosophical attention might have been paid to what is involved in conceiving beings who differ from human beings in the same way we differ from chimps and children. This is an internal critique since many of the arguments I make against the four metaphilosophical positions rely on the viability of this extrapolation. I happily concede that if more attention had been paid to the notion of intelligence, and how humans differ from apes and children in this regard, then, the extrapolation might have been made more precise. As I point out in chapter 9, making a plausible definition of 'intelligence' is a notoriously difficult task. My particular interest is in intelligence as it relates to the ability to grasp the truth, which further complicates the matter. In order to meet this line of criticism I think I would have to spell out in some detail what is here presupposed, namely: that
there is a systematic link (perhaps even a conceptual link) between lesser and greater intelligences, and the ability to grasp the complete truth. A proper treatment of this subject probably would also require mention of how these issues relate to the idea of a conceptual scheme. However, such a discussion is beyond the domain of the present work.

17. Pace Heidegger: "The end of philosophy proves to be the triumph of the manipulable arrangement of a scientific-technological world and of the social order proper to this world. The end of philosophy means the beginning of the world civilization based upon Western European thinking." ("The End of Philosophy and the Task of Thinking", in Basic Writings, edited by D. K. Krell, trans. Joan Stambaugh, New York: Harper & Row, 1977, p. 377). Heidegger goes on to ask "Does the title for the task of thinking then read instead of being and Time: Opening and Presence?" (p. 392). This rhetorical question invites a real question: "Opening and Presence for whom? Dasein oder Gott? I would have thought it would have to be the latter since Heidegger eventually came to the conclusion that "Only a God can save us now".


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